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WORKING PAPER NO. 8

STUDY ON GOVERNMENT REGULATION IN THE
RED MEAT INDUSTRY

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CAN.
EC26-
NO.8
1980

FOREWORD

This study is one of a series commissioned by the Economic Council's Regulation Reference which deals with regulation of the food processing, distribution and retailing sector. These studies do not profess to cover the whole field of food PDR regulation but they do focus on several important areas of concern, particularly overlap and duplication between and within levels of government.

The following is a list (alphabetically by author) of studies to be published in this series:

Anderson, Robert D., Government Regulation of the Canadian Dairy Processing, Distributing and Retailing Sector.

Hughes, David R. and Robert G. Shapiro, An Analysis of the Effects of Government Regulations on the Canadian Fruit and Vegetables Processing Industry.

* Leckie, Keith and John Morris, Study on Government Regulation in the Red Meat Industry.

* already published.

PREFACE

This study of the impact of government regulation on the processing, distribution and retailing (PDR) sectors of the red meat industry in Canada is part of the Regulation Reference studies, with particular relation to the Canadian food industry.

For the purposes of this study, special attention was directed to meat industry regulation at the federal level, because over 80% of meat comes under federal inspection. Two provincial jurisdictions, Ontario and Alberta, were also studied, as the regulations in various provinces were surveyed and found to be somewhat similar. Alberta and Ontario were considered to give a good and representative picture, both producing livestock and meat in volume. The cities of Edmonton and Toronto were used to exemplify municipal regulation. If time had permitted, Montreal and Vancouver would have been also included in the study. The authors estimate that a ball park figure for relative regulatory impact on the red meat PDR sector would be 60% federal, 25% provincial and 15% municipal.

In Part I of this study there is a broad brush review of the structure of the system which provides a continuous supply of meat to consumers and the institutional trade. Also in this section is a review of the regulatory mosaic at various levels and in various jurisdictions, which impinge on the industry.

Part II of the study outlines in more depth some of the regulatory concerns and issues, and in a number of case histories of regulatory experience shows how the regulatory system works in actual practice.

Part III comprises a summary and recommendations. An appendix records detail for reference, particularly the factual material reviewed in Part I.

The authors wish to acknowledge the assistance and co-operation from a great number of people whose firms are affected by existing regulations, or who have a hand in administering them. In particular, appreciation is expressed to the Retail Council of Canada and the Canadian Meat Council (formerly the Meat Packers Council of Canada). These organizations made their resources freely available. The excellent co-operation received from various regulatory agencies is also sincerely appreciated.

TABLE OF CONTENTS

PART I

<u>Chapter</u>		<u>Page</u>
1	AN OVERVIEW OF THE CANADIAN MEAT INDUSTRY	
	Introduction	1
	The Livestock Production Sector	4
	The Meat Processing Sector	8
	The Meat Distribution Sector	12
	Structure of the Canadian Red Meat Industry	16
	Performance in the Red Meat Industry	19
	Business Environment of the Red Meat Industry	21
	Present and Future Direction of the Red Meat Industry	23
2	A REVIEW OF REGULATIONS AFFECTING THE RED MEAT INDUSTRY	
	An Overview of Existing Regulations	25
	A Brief Historical Background to Regulations Affecting the Red Meat Industry	27
	Present Federal Regulations Affecting the Red Meat Industry	30
	Food and Drugs Regulations	32
	Consumer Packaging and Labelling Regulations	33
	Effluent Regulations	34
	Present Provincial Regulations Affecting the Red Meat Industry	34
	Ontario Regulations	34
	Alberta Regulations	38
	Municipal Regulations Affecting the Red Meat Industry	40
	Regulation at the Farm Level	41
	Regulation at the Processor Level	42
	Regulations at the Retail Level	46

PART II

CHARACTERISTICS AND OPERATION OF THE PRESENT REGULATORY SYSTEM

Proliferation	51
Jurisdictional Overlap and Duplication	56
Accountability and Policy Determination	65
Regulatory Experience of the Meat Industry	71
<u>Case Histories</u>	
Humane Slaughter of Livestock	72
Effluent Regulations for Meat and Poultry Plants	74
Metric Conversion	76
Beef Import Policy and Regulation	79
Financial Protection for Livestock Producers (Ontario)	80
Provincial Hog Marketing Regulation	82
Sliced Bacon Packaging	86
Date Marking Regulation	88
Nitrate Regulation	91
Microbiological Standards for Ground Beef	95
Salmonella Regulation	97
Sulfa Residues	98

	<u>Page</u>
Protein Standards, Simulated and Extended Meat Products	99
Standard Nomenclature for Retail Meat Cuts	101
Hog Grading Regulations	103
Beef Grading Regulations	103
Observations on Regulatory Case Histories	107
Consultation	108
Advance Notice	110
Prior Assessment	111
Periodic Evaluation	112
Co-ordination of Regulatory Actions	113

PART III

CONCLUSIONS AND RECOMMENDATIONS	114
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APPENDICES

I Livestock and Meat Tariffs	135
II Major Federally Inspected Beef Processors by Type of Operation and Province	137
III Federally Inspected Pork Slaughterers and Processors by Province	141
IV Processed Meats and Sausage Manufacturers by Province	144
V Federal Government Acts and Regulations Affecting the Red Meat Industry	148
VI Ontario Provincial Acts and Regulations Affecting the Red Meat Industry	161
VII Alberta Provincial Acts and Regulations Affecting the Red Meat Industry	166
VIII Edmonton City By-Laws Affecting the Red Meat Industry	173
IX Questionnaire Distributed to Members of Canadian Meat Council at Annual Meeting, February, 1980	179
X References	182

Résumé

Le présent rapport insiste avant tout sur la description et l'analyse des répercussions de la réglementation publique, à tous les paliers de gouvernement, sur les secteurs de la préparation, de la distribution et de la vente au détail de la viande rouge au Canada. Il présente ensuite certaines conclusions sur la mesure dans laquelle le système actuel est efficace; il se termine par des recommandations en vue de l'établissement d'une structure plus appropriée de la réglementation.

L'étude se divise en trois grandes parties. Dans la première, les auteurs donnent une description générale de l'industrie de la viande rouge, la plus importante industrie d'aliments au Canada. Ils y présentent la façon dont les divers secteurs de cette industrie sont reliés entre eux et comment l'important et complexe système de commercialisation du bétail et de la viande fonctionne de manière à assurer aux consommateurs un bon choix de viandes en tous temps.

Cette première partie présente ensuite les grandes lignes de la réglementation de cette industrie. Une attention particulière est accordée au secteur fédéral puisque 80 à 90 % du boeuf vendu sur le marché est préparé dans des usines tombant sous le système d'inspection du gouvernement fédéral.

L'inspection est obligatoire pour toute viande devant faire l'objet de commerce interprovincial ou d'exportation. Les principales lois fédérales visant les viandes comprennent la Loi sur l'inspection des viandes et la Loi sur les normes des produits agricoles du Canada (administrées par Agriculture Canada); la Loi des aliments et drogues (Santé et bien-être Canada); et la Loi sur l'emballage et l'étiquetage des produits de consommation (Consommation et corporations Canada).

L'industrie des viandes est fortement réglementée parce que la viande est une denrée très périssable, doit provenir d'animaux sains et ne doit pas contenir de résidus indésirables de produits ajoutés lors de la préparation. Ainsi, pour le bien des consommateurs canadiens et afin de permettre l'accès de la viande canadienne sur les marchés mondiaux, l'industrie et les organismes de réglementation doivent maintenir des normes de qualité élevées.

Le rapport donne aussi les grandes lignes de la façon dont les règlements provinciaux et municipaux complètent le système d'inspection fédéral en assurant la surveillance des installations et du système de distribution locale et de tous les magasins de détail où l'on vend de la viande au public.

Dans la deuxième grande partie du texte, les auteurs étudient plusieurs cas particuliers de réglementation. La

plupart sont du ressort fédéral, mais quelques-unes relèvent du palier provincial. Sont comprises des études sur l'emballage du bacon tranché, les lois portant sur l'abattage sans cruauté, l'indication sur l'emballage de la date limite pour la consommation des aliments périssables, la réglementation de l'utilisation de nitrite dans les viandes fumées, les méthodes de réglementation concernant la salmonelle et autres problèmes microbiologiques, et les règlements touchant la classification du bétail. Ces études examinent les procédures de consultation et d'avis préalable, le degré d'utilisation des techniques de l'évaluation préalable, la fréquence de l'évaluation périodique, etc.

La troisième partie du rapport comporte les conclusions et recommandations. M. Leckie et Morris sont d'avis que le processus de consultation préalable à l'adoption d'une réglementation s'est amélioré de façon soutenue, surtout au palier fédéral. Il n'existe pas encore un système complet et efficace assurant l'évaluation préalable des répercussions possibles d'importants projets de réglementation, mais il se manifeste une tendance à confier à des comités d'experts l'étude en profondeur d'un problème avant de prendre des décisions en matière de réglementation.

Les auteurs proposent, comme objectif ultime, la mise sur pied d'un seul système d'inspection des viandes, administré

de façon efficace grâce à la collaboration des paliers fédéral et provincial et à un travail d'équipe interministériel. Bien que l'industrie soit, à l'heure actuelle, fortement réglementée, il n'est pas recommandé de procéder à la déréglementation soudaine ou massive. On propose plutôt d'insister davantage, à l'avenir, sur l'amélioration continue des mesures de consultation à tous les paliers de gouvernement, sur l'évaluation préalable par des autorités compétentes de tous les nouveaux règlements importants, sur l'évaluation régulière, systématique et complète des règlements en existence, l'expansion de l'autoréglementation dans tous les cas où elle est applicable, et l'application aussi large que possible du principe de l'imputabilité dans l'administration des règlements.

De manière générale, les conclusions de Leckie et Morris se rapprochent grandement, du moins en ce qui a trait à l'industrie de la viande, à celles que présentait le Conseil économique du Canada dans son rapport provisoire intitulé Rationalisation de la réglementation publique, publié en novembre 1979.

Pour l'avenir, Leckie et Morris sont d'avis qu'il faudrait d'abord s'assurer que tous les projets de nouveaux règlements touchant les viandes soient fondés sur une recherche préalable complète et objective, menée en consultation avec les parties intéressées, que les règlements existants soient évalués

plus méthodiquement et, surtout, qu'un système sévère d'imputabilité soit mis en place pour l'application des règlements, cette dernière recommandation étant d'une importance particulière dans les cas où on utilise des pouvoirs législatifs subordonnés, comme pour les lois sur la commercialisation des produits de la ferme.

SUMMARY

This report is primarily concerned with a description and analysis of the impact of government regulations at all levels on the processing, distribution and retailing (PDR) sectors of the Canadian red meat industry. Conclusions are then drawn as to how effective and efficient the present regulatory system is, and the study concludes with recommendations for a sound regulatory format in future.

The study is divided into three main parts. In Part I the authors present an overview of the red meat industry, which comprises Canada's largest food industry. There is a description of the way the inter-related sectors of the industry function and how the large and complex marketing system for livestock and meat operates to ensure consumers a wholesome and diversified selection of meat products at all times.

In a second section of the introductory part the regulatory mosaic is outlined. The federal sector receives major attention because 80 to 90% of the commercial meat supply passes through plants that are federally inspected. The latter is mandatory for all meat entering interprovincial or export trade. Major federal legislation affecting meat includes the Canada Meat Inspection Act and the Canada Agricultural Products Standards Act (administered by Agriculture Canada); the Food and Drugs Act (administered by Health and Welfare Canada); and the Consumer Packaging and Labelling Act (administered by the Department of Consumer and Corporate Affairs).

The meat industry is highly regulated because meat is highly perishable, must come from healthy animals and must be kept free from undesirable residues or processing additives. Thus from the standpoint of domestic consumers, and to allow access of Canadian meat to world markets, the industry and regulatory agencies must maintain high standards consistently.

The report also outlines how provincial and municipal regulations complement the basic federal inspection system in overseeing local distribution and retailing facilities, and all outlets where meat is offered to the public.

In Part II of the study the authors undertake a number of case studies of specific regulatory experiences. These are mainly at the federal level, but some are in the provincial field as well. Included are studies of such matters as sliced bacon packaging, humane slaughter legislation, date marking of perishables, nitrite regulation in cured meats, regulatory approaches to problems of salmonella and other microbiological concerns, grading regulations for livestock, and a number of other case histories. In these studies there is examination of consultative and advance notice procedures, the degree of use of prior assessment techniques, frequency of periodic evaluation, and such matters.

Part III of the report comprises conclusions and recommendations. Leckie and Morris conclude that consultative procedures in advance of regulation, particularly at the federal level, have been steadily improving. A system of prior assessment of the impact of major regulatory proposals is not yet in full and effective operation but there has been a trend to have expert committees study a problem thoroughly before regulatory decisions are made.

The authors suggest an ultimate objective of one single, efficiently-administered meat inspection system achieved under federal-provincial co-operation and interdepartmental teamwork. While the industry is now highly regulated, no sudden or massive deregulation is suggested. Rather there should be more stress in future on further improving consultative procedures at all levels, the subjecting of all major new regulations to competent prior assessment, the conducting of regular systematic and thorough evaluation of existing regulations, the expansion of self regulation where feasible, and the positive assurance of accountability in administering regulations to the maximum degree possible.

In the main, the conclusions which Leckie and Morris reach closely parallel, as far as the meat industry is concerned, those advanced in the Interim Report, entitled Responsible Regulation, published by the Economic Council of Canada in November, 1979.

For the future Leckie and Morris suggest the chief need is to ensure that all new regulatory proposals affecting meat are thoroughly and objectively researched in advance in consultation with interested parties,

that existing regulations be more systematically evaluated and, above all, that regulations be administered under a strict system of accountability, the latter being especially important where subordinate legislative powers are used, such as in marketing legislation for farm products.

PART 1

CHAPTER I

AN OVERVIEW OF THE CANADIAN RED MEAT INDUSTRY

Introduction

The Canadian red meat industry is Canada's largest food industry, with present sales in excess of \$5 billion per annum at the retail level. The industry consists of three major sectors - the livestock production sector, the meat processing sector and the meat distribution sector. In addition, many ancillary operations are required to service this industry, including transportation, storage, credit, marketing services, brokerage and packaging. Three species of livestock are monitored - cattle, hogs and sheep. Charts 1 and 2 present a diagrammatic overview of the production/processing/distribution system for the two major components of the red meat industry - cattle/beef and hogs/pork.

Four major types of product are produced, depending upon the species of animal from which they are derived. These are beef, pork, veal and mutton and lamb. Beef accounts for about 60 per cent of the total output of the industry, while for pork the proportion is approximately 35 per cent.

(Table 1)

TABLE 1

COMMERCIAL OUTPUT OF MEATS AND OFFAL FROM LIVESTOCK SLAUGHTERED
IN CANADA

Class of Meat	1971-75			
	Average	1976	1977	1978
		(million pounds)		
Beef	2,009.6	2,451.3	2,414.3	2,254.9
Pork	1,382.6	1,174.7	1,188.1	1,366.1
Veal	88.3	111.2	105.4	82.3
Mutton &				
Lamb	17.9	16.5	11.9	9.4
Edible Offal	131.6	142.0	140.8	136.3
TOTAL	3,630.0	3,895.7	3,860.5	3,849.0

(Offal is the name given to non-skeletal meats such as kidneys, liver and sweetbreads. Some offal is classified as edible, the remainder as inedible.)

SOURCE: Statistics Canada, Livestock and Animal Products Statistics, Catalogue 23-203, Annual.

Beef System Overview-1978

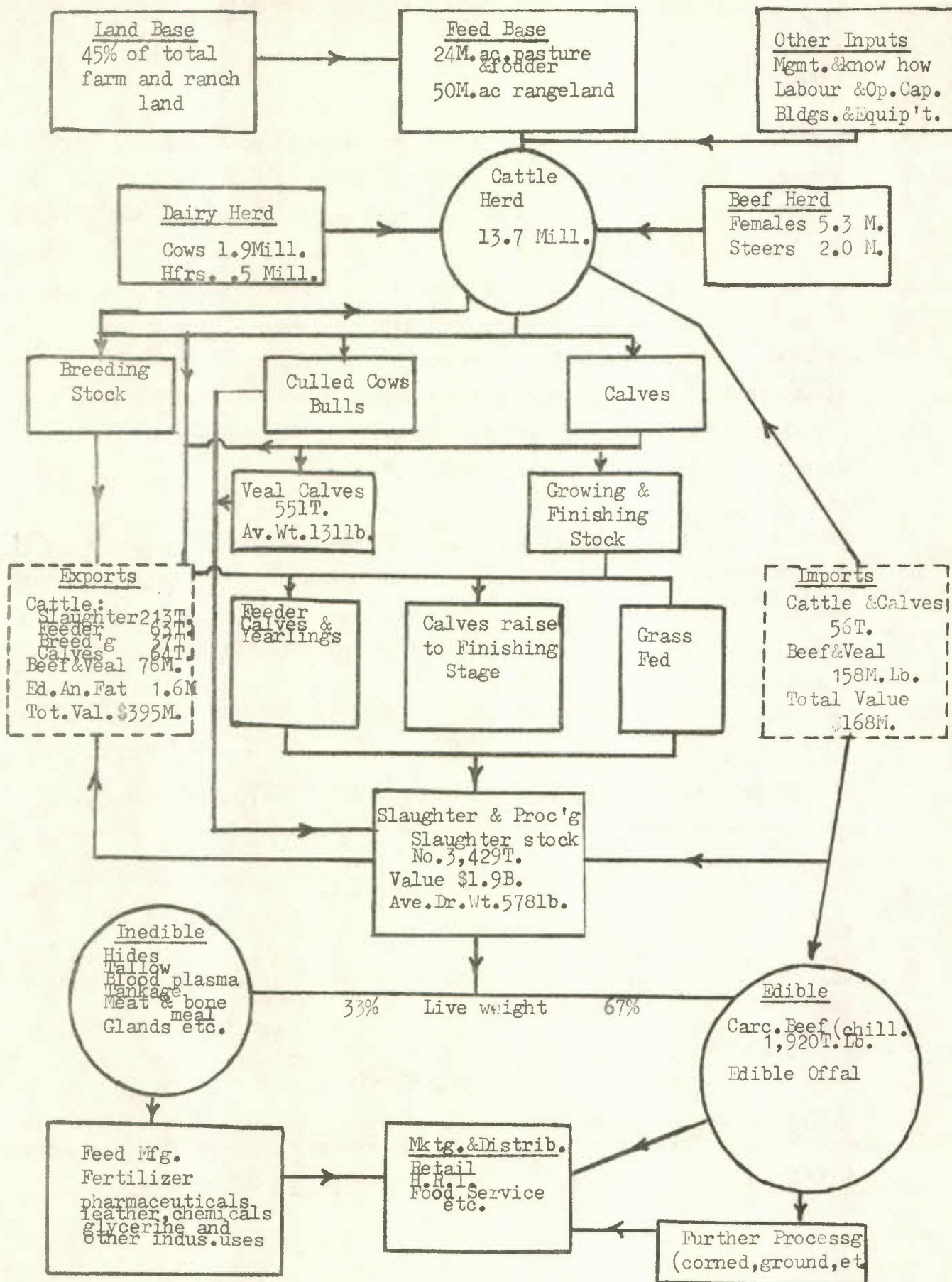
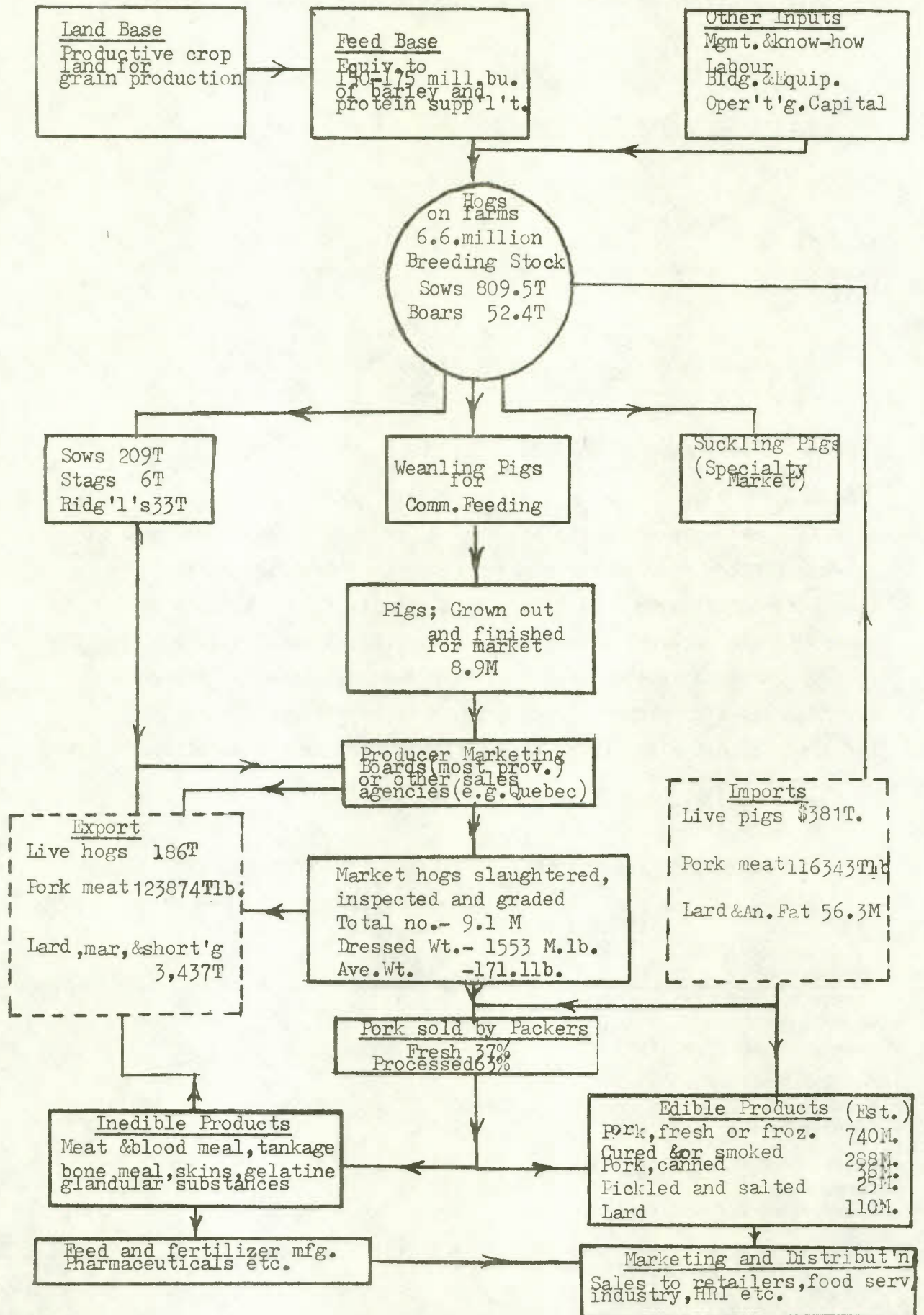


CHART II

Pork System Overview, 1978



There is a considerable degree of interdependence among these different types of red meat, as evidenced by the demand elasticity matrix presented in Table 2. Interdependence is also exhibited in supplies and prices.

TABLE 2

Demand Elasticity Matrix For Red Meats

	Beef	Pork	Lamb	Veal
Beef	-.852	.063	.009	.011
Pork	.109	-.955	.016	.034
Lamb	.406	.465	-1.866	.014
Veal	.267	.543	.008	-2.593

SOURCE: Hassan, Zuhair A. and S.R.Johnson, Consumer Demand for Major Foods in Canada, Economics Branch Publications No. 76/2, Agriculture Canada, April 1976.

The Livestock Production Sector

Overview

Livestock production and the associated activities of producing and processing livestock feeds represent the major segment of Canadian agriculture. The production of livestock is based on the family farm. Both corporate ownership and vertical integration are relatively insignificant, in this industry. In contrast to the past when feeding a few cattle or raising a few hogs was a supplementary enterprise on most farms, in recent years there has been a clear trend towards fewer, larger and more specialized units (Table 3).

TABLE 3

NUMBERS OF FARMS REPORTING VARIOUS LIVESTOCK SPECIES
AND AVERAGE NUMBERS PER FARM

Census Periods, 1951-1976

Species	1961	1971	1976
Cattle, number of farms with	291,694	215,722	206,958
Average number per farm	37.6	59.5	72.3
Hogs, number of farms with	184,311	108,596	59,914
Average number per farm	27.2	71.9	96.1
Sheep, number of farms with	25,631	10,380	8,833
Average number per farm	52.6	72.2	64.3

SOURCE: Statistics Canada, Agriculture, Livestock and Poultry on Census Farms Catalogue 96-719.

As a result, large specialized enterprises now account for the bulk of total output. This development has introduced greater stability of output in livestock production, as investment costs, scale economies and taxation considerations favour the operation of larger units at or near designed capacity.

Beef Production

Over 80 per cent of total domestic beef supplies are produced by the Canadian beef cattle industry. The remainder is a by-product of the dairy industry, mainly in the form of cull dairy cows and veal calves. The beef production sector, per se, has two distinct components - the cow-calf sub-sector and the beef feedlot sub-sector. This dichotomy has appeared with the development of the specialized beef feedlot since the early 1950's. The cow-calf industry is primarily based in Western Canada, particularly Alberta and Saskatchewan and the four western provinces consistently account for over 80 per cent of the Canadian beef breeding herd (Table 4)

TABLE 4

NUMBER OF COWS ON FARMS BY PROVINCE, JANUARY 1, 1979

Type of Cow	B.C.	Alta.	Sask.	Man.	Ont.	Que.	Atl. Prov.
Beef - 000 hd	220	1,390	1,013	430	415	215	57
Milk - " "	83	142	68	85	613	785	95

SOURCE: Statistics Canada, Livestock and Livestock Products Statistics 1978, Catalogue 23-203.

Beef cows are generally grazed extensively on range land. Calves are born in spring and usually sold as "weaners" in the fall to the feedlot, at a weight of approximately 450-550 pounds. If feed is plentiful or the cow-calf operator anticipates rising prices, the calves may be carried through the winter on pasture and hay before being sold in the spring as "stockers".

Some female calves (heifers) are normally kept as replacements for the beef cow herd. The annual calving rate is normally about 90 per cent and a cow usually produces 7 to 8 calves before being sold as a cull.

Feedlot feeding of cattle is concentrated in Alberta and Ontario, with the former province accounting for about 40 per cent of the Canadian total, and

the latter province approximately 30 per cent. Manitoba feedlots produce about 10 per cent of overall output and those in Saskatchewan about 5 per cent. The feedlot industry is relatively insignificant in British Columbia, Quebec and the Atlantic Provinces. There is considerable interprovincial movement of feeder cattle, particularly from Saskatchewan and British Columbia to feedlots in Alberta and from Alberta, Saskatchewan and Manitoba to Ontario.

In broad terms, the feedlot operator has the option of, first, buying weaner calves of about 6 to 7 months old, weighing 450-550 pounds live-weight in the fall and feeding these for 200 to 300 days; secondly, buying 600-700 pound stockers in the spring and feeding these for 100 to 200 days; and thirdly, buying "short-keep" cattle weighing 800-950 pounds and feeding these for 50-100 days. His choice will depend on present and anticipated beef prices, feeder cattle prices and feed prices. The selection of cattle to go into the feedlot and the feeding regime adopted has a significant effect on the level and pattern of beef supplies reaching the market.

Feedlot cattle are fed a high energy ration based on barley in Western Canada and on corn in Ontario, together with a protein supplement. Cattle are marketed from the feedlot at a liveweight of about 1050-1200 pounds.

Cattle Marketing

Beef packers purchase domestic cattle, both fed steers and heifers and culled beef and dairy cows and bulls through one of several channels - through terminal markets, through country auctions and direct to the packing house. The Commission of Inquiry into the Marketing of Beef and Veal estimated that in 1976 55 per cent of total slaughter cattle were sold direct to packers, while 30 per cent went through terminal markets and 15 per cent through country auctions. 1/

1/ Commission of Inquiry into the Marketing of Beef and Veal, Organization and Method of Operation of the Canadian Cattle and Beef Marketing System, Research Report No. 1, Supply and Services Canada, Ottawa, February, 1976.

Hog Production

In the hog production industry, the greater proportion of output comes from what are termed "farrow to finish" operations. In this type of operation, a breeding sow herd is carried and offspring are raised to market weight. However, there is some trend in the industry towards a greater degree of specialization, similar to that which has occurred in the beef cattle industry, with some producers specializing in the production of weaner pigs of about 40 pounds liveweight, while other producers concentrate on finishing operations, buying weaners and feeding these to market weight of about 200-220 pounds liveweight.

Two-thirds of Canadian hog production is carried out in Ontario and Quebec. Alberta accounts for about a further 12 per cent. In recent years there has been a strong growth in the share of total domestic production coming from Quebec, largely at the expense of Alberta.

Hogs are produced under an intensive feeding and management system. All stock are housed throughout the year. Each sow produces two litters, of 8 to 9 piglets on average, per year. Usually a sow produces 6 to 8 litters before being culled. Market hogs are slaughtered at 5 to 6 months of age.

Hog Marketing

Hog marketing in Alberta, Saskatchewan, Manitoba, Ontario, New Brunswick, Nova Scotia and Prince Edward Island is controlled by provincial producer marketing boards, the powers of which derive from the Provincial Agricultural Products Marketing Act. In Alberta and Ontario, the hogs are accumulated in specified assembly yards and then sold by a "dutch clock" teletype auction. In Manitoba a central "dutch clock" auction is held, while in Saskatchewan, the Board allocates hogs to packers according to a contract formula. Prices are also determined by a formula. In New Brunswick, Nova Scotia and Prince Edward Island, the Board is more directly involved in pricing hogs. In most areas shipping clubs have been organized in an effort to even out the flow of market hogs to packing plants.^{a/} Prices are arrived at through a formula based on the Toronto price. In Ontario, Manitoba and Alberta, the Board imposes a delayed killing penalty on hogs which are not slaughtered within a
^{a/} Achieving economies in shipping costs is another objective.

prescribed time after purchase. At present, there is no hog producers' marketing board operating in B.C., Quebec or Newfoundland. In B.C. there is a Commission and producers ship their hogs to plants and are paid on the basis of a formula related to the current Alberta hog price. In Quebec, hogs are sold by private treaty, although in most cases there is some degree of contract commitment between producer and packer. 2/

The Meat Processing Sector

Overview

Historically, the meat processing industry comprised full-line integrated plants which slaughtered all species of livestock - cattle, calves, hogs, sheep and lambs - and produced a full range of fresh and processed meats. More recently the trend has been for more specialization, both in species handled and operations carried out. Some of the older full-line plants are still operating, but there is an increasing number of plants specializing in a limited range of operations for a single species, notably beef killing, chilling and shipping, beef fabricating, beef-patty manufacturing, hog slaughtering and processing or sausage and processed meats manufacture. Also, primary slaughter plants have tended to move away from the centres of population, their traditional location, to the centres of livestock production. This move has been particularly noticeable in the case of beef, with specialized beef slaughter plants developing in parallel with the growth of the Alberta cattle feeding industry.

Beef Processing

Upon purchase by the packer buyer, the cattle are trucked to the packing plant. The slaughtering and dressing process yields a dressed beef carcass and a number of by-products (Chart 3). Cattle are given an ante-mortem inspection and the carcass and viscera are inspected post-mortem by provincial or federal meat inspectors, depending on which system of inspection the plant is operating under. After chilling overnight, the carcasses are graded by Agriculture Canada meat graders. There are 5 grade classifications - A,B,C,D and E, and within each grade there are sub-classes 1 through 5, depending on the

2/ For a discussion of this topic see: St. Louis, Robt., A. Position on Vertical Integration in the Quebec Hog Sector, Proceedings, C.A.E.S. Annual Meeting and Workshops, 1979.

thickness of external fat on the carcasses. The main factors which are used to determine the carcass grade are weight, age, colour of fat and colour of lean.

Traditionally, the beef packer sold carcass beef as whole sides or front and hind quarters direct from his cooler to the cooler of the retail store. The product was delivered, usually in the packer's truck, after several days of aging in coolers of the packing plant. More recently, an increasing proportion of beef is being fabricated into primal cuts (chucks, ribs, short loins, sirloins and hips) and sub-primal cuts (Chart 4), vacuum-packaged in plastic film bags, boxed in cardboard cartons and then shipped to the retail store in this form. This so-called "boxed beef" is processed by beef packers, beef fabricators and retailers at centralized processing facilities. 3/

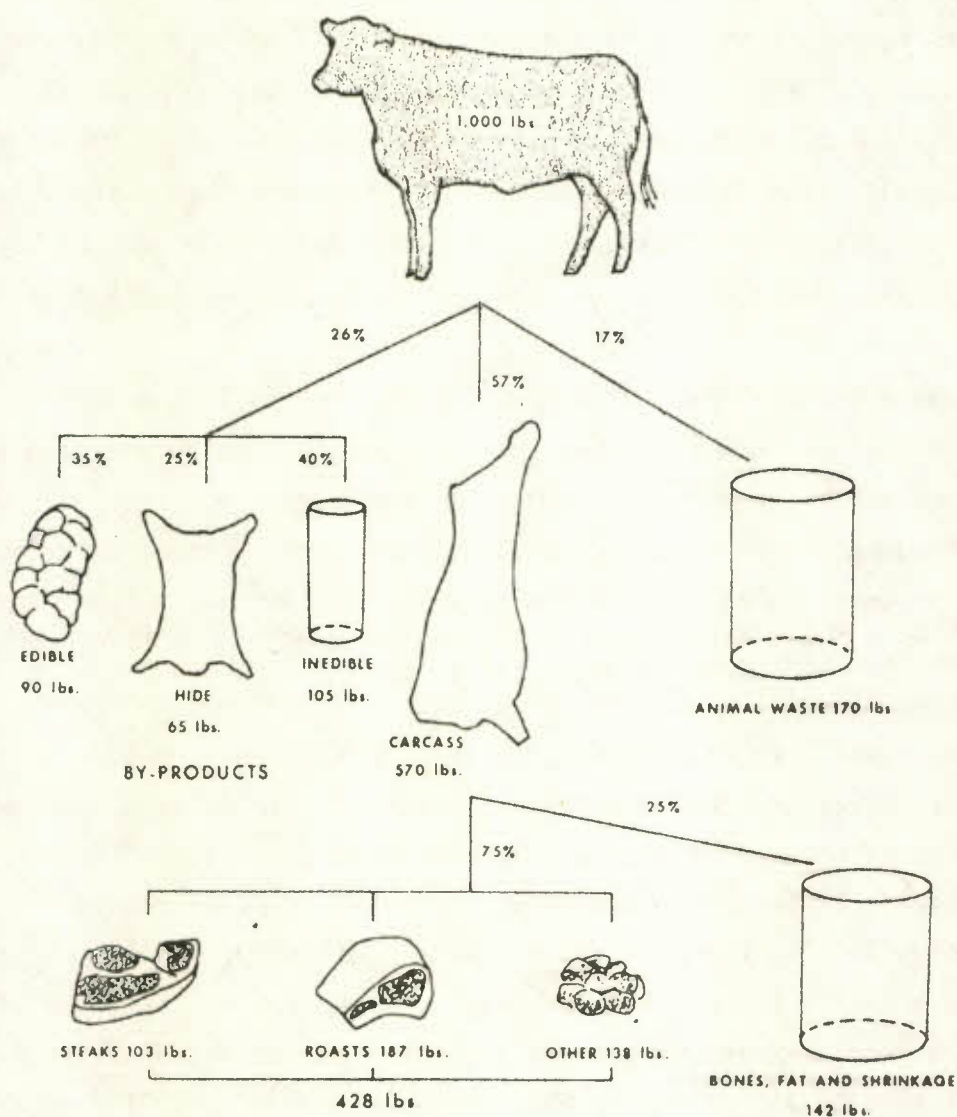
With the growth in "away-from-home" eating, increasing quantities of beef are being processed into hamburger patties, portion-controlled steaks and oven-prepared roasts, mainly by specialist meat purveying firms, for shipment to fast-food hamburger outlets and restaurants. A substantial proportion of these products is shipped in frozen form. Beef boning houses comprise another specialized and growing segment of the beef trade, boning out product for sausage and meat processing operations.

Pork Processing

Upon purchase hogs are trucked to the packing plant, usually by a commercial carrier. They are then electrically stunned, slaughtered and dressed; as in the case of beef, live hogs are inspected prior to slaughter and the carcass and viscera inspected post-mortem by federal or provincial meat inspectors, as appropriate to the particular plant. Currently, hog producers are paid on the basis of the quantity of lean meat and carcass weight of each individual hog. An indexing system is used to determine the market price for each hog in relation to market prices which are quoted for index 100 hogs. A premium is paid for hogs with a weight and backfat thickness index exceeding 100, while those indexing less than 100 are discounted. After the producer settlement is determined, the head, leaf lard and kidneys are removed and the

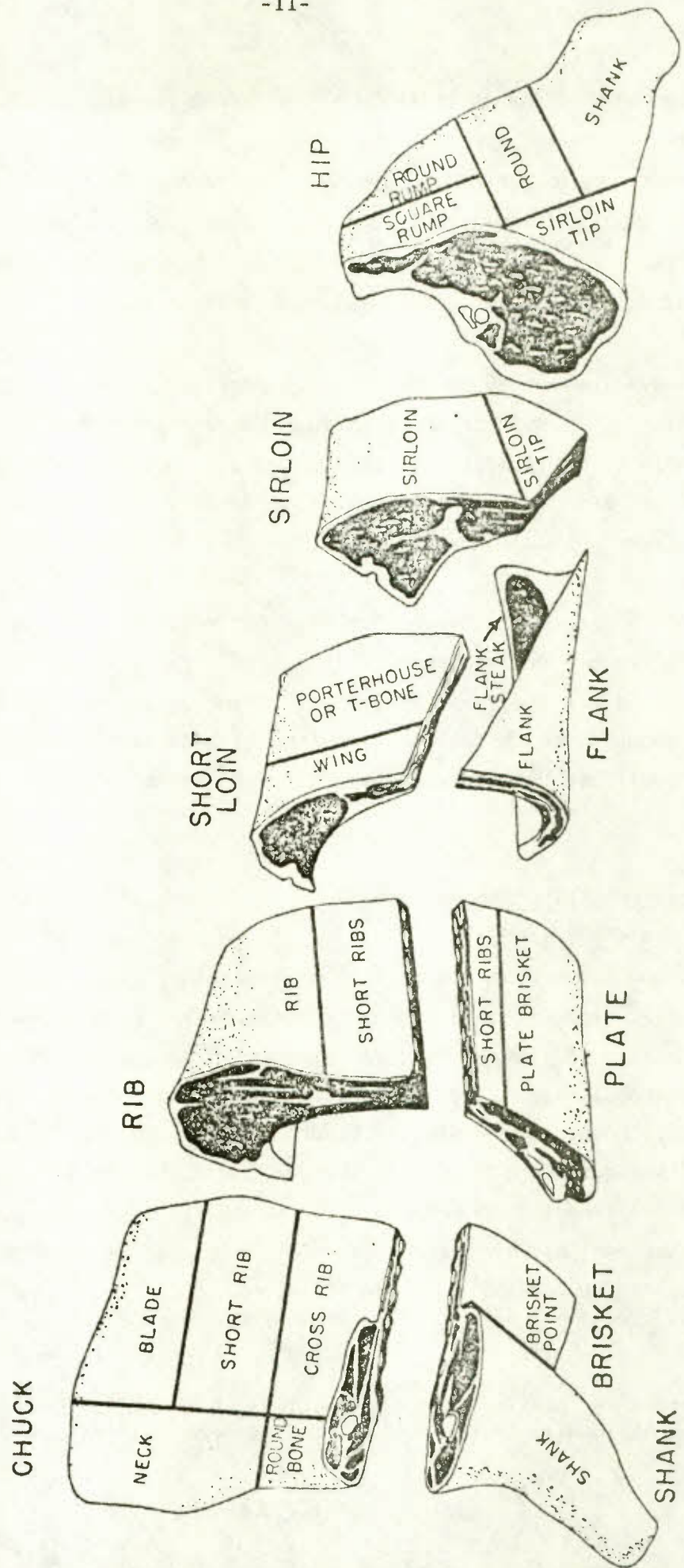
3/ For a discussion of this development see: Leckie, H.K. Some Economic Issues in Central Beef Breaking and Processing C.J.A.E. Workshop Proceedings Issue, 1979. It should also be noted that considerable western beef is shipped east in carcass form and ages in transit.

CHART III
DISPOSITION OF A FED BEEF STEER



SOURCE: Food Prices Review Board, Beef Pricing, Ottawa, June 1974

CHART IV
PRIMAL AND SUB-PRIMAL BEEF CUTS



SOURCE: Meat Industry Research Services Ltd.

carcass cooled for at least 24 hours before cutting into wholesale cuts. In the process of dressing the carcass, a number of edible and inedible by-products are yielded (Chart 5). The carcass is processed into fresh primal cuts and sub-primal cuts and a wide range of smoked, cooked, comminuted and canned products, including bacon, ham, cottage rolls, sausages, sliced cooked meats, lard and head cheese.

In general, about 46 pounds of fresh pork, principally loins, butts and spareribs, are sold from the average Canadian hog carcass, while 44 pounds are sold as cured meats of various forms. 20 pounds are sold as canned or cooked hams and about 12 pounds are utilized in the manufacture of sausages and other cooked and canned meats.

In contrast to beef, fresh pork does not require a period of hanging or "aging" to ensure tenderness. In general, the time lag between the slaughter of the hog and the fresh retail cuts being offered on the store counter is only about three to four days. In the case of most smoked and cured products, the usual time between slaughter and sale at retail is between four and ten days.

The Meat Distribution Sector

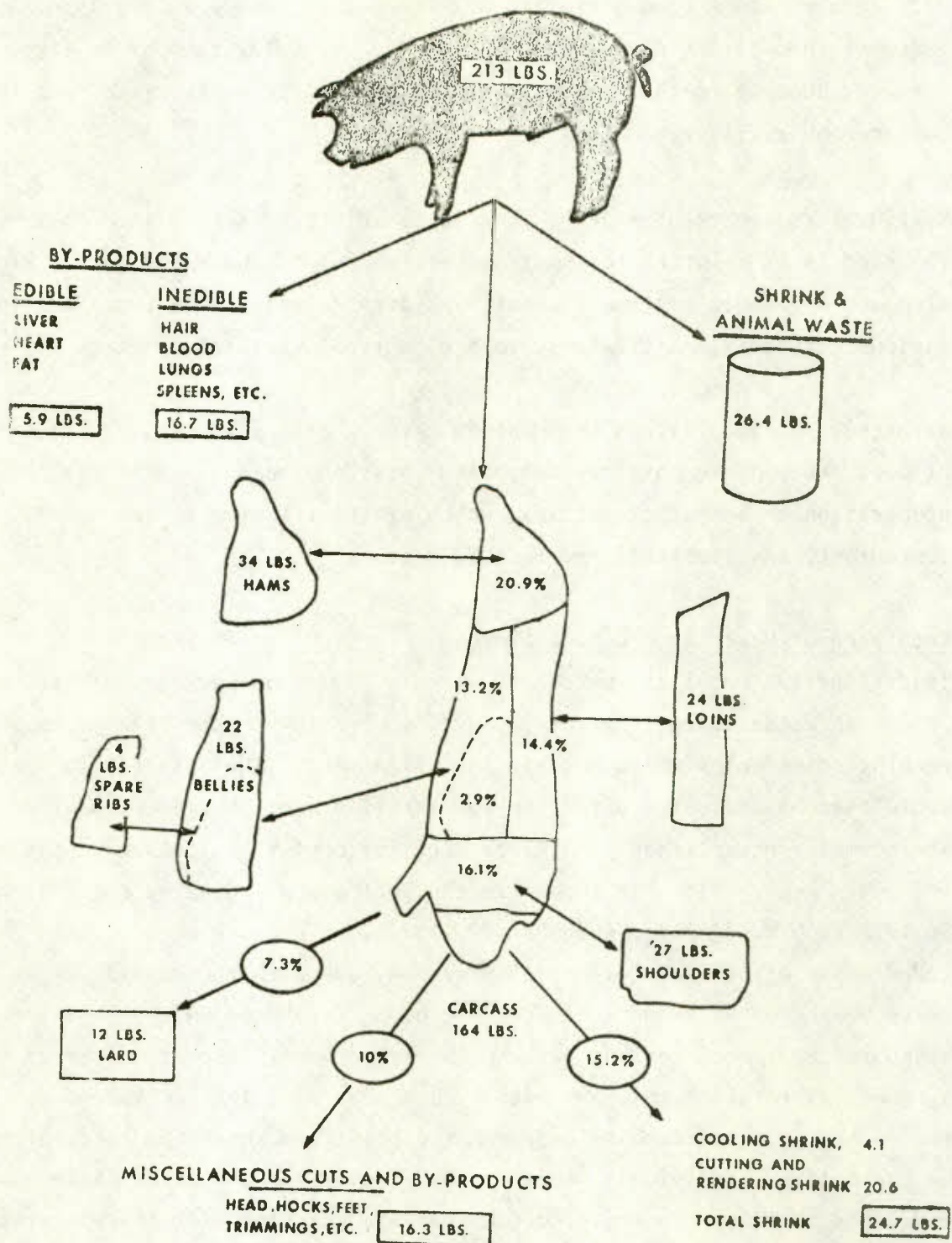
Meat Wholesaling

In the Canadian meat industry, the wholesaling function is very limited as most meat products move direct from the packer or processor to the retailer. The service of transporting the product is usually performed by the packer, a commercial carrier, or in some instances the retailer will use his own trucks. However, a wholesale trade has persisted in the Montreal market for the distribution of beef from Western Canada. ^{4/} Wholesalers buy railroad carloads of beef from western packers and distribute to eastern retailers and institutional buyers, performing such services as storage, breaking of carcasses into primal cuts and delivery.

^{4/} The structure and operation of the Montreal wholesale meat market are described in: Commission of Inquiry Into the Marketing of Beef and Veal, OP. CIT.

-12a-
CHART V

DISPOSITION OF A MARKET HOG



Historically, major packing firms operated branch houses or distribution outlets in various parts of the country, to which meat products were shipped from packing plants by refrigerated rail transport. The branch houses arranged local delivery to customers. However, with the development of refrigerated truck transportation, branch houses have now largely disappeared. Salesmen in outlying areas can now book orders, relay them by teletype and computer hook-up to the plant and the product is then shipped direct to the customer by refrigerated carrier.

Meat brokers represent another link in the distribution chain. Their chief function is in relation to inter-packer trading of wholesale cuts. Brokers may also act as import or export agents and arrange sales from suppliers to various customers, particularly in the Montreal wholesale market.

A further intermediary is the meat purveyor who buys wholesale cuts, mainly of beef, to prepare portion-controlled cuts, and boneless beef for the preparation of hamburger patties, which are distributed to the hotel, restaurant, institutional and fast food trade.

Retailing of Meat Through Food Stores

Traditionally, retailers purchased carcass beef from packers. After the price was established, the retail buyer would stamp the carcasses in the packinghouse cooler which met his specifications. The selected carcasses would then be delivered direct to the retail store. Wholesale beef prices are normally established in a given week for beef to be delivered the following week. With the change in the Beef Carcass Grading Regulations in 1972 (S.O.R. 72-364, September 27, 1972), which gave the Canadian beef industry an effective yield grading system, and with the growing rise of boxed beef, greater amounts of beef are being purchased on the basis of standardized specifications rather than by personal inspection. More recently, a number of retail firms have established meat distribution warehouses to which the packer delivers carcass and/or boxed beef from which the retailer makes up and delivers individual store orders. Several supermarket chains have developed their own centralized fabricating operations for the preparation of boxed primal and sub-primal cuts. Although several U.S. retail food firms

have been developing a system of centralized preparation of retail beef cuts, albeit with mixed success so far, as yet no Canadian retail chain has taken this further step.

When the beef is received at the retail store, it is stored in a refrigerated coolroom and then cut, trimmed, packaged, weighed, priced and displayed on a refrigerated display counter. Over 95 per cent of retail beef sales are in fresh form, with relatively small quantities of smoked and salted beef products, such as corned beef briskets, pastrami, cooked roast beef and sliced corned and smoked beef. Very little frozen beef is sold. On average, ground beef accounts for approximately 25 per cent of retail store beef sales. Ground beef is prepared in the store from one or more of store trimmings, purchased boneless beef (domestic and/or imported) and coarse ground beef (beef which has been blended, ground once and standardized with respect to fat levels at a centralized location and shipped in 12 or 20 pound "keeper" casings). Coarse ground beef is ground once, and that prepared from store trim and/or purchased boneless beef is ground twice, at the retail level.

The normal retail shelf life allowed beef is one day for ground beef and two days for fresh beef cuts. Most stores merchandise about 40 fresh beef cuts, although this can range as high as 80 in some stores. On average, beef accounts for approximately 10 to 12 per cent of total store sales.

In the case of pork the retailer purchases boxed fresh primal cuts and boxed processed products direct from the packer or processor. The packer may deliver these products direct to the retail store or else to the retailer's warehouse from whence individual store orders are picked, assembled and shipped on the retailer's trucks. Final cutting, packaging and weighing of fresh pork is carried out in the retail store. Most processed pork products are pre-packaged and only have to be priced at the store level, although a number of processed products, notably wieners and sausage are sometimes purchased in bulk and packaged in-store. Most stores merchandise about 30-40 fresh pork cuts and over 100 processed pork products, with several brands normally being offered for each of the latter products. Fresh pork normally accounts for about 5 per

cent of total store sales and processed meats (most of which contain a higher proportion of pork) for a further 5-8 per cent. Retailers normally allow a maximum display time of 2 days for fresh pork and one day for ground pork.

Retailing of Meat Through Food Service Outlets

The Commission of Inquiry into the Marketing of Beef and Veal estimated that food service outlets accounted for approximately 30 per cent of Canadian beef purchases. 5/ Three distinct types of food service outlet are found in Canada - hotels, restaurants and institutions. While there is functional similarity within each group, differences in size and service level are apparent. Hotels vary from large first-class chain establishments to local city, town or town hotels and/or motels. Similarly, restaurants range from the "white tablecloth" type, through cafes and diners, to chain fast-food outlets. Again, institutional organizations include industrial catering, cafeterias and government food service. Beef steak cuts, particularly ribs and loins, bacon and ground beef are the predominant types of meat purchased by food service outlets. By far the greatest volume of meat is in the form of ground beef sold through fast-food hamburger outlets. This has also been the area of greatest growth. Indeed, the rapid increase in the proportion of total beef sales accounted for by this sector has been the most significant development in the meat industry in the last 20 years. A recent report estimated that in 1978 126.3 million pounds of beef were used in prepared hamburgers sold through this channel. 6/

Trade in Livestock and Meat Products

Over 90 per cent of the beef and pork produced in Canada is sold on the domestic market. However, the Canadian market is strongly influenced by developments in the U.S. livestock economy as there are minimal tariff barriers and limited quantitative restrictions to trade between the two countries, which effectively form a single North American market. While certain animal health and meat inspection requirements must be met, livestock

5/ Commission of Inquiry Into the Marketing of Beef and Veal, OP. CIT.

6/ Broadwith, Hughes and Associates Ltd. A Study of the Present Sources and Channels of Supply for Major Food Inputs Utilized by the Fast Food Sector, a report prepared for the Food Policy Group, Consumer and Corporate Affairs, Canada, June, 1979

and meat can move across the border relatively freely. Thus the larger U.S. market effectively puts an "import ceiling" and "export floor" on livestock and meat price movements in Canada. When the price differential between the two markets exceeds the costs of tariffs, transportation and any difference in the currency values, then product flow will occur. Details of Canadian tariffs on the same items imported from Canada are presented in Appendix I. Live slaughter cattle can move freely to and from the U.S. At present, both countries have global and country-specified quotas on beef imports, but at the moment in neither case are these particularly restrictive. There is one tariff inequity re: Canadian processed beef entering the U.S. but this is in process of correction. Live hogs from Canada can move freely to the U.S. but health restrictions effectively bar U.S. slaughter hogs from Canada. Pork products, on the other hand, can flow either way, with minimal tariffs.

Apart from trade with the U.S. Canada has more recently developed a substantial market for pork cuts in Japan. In addition, small quantities of pork are exported to the Caribbean, Korea, New Zealand and the United Kingdom. Some canned ham is imported from Europe, usually Denmark. Substantial quantities of frozen boneless beef, manufacturing mutton and frozen lamb are imported from Australia and New Zealand.

Structure of the Canadian Red Meat Industry

Present numbers and trends in numbers and size of livestock farms in Canada have already been described earlier in this chapter. Despite trends to fewer farms and larger units, the livestock production industry is still characterized by a great number of relatively small independent operations.

In all provinces the majority of meat packing and processing plants and a very high proportion of total red meat volume is under federal meat inspection. Federally inspected plants which (a) process beef, (b) process pork and (c) manufacture sausages and processed meats are listed in Appendices II, III and IV, respectively. The meat packing industry is characterized by a small number of firms which are national in scope and a considerable number of regional and local firms. Canada Packers, J.M.Schneider Inc., Burns Foods Limited, Swift

Canadian Co. Ltd., Intercontinental Packers Ltd., and Hygrade Foods Ltd., operate processing plants in more than one province and distribute product across wide areas of the country. Most of these national firms are "full-line" packers. However, in all areas of the country, and especially in areas of heavy livestock production and urban population centres there are many local and regional packers and meat processors, most of which specialize in one or a few functions, such as beef slaughter, beef fabricating, hog slaughter or sausage manufacture, for example and produce a limited range of products. The breakdown of federally inspected meat plants by province and type of operation is presented in Table 5. Overall, the meat packing industry can be characterized as being moderately concentrated with several dominant national firms and a considerable number of smaller local or regional competitors. No current concentration figures are available. A study carried out by the Federal Department of Consumer and Corporate Affairs in 1965 found that the 4 largest enterprises in the category of slaughtering and meat processing accounted for 58 per cent of the total value of factory shipments and the largest 8 enterprises for 67 per cent. ^{7/} Capital investment does not comprise a major barrier to entry to this industry as a beef slaughter plant can be established for approximately \$5 million, a sausage manufacturing plant for about \$1 million and an integrated hog slaughtering and pork processing plant for about \$15-\$20 million. Advertising, through scale economies, and established brand and firm loyalties, do present something of an entry barrier, more especially in the case of processed pork products, but these are not a major problem. There are some economies of scale in operation, but these are soon offset in Canada by increasing assembly and/or delivery costs. Meat packing is relatively labour intensive, although substantial capital investment is required in land, buildings and equipment.

There are now fewer specialized butcher shops and a major part of retail meat sales are from food supermarkets. Typically, each store serves a local

^{7/}Department of Consumer and Corporate Affairs, Concentration in the Manufacturing Industries of Canada Director of Investigations and Research, Combines Investigation Act, Ottawa, 1971.

TABLE 5

PROVINCIAL DISTRIBUTION OF FEDERALLY-INSPECTED ESTABLISHMENTS
BY GENERAL TYPE, 1979

	Full Line Slaugh- tering & Proc- essing	Slaugh- ter & Fresh Meat	Proces- sing, Canning Etc.	Poultry Slaugh- ter or Proces- sing	Domes- tic Plants under Fed. Insp.	Sundry Live- stock
British Columbia	1	20	20	10	6	1
Alberta	5	12	13	6		4
Saskatchewan	1	5	1	3	15	
Manitoba	3	6	7	9	30	1
Ontario	7	25	83	26		1
Quebec	3	52	111	21		3
New Brunswick		2	5	3		1
Nova Scotia	1		2	3	4	
P.E.I.	1					
Newfoundland			2	2		
N.W.T.						1
TOTAL	22	112	224	83	55	12

SOURCE: Derived from: Agriculture Canada, Reference Listing of Approved Establishments Meat Hygiene Directorate, Food Production and Inspection Branch.

market of limited area. Four major types of retail food stores can be distinguished - the chain supermarket, the chain convenience store, the affiliated independent store and the unaffiliated independent store. At present in Canada, there are about the same number of chain stores as independent stores and the independents have been increasing their proportion slightly in recent years. However, the greater proportion of red meat sales is accounted for by chain stores. The major supermarket chains are the Great Atlantic and Pacific Tea Company of Canada Ltd., Canada Safeway Limited, Dominion Stores Limited, Loblaws Limited, Provigo, Inc., Steinbergs Limited and Woodward Stores Limited, while the largest convenience chains are 7-11 Limited, Mac's Milk Limited and Becker's Milk Company Limited.

As in the case of the meat packing industry, capital investment does not constitute a major barrier to entry, as a retail supermarket can be established for \$1.5 - \$2 million and a limited assortment store or a convenience store for as little as \$50,000. Again, the operation is labour intensive, there are some economies of scale in operation and in advertising. A few retailers have integrated backwards into meat processing, notably beef fabricating and sausage manufacturing.

Performance in the Red Meat Industry. 8/

Although there are limited published aggregate data, what there is indicates that historical profit levels are modest in both meat packing and food retailing, in each case averaging about one per cent of sales after tax. (Table 5).

8/

For a discussion of economic performance measures appropriate to the food industry see: Morris, John, "The Competitive Characteristics of the Canadian Food Processing Industry" in Loyns and Louks (eds), Competition and Public Policy on Competition in the Canadian Food Industry, Winnipeg, Department of Agricultural Economics and Farm Management, University of Manitoba, 1977 pp 27-46.

TABLE 6

PROFITABILITY OF MEAT PACKING AND FOOD RETAILING

Profitability Measure	Average 1964-1970	1971	1972	1973	1974
I. Meat Packing					
Pre-tax profit margin (%) (a)	1.6	1.6	1.9	1.8	1.7
Rate of return on share- holders' equity (%) (b)	6.8	7.3	8.7	10.7	8.9
II Food Distributing					
Pre-tax profit margin (%) (a)	3.2	2.2	1.5	1.7	2.1
Rate of return on share- holders' equity (%) (b)	11.6	9.2	7.2	8.7	11.1

(a) Ratio of net profit before tax to sales.

(b) Ratio of net profit after tax to shareholders equity,
including retained earnings.

SOURCE: Food Prices Review Board, Food Company Profits and Food Prices, Ottawa, October 1975.

Table 6 presents some more recent data on net profit margins and return on equity for a selected group of meat packers in Canada. In comparison with a similar group of U.S. firms, the Canadian group showed consistently lower performance on both measures. What data are available indicate that labour productivity has been increasing on both meat packing and meat retailing and both industries have shown moderate product and process innovation in recent years.

I. CANADA

COMPARISON OF MEAT PACKERS
(\$ millions)

	1975	1976	1977	1978	1979E
Sales	2945	3194	3551	4262	5000
Pre-tax income	61	67	52	45	90
Pre-tax/sales	2.06%	2.11%	1.48%	1.04%	1.80%
Return on Equity	10.4	10.9	8.6	6.9	12.7

II U.S.A.

	1975	1976	1977	1978	1979
	(\$ millions)				
Sales	4990	5643	5826	7230	8451
Pre-tax income	152	194	179	192	261
Pretax/sales Income	3.05%	3.44%	3.07%	2.65%	3.09%
Return on Equity	14.9	16.6	13.9	13.1	16.6

SOURCE: Tigert, Don, A Review of the Meat Packing Industry in Canada and the U.S.A.
Address to 60th Annual Conference, Meat Packers Council of Canada,
February 4, 1980.

Business Environment of the Red Meat Industry

To date, unlike the dairy and poultry industries, supply management marketing boards and production quotas have not been implemented in red meat livestock production. Thus, there is free entry into the industry, whether a beef cow-calf operation, a commercial beef feedlot a hog feeding or farrow-to-finish operation, a veal finishing operation or a sheep raising or finishing operation. Traditionally, beef producers and their trade organizations have strongly opposed government involvement in their industry. The major government involvement in the hog industry has been through legislation permitting the formation of producer marketing boards. Such boards which have the power to control all hog marketing, have been established in Alberta, Saskatchewan Manitoba, Ontario, New Brunswick, Nova Scotia and PrinceEdward Island.

Historically, per capita consumption of beef and pork has shown an upward trend, whereas mutton and lamb exhibits a secular downward trend. These trends are having the effect of reducing the number of sheep farms, while hog and beef cattle farms are decreasing in number, but increasing in stock carried and volume of output.

In the case of meat processing, distribution and retailing, there is also free entry to the industry. The major government involvement in the industry is through federal or provincial inspectors who participate directly in operations when the plant is operating. The major thrust of government concern is in the areas of meat wholesomeness , packaging and labelling and consumer awareness, generally.

Beef and pork supplies are characterized by marked seasonal, annual and cyclical variations. The most drastic of these movements occurs as a result of the so-called "cattle cycle", which typically comprises 4-5 years of rapidly declining beef supplies (and rising beef prices), followed six to seven years of gradually increasing beef supplies (and declining beef prices). ^{9/} A similar type of cycle of about 4 years duration occurs for hogs. The alternating expansion and contraction of supplies have drastic economic effects on all sectors of the red meat industry. During times of heavy meat supplies livestock prices, and therefore the incomes of livestock producers, decline. Paradoxically, these are times when the economics of meat processing and retailing improve, simply because the greater quantities of livestock available allow further utilization of plant capacity and the lower prices encourage increased consumption. When livestock supplies show cyclical reductions, producer prices and incomes improve, but the processing and retailing sector is usually in an unprofitable position because of reduced volumes of throughput, excess capacity and reduced consumer demand for the final product. Worker lay-offs, shorter operating hours and plant closings are common during the contraction phase of the cycle, beef in particular. These economic circumstances are particularly difficult for small firms, which process only one species, perform a function in which only limited value is added (beef slaughter, for example) and lack diversification and financial resources.

Red meats face an increasing number of substitute products. The most notable encroachment has been through the growth in per capita consumption of fresh, frozen and prepared poultry. A newer development has been the increasing usage of poultry meat, particularly turkey, in the preparation of processed meat products, especially wieners, bologna, salami, and even "turkey ham". Growing diet consciousness and concern with cholesterol has caused some consumers to eat more fish and chicken, largely at the expense of beef. In addition, during

^{9/} For a discussion of this subject see: Morris, John, An Economic Analysis of Cyclical Variations in the U.S. Beef Industry, Unpublished doctoral dissertation, Cornell University, Ithaca, N.Y. 1977

times of high meat prices, many consumers substitute eggs, cheese and pasta for red meats. Finally, the development of textured vegetable protein from soyabeans has created a further substitute for beef, particularly in hamburger and some processed meat products.

Present and Future Direction of the Red Meat Industry

While a number of other sectors of the Canadian agriculture and food system, for example, the dairy, broiler and turkey industries, have been adopting national supply management schemes and restrictive import quotas, in an effort to raise and to stabilize producer incomes, the red meat industry has to date preferred to continue operating under what is basically a free market system. At this stage it seems unlikely that a supply management system will be adopted for hogs, and it is even less likely for beef. ^{10/} Where centralized marketing of hogs utilizing a teletype auction with free access for all potential purchasers notably in Ontario, has been instituted, the level of efficiency in marketing and pricing has generally been enhanced and the system has been accepted by all participants. There is some likelihood that this type of competitive system will gain in acceptance, although beef producers remain opposed to greater market regulation.

In all sectors of the system - production, processing, distribution and retailing - there will be increasing use of automation (especially in the livestock slaughtering and carcass dressing process) and application of computer technology in processing and distribution systems, management information systems and process and financial control systems, in an effort to raise labour productivity and reduce unit processing and distribution costs.

New products will continue to be developed and marketed and the processing sector, in particular, will strive to increase the amount of value added in processing. At the same time, traditional meat products, especially processed meat items will face increasing competition from turkey-based products and simulated meat products and meat blend products derived from vegetable proteins.

^{10/} The recent producer rejection of a hog marketing board in Quebec and the consistent ongoing free market philosophy of all major beef producer groups lends support to this argument.

Some evidence is developing of a slow-down and a possible future reversal of the past trend for retailers to integrate backwards into processing, particularly of boxed beef and processed pork products.

CHAPTER 2.

A REVIEW OF REGULATIONS AFFECTING THE RED MEAT INDUSTRY

An Overview of Existing Regulations

The red meat industry is subject to varying degrees of regulations from livestock production right through to final product consumption. A first basis for classifying present statutes, regulations and related administrative directives is according to the legislative authority, that is, whether federal, provincial or municipal. Under the Canadian constitution, both written in the BNA Act and in legal precedents, certain powers are exercised by Parliament and certain others by Provincial Legislatures. The Legislatures, in turn delegate certain responsibilities and powers to municipal authorities. In addition, at both the Federal and Provincial levels, subordinate legislative powers are delegated to various boards, commissions and other such constituted authorities.

The BNA Act does not contain any specific sections to provide for the division of authority for food regulation, per se, between the federal and provincial governments, which implies that this is the domain of the Federal Government. ^{1/} However, Section 95, Agriculture, provides both the federal and provincial levels of government with authority to legislate on matters pertaining to agriculture, with the proviso that nothing in the provincial legislation be inconsistent with federal law. Section 91 (27) of the BNA Act, which assigns to the Federal Parliament jurisdiction over criminal law, has been invoked to support prohibitory enactments to protect the public from health hazards and fraud, such as in the Food and Drugs Act (R.S.C. 1970, c. F-27). Similarly, Section 91 (2), gives the Federal Government the right to regulate trade and commerce and provides the basis for the Meat Inspection Act (R.S.C. 1970 c.M-7) and the Canadian Agricultural Products Standards Act (R.S.C. 1970, c. A-8), for example.

The major legislation affecting the red meat industry involves the areas of

^{1/} Control of activity not specifically reserved within the BNA Act for provincial control falls within the control of the Federal Government.

product wholesomeness and packaging and labelling. In practice, most such regulations are administered by Departments of Agriculture (in some cases with Food included in the title), Departments with Health as a major responsibility and Departments charged with overseeing Consumer Affairs. In matters pertaining to agriculture, both Federal and Provincial authorities are involved, while in practice the health area involves participation by all three levels of government. At present, in both Alberta and Ontario, for example, the provincial act respecting public health, which has extensive provisions respecting sanitary and wholesome food handling practices, is primarily, and in some areas solely, administered by municipal authorities. Similarly, most of the many controls on waste disposal from meat processing plants and the control of odours and similar environmental concerns, while deriving their authority from federal and provincial statutes, are administered in the main by municipalities.

Another consideration in classification is whether the statute or regulation is general or specific. There are a number of federal, provincial and municipal regulations which are specific to the meat industry. At the federal level these include the Meat Inspection Act (R.S.C. 1970, c.M-7) and Regulations, the Humane Slaughter of Food Animals Act (R.S.C. 1970, c. H-10) the Meat and Canned Foods Act (R.S.C. 1970, c M-6), the Meat and Poultry Products Plant Liquid Effluent Regulations of the Fisheries Act (R.S.C. 1970, c.F-14) and the Stockyards Regulations of the Livestock and Livestock Products Act (R.S.C. 1970, c. L-8). ^{2/} In the case of provincial and municipal regulations, those which are specific to the red meat industry show some variation from one authority to another and among geographic jurisdictions. In Ontario, for example, regulations specific to the red meat industry include the Meat Inspection Act (Ont.) (R.S.O. c266) and the Slaughtering and Meat Processing Plants Regulations (Reg.719) of the Public Health Act. Similarly, in Alberta the specific acts include the Meat Inspection Act (R.S.A. 1972, c.117) and Regulations; Livestock and Livestock Products Act (R.S.A. 1970, c.215) and Regulations, the Horned Cattle Purchases Act (R.S.A. 1970, c. 173), the Livestock Assembling Station Regulations and the Livestock Market Regulations of the Livestock Diseases Act (S.A. 1971, c.64) and the Provincial Board of Health Regulations Respecting Abattoirs, Regulations Respecting the Preparation, Manufacture Processing and Site of Canned Meat or Canned Meat Food Products and Regulations Respecting

^{2/} It should also be noted (see Appendix V, page 151) that the Canadian Agricultural Products Standards Act regulates grade standards.

the Keeping of Livestock and Poultry of the Public Health Act (R.S.A. 1970, c 294). At the municipal level, in Edmonton, for example, regulations directed specifically at the red meat industry include, the Hide Warehouses By-law (B.L. 37), particular amendments of the Public Health By-law (B.L.9), particular amendments to the Licenses By-law (B.L. 25) specific to butchers shops and a by-law specific to one meat processing company (B.L. 870).

On the other hand, a great number of more general regulations, such as those concerned with labour relations, environmental concerns, competition policy, taxation, trade and tariffs, to name but a few, while having an important effect on the meat industry and sometimes including a clause specific to the meat or livestock industry were for the most part not enacted for this industry alone. A comprehensive listing of all Federal regulations affecting the red meat industry, catalogued on the basis of the Act under which they occur, is presented in Appendix V. Similarly regulations for Ontario, Alberta and the City of Edmonton are listed in Appendices VI, VII and VIII, respectively.

Regulations affecting the meat industry may also be classified according to their major purpose and the main party or parties to whom the benefits of the regulations accrue. For example, some are designed for the specific purpose of protecting the health and safety of consumers; others have as their major purpose improving consumer information to aid purchasing and dietary choices; still others have as their primary, if not sole, concern, the broad public interest.

A Brief Historical Background to Regulations Affecting the Red Meat Industry

Both the earliest, and to date the most important, regulations affecting the red meat industry are those related to meat inspection and product wholesomeness. The first laws for the protection of the meat-consuming public date back to pioneer times. As early as 1707 an early public health act decreed that an officer of the King had to be present when a food animal was slaughtered. By 1805 there were regulations in effect covering the curing, packing and inspection of beef and pork. 3/

3/ It is worth noting that by this time the term 'meat packer' had come to be applied to firms who salted meat and packed it in barrels. Hence 'salaison' (or salter) and 'meat packer' are synonymous terms.

The first legislation to guard against the adulteration of food, drink and drugs in Canada was 'The Inland Revenue Act' passed by Parliament in 1875. This was, in fact, the first such set of laws of national scope passed in the Americas. The first annual report on the administration of these regulations was issued in 1877 and it indicated a rather alarming portion - some 51.5% of food samples examined (mainly spices and milk) were adulterated to some extent. 4/

In 1884, the first major amendment to this Act, from then on known as the Adulteration Act, was enacted, creating a Chief Analyst. Later, in 1910, the first standards for various foods, were promulgated, after consultation with the food industry. There are now some 300 so-called 'standardized foods', the composition of which is specified in the Food and Drug Regulations.

The Food and Drugs Division was set up in 1919, and took over administration of the Adulteration Act, which in 1920 was repealed and replaced by the Food and Drugs Act. Following numerous amendment over the years, the Food and Drugs Act was revised and up-dated in 1953 and again in 1970 (R.S.C. 1970, c.F-27).

Early in the present century the United States and Canada enacted Federal Meat Inspection laws at about the same time - the U.S. in 1906 and Canada in 1907. In this country some 27 establishments applied for, and received, federal inspection shortly after it was available. Federal inspection was mandatory for any firms shipping meat interprovincially (or in the U.S. inter-state) or for firms engaged in export trade.

The Canada Meat Inspection Act and Regulations were revised and updated in 1959 and again in 1979 (P.C. 1979-2123, August 9, 1979).

At present there are two distinct and separate meat inspection systems in Canada - the federal system and a set of provincial systems. Product from one system cannot intermingle with the other, and provincially-inspected meat cannot enter export or interprovincial trade. Both systems conduct similar post-mortem carcass examinations at time of slaughter, but some significant differences exist in technical standards for the construction of abattoirs, for example.

4/ Food, Health and the Law - Publication of the Department of Health and Welfare, Ottawa.

In recent years various Canadian provinces have moved to tighten up the regulations governing local livestock slaughter, and in some cases local meat processing as well. Some provinces, for example Ontario and Quebec, have their own provincial meat inspection systems, applying their own inspection stamp or "legends". Other provinces, for example Manitoba, Saskatchewan and British Columbia, have arranged for the federal government to administer, under contract, their meat inspection services, using a domestic inspection legend which is visibly different from the federal legend. At the same time, the number of federally inspected establishments and professional meat inspection staff to man them, has steadily increased over the years, to the point where over 80 per cent of the commercial livestock slaughter and meat output is accounted for by federally inspected establishments.

The U.S.A. has progressed somewhat more rapidly than Canada toward a single national standard of meat inspection. About ten years ago, through the passage of the U.S. Wholesome Meat Act, state inspection systems were given the option of upgrading to the federal standard within a reasonable time, or failing this, the federal government would step in and operate the system. To date, Canada has not used this approach, and we still retain a dual system, with some variances between federal and provincial standards, and from one province to another.

Another development in the past decade has been the stationing in Canada of U.S. meat inspection officials, who monitor the operation of our federal inspection system. ^{5/}Present U.S. law requires this inspection of foreign establishments who export meat for American consumption. Canada adopts a different policy of monitoring foreign inspection systems rather than a constant checking of individual foreign plants. An official list is maintained of countries approved as eligible to ship meat to Canada, considering both their meat inspection standards and their animal health status. Canadian officials visit various countries as often as necessary to check the inspection standards in effect.

In 1960, after extensive research and study, the Humane Slaughter of Food Animals Act, came into operation. For hogs, humane slaughter methods include immobilization by CO₂ gas, and electrical stunning. Cattle, for the most part are mechanically stunned.

^{5/} EEC countries have taken similar steps individually and are now moving toward consolidation of such activities as a community.

Legislation for the grading of live hogs sold at terminal markets was instituted in 1922. Within ten years carcass or 'rail' grading began, on an optional basis at first, and then became the only official basis, starting in 1940. By joint agreement between hog producers and meat packers a carcass indexing system was initiated in 1969 in which a carcass grade assigned by a government grading official became the universal basis for producer settlement. Official carcass grading of beef commenced in 1928, with the top grade being assigned a 'Red' brand and the second grade a 'Blue' brand. In 1972, the beef grading system was extensively revised to a yield grade basis. Even so, grading is not an essential component of all producer settlements for beef and the majority of cattle are still sold "on the hoof", that is, on a liveweight, ungraded basis. At the same time carcass grades do serve as the basis for wholesale trading in beef.

The Consumer Packaging and Labelling Act was gazetted in 1970 (R.S.C. 1970-71-72, c. 41) and, after a period to allow industry to make the necessary adjustments, came into full operation in March, 1976. This Act included a "Best Before" or Durable Life Dating Regulation for perishable foods, including pre-packaged meats. Another requirement under this Act was that a dual weight declaration (avoirdupois and metric), paving the way for a metrication programme. A bilingual labelling requirement was also part of this.

Present Federal Regulations Affecting the Red Meat Industry

There are many current federal acts and regulations which impinge to a greater or lesser extent on the meat industry. These are listed in Appendix V.

However, there are five major regulations which have the greatest impact on the red meat industry. These are the Meat Inspection Act (R.S.C. 1970, c.M-7) and Regulations, the Food and Drugs Act (R.S.C. 1970, c.G-2) and Regulations, the Consumer Packaging and Labelling Act (R.S.C. 1970-71-72, c.41) and Regulations and the Effluent Regulations of the Fisheries Act (R.S.C. 1970, c.F-14) , and the Canadian Agric. Products Standards Act. (R.S.C. 1970, c.A.8)

Meat Inspection Regulations

The latest version of the Canada Meat Inspection Regulations, considerably revised and updated from the previous 1959 edition, as amended, was enacted

by order-in-council P.C. 1979-2123, gazetted August 10, 1979. In effect this document sets forth all the main ground rules for the operation of federally inspected meat plants, including both slaughterers and processors, deriving its basic authority from the Meat Inspection Act, 1955 R.S.C. c.36.

The initial part of these Regulations comprises detailed interpretations of terminology used throughout. Part I of the Regulations then sets forth in detail the conditions for securing initial registration of an establishment, the standards under which they may operate and very detailed provisions for plant maintenance and operation, including the checking of health status of employees. Requirements for the thermal processing of meat are defined, to ensure adequate and safe preparation.

Part II of the Regulations covers ante-mortem inspection procedures in slaughtering establishments. Part III then lays down requirements for the slaughtering operation.

Procedures to be followed in post-mortem inspection of the carcass and viscera of each head of livestock are detailed in Part IV. Then in Part V are described in full detail the permissible and required procedures for meat products approved as food, including sanitary standards, additives, fillers and binders and the requirements for prepared meat products and by-product meats. This section ties in with the Food and Drugs Act.

Part VIII outlines the packaging requirements, these being in line with provisions of the Consumer Packaging and Labelling Act. Part IX covers marking of packages and cartons, and includes explicit detail.

Part X of the Meat Inspection Regulations relates to import requirements, and Part XI covers administrative procedures, including the application of the Inspection Legend for human food products and the Animal Food Mark used on products destined for animal feed.

These Regulations tie in with the Foods and Drugs Act and Regulations and the Consumer Packaging and Labelling Act and Regulations. Supplementary to the Regulations themselves are periodic circulars and directives issued by the Meat Hygiene Directorate. The documents explain compliance and enforcement procedures in greater detail, as required.

In brief, the Meat Inspection Act and Regulations comprise the basic ground rules for both the operators of federally inspected establishments and the administrators who function under this Act. The provisions of the Act cover a wide range of requirements, from type of facilities permitted, through sanitation and hygiene requirements, strict separation of edible and inedible products, cooking, smoking and curing procedures, requirements for, and approval of, ingredients, to approval of packaging and labelling.

Food and Drugs Regulations

The federal Food and Drugs Act (R.S.C. 1970, c.F-27) in itself is a relatively concise document of less than half a dozen pages, and, of these, it is mainly Part I, Sections 3 to 7, comprising less than a page, which deals with food. Basically the 'food' provisions of the Act are aimed at protecting the public against the sale of unfit, unwholesome, adulterated, or harmful food products, as well as checking misleading or deceptive practices in presenting food to the public, or in offering products which may be confused with food.

It is the Food and Drug Regulations (completely revised in 1953-54 and amended frequently since) which spell out in detail the requirements under the Act. Then it is Part B of the Food and Drug Regulations which apply to food processing and manufacture, and Division 14 of Part B pertain specifically to meat and meat preparations. Division 16 pertains to food additives, and Division 22 has reference to poultry and poultry meat. Division 1 of Part B covers labelling requirements for various products, including meat.

In Division 14, Sections B.14.002 and 14.003 define meat and meat by-products, respectively. Then follows in succession a series of regulations covering

such subjects as the composition of meat binders and curing pickles, regulations against adulteration and dead animal product, regulations covering heat processing requirements, fat content of ground meat, edible use of horse meat, composition of prepared meats and maximum binder levels, regulations respecting sausage, meat spreads, meat loaf, and luncheon meat. In short, the Food and Drug regulations cover rather exhaustively the required standards for all usual kinds of meat and meat by-product food items, including extended and simulated meat products.

Meat packers, therefore, must not only comply with the meat inspection regulations, but with the Food and Drug regulations under Section B.14 as well, and meat inspectors monitor compliance with Food and Drug Regulations in all establishments. In addition, as before noted, the Meat Hygiene Directorate, in giving prior approval to establishments of all meat packaging samples, ascertains that such complies with the Consumer Packaging and Labelling Act (R.S.C. 1970-71-72, c. 41)

Consumer Packaging and Labelling Regulations

These regulations, made by P.C. 1974-339, under the Consumer Packaging and Labelling Act, (R.S.C. 1970-71-72, c.41) were gazetted February 26, 1974 and came into full effect March 1, 1976 as far as meat products were concerned. From March 1, 1974 products regulated by the Meat Inspection Act, the Fish Inspection Act, the Dairy Products Act, the Maple Products Industry Act, the Agricultural Products Standards Act and the Food and Drugs Act were given a 24 month exemption period from various sections of the Act and Regulations.

The Consumer Packaging and Labelling regulations impose various broad requirements, viz:

- Bilingual labelling provisions
- Various mandatory information on the label shown on the principal display panel (net quantity, common name, name and address of seller, listing of ingredients, etc.)
- Manner of showing number of servings.
- Manner of depicting flavourings, etc.

Effluent Regulations

Extensive regulations governing liquid effluent standards for all new or expanded meat and poultry plants made under the Fisheries Act (R.S.C. 1970, c.F-14) were gazetted March 31, 1977 (P.C. 1977-847 March 30/77). These same regulations include liquid effluent guidelines for all existing plants.

The waste of slaughtering plants comprises a good deal of water which contains biological material of various kinds, and thus the effluent must be treated extensively to comply with these newer regulations. Plants which only do meat processing generally have less demanding waste disposal problems.

Present Provincial Regulations Affecting the Red Meat Industry

Ontario Regulations

A complete listing of Ontario Regulations which impinge on the red meat industry is presented in Appendix VI. Those regulations which have a direct effect, and include provisions specific to the red meat industry, include the Meat Inspection Act (Ont.), the Beef Cattle Marketing Act, Farm Products Grades and Sales Act, Livestock and Livestock Products Act and the Public Health Act.

(i) Meat Inspection Act (Ont.)

This Act provides for the inspection of animals and carcasses in slaughtering plants under provincial inspection and sets sanitary standards for such plants. The Act is administered by the Veterinary Services Branch of the Ministry of Agriculture and Food.

(ii) Beef Cattle Marketing Act

This Act includes a provision which enables regulations for overseeing the weighing of beef carcasses. The Act is administered by the Livestock Branch of the Ministry of Agriculture and Food.

(iii) Farm Products Grades and Sales Act

This Act establishes carcass grades for beef, hogs, veal, lamb and mutton and poultry. In the main, these are identical with federal grades, thus authorizing grading where interprovincial or export trade is not involved.

The grading function is carried out by federal grading staff. This Act is administered by the Livestock Branch of the Ministry of Agriculture and Food.

(iv) Livestock and Livestock Products Act

This act provides provincial authority for grading livestock and poultry products, and also authorizes regulations respecting stockyards, livestock exchanges, livestock shippers, etc. The Act is administered by the Livestock Branch of the Ministry of Agriculture and Food.

(v) Public Health Act

This Act, now being revised as the Health Protection Act, includes among its major regulations Regulation 719 respecting slaughtering and meat processing plants and Regulation 972/75 respecting food premises, including retail meat stores, and particularly food handling practices in such premises.

Under Regulation 719, smaller abbatoirs and meat processing plants which are not provincially or federally inspected, are monitored by inspectors of the Community Health Services Branch of the Ministry.

Regulation 972 provides for the licensing and inspection of all premises where food is manufactured, processed, prepared, stored, handled, displayed, transported or sold or offered for sale, including locker plants or vending machines. It is thus, a broad-ranging and important regulation. Municipal authorities derive their authority, under this regulation, for inspecting various types of food outlets.

This Act is administered by the Ministry of Health.

In addition to the above acts, which contain provisions specific to the red meat industry, there are a number of acts which are more general in nature, but do have an influence on this industry, including the following:

(i) Livestock Community Sales Act

There are a number of local auction markets and sales farms throughout Southern Ontario where livestock are sold. This Act enables the regulation, licensing, inspection and bonding of 5 classes of local auctions.

(ii) Dead Animals Disposal Act

This is an important Act for the protection of the public against the possibility of unwholesome meat from deadstock being sold. It enables the licensing and regulation of persons involved in the disposal, for pet food or rendering, of animals dying on farms and preventing such animals from entering regular market and slaughter channels.^{6/}

(iii) Farm Products Payments Act

This legislation enables funds to be collected and set aside to provide protection for livestock or dairy producers in the event of buyer insolvency. It is now used for dairy products and is in process of being considered for added protection to livestock producers.

(iv) Farm Products Marketing Act

This act enables the delegation of extensive powers to producer commodity boards to direct and control marketing and sale of their products, including, in the ultimate the setting of production or marketing quotas and the fixing of producer prices. In Ontario hogs are sold through a producer board, but beef cattle are not. The Pork Marketing Board does not set quotas or prices. Broiler chickens and turkeys are marketed through local boards who fix producer quotas and set prices.

(v) Occupational Health and Safety Act (1978)

The Occupational Health and Safety Division of the Ministry administers the Construction Safety Act, the Industrial Safety Act and the Employees Health and Safety Act. Regulations under these acts are designed to promote the safety of employees in the construction, mining and other industries, including meat processing.

(vi) Ontario Labour Relations Act

This Act administered by the Labour Relations Board, provides for collective bargaining of wages and employee benefits. It is of major importance to the meat industry. Any strikes or lockouts which occur in the meat industry are of prime concern not only to the part of the meat industry involved but also to livestock producers, meat consumers, retailers and the entire meat marketing chain, since there is the dual pressure to slaughter and process all livestock ready for market and to keep retail meat outlets constantly supplied.

^{6/} In 1975 prosecutions were instituted when an illicit trade in unfit meat was uncovered in Eastern Canada, involving product from Ontario channelled into Quebec. This led to a Crime Probe Inquiry in Quebec and a tightening of enforcement. No federally inspected plants were involved.

(vii) Ontario Water Resources Act

This Act, and the Regulations promulgated under it, provides the basic legislation governing municipal water supply and sewage services. Ontario Regulation 54/76 transfers the administration of certain sections of the Act to the Ministry of Consumer and Commercial Relations.

(viii) Environmental Protection Act (1971)

This is a broad-ranging Act regulating the discharge of effluent or other emittant into the natural environment, including air, water, etc. It covers such topics as sewage system installations, motor vehicle emissions, litter, and given authority for controlling various polluting practices.

(ix) Environmental Assessment Act (1975)

This Act provides for the setting up of an Environmental Assessment Board with authority to hold hearings and render decisions with respect to environmental assessment projects proposed by Government or industry.

(x) The Pesticides Act (1973)

This Act provides for the control and regulation of service activities related to the extermination of insect and other pests, including the use of extermination materials and equipment, and the sale of chemicals and other toxic materials.

(xi) Ontario Highway Traffic Act

This Act provides for the regulation of highway traffic, including the operation of commercial motor vehicles (trucks and trailers).

(xii) Public Commercial Vehicles Act

This Act provides for the licensing (P.C.V.) and regulation of the operation of commercial vehicles including livestock trucks and refrigerated vehicles for meat transport and delivery.

(xiii) Ontario Building Code

This Act defines construction standards for public protection. In summary it is apparent that the Ontario Ministry of Agriculture and Food administers a number of Acts which are of considerable significance to the livestock and meat industry. The Livestock Branch and the Veterinary Services Branch are two of the chief administering agencies involved. The Ministry of Agriculture and Food co-operates with the Ministry of Health in various activities for the protection of the meat-consuming public. As well, provincial authorities

co-ordinate their efforts with the federal departments which administer the Canada Meat Inspection Act and the Food and Drugs Act . The Department of Consumer and Corporate Relations administers acts concerned with consumer protection and business practices. These activities are co-ordinated with those of the corresponding federal authorities. Similarly there is federal-provincial co-operation in the area of environmental protection.

The Labour Ministry administers a number of Acts aimed at promoting the health and safety of industrial employees, providing authority for collective bargaining, and providing for compensation for employees injured or killed in line of duty.

Other legislation administered by the Ministry of Labour includes the Workmen's Compensation Act and Insurance Act, and the Ontario Human Rights Code. The Workmen's Compensation Board administers the Compensation Act and the annual cost of meat industry workers off work due to injuries on the job is of increasing concern. The meat industry conducts an active safety programme.

The Human Rights Code is designed to prevent discrimination in employment due to race, religion, age or other personal considerations. It is generally not a serious problem for employers in the red meat industry.

Alberta Regulations

A comprehensive list of Alberta Regulations which affect the red meat industry are given in Appendix VII. The Acts which are specific to, or have provisions specific to the red meat industry are the Meat Inspection Act (R.S.A. 1972, c. 117) the Livestock and Livestock Products Act (R.S.A. 1970, c. 215), the Public Health Act (R.S.A. 1970, c. 294) the Clean Air Act (S.A. 1941 c.16) and the Clean Water Act (S.A. 1971, c.17)

The provisions of these Acts are similar to those for the corresponding Ontario legislation .

(i) The Meat Inspection Act

Under this Act all meat sold in Alberta must be inspected, apart from a farmer's slaughter solely for his own consumption. The carcass inspection procedures involved are identical with those for federal meat inspection, but the provincial system makes greater use of specially trained meat inspectors rather than veterinarians. Also, provincial inspection requirements for premises are not quite as stringent as those under the federal inspection system. The Act is administered by the Animal Health Division of Alberta Agriculture.

(ii) The Livestock and Livestock Products Act

This Act includes regulations for the weighing of beef carcasses, ribbon branding of beef, mutton, lamb and veal carcasses, stockyard licensing and operating regulations and bonding of livestock purchasers, including meat packers. This Act is administered by the Livestock Branch of Alberta Agriculture.

(iii) Public Health Act

This Act incorporates specific health regulations for abattoirs, preparation and sale of canned meats and also for premises handling foods, including red meats. This Act is administered by the Provincial Board of Health, which in turn delegates authority to 29 local Boards of Health.

(iv) The Clean Air Act and the Clean Water Act

Under these Acts an existing meat processing company must apply for, and receive, a licence to operate and a firm wishing to construct a new facility must apply for and receive a licence to construct. In the case of a new plant an environmental impact statement may have to be filed. Under the Clean Air Act odorous emissions are the main concern, and hence, stock pens, manure handling systems, slaughter floor vents, cooking and smoking facilities and rendering equipment are of major concern. The Clean Water Act is primarily concerned with the quality of water discharged from the plant. If this water is discharged into a municipal system, the plant can be exempted from the Clean Water Act. If not, the water quality must comply with b.o.d., grease, suspended solids, pH, ammonia and toxicity standards. In addition, in the case of a new plant the Department of Municipal Affairs can under the Provincial Planning Act influence the plant location and require a "buffer zone" around the plant. The licences

are valid for a period of five years and are not automatically renewed. If water is drawn from other than municipal supplies, regulations of the Water Resources Act (R.S.A. 1970 c.388) and Ground Water Control Act (R.S.A. 1970, c.12) must be complied with.

As in Ontario, there are numbers of provincial acts of a more general nature which have an influence on the read meat industry. These include the Alberta Labour Act, the Animal Protection Act, the Boiler and Pressure Vessels Act, 1975 the Brand Act, the Feeder Associations Guarantee Act, the Highway Traffic Act, Livestock Brand Inspection Act, the Marketing of Agricultural Products Act the Municipal Government Act, the Occupational Health and Safety Act and the Workers' Compensation Act.

Municipal Regulations Affecting the Red Meat Industry.

Most municipalities have a number of regulations which have an effect on the red meat industry. The relevant regulations in Edmonton, as an example, are presented in Appendix VIII.

Those directed specifically at this industry are the Hide Warehouse By-law (B.L.37) particular amendments to the Public Health By-law (B.L.9) and particular amendments to the Licenses By-law (B.L.25)

The Hide Warehouse By-law is part of a set of business area by-laws which prescribe areas for certain businesses considered to be offensive. The Public Health By-law includes specific provisions for inspection and approval of premises handling and selling food, which includes red meats. The Licenses By-law requires that all butcher shops (butcher being defined as "any person cutting, processing or packaging meat and exposing, selling or offering the said meat for sale by retail") obtain a license from the Inspector of Licenses and that "all premises in which the butcher business is carried on shall at all times conform in all respects to any regulations duly passed pursuant to the Public Health Act, the Alberta Building Code and to the relevant by-laws of the City of Edmonton". A similar license is also required for restaurants, a major outlet for red meats.

Another by-law while not specific to the red meat industry, does have major implications for this industry. This is the Sewers By-law (B.L. 3875) which imposes maximum levels for sewer discharges and allows for the imposition of surcharges on overages.

Other by-laws which have a significant effect on the red meat industry include those related to:

Planning and Zoning By-laws

Noise and dust control by-laws

Roads and Traffic matters, snow removal

Waste Management, sewage treatment, etc.

Local public utility matters and public works (sewers, etc.)

Building, plumbing and electrical inspection

Local humane society activities

Fire and police protection

Regulation at the Farm Level

Any farm-level regulations which affect the level or pattern of livestock supplies, animal slaughter weights, the institutional marketing structure, animal feeding or animal health have an impact on the meat processing, distribution and retailing sectors.

A few examples may serve to indicate the interlocking relationships:

- (i) Livestock stabilization and support programmes may importantly affect the output of livestock in both the intermediate and longer term, as well as its geographic distribution.
Processors may often be involved in the administration and accounting of support programmes.
- (ii) Relative freight rates on grain, livestock and meat have an important influence on the location of production and processing.
- (iii) Animal health programmes such as slaughter policies to control major disease outbreaks, have important spill-over effects for the meat industry. The foot-and-mouth disease outbreak in 1952 was a case in point, having extensive international trade implications.

- (iv) Producer marketing board legislation for hogs has altered the marketing structure considerably in provinces with boards, and the processing and retailing industry has been directly affected in various ways, depending on board operating strategy and policies.
- (v) Regulations regarding the use of certain animal feed additives such as the cattle growth promotent DES (di-ethylstilbestrol) or various animal drugs such as sulfa compounds and antibiotics have direct effects on meat. Sophisticated scientific equipment now can detect very small residues of pesticides, drugs or other substances in meat causing product to be detained, or even condemned as food at any point in the marketing chain, including export channels.
- (vi) The effectiveness of legislation safeguarding the meat supply from unwholesome product from dead or fallen farm animals, is at all times highly important. The Quebec meat scandal of the mid-70's is a case in point.
- (vii) Processors have a direct interest in livestock grading regulations and how they are administered. The grade importantly affects the price the packer pays.
- (viii) The general thrust of agricultural and food strategy and policy, nationally and provincially, particularly the extent to which policies act to the advantage or disadvantage of animal agriculture, is of prime importance to the meat industry. Also important is whether the thrust of policy is toward remaining competitive internationally and fostering export trade, or, on the other hand toward domestic self-sufficiency and a protectionist approach through import quotas, etc.

Regulation at the Processor Level

Overview

An individual or company wishing to enter the meat industry on a federally-inspected basis, may as one alternative try to purchase an existing plant. In this case, many of the initial regulatory hurdles in getting a plant established are by-passed, although the Meat Hygiene Directorate may still require certain parts of the plant to be upgraded before transferring federally-inspected status to the new owner.

A firm starting from scratch is faced with more extensive problems. It must first ascertain if federal inspection services will be available providing it can comply with the requirements.

The plant design and location must not only meet federal approval, but local zoning, building, parking requirements will have to be met and adequate arrangements made for utilities and waste disposal.

The latter need to satisfy municipal, provincial and federal standards. It is not easy to locate a meat packing plant, so as to satisfy local citizens that it will not create environmental problems or traffic problems with incoming and outgoing truck movement of livestock and meat. The problems are considerably more extensive than for locating a relatively clean and quiet manufacturing industry.

The inspected establishment must secure official approval of all packages, labels, boxes and cartons to be used for inspected products, with sketches and samples submitted in advance. Processing materials must also meet approval.

If the plant is a slaughtering plant, livestock holding pens, unloading equipment and ramps must be of acceptable design and construction. A safe, potable water supply is necessary for meat processing.

A fully-integrated meat packing plant which slaughters livestock, handles the by-products, processes meats including curing and smoking, is by the very nature of its operations, liable to public criticism from the environmental standpoint. Smokehouses give rise to emissions, to say nothing of the rendering operations of the plant, and the manifold odours associated with the holding, slaughter, disassembling of livestock and the processing of meat. Once the meat is chilled and processed, it is a relatively clean and odour-free operation.

The operating meat plant, at all times is subject to resident meat inspection, with all incoming and outgoing shipments monitored continuously to ensure that all product complies with inspection regulations. Product to be exported must be documented, under the approval of the inspection

staff. Government graders inspect and grade all hog carcasses on the slaughter line, while beef carcasses are graded in the cooler on the day following slaughter.

It should be apparent, therefore, that the degree of regulatory oversight over meat plant operations is considerably more extensive than for most types of manufacturing. This is because the main raw material, either meat animals or carcass meat, is biological in character, highly perishable, and intended for use as a major food item.

Industry Viewpoint

Discussions were held with representatives of meat processing companies and the Canadian Meat Council in effort to classify the federal acts identified as affecting the red meat industry (Appendix V) by degree of impact upon the meat processing sector. The Acts considered to have a major and direct impact were:

Agricultural Products Standards Act (R.S.C. 1970, c.A-8)
Animal Disease and Protection Act (R.S.C. 1970, c. A-13)
Combines Investigation Act (R.S.C. 1970, c. C-23)
Consumer Packaging and Labelling Act (R.S.C. 1970, c. C-41)
Energy Supplies Emergency Act (R.S.C. 1978-79, c.17)
Export and Import Permits Act (R.S.C. 1970, c. E-17)
Humane Slaughter of Food Animals Act (R.S.C. 1970, c. H-10)
Labour Code Canada Act (R.S.C. 1970, c. L-1)
Livestock and Livestock Products Act (R.S.C. 1970, c.L-8)
Livestock Shipping Act (R.S.C. 1974, c.86)
Meat and Canned Foods Act (R.S.C. 1970, c. M-6)
Meat Inspection Act (R.S.C. 1970, c. M-7)
Weights and Measures Act (R.S.C. 1970-71-72, c.36)

The Acts considered to have a moderate effect on the meat processing industry were:

Agricultural Products Marketing Act (R.S.C. 1970, c. A-7)
Agricultural Stabilization Act (R.S.C. 1970, c. A-9)
Clean Air Act (R.S.C. 1970, c. C-47)
Customs Tariff Act (R.S.C. 1970 c. C-41)

Export Development Act (R.S.C. 1970, c. E-18)
Fisheries Act (R.S.C. 1970, c. F-14) specifically the Meat and
Poultry Plant Liquid Effluent Regulations (C.R.C.1978, c818)
Railway Act (R.S.C.1970, c. R-2)
Regional Development Incentives Act (R.S.C. 1970 c. R-3)
Shipping Conferences Amendment Act, 1979 (R.S.C. 1978-79, c.15)
Standards Council of Canada Act (R.S.C. 1970, 1st supplement c.41)
Statistics Act (R.S.C. 1970-71-72, c.15)
Trade Marks Act (R.S.C. 1970, c. T-10)
Western Grain Stabilization Act (R.S.C. 1974-75-76, c.87)

The remaining Acts listed in Appendix V were classified as having a lesser and often indirect effect on the red meat processing industry.

At the provincial level, using the Province of Ontario as an example, important regulatory activities as expressed by representatives of the meat industry stem from the following Acts:

The Farm Products Grades and Sales Act and the Livestock and
Livestock Products Act.

The Public Health Act (Regulations respecting meat, plants and those
concerning Food Premises and handling)

The Meat Inspection Act (applies to provincially inspected
plants and exempts federally inspected).

Farm Products Marketing Act (Hog Marketing Regulations)

Ontario Labour Relations Act (collective bargaining regulations)

Workmen's Compensation Insurance Act

Ontario Water Resources Act (Waste Management and Pollution
Control Regulations)

A variety of regulations governing construction and electrical
standards, inspection and pressure vessels, elevators and lifts,
etc.

The major municipal regulations of concern to the industry and those related to zoning, planning and development, noise and dust control, safety, health, fire and police protection, humane provisions, building inspection, sewers and water supplies.

Regulations at the Retail Level

Overview

Many of the regulations pertaining to meats (and to other foods, for that matter) come into a final focus at the retail level. In addition to consumer market requirements, the product must also meet a variety of federal, provincial and municipal regulations related to safety, wholesomeness, health, composition, durable life, nomenclature, temperatures, packaging, labelling and pricing.

Retailers with central warehouses where carcass meat is received from packers, and then prepared and processed by the retail firm, may operate under federal inspection. Individual stores, where meat is cut, trimmed and wrapped in a room back of the meat department, are not under federal inspection. However, they are still subject to provincial and municipal inspection under health regulations. There are also regulations governing the temperature of refrigerated display counters for fresh and frozen meat.

Retailers are also subject to inspection by Consumer and Corporate Affairs, Canada, travelling staff, who check compliance with Packaging and Labelling Regulations (with particular emphasis, of late, on Durable Life Dating), certain aspects of the Food and Drugs Regulations (notably the fat content of ground beef recently) and also Weights and Measures Regulations.

Municipal regulations affecting store locations, parking and snow removal requirements and noise and hours of operating restrictions on trucks also are of particular relevance to the retail sector.

Industry Viewpoint

When discussions were carried out with representatives of meat distribution and retailing companies and the Retail Council of Canada, those Acts classified as having a major and direct effect on these sectors of the industry.

Broadcasting Act

Combines Investigation Act (R.S.C. 1970, c. C-23)

Consumer and Corporate Affairs, Department of, Act (R.S.C. 1970, c. C-27)

Consumer Packaging and Labelling Act (R.S.C. 1970-71-72, c. 41)

Criminal Code (R.S.C. 1970, c. C-34)

Customs Act (R.S.C. 1970, c. C-40)

Customs Tariff Act (R.S.C. 1970, c. C-41)

Energy Supplies Emergency Act (R.S.C. 1978-79, c. 17)

Export and Import Permits Act (R.S.C. 1970, c. E-17)

Farm Products Marketing Agencies Act (R.S.C. 1970-71-72, c. 65)

Food and Drugs Act (R.S.C. 1970, c. F-27)

Hazardous Products Act (R.S.C. 1970, c. H-3)

Labour Code Canada Act (R.S.C. 1970, c. L-1)

Labour, Fair Wages and Hours of, Act (R.S.C. 1970, c. L-2)

Lord's Day Act (R.S.C. 1970, c. L-13)

Meat Inspection Act (R.S.C. 1970, c. M-7)
Metric Conversion (Statute Law Amendment Act (R.S.C. 1976-77, c.55)
National Health and Welfare, Department of, Act (R.S.C. 1970, c. N-9)
Official Languages Act (R.S.C. 1970, c. O-2)
Pest Control Products Act (R.S.C. 1970, c. P-10)
Standards Council of Canada Act (R.S.C. 1970-71-72, c.15)
Unemployment Insurance Act (R.S.C. 1970-71-72, c.48)
Weights and Measures Act (R.S.C. 1970-71-72, c.36)

Among this group, Acts considered to have a moderate effect on the industry were:

Agricultural Products Standards (Canada) Act (R.S.C. 1970, c.A-8)
Cold Storage Act (R.S.C. 1970, c. C-22)
Environment, Department of, Act. (R.S.C. 1970, 2nd supplement c.14)
Provincial Subsidies Act (R.S.C. 1970, c. P-26)

Statistics Act (R.S.C. 1970-71-72, c.15)
Tariff Board Act (R.S.C. 1970, c. T-1)
Transport Department of, Act (R.S.C. 1970, c. T-15)

As in the case of the meat processing industry, the remaining Acts in Appendix V were considered to have a lesser effect on the distribution and retailing sectors.

At the provincial level, the major regulations of primary concern, in Ontario, for example were:

Farm Products Grades and Sales Act
Farm Products Marketing Act
Livestock and Livestock Products Act
Meat Inspection Act (Ont.)

Public Health Act
Ontario Labour Relations Act
Occupational Health and Safety Act
Workmen's Compensation Act
Ontario Human Rights Code
Business Practices Act
Consumer Protection Bureau Act
Consumer Reporting Act
Ontario Building Code
Environmental Protection Act

The following regulations were considered to have a moderate effect on this sector of the industry.

Dead Animals Disposal Act
Workmen's Compensation Insurance Act.

The remaining regulations in Appendix VI were considered to have a limited effect on the sector.

The municipal regulations of greatest concern were those related to zoning, planning and development, noise and dust control, safety, health and fire and police protection.

II

CHARACTERISTICS AND OPERATION OF THE PRESENT REGULATORY SYSTEM

In this section of the report we will comment as to the degree of proliferation which has taken place in meat industry regulation, to what extent there is overlap and duplication, and then discuss the matters of accountability and policy determination.

This is followed by a number of regulatory case histories, which illustrate in a practical way how regulations or regulatory proposals are formulated, and how problems can be created or avoided. After the case histories some general conclusions are summarized.

PROLIFERATION

The March, 1980 issue of the trade magazine 'Food in Canada' contains a special article on 'Food Processing in the 80's 1/ which comments on the connection between productivity trends and regulatory proliferation. Commenting on findings of a recent U.S. food industry study 2/ the article notes the latter found productivity on the decline, with one factor contributing to this being "the burden of federal regulations".

The article then goes on:

"It can hardly be less of a factor in Canada where industry seems to be awash in a sea of regulations and red tape. Compliance with all these regulations costs billions of dollars a year, which in turn cuts into productivity growth because they absorb funds, worker time and management time which would otherwise be spent in producing more goods and services. Regulatory uncertainty also leads to business uncertainty about the future of the industry, slowing down investment".

Along the above lines, one may ask whether the PDR sectors of the Canadian red meat industry considers that it is faced with such a multiplicity of regulations that its efficiency and productivity is seriously prejudiced, and that such regulations also pose an important degree of decision-making uncertainty?

If one were to address the above questions to a number of individual meat processors and retailers it seems likely that the replies would cover a wide-range of opinion. There is little doubt, however, that there would be little disagreement on the following basic propositions:

1. That the industry has by degrees, become more and more highly regulated;
2. That the costs of compliance with existing regulations are substantial and increasing;
3. That uncertainty as to future regulations, particularly in certain areas, does create considerable planning uncertainty.

1/ 'Food Processing in the 80's by John O'Keefe, page 20, Food in Canada, Volume 40, No. 3, March 1980.

2/ As reported in Eurofood World Directory of Food and Drink Manufacturing Companies, 1979.

An informal survey conducted in February, 1980 among members of the Meat Packers Council of Canada indicated that:

1. With respect to whether the present regulatory system creates management and planning uncertainties, 79.2% of respondents agreed that it did.
2. When asked whether any sudden major move to de-regulate would, in view of sizeable investments already made to comply with existing regulations, be more costly than living with the latter, 78.9% of the respondents felt this would be the case.
3. When asked if it was considered there were any practical ways to reduce present regulatory and compliance costs, other than through a major degree of de-regulation more than half the respondents felt this could be accomplished and most gave examples.
4. The majority of respondents indicated examples of regulatory areas which they felt were in need of assessment as to continuing relevance or with respect to cost/benefit ratios.

more details of this survey are contained in Appendix IX.

Is there a trend to proliferation?

Regulations may be said to increase in amount and complexity when new statutes or acts are brought into law, when the regulations under existing acts are amended significantly to increase their effect or when existing regulations are amplified by administrative decisions, written interpretations, directives, guidelines or the like.

At the federal level the number of major new statutes in the last two decades which directly affect the meat industry have not been particularly large, although there is a continuing process of updating previous laws. These include an update on the Meat Inspection Act and Regulations in 1959 (the original legislation under the Meat and Canned Foods Act dated back to 1907); the Humane Slaughter of Food Animals Act which became effective in 1960; in the decade of the 1960's little major new legislation was introduced although

major changes in the pork and beef grading systems were under discussion and contemplation as was competition policy; in the early 1970's the Consumer Packaging and Labelling Act and the Federal Agricultural Products Marketing Act were enacted as well as successive versions of the Competition Act (Bill C-256 in 1971, Bill C-42 in 1977 and finally Bill C-13, with these legislative proposals not yet carried through to completion. In 1979-80 beef and/or meat import legislation has been under discussion with the Throne Speech in April, 1980 indicating intention to proceed with this.

At the provincial level, most provinces in recent years moved to enact more thorough-going meat inspection legislation. Successively, various provinces signed Meat Inspection Service Agreements with Agriculture Canada 1/. Basically under these arrangements, the federal government contracts to supply inspection services for meat going into intra-provincial trade from domestic plants under the authority of provincial legislation. This is independent of federal inspection.

While most provinces have had farm or natural products marketing acts in place for some years, permitting the establishment of marketing plans and producer marketing boards, amendments to these acts and the regulations made under them, have occurred from time to time, as have amendments to the Public Health Acts relating to premises where meat is processed, handled or served.

Other types of provincial legislation relating to beef cattle marketing (e.g. Ontario and Manitoba) have been enacted and Ontario has been proceeding toward legislation to give greater protection to livestock producers against buyer insolvency.

While there has been this moderate but steady increase in basic new statutes or additions to existing legislation, a much greater proliferation has occurred in the regulations made under acts in force, as well as in the issuance of official circulars, directives and bulletins which convey interpretations or decisions as to what the regulations require. In the 70's a majority of new regulations have been aimed at consumer safety, information or awareness.

1/ Manitoba (1965); Saskatchewan (1968); Nova Scotia (1970); New Brunswick (1975); British Columbia (1977); Newfoundland (1978); Prince Edward Island (1978)

As an example, the Health of Animals Division of Agriculture Canada periodically issues circulars which serve as guidelines for its own staff or those who comply with regulations relating to Meat Inspection.

In the most recent listing (February, 1980) 67 circulars pertain to meat hygiene. One (circular 19) is obsolete due to regulatory changes respecting rejected products. Of the 67, 47 pertain to domestic affairs and 20 to export matters.

As to periodicity, 11 of the 47 circulars on domestic operations are new since 1975 and 19 are older circulars which have been revised and updated since 1975. Thus, of the 67 current circulars respecting meat hygiene matters: 11 or 16% are new since 1975, 19 or 28% have been revised since 1975, 17 or 26% are unrevised since 1975, 20 or 30% relate to export matters (for information).

Even allowing for the natural process of updating and revision it is apparent that the volume has increased in recent years. The Division has indicated plans to bring these circulars together in a loose leaf manual which can be updated as required.

One detailed circular, No. 47, outlines the required standards of construction and other facilities for establishments under the Canada Meat Inspection Act and Regulations. Recently it has been published in the form of a 68-page Manual which would be one of the primary information sources for any firm contemplating applying for federal inspection or making major changes to existing facilities.

A current office consolidation of the Canada Meat Inspection Act and Regulations comprises a volume of 81 pages and the Food and Drugs Act and Regulations is also a fairly lengthy compilation available at a cost of \$30.00 a copy.

Most of the existing firms in the PDR sectors of the red meat industry have become aware of the main acts and regulations under various jurisdictions with which they are required to comply, through experience. If they are members of trade associations such as the Canadian Meat Council (formerly the Meat Packers Council) and the Retail Council of Canada they are made aware of proposed or actual regulatory changes and in fact may be part of the consultative process. The information divisions of Regulatory Agencies now generally issue releases respecting revisions or proposals for change. Examples of such are the Circulars from the Meat Hygiene Directorate of Agriculture Canada, the Information Letters of the Health Protection Branch of Health and Welfare Canada and Consumer Communiques of the Department of Consumer and Corporate Affairs. Provincial

Ministries generally also issue information releases on regulatory matters as appropriate.

Any new entrant in the meat processing, distribution or retail field is confronted with an extensive array of regulations requiring compliance. In practice, of course, most new firms have on staff personnel experienced in the industry who are broadly acquainted with regulatory requirements and who know who to consult for further information.

As the regulatory mosaic becomes more complex, a practical problem is faced by those who must comply, in securing ready access to copies of existing acts and regulations, and up-to-date amendments. At the federal level, the curtailment of Information Canada outlets, has reduced local availability of regulatory information and publications and some Departments do a better job than others in servicing the needs of regulated industries and persons. Agriculture Canada appears to merit particular commendation for its regulatory information efforts.

In summary, to return to the question posed earlier as to whether the current extensive array of meat industry regulations seriously affect efficiency and productivity in the PDR sectors and induce extensive managerial uncertainties, the answer while generally in the affirmative must be weighed against the perishability of the product and the need to adequately protect consumers by ensuring a safe and wholesome meat supply.

As will be discussed in the concluding section of this report the most rational approach is not to propose sudden, massive de-regulation but to have further major regulatory moves preceded by full and effective consultation and realistic cost-benefit analyses, and to provide a programme whereby existing regulations are re-assessed at regular intervals as to their continuing relevance. In addition current administrative procedures vis-a-vis regulations should be under continuous review with effective appeal mechanisms available for persons who require relief from presumed inequities or inefficiencies.

In no sense should it be assumed, in the absence of a continuous clamour by the meat industry to be massively de-regulated, that the industry relishes a high degree of regulation or actually finds such to be an advantage. It is probably more accurate to say the industry has come to accept a relatively high degree

of regulation as inevitable and thus when a new regulation or a regulatory change is proposed, the industry does not usually dig in its heels and demand no regulation, but seeks to negotiate a form of regulation which it can best live with and which will be less costly than other alternatives. When there is effective consultation, the regulatory pill is usually easier to swallow.

JURISDICTIONAL OVERLAP AND DUPLICATION

Since meat in its various forms is a food item of major importance in the human diet, it follows that adequate regulations governing the preparation, processing, distribution and sale of meat would seem to be essential for the protection of the consuming public. This is particularly so considering the fact that meat is derived from meat animals whose health status must be checked at time of slaughter, and also keeping in mind that meat is highly perishable and requires constant adequate refrigeration from the time of initial processing, to final use. Another potential hazard that requires effective law enforcement is the possibility of meat from fallen, dead, or diseased animals getting into the public meat supply through irresponsible and illegal channels. 1/

To the meat consumer who buys meat in a local food outlet, or eats it in a hotel or restaurant, it is quite important to have adequate assurance that the product is safe and wholesome, both as to its origin and standards of preparation and respecting the way it has been handled. By this same token buyers in foreign countries of Canadian meat want equal assurance.

In Canada a combination of federal, provincial and municipal regulations and administrative agencies combine to provide a relatively close and constant monitoring of the meat supply, backing up the efforts of the livestock and meat industry to produce wholesome, good quality product.

The question which logically arises is - Does the regulatory system for meat in Canada function effectively to protect the consuming public without at the same time involving unnecessary jurisdictional overlap and duplication?

To answer this entails looking at the various federal, provincial and municipal agencies, and the legislation under which they operate and gain their regulatory powers with respect to the PDR sectors of the red meat industry.

1/ A ringleader in a recent Ontario prosecution was sentenced to a three year prison term with varying sentences for others involved.

The Federally-Inspected Sector

Over 80% of the commercial meat supply of Canada passes through the Federal inspection system.

The Federal Inspection Act 1/ provides in sec. 3 that:

3. (1) No person shall export out of Canada, or send or convey from one province to another, any meat product unless
 - (a) the meat product was prepared or stored in an establishment that
 - (i) complied with prescribed conditions and
 - (ii) was registered and operated in prescribed manner;
 - (b) the animal from which the product was derived
 - (i) was slaughtered in prescribed manner, and
 - (ii) was inspected as prescribed before and after slaughter;
 - (c) the meat product is packaged and marked as prescribed; and
 - (d) the meat product conforms to prescribed standards.

The above regulatory clause, in the case of products exported and shipped inter-provincially, it will be noted provides for close control of the slaughtering, inspecting, preparation, packaging and labelling and product standards in registered establishments which must meet official requirements as to both facilities and manner of operation.

The constitutional basis of the Meat Inspection Act stems from the federal trade and commerce powers provided in Section 91 of the British North America Act. Under this power federal meat inspection is mandatory for a plant which wishes to ship product into other provinces or sell to other countries.

Further federal powers to regulate the sale of meat and other foods are incorporated in the Food and Drugs act 2/ in sections 4 and 5, viz:

1/ The Meat Inspection Act, Canada, 1955, c.36 s.1

2/ R.S.C. 1970, c. F-27. Also S.C. 1976-77, c.28

4. No person shall sell an article of food that
 - (a) has in or upon it any poisonous or harmful substances.
 - (b) is unfit for human consumption;
 - (c) consists in whole or in part of any filthy, putrid, disgusting, rotten, decomposed or diseased animal or vegetable substance;
 - (d) is adulterated; or
 - (e) was manufactured, prepared, preserved, packaged or stored under unsanitary conditions.
5.
 - (1) No person shall label, package, treat, process sell or advertise any food in a manner that is false, misleading, or deceptive, or is likely to create an erroneous impression regarding its character, value, quantity, composition, merit or safety.
 - (2) An article of food that is not labelled or packaged as required by the regulations, or is labelled or packaged contrary to the regulations, shall be deemed to be labelled or packaged contrary to subsec (1).

The Food and Drugs Act, it will be noted, is operative as food is sold, and its main concerns are (1) human health and safety and (2) the prevention of misleading or deceptive practices in the presentation of food products to the public.

The Meat Inspection Act and Regulations are aimed at a number of the same things as the Food and Drugs Act viz. to ensure that products are fit and wholesome for consumption, do not contain harmful substances or adulterants, are prepared under sanitary conditions and are truthfully packaged and labelled.

The Food and Drugs Act, however, applies to all products sold, whether produced under federal inspection or not, and also applies to the conditions at time of sale which may be a considerable time after they left the inspected establishment.

While the Food and Drugs Act has provided for many years general federal authority to regulate against deception and misleading practices in the labelling and advertising of meat and other food products, the Department of Consumer and Corporate Affairs now has the general responsibility for administering packaging, labelling and advertising regulations. It uses the authority of the Food and Drugs Act and Regulations, and also the authority of the Consumer Packaging and Labelling Act (1974) and Regulations which became effective under it in March, 1976.

Before the Consumer and Corporate Affairs Department was formed, the Food and Drugs Act was used to bring about official guidelines for the packaging of sliced breakfast bacon, as will be outlined in more detail in a case history later in this section. With the advent of pre-packaged sliced bacon a succession of packing styles were employed, leading up to a flat pack in which the slices were reverse shingled, showing only the leaner edges. Earlier packages also had wavy red lines on the film over-wrap to create a certain effect.

As a result of joint discussions initiated by the Food and Drug Directorate after representations by consumers, processors agreed with a guideline to require substantially all of one complete slice of bacon to be shown in the package which would be fairly representative of the lean to fat ratio of all the slices in the package. This was considered a more practical and effective solution than government grade standards for bacon, since the latter is a highly variable product from pig to pig, not necessarily being closely correlated to the carcass weight and general leanness of the other cuts.

All pre-packaged meat products, carcass meat and edible animal by-products which leave federally inspected establishments carry the inspection legend. The latter is a circular stamp of a diameter of not less than 12.7 mm ($\frac{1}{2}$ inch) on a printed label, and not less than 25.4 mm (1 inch) when stamped directly on a meat product. It bears the word 'Canada', a crown, and the registered number of the establishment.

The inspection legend is evidence that the product has been produced in the designated establishment, in accordance with all the detailed provisions of the Meat Inspection Act and Regulations. But more than this, it also denotes that the product complies with the Food and Drugs Act and Regulations and the Consumer Packaging and Labelling Act and Regulations.

A perusal of the Meat Inspection Regulations will indicate frequent reference to the Food and Drugs Act. As a matter of fact the Meat Inspection Regulations, as they are presently revised, incorporate all the salient provisions of Section B.14 of the Food and Drug Regulations respecting processing, additives, composition and standards for meat and meat by product preparations. In addition they incorporate the provisions of the packaging and labelling

regulations administered by the Department of Consumer and Corporate Affairs.

Is there, therefore, overlap and duplication, as far as federally inspected meat is concerned? The answer is that the regulations overlap, but that, administratively, undesirable overlap and duplication is largely avoided through interdepartmental agreement and co-operation, as well as by the fact that the Meat Inspection Regulations, as previously indicated, now include pertinent sections of the Food and Drug and Packaging and Labelling Regulations.

In the early 1970's the meat industry through the Meat Packers Council, made strong representations, with considerably extended packaging and labelling regulations imminent, to have only one agency administering the regulations respecting inspected meat. This led to the three federal Department's of Agriculture Canada, Health and Welfare and Consumer and Corporate Affairs concluding an agreement which has had the effect of inspected establishments mainly dealing with one agency, namely, Agriculture. Consumer and Corporate Affairs takes on the main responsibility for inspection at the retail level.

With the operations of inspected establishments constantly under the surveillance of in-house government inspectors, and products produced and shipped bearing the inspection legend, inspected meat products leaving the plant must be in compliance with Sections 4 and 5 of the Food and Drugs Act. They must also be in compliance with packaging and labelling regulations since all packages bearing the inspection legend require prior approval by the Meat Hygiene Directorate respecting Part VIII of the Regulations respecting 'packaging' and Part IX respecting 'marking' which also incorporate the packaging requirements administered by Consumer and Corporate Affairs under the Food and Drugs Act and the Weights and Measures Act. Part IX also includes regulations respecting the application of the Inspection Legend and the Animal Food Mark.

To sum up, while there is clearly overlap and duplication between Meat Inspection Act, the Food and Drugs Act and the Consumer Packaging and Labelling Act, and their respective regulations, as far as inspected establishments are concerned, administratively the Meat Hygiene Directorate centralizes enforcement at the processing level. At the retail level the Department of Consumer and Corporate Affairs

assumes the main federal inspection function although various inspectors from federal, provincial and municipal agencies may check up on specific matters.

At the retail sales level the provisions of the Food and Drugs Act and its Regulations still apply, including packaging and labelling regulations, but having been presumed to be in compliance when leaving the processing plant, only subsequent special circumstances might raise a question with respect to federally inspected product, such as for example improper handling conditions or over-age.

Provincial Meat Inspection Regulations

Another potential area of over-lap and duplication concerns the application of federal and provincial meat inspection regulations. As previously noted compliance with the federal regulations is mandatory for meat products destined for export or interprovincial trade. Where the product is entirely sold within a province, only provincial meat inspection regulations, coupled with the consumer safety provisions of the Food and Drugs Act and provincial health regulations, must be complied with.

In recent years most provincial jurisdictions have promulgated meat inspection acts and regulations which require veterinary inspection of livestock at time of slaughter and impose sanitary standards for abbatoirs. In Ontario, for example, the Meat Inspection Act (Revised Statutes of Ontario 1970, c. 266, as amended by 1971, c.50, s.56 and 1972, c.81) provides that:

2. (1) Except as provided in the regulations, no person shall slaughter an animal unless the animal has been inspected by an inspector immediately before the time of slaughter.
- (2) No person shall slaughter an animal, except in the manner and by the devices prescribed in the regulations.
- (3) Except as provided in the regulations, no person shall sell, offer for sale, transport or deliver to any person meat unless,
 - (a) the animal from which the meat was obtained was inspected by an inspector as provided in subsec. 1.

- (b) the slaughter of the animal took place at a plant that complies with this Act and the regulations, or at an establishment; and
 - (c) the meat is stamped with an inspection legend or is labelled, as provided in the regulations (R.S.O. 1970, C.266, S.2)
- (4) No person shall engage in the production, processing or storage of meat product at a plant except in accordance with these regulations.

Under the Ontario Act and Regulations, the only type of animal slaughter that is exempt from the inspection regulations are:

1. Animals owned and kept by a farmer on his own farm for at least 2 months and slaughtered and sold to a person for his own consumption;
2. Animals owned by a person and slaughtered for own consumption.
3. Animals owned and slaughtered by members of an association who supply meat to themselves;
4. Livestock slaughtered in a federally inspected establishment.

The local processing of meat in Ontario is not yet covered by provincial regulation, but under the Public Health Act of Ontario, Ontario Regulation 972/75 imposes sanitary requirements for premises where food for human consumption is manufactured, processed, prepared, stored, handled, displayed or transported. In addition Ontario Regulation 195/57 imposes standards for slaughter houses and meat processing plants, which covers their construction and equipment, maintenance and operation, the health status of employees and sanitary facilities for same, and authorizes periodic inspection of the premises and mandatory records.

The provinces of Quebec and Alberta also have provincial Meat Inspection Acts and regulations and administer their operation re the inspection of local slaughtering facilities. In the other seven provinces meat inspection services in local abbatoirs are provided under contract with the Food Production and Inspection Branch of Agriculture Canada. The latter are known as "Federally Inspected Domestic Establishments". The January, 1980 reference listing of Registered Establishments includes the following domestic, establishments in 5 provinces:

DOMESTIC PLANTS OPERATING UNDER FEDERAL-PROVINCIAL AGREEMENT

Nova Scotia - 3 plants
New Brunswick - 0 plants
Manitoba - 29 plants
Saskatchewan - 15 plants
British Columbia - 6 plants

Thus while the federal and provincial meat inspection systems overlap, in effect there is no practical duplication. Plants engaged in interprovincial and export trade must necessarily be under federal inspection and most provinces exempt such from their inspection, as are also any plants presently engaged in intra-provincial distribution only, but who voluntarily elect to qualify for, and secure, federal inspection. Otherwise, plants engaging in slaughtering for local sale only, must of necessity be under provincial license and inspection or where there is a federal-provincial agreement in place, be under domestic federal inspection services.

Thus meat plants are under either federal or provincial inspection, but not both. The product from the two systems cannot intermingle in inter-plant trade. Either product may be available at the consumer level, although most major chains state they have a policy of handling only federally inspected meat.

The difference in standards between the two systems is a subject of frequent debate. For one thing the construction and equipment standards for federally-inspected plants are generally regarded as more exacting than the provincial standards. Many provincial abbatoirs are relatively small and do not slaughter every day in the week, thus they do not have veterinary inspectors present at all times, but roving or part-time veterinarians are employed.

The advantages of eventually having a single national standard of meat inspection, allowing product to intermingle, seem obvious. Consumers have argued for this, but to date practical and constitutional problems have slowed progress toward this goal.

Supplementing meat inspection legislation, and Section 4(c) of the Food and Drugs Act making it a serious offence to sell unwholesome meat, the various provinces have legislation regulating the disposal of animals which die outside of commercial slaughter channels.

Ontario, for example, has the Dead Animals Disposal Act (R.S.O. 1970, c. 105 as amended by 1971 c. 50 s. 26; 1972 c. 60 and 1976 c. 30). Regulations under this Act were promulgated in 1970 and amended by O. Reg. 751#73.

Under this legislation collectors of dead animals from farms for rendering or other purposes are licensed, they must keep prescribed records and their operations are subject to inspection at all times. In recent years there have been periodic criminal prosecutions of illegal transactions in dead meat. Whenever such occur, they detract from public confidence in the assured wholesomeness of the meat supply, since no one likes to contemplate eating meat from fallen or diseased stock which may also contain quantities of drugs or antibiotics used in treating the animal. Severe penalties are provided on conviction in this nefarious traffic.

One further type of duplication may be noted, and this is in the international field. The United States now has a public law requiring the inspection by U.S. inspectors of foreign plants shipping meat to the U.S.A.¹/Canada's policy, on the other hand, is based on mutual acceptance of the meat inspection and animal disease control systems by countries which trade in meat products and livestock. American inspectors are now stationed in Canada and periodically, accompanied by Canadian headquarters inspection staff, visit slaughtering and processing plants. They report on any deficiencies found, either in plant facilities and practices or in inspection procedures.

This duplicate inspection is somewhat burdensome, but there does not seem much that can be done about it as long as U.S. legislation requires it. The Canadian approach seems preferable, viz. that each country accept the inspection system of the other, possibly with periodic conferences and visits back and forth to ensure comparable standards of inspection, with the inspection legend of one country accepted by another, assuming that no serious epizootics of highly contagious animal diseases are prevalent such as foot and mouth disease or anthrax in cattle or hog cholera or African Swine Fever in the case of pigs. When such occur, temporary bans are applied on the movement of meat products and livestock.

^{1/} As previously noted, E.E.C. countries are moving in a similar direction.

ACCOUNTABILITY AND POLICY DETERMINATION

At the Federal Level

At the Federal level the major regulations directly affecting meat such as the Meat Inspection Act and Regulations and the Food and Drugs Act and Regulations are administered, not by special statutory agencies, but by executive branches of various departments, viz. Agriculture, Health and Welfare and Consumer and Corporate Affairs. Other legislation of interest to the industry, such as for example, the Export and Import Permits Act, is administered by Industry, Trade and Commerce.

Any amendments to the Acts themselves require a bill which is approved by Parliament and subsequently receives Royal Assent. Amendments to the respective regulations, normally arrived at after appropriate notice and consultation, are finally approved by Order-in-Council and published in the Canada Gazette. Thus there is a large measure of political accountability assured.

Taking the Meat Inspection Act and Regulations as an example, there is a clear-cut path of accountability respecting administrative decisions. In each establishment, an individual inspector is accountable to the inspector-in-charge. Through a linkage of Regional Offices of the Food Production and Inspection Branch located in all major provinces, the meat inspection staff is ultimately accountable to the Director General of the Meat Hygiene Directorate. This official in turn reports to the Veterinary Director General, who is also an Assistant Deputy Minister. At the top of the departmental echelon are the Deputy Minister of Agriculture and the Minister. Thus anyone feeling aggrieved by a decision of a local inspector, if it is considered sufficient consequence, may seek relief through various levels of this chain of authority. Representations respecting a regulation itself, or the basic interpretation of it, obviously must eventually come to the attention of the top echelon of authority in Ottawa.

Although regulations are approved by the Governor-General-in-Council, the Health of Animals Branch (both the Meat Hygiene Directorate and the Animal Health Directorate) issue interpretative circulars periodically, spelling out the rules in finer detail how they propose to enforce compliance. In issuing these the heads of the respective Directorates are accountable to the Assistant Deputy Minister who heads the Branch.

Annually the Agriculture Committee of the House of Commons has the opportunity to discuss the estimates of the Department and to question officials who administer various Acts, such as the Meat Inspection Act, on their stewardship.

While Statutory Regulatory Agencies are not involved with the administration of regulations covering meat inspection, food-drug matters or packaging and labelling, there are some S.R.A.'s whose operations have some impact on the meat industry in varying degrees. Some examples are:

Agricultural Stabilization Board - when price supports, subsidies or deficiency payments are approved for livestock producers, e.g. for beef producers or pork producers, the industry may in certain cases be involved in the documentation or actual mechanics of the producer payments. If stabilization programmes realize their objective of stabilizing production of livestock and meat over time, the effort is of broad significance to the whole meat system.

Canadian Government Standards Board - Meat products purchased for the armed services or various government institutions and agencies have specifications drawn up through advisory bodies sponsored by the Standards Board. The meat industry is represented on the advisory arm of this body, formerly known as the Canadian Government Specifications Board.

Canadian Livestock Feed Board - The primary function of this body is to assist in the availability of feed grains, particularly to eastern livestock producers. The success of its efforts are of interest to the meat industry, although it is not directly involved or ordinarily consulted.

Canadian Wheat Board - This body is primarily involved with the marketing of Prairie wheat. However, since wheat production and marketing competes for resources with animal agriculture in Western Canada, the policies and programmes of the Board are related to the economics of livestock and meat rather closely.

Metric Commission - The PDR sector of the red meat industry worked closely with the Metric Commission in planning the metric conversion programme for livestock and meat which was due to complete its final phase in January, 1980, but was postponed by the government.

Restrictive Trade Practices Commission - In company with other industries, the meat industry is subject to continuing oversight by the R.T.P.C. with respect to competition and trade practices. In recent years the Commission has had minimal investigational involvement with the industry.

Public Service Staff Relations Board - The meat industry is vulnerable to any disruption of services by government-employed meat inspectors or livestock graders. Thus the success of the P.S. Staff Relations Board in securing renewal of contracts of the government with its employees is of direct interest to the industry. Slaughterers cannot operate if inspectors withdraw their services. Arrangements re hours of work and overtime for inspectors also have an impact on the industry.

Canadian Transport Commission - With large volumes of livestock and meat constantly on the move, the level of freight rates has a major economic impact on the industry. Rate changes are first discussed and negotiated by the rail carriers and the industry and final proposals then are submitted to the Canadian Transport Commission for ratification.

National Farm Products Marketing Council - There are at present no national producer marketing plans covering red meat products, similar to those in effect for eggs, broiler chickens and turkeys. If at some future time, pork or beef producers should decide on a national plan the N.F.P.M.C. would be involved.

The foregoing are some of the S.R.A.'s at the federal level which are of direct or indirect interest and concern to the P.D.R. sector of the red meat industry.

With regard to policy determination, the most ambitious efforts by the federal government in recent years to promote an active public policy dialogue have included:

- the extensive exercise aimed at developing a revised competition policy;

- the publication of the White Paper 'The Way Ahead' detailing major objectives in economic policy;

- the discussions during 1977-78 of proposals on 'Canadian Food Strategy'

The dialogue on Food Strategy commenced with the issue in June, 1977 of a study paper jointly sponsored by the Ministries of Agriculture and Consumer and Corporate Affairs. Nine organizations with a special interest in food were subsequently invited to present responding briefs to a Cabinet Committee in December, 1977. Subsequently a National Food Policy Conference was convened in Ottawa Feb.22-23, 1978, a week before the federal-provincial first Ministers' Conference on economic matters. At the Food Conference representatives of all sectors of food industry, government representatives, consumers and academics debated policy options and objectives.

One of the principal food policy and strategy options which has remained under continuing debate is whether Canada ought to aim at maximum food production and through high levels of productivity and efficiency remain as competitive as possible internationally, so that surplus food can be exported. Another viewpoint is to control supply and administer prices in an attempt to ensure that producers at least recover average production costs, with control of imports when domestic prices rise significantly above world levels. These two options essentially represent expansionistic and restrictive philosophies of food strategy, respectively. The former, in the views of the latter, represents a 'cheap food' policy.

At the Provincial Level

A good many of the provincial acts and regulations directly affecting the meat trade, like those in the federal arena, may be said to have full political accountability, since the statutes themselves are approved by the respective provincial legislatures and the regulations are approved by Lieutenant-Governor-in-Council and administered by executive arms of various Ministries. This is exemplified by the administration of the provincial meat inspection regulations and those respecting disposal of dead animals, provincial health acts, grading regulations which complement the federal, and regulations covering the operation of local stockyards and the licensing and financial responsibility of buyers and dealers, and the like.

The various provinces have moved rather extensively in recent years in conferring subordinate legislative powers which the McRuer Commission in Ontario 1/referred to as "rule-making powers conferred by statute on a person or persons outside the Legislature".

1/ Royal Commission of Inquiry Into Civil Rights, Province of Ontario, Report No. 1 Volume 1, February 7, 1968, page 27.

A clear example of this is the provision for delegation of extensive powers under provincial farm products, or natural products, marketing acts. This is a two-stage delegation. In the first place the regulatory powers provided in the Acts are conferred on government-appointed marketing boards or councils, who in essence are accountable to the Minister of Agriculture. The provincial boards, in turn, may approve proposed commodity marketing plans and delegate similar powers to those they possess, to local commodity boards whose members are generally elected by the producers concerned. These latter producer boards may then, within the purposes of the plan and delegated powers, make rules and regulations without formal approval by the supervisory board or the Lieutenant-Governor-in-Council. Appeals against their orders or directions have to be made first to the local board who made the order, and then to the supervisory board who delegated powers to it.

To date only in Ontario is an independent Appeal Tribunal set up to hear such appeals.

The matter of accountability assumes major importance in the delegation and exercise of subordinate legislative powers, particularly where such is conferred on persons or bodies outside the executive arm of government, as is normally the case where regulations are enacted and administered, under statutes.

There is a marked similarity in the basic concept underlying farm marketing legislation and labour legislation. Each starts with a plebiscite of the workers or farm producers to ascertain if there is a common desire to be part of a collective bargaining group. A main function of a union is to collectively bargain for wages and other conditions of employment. A local marketing board supervises collective sale of the product and bargains for price and terms of sale. However, in practice local marketing boards have been delegated much greater subordinate legislative powers than unions. Some boards have the power to manage the supply of the product and fix the initial price. Unions do not have comparable powers of this nature. Thus over-all, producer marketing boards that have been delegated maximum powers in fact possess a great deal of authority. In recognition of this there is an increasing trend toward providing independent appeal channels and for the supervisory boards who delegate authority to local

boards to hold the latter more closely accountable for the way subordinate powers are exercised to regulate their own and other sectors of the industry.

The Ontario Royal Commission of 'Inquiry into Civil Rights' recommended adequate safeguards in the conferring and exercising of subordinate legislative powers, as the following extract from one of their reports indicates:

"In accordance with constitutional principles discussed earlier, the exercise of powers to make decisions affecting rights of individuals on grounds of policy by persons or bodies other than the Legislature, should be subject to political control. As in the case of administrative powers, political control of subordinate legislative power should be maintained by conferment of power on ministers, either singly or collectively, who are responsible to the Legislature, or on persons subject to the supervision and control of ministers". 1/

Subsequently Ontario enacted the Statutory Powers Procedures Act, defining guidelines for the exercise of statutory authority. in 1971.

1/Royal Commission (Ontario) Inquiry into Civil Rights, Report No. 1, Vol. 1
page 356, February, 1968

REGULATORY EXPERIENCE OF THE MEAT INDUSTRY

A practical and effective way of assessing how regulatory processes and procedures have worked in the past vis-a-vis the meat industry is to trace through a number of case histories. The stage-by-stage reconstruction of a selected number of these, representative of various types of regulation, provides a logical and factual basis for examining how the system for formulating regulations has worked, for identifying some of the problem areas, and suggesting, hopefully, how the process can be made more efficient, with a more favourable cost/benefit ratio.

In selecting a sample of case histories to pursue, it seems appropriate to try to make it reasonably representative, as regards who is considered to be the main beneficiary. The following classification appears to include the main types as to benefit/objective:

1. Regulation of the industry in the general public interest.
2. Regulation of the industry in the interests of livestock producers.
3. Regulation of the industry in the interests of the health and safety of consumers.
4. Regulation of the industry in its own self-interest.
5. Regulation of the industry in the mutual interest of various participants jointly, e.g. producers, the PDR sector and consumers.

Examining the broad sweep of meat industry regulations proposed or enacted in the last two decades indicates the regulations designed mainly for the protection and better awareness of meat consumers are the most numerous class, including in this mandatory information on labels designed to facilitate more intelligent selection in the marketplace.

Regulations in the interests of livestock producers, who annually sell millions of dollars worth of stock to meat packers, include various types of marketing legislation, including that governing provincial marketing boards, regulations respecting stockyards, the financial responsibility of dealers and processors, and the like.

Another class of regulations may be said to be in the general public interest. This includes humane slaughter legislation, environmental laws and regulations and more recently metric conversion. Legislation to promote competition may be said to

belong in this class also.

It is difficult to identify any regulations imposed at the specific request of, and for the specific benefit of the meat industry itself.

A final broad class of regulation is a type which is of mutual benefit to various participants of the meat system, probably in varying degrees. A good example of this is grading regulations for pork and beef. These, assuming they are rationally conceived, mutually benefit both the sellers and purchases of livestock and carcass meat, and by encouraging better quality, act to the advantage of consumers also, as well as keeping the industry's products more competitive internationally.

In addition to grading, meat inspection is a multi-interest type of regulation. Primarily it protects meat consumers, but by the same token aids livestock producers and meat processors by promoting public confidence in the meat supply and enabling meat products bearing the inspection legend to move in world markets. From this standpoint meat inspection can be said to be in the general public interest.

In the case histories which are reviewed in this section of the report, attention is confined to regulatory matters current in about the last 20 years, with the majority in the last ten. While it cannot be claimed that deliberate efforts were made to secure a random representative sample, on the other hand there was simply a choice of significant regulatory developments illustrative of various types as previously indicated. While the majority are federal, some are in the provincial area as well. Attention is particularly directed to such aspects as advance notice and consultation, any indication of prior consideration of the socio-economic impact, and the reasons why the regulation was or was not proceeded with.

REGULATIONS IN THE GENERAL PUBLIC INTEREST

The three case histories reviewed here include humane slaughter legislation, effluent regulations for meat and poultry plants and the aborted metric conversion exercise.

HUMAN SLAUGHTER OF LIVESTOCK

Except for the minority of consumers who are vegetarians, most consumers like and enjoy meat and in the process generally give little thought to the fact that thousands of cattle and hogs have to be slaughtered each year to provide the meat supply. In the public's mind, however, it is commonly assumed that humane methods of despatch will be mandatory, which generally means that animals must be rendered unconscious by some quick and efficient means before being bled and dressed.

Although meat animals have been slaughtered for food use in Canada ever since pioneer times, specific laws requiring and defining 'humane' methods of despatch in abattoirs have only been on the statute books for a little over 20 years. Bill C 32 to amend the Criminal Code respecting the slaughtering of meat animals, was given first reading in the House of Commons, June 25, 1958. It was not until 1959, however, that the Humane Slaughter of Food Animals Act was eventually passed, after extensive committee hearings. This Act is administered, along with the Meat Inspection Act, by the Food Production and Inspection Branch of Agriculture Canada. Both the federal and provincial inspection systems require humane slaughter by approved methods.

Prior to humane slaughter legislation, the general practice with cattle was to confine each animal in a knocking pen and to render it unconscious with a blow on the forehead from a knocking hammer. Then it was bled, skinned and hoisted to the rail for further dressing and washing. In the case of hogs, however, they were simply hoisted and stuck in the jugular vein and bled, without preliminary stunning, since the physiology of a pig makes mechanical stunning, or even shooting, a matter of some practical difficulty and a high margin of error.

Societies for the Prevention of Cruelty to Animals (SPCA) or as more commonly known 'Humane Societies', began to publicly agitate for humane slaughter legislation for livestock after World War II. In Canada activity came to a focus in British Columbia in the early 1950's, through the activities of the B.C. Humane Slaughter Association. This group appeared before the B.C. Legislature's Select Committee on Agriculture to state their case. Subsequently information was laid against certain larger British Columbia meat packers for the inhumane slaughter of hogs and a test case was heard in the courts against Pacific Meat Company, a local meat packer and hog slaughterer. While the court did not find the packer guilty, as charged, the case attracted considerable public attention and press comment.

Amendments to the Criminal Code were proposed in June, 1958, in the Parliament of Canada by the Honourable Davie Fulton, Federal Minister of Justice. About this same time the U.S. Congress was also considering humane slaughter legislation, which provided that the Secretary of Agriculture should define acceptable humane slaughter methods.

By this time Canadian meat packers had come to recognize that mandatory advanced slaughter techniques, which could be seen to be humane, were inevitable. In a letter to Justice Minister Fulton on July 18, 1958, the Meat Packers Council of Canada told the Minister that "it is the industry's continuing sincere desire to see the earliest practical solution to this problem". The Council also noted that it had set up a Committee on Improved Slaughter Methods which during recent months had carried on a good deal of research and investigational work. One major packer (Canada Packers Ltd.) had already installed a hog immobilizer tunnel, which enabled hogs to be anaesthetized with CO₂ gas before slaughter. In the case of cattle, mechanical stunning devices, in place of the knocking hammer, had been widely adopted by most major beef plants. The Council suggested that it would be unwise in the proposed legislation to leave it to the discretion of courts to decide whether any specific method was humane. Rather some body with technical expertise should evaluate various methods and officially approve certain ones as acceptable.

Subsequently, before any federal legislation was finalized, a Joint Committee on Improved Methods of Slaughter was set up. Dr. R. Gwatkin, former head of the Pathological Research Laboratory in Hull, assisted by Dr. A.C. Tanner, a retired chief meat inspector, carried out test work in co-operation with an expert scientific Advisory Committee selected by the National Research Council. Dr. Gwatkin subsequently prepared a detailed report recommending stunning of cattle by a mechanical instrument such as a captive bolt pistol, and the use of electrical stunning for pigs, with CO₂ immobilization a very acceptable alternative for larger plants. For small stock - calves, sheep and lambs - the report discussed suitable alternatives.

The result of this was that when the Humane Slaughter of Food Animals Act was passed by Parliament in 1959, the way was cleared for the industry, both large and small plants, to comply with the requirements without delay. The Health of Animals Branch of Agriculture Canada then proceeded forthwith to draft the regulations under the Bill. Copies of the proposed regulations were made available to the meat packing industry, through the Meat Packers Council and other sources, and the opportunity was afforded for the industry to comment on small details and to express views on the minimum time required for all plants to secure the necessary equipment to comply.

In the past 20 years since humane slaughter regulations came into effect there appears to have been a minimum of enforcement problems and this previous contentious issue has been satisfactorily resolved. Recently a committee has been reviewing the situation to see if the regulations require any up-dating in the light of further technological developments. Representatives of the regulatory agency, humane societies and processors are included on the committee.

EFFLUENT REGULATIONS FOR MEAT AND POULTRY PLANTS

In the late 1960's Environment Canada began a process of developing regulations respecting liquid effluents discharged by various major industries, designed to establish standards and guidelines to control the amount of deleterious substances eventually getting into streams with adverse effects on fish and other forms of life and vegetation. Such regulations were enacted under the Fisheries Act. In November, 1973 the Petroleum Refinery Effluent Regulations and Guidelines were issued. 1/

In 1972 the meat and poultry processing industries were selected for regulatory study, presumably because it was apparent that the industry was quite a large one, with plants all over Canada producing waste by-products. Slaughtering plants especially, were known to use and discharge large quantities of water, in which would be considerable organic material such as small scraps of meat and fat, blood, grease and certain other waste by-products of the slaughtering and dressing operation. This type of effluent, while not caustic or noxious, is relatively high in B.O.D. (biochemical oxygen demand) as it breaks down.

In 1972 representatives of the Abatement and Compliance Branch of Environment Canada approached the Meat Packers Council of Canada and the Canadian Poultry and Egg Processors' Council, requesting help in setting up a Technical Advisory Committee to work with the Department and assist in planning a fact-finding industry survey. Both Associations extended their full co-operation.

1/ In 1977 the Treasury Board conducted a case study of the Petroleum Industry Effluent Regulations and Guidelines using the RIAS approach. This was published in 1979.

Subsequently a consulting firm, Stanley Associates Engineering Ltd., were retained by the Department on a contract basis to carry out a detailed 'Inventory of the Meat and Poultry Products Industry in Canada'. 1/ In their subsequently published report the foreword stated "This report is the first stage in the establishment of effluent standards by the Federal Government". The central core of the report revolved around the amount of wastes, the treatment presently given them and indicated future action.

Both the meat and poultry industries co-operated with Stanley Associates in the conducting of this inventory, which entailed extensive questionnaires. Technical industry representatives reviewed the Report and offered comments.

The next step by Environment Canada was to approach the industries, in August, 1974, through their associations, in setting up a Joint Industry/Government Task Force. The project co-ordinator, M.J.Riddle described the purpose of this was to "hammer out the details of effluent controls for the industry".

Again the industry groups actively co-operated and a first meeting of the Task Force was held November 5-6, 1974. By early 1975 the Task Force completed a series of recommendations respecting regulatory concepts. At this stage there appeared to be a good consensus on what was required.

A few months later, however, when the first draft of proposed Regulations and Guidelines drawn up by the Department was circulated, it was found that several major Task Force recommendations had been overlooked or ignored. For example, the Task Force had concluded that effluent regulations should not apply to where a plant discharged effluent into a municipal sewage system where it would be treated, but should only apply to discharge directly into natural watercourses. The Department's first draft ignored this.

In February, 1976, after a period of ineffectual negotiation, the Meat Packers Council wrote the Department requesting a meeting to try to clarify, point-by-point, the contentious issues and hear and discuss the Department's rationale. Then followed some written exchanges and a meeting took place on June 22, 1976, at which a fourth draft of regulations was presented. The industry felt that several key points which it was concerned about were left uncertain or unresolved. Subsequently the Department approached the meat and poultry industry associations to co-sponsor, in early 1977 a series of three two-day Technology Transfer Seminars. The purpose of these was ostensibly to explain the final, official draft of the Regulations to industry people from large and small plants across the country, and to provide technical information on compliance requirements and waste disposal systems.

In October, 1976, the Meat Packers Council wrote the Environment Minister, Honourable Romeo Leblanc, reviewing the whole exercise and the concerns of the industry that Joint Task Force recommendations had been ignored, without a rational explanation. 2/

1/ Their study was published in July, 1974 in two volumes. One volume comprised the 'Inventory' of the meat and poultry industry and the other volume was a 'Plant Inventory' naming and locating all establishments.

2/ In this letter a key sentence read "Our concern has been the Department's monolithic, inflexible policy posture on key issues on the one hand, while soliciting full industry co-operation and technical advice on the other, which we have tried to render".

The Regulations were subsequently promulgated.^{1/} A grandfather clause was included for plants in existence before the Regulations came into force. For these, the standards in the Regulations would serve as guidelines only. For new plants, or plants with a major expansion subsequent to the Regulations, the latter would apply.

The Regulations, Guidelines and appended Schedules are very detailed, requiring extensive sampling, testing, reporting and record keeping.

No Regulatory Impact Analysis Survey has been done, as in the case study for petroleum. Such a study would certainly have been of value in this instance. The quasi-consultative approach used left the industry rather disgruntled after having extended all reasonable co-operation along the way.

METRIC CONVERSION

The aborted metric conversion exercise for meat and livestock illustrates a programme with which the industry made extensive preparations to comply, and then close to the expected implementation date, there was an indefinite postponement. This was a study in contrast with the pre-planned packaging and labelling changeover which occurred March 1, 1976.

The PDR sector of the meat industry was actively involved in metric conversion planning from 1974-79 with an extensive series of steps targetted to come into fruition January 1, 1980.

Early in 1974 the meat industry, and especially the processing sector, began to think seriously about metric conversion. It was apparent a complex series of changes were entailed, including:

- . Consumer packages (pre-packaged meat). If a 500 gram unit was to replace the pound, this involved slicing, forming and packaging equipment changeovers.
- . Livestock buying - discussions with producers and governments re metric units, scales, grading regulations, etc.
- . In-house changes - accounting (computer programmes, forms, etc.)
 - formulations (scales, computer programming, formula conversion).
 - Equipment (scales, pkg. equipment, 500 g units.)
- . Buildings - metric specifications in construction.
- . Staff - Training and orientation.

^{1/} Meat and Poultry Products Plant Liquid Effluent Regulations P.C. 1977-847 March 30, 1977. Special report published by Water Pollution Control Directorate, EPS 1-WP-77-2, July, 1977.

By June, 1974, the Meat Packers Council set up a Metric Conversion Committee, members were asked to appoint company co-ordinators, information meetings were held, and the industry began to consider acceptable metric package sizes. The Metric Conversion Committee of the Meat Packers Council was communicating with the Metric Commission and its Food Sector Committee (6.2).

By 1975 the Meat Packers Council members had arrived at a tentative schedule of meat package sizes. Further meetings were held with Food Sector Committee representatives and discussions were held with scale manufacturers and retailers. The meat industry was being asked to commit itself to metric conversion, although as yet there was no positive legislation, full assurance of political and public support, or any proposals re assistance with conversion costs.

By 1976 a major segment of the meat industry had approved conversion to a 500 gram basic unit in place of the pound, with a proposed schedule of smaller sizes, viz. 100 g, 200 g, 250 g, 300 g and 400 g. The Retail Council and the Meat Packers Council had tentatively agreed on these sizes. The conversion target date had been established as of January 1, 1980. Discussions were also proceeding in the Food Service product area, to consider metric sizes for patties and portion-control items.

Metric conversion activities in the meat industry stepped up to a faster tempo in 1977. A revised schedule of proposed package sizes for various products was set up. Discussions were held with Federal Government Departments with a view to reducing package size proliferation. Discussion of standard carton sizes was well advanced.

By the beginning of 1979, a year before the target date for implementation, the position was:

1. The Metric Conversion Plan for meat had been approved by the Metric Commission.
2. Bilingual 'Metric Reminders' had been widely circulated.
3. Plans were well advanced for scale conversion, packaging and carton changes in computers, record forms, production and packing machinery changes, etc.
4. Discussions had been held with livestock producers relative to commencing buying in metric units (kg) effective January 1, 1980 and changing grade standards to metric was under detailed consideration.

During 1979 all systems still appeared 'go', with periodic preparatory meetings, in various areas being staged, sponsored by the Metric Commission. Public awareness activities were in hand to explain what was in prospect. 'Meat Goes Metric' channel strips were distributed in stores nationally. The PDR sector appeared ready to convert at the target date, as a result of much planning, effort and expense at national, local and individual company levels extending back over 4 to 5 years.

During the summer of 1979 the federal responsibility for metric conversion details was assigned to the Minister of State for Small Business, Honourable Ron Huntington. In view of some public criticism, an Overview Committee to Study Progress on Metric Conversion was set up in October, 1979 and when this Committee reported, the federal government moved December 18th to delay the Retail Scales Conversion Programme for at least a year. This touched off a chain reaction which forced the meat industry to abandon a major portion of its metric conversion plans.

The position, at the beginning of 1980 was, therefore:

1. Purchase and grading of cattle and hogs in metric - postponed indefinitely.
2. Wholesale trade in random or catch weight meat products (carcass beef, hams, loins, etc.) - metric conversion postponed.
3. Trade in pre-packaged meat products in unit package sizes - to proceed in metric in 500 gram sizes and fractions.
4. Retail fresh meats and in-store packaged - sale in metric postponed.

The various sectors of the meat industry are still assessing the cost of the major efforts which went into planning for the conversion over the past five years, with the major part of the exercise now in limbo. They can hardly be blamed for a feeling of frustration as the exercise clearly points up undesirable effects of calling off a regulatory change, after full momentum had been developed.

SUMMARY

To briefly summarize:

1. The bringing in of humane slaughter legislation, and implementing the regulations under it, resolved a contentious public issue and utilized the application of modern technology to develop approved methods which large and small plants could use without prohibitive expense. The use of efficient, humane methods reduces the stress on plant employees and improves the public image of the industry.
2. Slaughtering and meat processing plants, by the nature of their operations, present environmental problems in minimizing air and water pollution. The general process of developing federal effluent regulations was rational but the consultative process, the industry felt, was not carried to a full and satisfactory conclusion. It should have been possible to end up on a stronger note of co-operation.
3. Metric conversion in the meat industry represented a high degree of consultation and co-operation, without, it appeared the final measure of political and legislative backing, and complete public support, needed to put it in place. An initial decision for or against mandatory conversion, it now appears, would have been preferable. Indefinitely postponing change-overs, after much preparation, is an economic waste.

REGULATIONS IN THE INTERESTS OF LIVESTOCK PRODUCERS

In this section are reviewed two regulatory case histories in the provincial field (financial protection for livestock producers and hog marketing regulation) and one of federal concern (beef import regulation).

BEEF IMPORT POLICY AND REGULATION

As this is being written, no specific regulation of beef or meat imports is as yet on the statute books, after two interrupted attempts. However, the Throne Speech at the opening of Parliament in April, 1980 indicated the intention to introduce such legislation in this session.

Traditionally Canada has both exported and imported cattle and beef, being on a net import basis generally. Feeder and slaughter cattle are exported to the United States, plus dressed carcass and boneless beef and some prepared cuts. Dressed beef and some live cattle are imported from the United States and frozen boneless beef, and some carcass beef, is imported in substantial amounts from Australia and New Zealand. Canned corned beef is another historic import.

During recent years Canada has controlled the import or export of beef, as necessary, by a permit system administered by the Department of Industry, Trade and Commerce. The United States, on the other hand, has had a Meat Import Law which provides that the President may set import quotas, when an unusually heavy movement warrants.

In 1973 large imports of cattle and beef into Canada occurred and threatened to unduly depress cattle prices. At this time Australia and New Zealand had a large surplus of beef to export and the work market price of boneless beef was substantially below North American prices. This situation continued through 1974-75.

In 1976 U.S. President Gerald Ford announced a beef import quota limitation, as triggered by their Import Law. On October 17, 1976, Canada placed beef and veal on an import permit basis, and also placed exports on a permit basis in view of the U.S. quota on Canadian beef.

In 1977 both Canada and the U.S. maintained import quotas on beef, in the face of ample domestic supplies and a large supply of low-priced boneless beef on the world market.

In late 1976 the Canadian Cattlemen's Association proposed a Meat Import Law for Canada to replace ad hoc import permit restrictions. The Meat Packers Council of Canada lent support to this, on the grounds that the whole industry would be better off with more advance supply certainty for the year ahead. Thus both groups were in favour of import legislation which might afford a measure of stability and protection.

In 1977 the Standing Committee on Agriculture of the Senate of Canada held a series of public hearings across Canada on beef industry stabilization proposals, including regulation of imports. Various groups from the cattle and beef industry testified at these hearings.

Subsequent to these hearings, in 1979 Bill S-13 was introduced in the Senate. This proposed controls on the annual importation of beef, under a control formula. Various industry groups, including producers and processors, testified before the Senate Committee, for the most part supporting the Bill in principle although opinion differed as to the best formula. Before it was passed and sent on to the House of Commons, a Federal Election was called, and a new administration was elected under Prime Minister Clark.

After the election a Beef Import Consultative Committee, chaired by Bert Hargrave, M.P. was set up by Agriculture Minister John Wise.^{1/} Renewed proposals to regulate beef imports on a counter-cyclical basis were discussed. The Government then indicated it proposed to introduce a Beef Import Bill in December, 1979 but before this occurred the government was defeated on a no-confidence motion on the budget, and an election was called.

During the campaign, the Liberal Party, which subsequently won the election in February, 1980 had indicated it would consider putting into legislation a long-term beef trading policy. In the Throne Speech delivered at the new opening of Parliament in April, 1980, the intention to introduce meat import legislation was indicated.

This is an example of a regulation in which there has been extensive consultation on the basic policy decision, in advance of the regulatory detail.

FINANCIAL PROTECTION FOR LIVESTOCK PRODUCERS (ONTARIO)

When farmers sell livestock not under a marketing plan, such as beef cattle, they have various selling options. These include: direct sale on a live or dressed basis to a beef packer by private treaty; sale through commission agents at a terminal market; or sale through a local country auction. Until the producer receives and cashes his settlement cheque, he has to depend on the financial security of the buyer or sales agent.

In the case of hogs, which have producer marketing boards in the Prairie Provinces, Ontario and the Maritimes, the board sells the product, collects from the buyer and pays the producer. Boards undertake to keep informed as to the financial capability of purchasers and generally insist on prompt payment.

In Ontario a plan and regulations under the Farm Payments Act have been in effect since 1967, providing a fund to ensure payment to milk and cream producers in the event of processor insolvency.

Lacking similar protection, Ontario beef producers began in 1975-76 to request the Ministry of Agriculture and Food to take appropriate action to provide more financial protection. This followed some fairly sizeable meat packing firms in the province going into receivership.

The response of the Ministry was to establish, in 1976, a Financial Protection Task Force to inquire into the problem, receive submissions, and recommend a course of action. Cattlemen, processors and marketing agencies presented briefs to the Task Force. Prior to this the Ontario Cattlemen's Association had held discussions on the subject with processors as represented by the Meat Packers Council.

^{1/} See Proceedings of Beef Import Consultative Committee, Information Branch, Agriculture Canada, September, 1979.

The subsequent inquiries gathered information on U.S. packer bonding proposals under the Packers and Stockyards Act, and a buyer licensing system used in Alberta and elsewhere.

Out of the discussions and recommendations of the Task Force came proposals which included a licensing system for dealers and buyers, a jointly-contributed insurance fund, and updated regulations for prompt payment. The Task Force estimated that Ontario farmers had lost about \$1 1/3 million due to buyer insolvency, in the previous decade.

The most controversial item concerned what groups should contribute to the fund, and in what relative proportions.

On May 25, 1977 the Ontario Minister of Agriculture and Food, Hon. W.G. Newman, informally announced proposals for an insurance fund administered by the Ministry and to which producers would contribute 40% and the buyers 60%. The Ministry would contribute an initial \$25,000 and grant an interest-free loan of up to \$250,000 repayable within a 10 year period as contributions built up.

In August, 1977, Bill 45 was introduced in the Ontario Legislature to amend the Farm Products Payments Act. Some of its proposals, however, were not acceptable to various groups and the Bill was held in abeyance pending further discussion.

In January of 1978 the Ontario Cattlemen's Association and the Meat Packers Council both wrote the Ontario Minister of Agriculture and Food advancing considered views of their members and further proposals in the principle of a financial protection plan for producers. Further discussions then ensued. In the meantime the Toronto Livestock Exchange, comprised of commission firms selling on the Ontario Stockyards, took action to expedite prompter payment by packers, and to producers, for livestock.

Through 1978-79 periodic meetings were held between cattlemen, processors and country auction operators, with the Ministry of Agriculture and Food maintaining a watching brief, but not introducing further regulatory proposals, because of the continuing disagreement as to the equitable make-up and size of the fund, and who could draw on it. Another matter of technical concern was how to enact the regulations, and whether they should be based on existing or new legislation.

The Ontario Cattlemen's Association wrote the Minister on February 26, 1980 reviewing the four year period of discussion and giving him their considered views. A fund on the order of \$1½ to 2 million was now proposed, due to the advancing price of cattle.

The Throne Speech at the opening of the 1980 Spring Session of the Ontario Legislature indicated the intent to introduce a Financial Protection Bill in these words:

"A special beef producers' financial protection fund will be created, in co-operation with producers, dealers and meat packing industry, to bring this key area of the agricultural sector similar protections now afforded to farmers in other areas of production". 1/

1/ Excerpt from Throne Speech, March 11, 1980.

PROVINCIAL HOG MARKETING REGULATION

The provinces of Ontario, Manitoba and Alberta, all important hog-producing provinces, have for a number of years had in place mandatory hog marketing plans organized under provincial marketing legislation. The Ontario Plan was established in 1946, the Manitoba Plan in 1965 and Alberta in 1968. Under these plans a Hog Producers' Marketing Board is delegated extensive powers to regulate and control the marketing and selling of hogs. These powers derive from the provincial Farm Products Marketing Acts and are conferred on the local board by the Provincial Farm Products Marketing Board (or Council in Alberta), appointed to exercise general oversight over all local farm marketing plans.

To give an example, Alberta Regulation 195/68 establishing the hog producers' marketing plan states:

"The purpose and intention of this Plan is to provide for the effective promotion, and the effective control and regulations in all aspects of the marketing of hogs within the Province, including the prohibition of such marketing in whole or in part".

In all three provinces the Hog Producers' Board has exclusive power to sell all hogs produced in the province through a sales agency it establishes. The local board can issue Orders and Directives, or in other words exercise subordinate legislative powers within the broad scope of the Plan, in the main without prior approval of Lieutenant-Governor in Council. Changes in the basic plan would require such approval, but not regulations made under delegated powers.

Any person feeling aggrieved by orders, decisions or directions of the Hog Producers' Board and wishing to appeal such aggrievement, may now in the case of Ontario lodge an appeal with the Farm Products Appeal Tribunal. This independent appeal agency has been in existence since February, 1979. As yet other provinces have not established similar tribunals.

In Manitoba an appeal from actions of the Hog Producers' Board may be made to the Manitoba Marketing Board, which is the agency which administers the Act and delegates powers to the local board.

In Alberta appeals against the local board may be made to the Alberta Marketing Council which body in turn is accountable to the Minister of Agriculture. The Alberta Marketing Council may refuse to hear specific appeals at its discretion, and direct them to the Courts.

Thus only a limited right of appeal exists in Manitoba and Alberta, while a relatively true appeal channel, independent of marketing administration, is available in Ontario.

Three examples will now be cited of the manner in which the local producer board has exercised regulatory functions.

Manitoba

From its inception in 1965 the Manitoba Board instituted a central electronic or teletype system for offering and selling hogs, patterned after the successful prototype established in Ontario in 1961. This system enabled all hogs to be offered in suitable lots for competitive bids from any processor, and was generally considered efficient and equitable.

The teletype selling system continued to be used in Manitoba until the summer of 1977. At that point the Hog Producers' Board, without any prior consultation with hog processors, summarily announced that the teletype system was to be discontinued and that a new system involving a price formula and market share allocations would be instituted September 6, 1977. The Board stated in a press release that "whatever happens, the Board does not plan to reinstate the teletype system". It had enacted MHPMB Order 1/77 to implement the changes.

Following its announcement the Board called individual processors in to private meetings to explain its proposals, which it stated were non-negotiable pending a suitable trial period.

After the series of individual meetings Manitoba members of the Meat Packers Council asked the Board to convene a meeting with all processors as a group, to try to iron out remaining points of dispute. The Board refused initially to do this but later relented and discussions were held August 23, 1977. An initial trial bidding session under the new system was held August 30 with all firms participating. Prior to this Manitoba processors sent a joint wire to Manitoba Premier Schreyer as follows:

"Manitoba Hog Producers Marketing Board under this Order 1/77 effective September 6 proposes implementing far reaching changes in selling and pricing system for hogs which processors had inadequate notice of and do not consider square with basic principles of equitable and competitive sale stop thus far negotiations with Board have failed to arrive at a mutually acceptable solution and with timing critical we urge you use your offices to persuade board to postpone implementation to enable further joint consultation on workable alternatives".

Through the next few weeks a virtual impasse between processors and the marketing board continued, with the former threatening to stop buying unless acceptable changes were made in the selling system. Finally the Board agreed to a few minor changes and processors agreed to a three month trial on that basis.

A review meeting was held in December, 1977 at which further proposals and counter proposals were made. After a period of further uncertainty the Board, after considering certain basic 'principles of sale' advanced by processors, agreed to investigate, and if possible acquire, a 'Dutch Clock' selling mechanism already in use elsewhere for tobacco, flowers and other commodities.

This course of action was pursued, but after a start-up date target of April or May was not realized, the Board finally announced it was prepared to institute 'Dutch Clock' selling commencing August 25, 1978 on a 'day ahead' basis. Board Order 1/78 was promulgated to provide this authority.

An impasse developed on final details, however, which was not resolved for a month, with the aid of mediation efforts by the provincial Agriculture Ministry. Finally 'Dutch Clock' sale of Manitoba hogs commenced on a 90-day trial basis on September 22, 1978 and has remained in operation since that time, with the matter being reviewed from time to time. Relations between producers and processors have significantly improved.

Alberta

The Alberta Hog Producers Marketing Plan came into operation in 1968 after a producer plebiscite. The literature distributed to producers prior to the plebiscite stated that a main feature of the Plan was "to provide a selling mechanism, likely to be teletype, that would enable producers to offer and sell all slaughter hogs...through competitive bidding....and providing that all buyers of slaughter hogs be given equal opportunity to bid on all hogs".

From the inception of the Plan, a teletype selling system, similar to Manitoba and Ontario, was used as the main sales method for Alberta hogs. However later on the Alberta Board modified its regulations to enable it, completely at its own discretion, to negotiate sales directly with individual packers on a private treaty basis.

In the latter part of 1977 hog marketing disruptions occurred in Alberta with the Board counselling producers to withhold hogs from the market and in turn processors, for a time, refused to buy under such an uncertain situation. This led to the Minister of Agriculture commissioning an independent study of the situation by Hu Harries and Associates. This consulting firm filed a report in November, 1977, but this did not clear up the problems.

Early in March, 1978 the Alberta Hog Producers Marketing Board convened a meeting with hog processors and announced that, effective in one week (March 20) modified selling procedures would be put into effect. These new procedures constituted a very major change from the current teletype sale. Each day the Board said it would offer a certain number of hogs in a certain number of lots for possible delivery the next day, but with no guarantee of sale and delivery on any specific lots. After each bidding session the Board would arrange the bids from high to low and confirm, at its discretion, a certain number at the top end, simply rejecting the rest.

Processors objected to this proposal which was at variance with the traditional auction principle of sale to the highest bidder on each lot. The Board refused to change or delay its proposed procedures. A further meeting on March 31 failed to resolve the dispute.

Processors continued to buy hogs under the amended procedures under protest, even during an ensuing period of plant labour difficulties.

An appeal by the processors was heard by the Hog Producers Marketing Board on June 29, 1978. It was mid-September before a brief and inconclusive response was made by the Board to this appeal. On July 15, 1978 the Board belatedly gazetted a regulation respecting its amended Sales Procedures.

In October, Alberta processors, represented by the Meat Packers Council, submitted an appeal to the Alberta Marketing Council, respecting the Board's actions in instituted disputed selling procedures and also with regard to the signing by the Board of forward contracts for hogs with two processors, under undisclosed terms and conditions.

To clarify a technical point, the processors withdrew the appeal to the Marketing Council in order to permit a final request for reconsideration to the Producer Board. This was heard on November 9, 1978 and the Board rejected the processor requests.

During 1979, despite further appeals to the Marketing Council, and various legal steps, processors obtained no relief with respect to their complaints.

In February, 1980 difficulties between the Alberta Board and processors flared up again. A dispute arose over minimum prices for hogs, with a record North American supply of pork, and teletype sale of hogs in Alberta was suspended, with the Board negotiating private treaty sales by telephone.

On February 21, 1980 the Alberta Minister of Agriculture announced the appointment of a four-man committee to investigate all aspects of hog marketing in the province. During April the Committee held a series of public meetings, inviting interested persons to make submissions.

On March 17 the Alberta Agricultural Products Marketing Council issued a number of directions to the Pork Producers' Marketing Board, including changes in its method of offering and selling hogs and requiring the board to secure the Council's written authorization before exercising certain delegated powers. Subsequently, however, the Minister announced in the Legislature, that the Council was suspending these actions until October, by which time the study committee would have reported.

Ontario

Since the teletype method of sale was pioneered in Ontario in 1961 generally harmonious relationships have consistently prevailed between the Ontario Pork Producers Marketing Board and the processing industry.

One basic reasons for this is that Ontario Hog Marketing Regulation 328 1/which outlines the marketing plan, sets forth in Clause 12 provisions which clearly prohibit discriminatory hog selling practices. It requires:

1. The local board to establish a selling procedure enabling all processors reasonable opportunity to bid on each lot of hogs offered for sale.
2. That hogs be offered for sale in lots, without discrimination, allowing processors to bid competitively for each lot.
3. For each lot sold, the buyer is to be the processor first bidding the highest price offered.

1/ Revised regulations of Ontario, 1970 as amended by O.Reg 419/71 and O.Reg. 656/74, made by the Farm Products Marketing Board under the Farm Products Marketing Act.

Since the local board is required to sell all hogs as above outlined, and has followed this at all times, the difficulties and confrontation occurring in Manitoba and Alberta have been completely avoided. Ontario processors have not been confronted with sudden and arbitrary changes in sales procedures, the negotiation of private contracts with certain buyers, or the withdrawal of hogs off the market for sale elsewhere.

In 1978 the Ontario Board encountered some difficulty in having more hogs on hand at certain times than processors could handle. Through joint consultation a procedure was developed for exporting surplus hogs to U.S. processors and to record this movement over the teletype system. The Board in recent months, with the knowledge of processors, has been proceeding toward regulatory changes which will permit the export of hogs in emergencies, without prejudicing the principle of maintaining full access to the supply by Ontario processors.

The foregoing resumes of hog marketing regulatory experience in the three provinces show some interesting contrasts, despite the fact the three plans are quite similar in format and objectives.

It appears the initial adversary relationship in the operation of the Ontario plan disappeared when the delegated authority to the local board was amended to lay down certain basic criteria, requiring that all of the regulated product, i.e. processing hogs be offered in public view to all buyers in a manner which would induce open competitive bidding and be seen to eliminate the possibility of discrimination. This seems to have been successful in maintaining an atmosphere of mutual confidence and co-operation, which is now also evident in Manitoba under the 'dutch clock' system.

In Alberta a government-appointed Review Committee is currently studying the difficulties in buyer-seller relationships which have continued to mark the hog marketing plan in that province.

The basic factor, in each of these experiences, would appear to be accountability, which was discussed in more detail at the beginning of this section of the report.

REGULATIONS IN THE CONSUMER INTEREST

The majority of regulations respecting the way meat is prepared, handled, labelled and sold are for the benefit of the final link in the meat system - the consumer. The meat inspection system itself is designed to assure the consumer of a safe, wholesome meat supply and a constant monitoring process goes on to ensure that not only is the meat which is sold itself wholesome but also it does not contain undesirable residues or additives in excess amounts or kinds that are not permissible. In addition to an extensive array of regulations aimed at consumer safety there are also regulations, such as labelling, which inform the purchaser, thus enabling more rational buying choices.

The following case histories, all fairly recent, have to do with regulations primarily of consumer benefit.

SLICED BACON PACKAGING

Before the inception of the Department of Consumer and Corporate Affairs, organized consumers sometimes sought relief from marketing and merchandizing practices they objected to under Section 5 of the Food and Drugs Act, which has provisions relating to packaging, labelling and advertising, deemed false, misleading or deceptive.

In the 1950's practices in packaging of sliced side bacon (breakfast bacon) became a controversial issue. Before the advent of mass merchandizing and self-service food counters with pre-packaged products, bacon customers generally watched their bacon sliced from a slab, with the slices then wrapped in waxed paper with a kraft paper over-wrap.

As bacon gained in sales and popularity as both a breakfast and sandwich item, more and more pre-packaged, sliced product was sold in $\frac{1}{2}$ lb. or 1 lb packs. The early packs were simply stacks of slices wrapped in cellulose film, with elastic bands to hold the package together. Some processors began to have wavy red lines printed on the film to offset the white bacon fat and produce a more colourful and appealing display.

Side bacon is, as is well recognized, a relatively fat product. Bacon sides are from the belly of the pig and the proportion of fat to lean varies considerably from carcass to carcass, and also from one end of the side to the other. Some slices from the centre section are nicely streaked with lean and fat while at the flank end there is a sizeable solid lean portion, but generally this is less preferred for tenderness than desirably streaked slices.

Later on the flat window pack (1 lb. and $\frac{1}{2}$ lb.) was widely adopted for sliced bacon. This consisted of a cardboard backing with a printed front border, and a heat-sealed film over-wrap. The slices inside were 'shingled', one overlapping the other, in the way they came off the power slicer on the packaging line. In the package they were placed in 'reverse shingle' with the leaner edges visible in the window. This type of package was colourful, fitted well in counter display, protected the contents against light to some extent, and was convenient for home use. ^{1/} Subsequently, however, consumers complained that flat reverse shingle packs gave a misleading impression as to the leanness of the bacon, although they knew from experience that bacon was quite a fat product and varied considerably. Also the No. 1 brands of leading bacon processors had become fairly well known, with No. 2 and No. 3 brands generally less desirable, and considerably cheaper in price.

The Consumers Association of Canada took up the issue and began to press for either (a) government grades for side bacon or (b) regulations requiring more revealing bacon packages.

Surveys were conducted as to the preferences of consumers in the appearance of bacon, both before and after cooking. These tended to reveal that it would be difficult to arrive at official grade standards combining all attributes which consumers sought in bacon such as the lean/fat ratio and distribution, flavour, tenderness, degree of smoke, etc. No cost/benefit analyses of a grading programme were conducted, but it was concluded, for various reasons, to switch attention to packaging changes.

^{1/} Trade Information Letter 132, issued February, 1956 defined guidelines for bacon packs which would be considered in line with Section 5 of the Food and Drugs Act. For a flat one pound pack of sliced bacon the window area was required to be at least 30% of the face area, and comprised a film clear, colourless and free from printing.

A number of meetings were convened in 1964 by the Food and Drug Directorate, at which representatives of consumers and bacon processors were represented. Various options were explored but the final conclusion was in favour of the principle of a bacon package which would display a complete representative slice in the clear film window of the package.

On February 4, 1965, the Food and Drug Directorate issued Trade Information Letter 248 which in effect directed bacon processors in designing bacon packages, and displaying their contents, so as to conform to the spirit of Sec. 5 of the Food and Drugs Act. In future the shingle seen in the pack window has to show the full cross area of a representative slice and not be reverse shingled so as to show only the lean edge. The new requirement was required by January 1, 1966, but an extension to May 1, 1966 was later given to avoid excessive waste of unused packaging materials.

DATE MARKING REGULATION

Early in the 70's, as part of demands for more consumer information about the quality and freshness of packaged foods, it was increasingly suggested that perishable foods ought to carry a date. There were differing opinions, however, as to whether the date should indicate time of manufacture or packaging, or whether it should signify the durable life of the product, with products withdrawn from sale at the expiration of the date.

Date marking has been one of the topics discussed at the annual meetings of the Food Packaging and Labelling sub-committee of the international Codex Alimentarius Commission of F.A.O. Canada was the host country of this sub-committee and Canadian delegates agreed with those who favoured bringing perishable food dating under more formal control.

Up to this time Canadian meat packers had been using a system of 'code dating' for pre-packaged meat products such as bacon, wieners and sliced luncheon meats. Packages were stamped with a combination of numbers in a fairly simple code which denoted the age of the product. However it was basically intended for the information of processors and the retailers, rather than for the consumers. Retailers used the code date of products to manage stock rotation, and it also became significant in the event of claims for unsatisfactory product or defective packaging. When vacuum-packaged products such as sliced bacon failed to hold vacuum, thus shortening their shelf life, the retailer customarily made a claim on the processor for such 'leakers' as they were known in the trade.

Code dates were also significant to the processor, in allowing product to be traced back, in case of difficulty of any kind, to the date of packaging and manufacture.

In 1970 the common practice of most major Canadian meat packers was to code date meat packages with a date signifying the expected time of arrival in the retail store. Since the in-transit time was variable, a maximum lag of 5 days was used in dating. For example, product passing through the bacon slicing and packaging line of a plant on May 20 might be dated up to May 25, to allow for shipping, delivery and placing in the retail counter. It was common practice for the processor to honour claims from customers for 'leakers' or other defects for up to 10 days subsequent to the code date.

It should be noted that in the case of canned meats, code dating is mandatory under the Canada Meat Inspection Regulations. Each can is required to carry the coded date of canning and the batch number for control purposes. Meat inspection staff are provided with the code key for their information.

In 1970-71 the advisability of requiring an open dating system for perishable foods, readily discernible to the buying public, was being widely discussed. An indication of the public dialogue was the conference on 'Food Stability and Open Dating' which took place October 21-22, 1971 at Rutgers University, New Brunswick, N.J. under the aegis of the Food Science Department of the College. Well over 100 U.S. and Canadian representatives of government, the scientific community, the food industry, and consumers, attended this conference. Its official purpose was stated as follows:

"The Conference is organized to bring together interested parties representing technical, governmental, business and consumer groups to review and discuss research findings and experience in the general area of Food Stability and Open Dating. The legal status of Federal, State, Local and Foreign programs will be reviewed. The basis for a Model Law on Open Dating will be reviewed". (Conference Proceedings Page 5).

There was no comparable gathering to the Rutgers Conference held in Canada, but just prior to it the Meat Packers Council of Canada, in view of the fact that Bill C-180 (Consumer Packaging and Labelling Act) enabled proceeding to some type of dating regulation, issued a position paper on September 11, 1971.

The Council suggested that shipping cartons of meat be marked with an open date designation, e.g. 'Sept. 16' to indicate date of packaging. For individual packages, pre-packaged by the processor, it was suggested they bear an open, uniform code, e.g. '0916' the latter denoting Sept. 16 as the date of packaging or manufacture.

At the retail level the Council suggested an open date, e.g. 'Sept. 18' be applied, indicating the date of shelf display. The foregoing, it was felt, were in line with recommendations of the Rutgers study.

The next move was made on September 25, 1972, by the Federal Department of Consumer and Corporate Affairs, after extensive study of the matter. On that date the Department's Assistant Deputy Minister, J.B. Seaborn wrote to various food trade groups, including the Meat Packers Council, proposing a dating regulation for perishable foods with a shelf life of six months or less, other than fresh fruits and vegetables.

What was proposed was an 'expiry date', which would be preceded by the notation, "For optimum freshness buy before or on the date shown on the package" (indicating the location of the date). Interested parties were allowed 60 days for written comments, but the matter remained under active discussion for several months.

The Meat Packers Council submitted a written response in November, 1972. This was followed by a concise updated position statement at a meeting with Departmental officials in April, 1973, and the dialogue was continued at a further meeting with the Assistant Deputy Minister November 19, 1973.

During the course of the discussions with various food trade groups and others, the Department changed its proposal from an 'expiry' date to a 'use by' date. The latter proposal was advanced in Trade Communique No. 3, issued on September 22, 1973.

The Meat Packers Council's response to these proposals was not in opposition to dating of packaged meats per se, but it indicated concern with some of the practical details, with the anticipated costs in relation to possible benefits, and with the lack of initial consultation before a basic policy decision was made.

On January 15, 1974, the Council held a final meeting with the Minister, the Honourable Herb Gray. In a three page memo the Council reviewed its major concerns, which were:

1. The increasing cost of food, raising the question whether mandatory dating as proposed would cost more than the real consuming public benefit. Also, needless product waste might be involved if consumers always chose the latest-dated product in the counter, letting some become out-dated.
2. The possibility that consumers would interpret the 'use by' date as expiry of product life, when such was not the case.
3. The problem of the manufacturer in determining a durable life date of perishable packaged meat without control of holding temperatures throughout the marketing cycle. Nevertheless the Council told the Minister it "supported in principle the concept of a dating system for perishable meat products which would provide reliable and effective guidance throughout the marketing-consumption cycle as to relative freshness and wholesomeness".

Subsequently the Department considered the views of food processors, retailers and consumers. Broadly speaking the manufacturers favoured the date of manufacture or packaging, the retailers leaned toward the date of initial display, and the consumers favoured a date which would enable them to assess the amount of product life remaining.

As a final compromise the Department published the regulation in March, 1974 requiring a 'Best Before' date. This designation inferred that the product ought to be used before that date to ensure maximum freshness and wholesomeness. It did not necessarily mean the product was hazardous after that date and should be discarded.

In the period before 'Best Before' dating became mandatory on March 1, 1976 (together with all other extensive packaging and labelling changes required under Bill C-180) the meat industry had to work out the details of technique and equipment for satisfactorily applying the dates on the many types of meat packages, on an assembly-line basis. This entailed considerable investigation, testing cost and equipment expense.

A problem of prime concern in the industry was that dating practices not become an undesirable competitive drive to outdo competitors in shelf life, creating

the possibility of product hazard if it was not kept at approved temperatures in the meat counter or after consumer purchase. While no uniform advance dating schedule for various types of products was adopted the PDR sector agreed that a responsible course would be to avoid over long 'Best Before' dates.

Another problem concerned the way in which dating policy would apply to fresh meats packaged by the retailer at point of sale. Initially this was resolved by allowing such products to be dated with the date of packaging, rather than with a 'Best Before' date. Eventually retailers were given a permanent exemption from 'Best Before' dating for fresh meat and poultry. This seemed to be the only practical solution for products with a relatively short display cycle.

Mandatory dating policy for meats has now been in effect for some four years. No comprehensive analysis has been made as to whether the public benefits to consumers have outweighed the considerable costs involved to the PDR sector. It seems likely that dating has enforced stricter policies of stock rotation and inventory control, and possibly has also induced stricter supervision of counter temperatures and refrigerated case equipment. There is no indication of how much attention consumers pay to product dates after they purchase it. Nor are there data available on the proportion of product which remains in counters past the 'Best Before' date and is then either discarded or sold at a reduced price.

NITRITE REGULATION

Nitrites and nitrates of sodium and potassium occur quite widely in nature and have been used for literally hundreds of years in the curing of meats, particularly pork. The main function of nitrite in curing is to act as an anti-botulinal agent, thus guarding against severe food poisoning from this source, often fatal. But in addition, nitrite imparts desirable colour, and traditional cured meat flavour.

Since 1920 regulations have been in effect in Canada which limit the residual nitrite in cured meats. However, within the last decade, the need to re-assess nitrite usage has been under review in Canada, as well as the United States. This followed the findings of researchers in the early 1960's, indicating that nitrite could react with amines to form nitrosamines, and that the latter were demonstrated to have carcinogenic potentials. This raised concerns about cured meats, since nitrosamines were found in them, especially fried bacon. Although it was estimated that only about 2% of human exposure to nitrite is attributable to cured meats (other common sources being vegetables, water, saliva and normal nitrite production within the human system) food chemists and scientists began to examine meat curing practices. In the United States concern was heightened by the existence of the Delaney Amendment to the U.S. Food and Drugs Act which decreed zero tolerance for any carcinogenic substances.

Early Canadian Moves

Canada moved considerably earlier than the U.S.A. in examining the need for closer regulation of nitrite/nitrate usage in cured meats, particularly bacon. In the latter country the nitrosamine controversy did not reach its crest until about 1978.

Early in June, 1971, as an initial step, officials of the Health Protection Branch, Health and Welfare Canada, aware of the current research on nitrosamines

and their possible relation to cancer, called a meeting with representatives of the Meat Packers Council of Canada to discuss nitrite levels and current curing practices. It was agreed, as a first step, to conduct an immediate industry survey of current input levels of these curing ingredients in bacon and other cured meats. Through the co-operation of the Meat Packers Council and its members this survey was carried out in June, 1971 and the results were turned over to the Health Protection Branch for study and evaluation. At this time an informal industry testing programme on cured meat samples was also underway in the U.S.A., but little serious concern had yet begun to be manifested there.

In April, 1972 the HPB and the MPC again met to discuss the nitrite situation. The processors proposed the immediate elimination of nitrate in some products and the imposition of reduced maximum limits of nitrite in others, with bacon coming in for special attention due to its cooking methods. Meanwhile food chemists and scientists were searching the field for possible curing alternatives for nitrite which would be safe and effective. They were also trying to develop blocking agents which might inhibit nitrosamine formation. Arising out of this, the Canadian industry voluntarily reduced and tightened up nitrite usage in the early 70's without formal regulation.

In 1975-76 food dating proposals for perishables were also being advanced. This meant that the keeping qualities of cured meats, long dependent on nitrite to guard against botulinum and other bacteriological hazards, assumed additional importance.

During 1976-77 further investigational work on the nitrite-nitrosamine question continued actively, but food scientists in the U.S. and Canada, trying to find definitive answers. Tests on laboratory animals confirmed that nitrosamines were carcinogenic, although not necessarily proving that consumption of ordinary quantities of cured meats presented any abnormal health hazard.

Developments in the Late 70's

After a period of relative quiescence on the nitrite question, the subject began to heat up extensively in 1977. On October 18 the U.S. Department of Agriculture published a demand that the American meat industry submit data by January 16, 1978 to demonstrate that nitrite usage did not produce nitrosamines, or face the early prospect of a complete ban on nitrite as a curing ingredient for bacon and other meats.

In Canada, in November 1977 processors attended a technical seminar arranged by the Research Division of Canada Packers Ltd., relating to nitrites, nitrosamines and inhibitors. This was followed, in December, 1977 with a meeting between processor representatives and officials of the Health Protection Branch and other government agencies. This was to fully review and discuss the nitrite situation, including possible replacements, inhibitors, research programmes, the feasibility of further nitrite reductions, and the general economic and other consequences of a complete nitrite ban, such as was being proposed in the U.S.A.

Growing out of this meeting a joint Industry-Government committee was formed on Nitrites and Nitrosamines. Starting in January, 1978 this Committee began to meet regularly, and embarked on a comprehensive programme to generate information needed as a basis for rational, science-oriented nitrite control policy. Members of the Committee were drawn from five government departments, universities and industry. It was chaired by Dr. E.J.LeRoux, Assistant Deputy Minister, Research Branch, Agriculture Canada, with Dr. C. Randall of Agriculture acting as Secretary. 1/

One of the early projects of this committee was to assess the economic impact of a ban on nitrite in bacon and other cured meats. This study was jointly carried out by the Health Protection Branch and Agriculture Canada. The economic impact was placed at \$302 millions, mainly on hog producers and meat processors.

Another major project of the Committee was a survey of the nitrosamine levels in a cross section of Canadian cured meat products, including wieners, bologna, hams, smoked meats, luncheon meats, specialty sausage and breakfast strips. Samples were collected and analyzed in an approved independent laboratory. The results were on the whole reassuring. Most of the main forms of nitrosamines were either found absent or if existent, in rather negligible quantities.

In all, the Committee carried out well over a dozen projects to broaden the understanding of the nitrite and nitrosamine problem. Included in its work was a close watching brief on U.S. developments. The latter threatened severe economic repercussions on the whole bacon and cured meat industry, since no safe and effective substitute for nitrite was yet in sight, despite intense scientific research.

In May, 1979 the HPB (Health and Welfare Canada) proposed a reduction in maximum nitrite input levels in bacon to 50 ppm from the previous 150 ppm. This reduction was based on a revised conclusion that the botulinum hazard was less than previously supposed, taking into account possible consumer abuse of the product and other factors.

Members of the industry represented by the Meat Packers Council argued strongly against the drastic reduction to 50 ppm. They cited the natural variation in belly composition and range in pumping pickle concentration, which would introduce a botulism hazard in underpumped sides. In August, 1979 the Council released a manual "Critical Control Points in Bacon Manufacture" which outlined latest curing and smoking practices and technology and was well received by both industry and government.

During this time the M.I.T. study by Dr. Newberne 2/ on which the U.S. government had based its prospective nitrite ban, was undergoing intense scientific appraisal and some of its conclusions were being seriously challenged.

1/ A review of the Joint Committee's work is given in a paper by Dr. E.J.LeRoux at the 1980 Convention of Canadian Meat Council, Toronto, Feb. 4-5, 1980.

2/ Newberne, Paul M. - Dept. of Nutrition & Food Science, Massachusetts Institute of Technology - Dietary Nitrite in the Rat - Final report May 18, 1978 on contract FDA 74/2181

As a result of questions raised by the Council on Agricultural Science and Technology and other groups as to the proof of human cancer risk from the quantities of nitrosamines in cured meats, the U.S. Food and Drug Administration was tending to back off, and arrange for further scientific evaluation of the Newberne findings. Further results of these studies are pending in the near future.

At the present time active research and investigation is continuing in Canada and the United States with a view to developing the most advanced methodology for the control and reduction of nitrosamines, including lactic acid starter cultures, sorbates as inhibitors, dual pumping, irradiation and processing aimed at improving the acceptability of nitrite-free processed meats. Recently scientists have been investigating the possibility that nitrite may inhibit the formation of malonaldehyde (a by-product of lipid oxidation) the latter possibly entailing more carcinogenic hazard than nitrosamines.

To sum up briefly, the industry-government consultation and co-operation which has taken place to evaluate the documented evidence respecting nitrites and nitrosamines, appears to have been a much sounder approach than premature regulation, and a possible unwarranted ban on nitrite usage, with no effective replacement for this curing ingredient in bacon and the many other popular varieties of cured meats.

Dr. E.J.LeRoux, Chairman of the Joint Committee, has stated the following with regard to the handling of the nitrite question:

"This mutual co-operation has promoted the efficient development of research on nitrite that fits both government and industry programmes. Industry concerns have been identified and research studies have been initiated, and will hopefully assist in alleviating these concerns.this co-operative effort is in direct contrast to the current situation in the United States. There the status quo is direct confrontation between industry and government on such issues as nitrites...such an approach appears to be derogatory and disruptive to the logical solution of any problem...It is our hope that this Committee can be used as a forerunner of similar industry-government interaction on matters of mutual concern".

The government, in considering the nitrite question, has had to consider the best scientific evidence available on the human health hazard of substantially reducing or even banning, the continued use of nitrite on the one hand, as against the danger from botulism if its anti-microbial properties were not replaced, in cured meats, by some other equally effective agent. In addition, it has been necessary to weight the economic effects of a nitrite ban on the cured meat industry. The way the nitrite regulation has been handled in Canada seems to represent a rational systematic approach to a complex problem.

MICROBIOLOGICAL STANDARDS FOR GROUND BEEF

With a steadily growing proportion of beef being sold and consumed in ground form, it was perhaps natural to see increasing public concern developing in the early 70's regarding the microbiological quality of ground meat. Quite a proportion of hamburger meat consumed in the home is ground and packaged at the retail point of sale. Hamburgers and meat patties for the institutional trade are commonly processed in plants, as well as packaged patties for the retail trade.

The State of Oregon in the U.S.A. was one of the early jurisdictions to impose microbiological standards for ground meat and the experience there with compliance and enforcement was watched with interest. Eventually Oregon discontinued their ground meat regulations due to continuing difficulty in making them work properly. Serious problems of enforcement and compliance were encountered.

In August of 1977 Colorado State University published an extensive report on "Benefits and Costs of Public Regulation of the Production, Processing and Distribution of Ground Beef". This was a study carried out through grants-in-aid from the U.S. National Science Foundation. It seemed to conclude that additional research would be required to demonstrate whether costs outweighed benefits, or vice versa. 1/

In Canada the first concrete move toward setting up microbiological standards for ground beef occurred in December, 1975. At that time, with no preliminary dialogue with the major interested parties, the Health Protection Branch of Health and Welfare Canada issued Information Letter 453. In this, standards for ground beef were proposed, and comment was invited from those interested. The PDR sectors of the meat industry responded promptly with position papers.

In a written response to the HPB dated February 4, 1976 the Meat Packers Council of Canada agreed with the objective of maintaining high standards for Canadian meat products under the Meat Inspection and Food and Drugs Acts, but questioned (a) whether there was a demonstrated need for the proposed microbiological standards for ground meat, (b) whether they would be effective in achieving the slated objectives, (c) whether consistent compliance would prove possible or practical and (d) whether public health benefits would equal or exceed compliance costs.

The Council's brief noted that in the U.S.A. from 1966 to 1973 there had been 2,464 reported cases of food-borne illness, of which only 65 were reportedly attributable to ground beef. In the majority of the latter, it was post-purchase handling of the product that was believed mainly responsible. The Council said that the evidence was the ground beef was not a 'high risk' food, noting further that 1972-75 investigations of ground beef patties by the U.S.D.A. had found only 3 out of 735 (0.4%) were salmonella positive. A similar survey in Canada in October, 1973 had found a low incidence of salmonella in ground beef and patties. Dr. W.K. McKinley, Director General of the Food and Drug Directorate was quoted as saying "We have no reports that hamburger has caused food poisoning in Canada" while another official of the Ottawa-Carleton Regional Health Authority had recently said "the quality of hamburger is the least of our concerns (as a factor in food poisoning incidents)".

1/ Final Report - Benefits and Costs of Public Regulation of the Production, Processing and Distribution of Ground Beef. Colorado State University August, 1977, made under National Science Foundation Grant Apr 76-18473

The Meat Packers Council then commented specifically on the proposed standard of 5×10^6 for Aerobic Plate Count, and the proposals regarding tolerances for E.Coli, S. Aureus and Salmonella. Its general conclusion was that not only would complete compliance be difficult if not impossible, but that the standards attained, effectively would not reduce the risk of health hazard or provide consumers with "assurance that any ground beef is safe from harmful and excessive contamination". Rather, the Council suggested, stress should be laid on good initial manufacturing practice and proper sanitation and temperature control throughout the entire marketing cycle and use in the home after purchase.

The Health Protection Branch convened a meeting in Ottawa February 10, 1976 which was attended by representatives of the PDR sector (meats), consumer representatives, relevant government agencies and others. An extensive discussion occurred pro and con the proposed regulation.

Arising out of this meeting came a decision by the Federal Government not to proceed immediately with a ground meat regulation. Rather it was resolved that specifications similar to the proposed standards should serve as industry guidelines for at least two years. Meanwhile a Co-ordinating Committee on the Microbiological Quality of Ground Beef was set up. This Committee was directed to examine ways and means all along the line of improving the microbiology of the raw material and the final product.

The Meat Packers Council, with the approval of the Co-ordinating Committee, completed a survey of the microbiological quality of ground beef, and the preparation by September, 1978 of a statement on good manufacturing practice. Other sub-committees of the Co-ordinating Committee, representing the transportation, retail and consumer sectors were also studying the problem. It was found that effective standards of personal hygiene and sanitation all along the line, coupled with good temperature control, were essential elements in a safe wholesome product. During this time the trend toward more beef carcasses being broken centrally, put in film bags and boxed, tended to reduce the surface bacteria problem. Another basic project was aimed at cleaner hides on cattle in feedlots and this tended toward reduced surface contamination of carcasses on the killing line of plants.

A watching brief on the microbiology of ground beef is being maintained, but the general conclusion appears to be that mandatory bacteriological standards for this popular product are at present unnecessary for consumer safety and would pose difficult problems of enforcement and compliance. The exercise illustrates that joint co-operation in correcting a problem which presents no serious health hazards is generally preferable to ineffective and impractical regulation and the imposition of standards which are not practically attainable or effectively enforceable.

The Joint Committee chaired by Dr. Michael Stiles of the University of Alberta was preparing its report in April, 1980 of the two-year industry experience under the guidelines.

SALMONELLA REGULATION

About the same time that the microbiological status of ground meat was being questioned and some type of regulation being considered, one specific type of bacterial contamination was a subject of growing public concern. The particular culprit was salmonella, an organism frequently detectable in poultry, but also a potential hazard in certain other perishable foods. When this disease organism multiplies under favourable conditions, such as inadequate refrigeration, it is capable of causing severe illness and digestive upsets in consumers, which are generally reported as 'food poisoning'. In its extreme form the designation is salmonellosis.

In 1977 the Health Protection Branch of Health and Welfare Canada announced its intention to embark on a regulatory programme which would in due course restrict the sale of poultry containing salmonella. It was realized, however, that elimination of salmonella was a deep-seated problem, requiring fundamental changes in the breeding, rearing, and feeding of poultry in order to minimize the incidence of salmonella infection all along the line. Since the latter was a troublesome, but not usually fatal, type of food borne infection, it seemed to be the general view that a sudden, drastic type of regulation was not required, which would completely disrupt the production and sale of poultry at a time when protein foods were becoming increasingly expensive.

Subsequent to the announced longer term HPB policy aimed at substantially reducing the salmonella incidence in poultry, Agriculture Canada convened a meeting of all interested sectors including the poultry and feed industries, processors, scientists, government agencies and consumers. This meeting was held in Ottawa March 1, 1977. It resulted in a common resolve to seriously attack the salmonella problem on all fronts. The first concrete step was the formation of a "Poultry Industry Committee on Salmonella" (PICS). Sub-committees were set up, under this central committee, representing various sectors of the production/marketing chain from producer to consumer, such as for example Feed and Feed Ingredients. Each sub-committee was charged with examining the current situation of infection, and the most practical and effective ways of bringing about improvement.

On December 5, 1977 PICS representatives met with officials of Agriculture Canada and the Health Protection Branch (HW Canada) to report progress. It was recommended, and subsequently agreed, to withhold salmonella regulations pending further concrete results from PICS sub-committee activities.

Throughout 1978 the PICS Committee investigational work continued actively. The Feed and Feed Ingredients group identified meat and bone meal used in poultry feeds as a significant source of salmonella infection, which indicated that by-product rendering methods would need to be improved. Meanwhile the Health Protection Branch of Health and Welfare Canada laid out a specific objective. It said that salmonella contamination should be reduced to 5% or less by 1982, or else specific regulation would be considered.

Through 1978 and early 1979 joint investigation of the salmonella question continued, but on a fairly low profile. In June, 1979, however, the federal Agriculture and Health and Welfare Departments announced intention to step up activities. The most immediate action was to despatch a Joint Task Force to Sweden and Denmark, countries which had salmonella control programmes in place for a number of years. The Task Force was directed to study these regulatory programmes and evaluate their suitability for Canada.

On its return the Task Force submitted a report to the federal government for limited distribution in appropriate channels. It was reported the main thrusts of this report was to question somewhat the effectiveness of the Danish and Swedish programmes, both as they functioned in those countries and for adoption in Canada.

The current situation appears to be as follows:

1. Agriculture Canada has signified that it is committed to a long-term salmonella control programme.
2. As a first stage there will be monitoring of salmonella incidence at the producer, processor and retail levels with a national programme proposed to begin January 1, 1981.
3. A three-year research programme, with a federal grant of \$200,300 will be undertaken at the University of Guelph, aimed at improving production and processing systems for the control of salmonella contamination. Particular stress will be on improved techniques at the producer level, anti-microbial aids and mass screening technology.
4. Agriculture Canada has formed a Salmonella Co-ordinating Unit and given it a mandate to make specific recommendations toward meeting the government objectives of reducing the incidence of salmonella significantly. It is scheduled to issue its first report in September, 1980.

The foregoing series of activities to deal with the widespread and deep-seated salmonella problem illustrate a type of approach which is feasible where human health considerations are significant, but not critical enough to demand an immediate drastic regulation. On the other hand it represents a situation offering prospects of progressive improvement over the longer run, rather than 'living with' the situation indefinitely. The industry is challenged to show definite improvement or face the prospect of further regulation which would likely have very significant economic effects.

SULFA RESIDUES

The problem of sulfamethazine residues in fresh pork flared up during 1978 in Canada when residues of this drug, used as a feed additive in young pigs, showed up in samples from export shipments of pork ribs, skins and other sundries made from Canada into the United States. With stringent enforcement of U.S. regulations in effect respecting anti-biotic residues, this led to the originating plants where residues had been previously found, being placed on a special listing requiring extra certification and checking. A Canadian plant had little control over the situation since a quick detection test for sulfa residues was not yet developed and approved laboratories which could conduct sulfa residue testing were also not readily available. As a result, the sulfa residue problem in 1978 became extremely serious as far as Canadian pork export trade was concerned. A peak was reached in August when several export shipments of Canadian pork were held at the border, tested and refused entry when samples showed sulfamethazine levels greater than 0.1 ppm, which was the U.S. tolerance maximum.

The steps taken to deal with this situation included:

1. Successive discussions were held between the Canadian and U.S. Departments of Agriculture in an effort to obtain mutual recognition of each country's sulfa control programmes and thus avoid non-tariff barriers at the border, if satisfactory ways could be found for the country of origin to pre-certify shipments as sulfa-free. Essentially Canada adopted the American programme.
2. Meetings were held between Canadian pork processors, The Canadian Pork Council (producers) and provincial producer marketing agencies, in an effort to curb the incidence of sulfa residues by effective practices at the farm level.
3. A meeting was convened in Ottawa early in 1979 by Agriculture Canada to which representatives of various sectors of the pork industry were invited, together with representatives of the feed industry, veterinary associations and provincial governments. It was agreed to mount an intensive information campaign aimed at restricting, to young pigs only, the use of feeds with sulfamethazine added for therapeutic purposes. All other necessary steps to avoid sulfa residues in pig feeds during the finishing period were to be taken, including the tightening of regulations generally, governing the use of the drug.
4. Steps were taken by Agriculture Canada to monitor sulfa use on farms and sample carcasses in plants for residue traces. When any such are found a rigorous trace back to producing premises are instituted on further shipments of market hogs are restricted and checked.

Through these co-ordinated, combined actions by mid-1979 the U.S. and Canadian governments agreed to recognize their respective programmes to control the sulfa residue problem and border testing of incoming shipments was discontinued. Each government undertakes to do its own rigorous monitoring.

This was an example of international and interprovincial co-operation in resolving a problem, coupled with co-ordinated efforts by all sectors of the pork and feed industries to try to eliminate the difficulty at the source. The control programme also involved scientific research to develop quick and reliable methods of sulfa residue testing.

PROTEIN STANDARDS, SIMULATED AND EXTENDED MEAT PRODUCTS

In recent years developments in vegetable protein technology, including various soya protein products, coupled with a rising price of meat protein, has resulted in increasing interest in combinations of meat and vegetable protein (extended meat products) as well as in meat simulations or analogs. These developments have raised regulatory questions relating to the quantity and quality of protein in combination or simulated products vis-à-vis 'all meat' products.

In October, 1972 the Health Protection Branch, Health and Welfare Canada, first made exploratory proposals respecting proposed protein quantity and quality standards for processed meat products, extended meats and imitation meats. These proposals were studied by interested parties. A response by the meat processing industry was prepared under the auspices of the Meat Packers Council and presented to the Health Protection Branch at a meeting held April 5, 1973.

Subsequently, in July, 1973, H.P.B. issued Trade Information Letter 393. This document set forth the government's proposals for protein standards for certain processed meat products, as well as standards and testing procedures for extended and simulated meat products. Prior to the publication of this letter, a major retailer on April 17, 1973 commenced offering on the market a mixture of ground meat and soya protein. No official action was taken to check this practice, although no regulations to control such product, or even to permit it, were in place, and no practical technology was readily available for the quantitative analysis of combined soya and meat protein.

Previously meat processors represented by the Meat Packers Council had expressed concern with the proposed testing and sampling procedures for minimum total protein, with the suggested control procedures for determining the amount of soya and other vegetable protein in meat mixtures, with the test procedure for the amount of vegetable protein in extended products, and to the use of the word 'simulated', coupled with traditional meat product names, in describing meat analogs.

After publication of T.I.L. 393, meat processors requested a meeting with senior officials in the three federal departments most concerned with the regulation of meat viz. Agriculture Canada, Health and Welfare and Consumer and Corporate Affairs.

After considerable further joint dialogue in 1973-74, the Health Protection Branch in August, 1974 issued a number of revisions to Information Letter 393.

For fresh sausage the original minimum protein of 10% with a PER (protein efficiency ratio) of 25 was reduced to 9% with a PER of 23. For cooked sausage (weiners, bologna, etc.) the minimum protein was lowered from 12% to 11%, and the PER from 30 to 28.

On August 29, 1974, a meeting of three Departments and the Meat Packers Council was held. The validity of 3 proposed tests for vegetable protein was extensively discussed and there was obvious disagreement, even among government agencies as to their practicability and reliability. Nevertheless the Health Protection Branch indicated it was ready to approve the use of vegetable protein in meat products. Processors argued strongly against being placed in a regulatory straight jacket with respect to meat product standards which would be difficult to enforce and comply with due to the variation in fat and protein content of the raw product. 1/

On October 8, 1974 the Meat Packers Council submitted a detailed memorandum to the Health Protection Branch. This included comments on the nomenclature for traditional meat products, extended or combination products such as beef and soya patties and for imitations or meat analogs such as simulated weiners. The industry strongly objected to a product labelled 'simulated ham' or similar combinations of a long-established meat product name preceded by 'imitation' or 'simulated'. The industry pointed out that it was proposed to continue restricting the amount of vegetable-based filler in meat products, while allowing a similar appearing product with a name connoting meat to have no meat content, but be comprised of 100% vegetable protein.

With the Meat Inspection Division of Agriculture Canada, the Health Protection Branch of Health and Welfare and the Foods Division of Consumer and Corporate Affairs, the meat industry and consumers all expressing somewhat different viewpoints, the complex policy questions involved in this matter finally reached the Cabinet level.

1/ The industry argued that the proposed regulations might well increase the cost of meat products, without adequately protecting consumers of simulated products.

A regulation on protein standards was published January 31, 1975. As far as federally-inspected meat processing plants were concerned, implementation of the standards rested with the Meat Inspection Division of Agriculture Canada. Amendments were made to the Food and Drug Regulations to cover the minimum standards for total protein, fat, dextrose and moisture for various products. Now these same standards are incorporated in Schedule IV of the Meat Inspection Regulations.

For fresh sausage, for example, the permissible ingredients of meat and meat by-products are defined, the permissible additives, and it is stated the minimum total protein content is 9%, the maximum fat is 40%, the maximum dextrose in the binder is 4% and the maximum moisture is 60%.

As matters stand, the processor is charged with the primary responsibility of producing products in compliance, with the Meat Hygiene Directorate checking compliance through a programme of sampling and check analyses. The products of non-federally inspected manufacturers can mainly be checked by inspectors at the point of sale.

The standards for various products enforced since January 1, 1976, are as follows:

	Min. Total Protein	Max. Fat	Moisture	Cereal
Fresh sausage (not cooked)	9%	40%	60%	4%
Cooked sausage (wieners, etc.)	11%	-	60%	4%
Potted Meats & Spreads	9%	-	60%	4%
Meat loaves, rolls, Luncheon meat	11%	-	60%	4%
Cooked Poultry loaf, Sausage, etc.	11%	20%	60%	4%
Steakettes and burgers	13%	-	60%	4%
Ground Beef and patties	16%	30%	-	-

STANDARD NOMENCLATURE FOR RETAIL MEAT CUTS

In times past names commonly used to designate various retail meat cuts have not always been the same in all outlets or in all parts of the country. For example, a rib roast of beef may variously be described as 'Prime Rib', 'Standing Rib', 'Rib Roast-Chef Style', 'Rib-Roast-Short-Cut' etc. Similarly, pork chops or loin roasts may be more accurately described as 'centre cut', 'rib-end' or 'tenderloin-end'. For some cuts a coined name is used, e.g. 'Delmonico Steak' or 'New York Strip'. There are many variations depending on the nature of the cut, how it is prepared, and local custom.

During World War II, the Wartime Prices and Trade Board, in its Price Ceiling programme, went some distance in standardizing retail cut nomenclature, since some cuts with somewhat similar names differ significantly in degree of trim and boning and hence in intrinsic market value.

Following the inception of the Consumer Packaging and Labelling Act in March, 1976 the Department of Consumer Affairs became interested in the subject of standard nomenclature for meat cuts, starting with beef. The intent was to make it easier for consumers to buy meat from retail counters, from store to store and from one part of the country to the other. Also when eating out it was felt it should be helpful to have standard cut names appearing on the menu. Retailers and the food service industry agreed to co-operate.

Consumer and Corporate Affairs issued Communique No. 16 which became effective May 1, 1978. This set forth standardized names for various cuts from various parts of the carcass, prepared in various ways. There had been consultation

with the Meat Committee of the Retail Council of Canada on this, as well as with processors and others. Thus there appeared no great problem in using this as a guideline for the labels on meat packages or in menus.

Later in 1978 however, Consumer and Corporate Affairs proceeded toward the further step of drafting detailed standard cutting specifications for each prescribed cut. The trade considered this unduly restrictive, posing extensive compliance and enforcement problems. Both processors and retailers requested that the Department withdraw the standard cutting proposals and action was suspended and has remained in abeyance since.

Regulations exist now which can be utilized if product is misrepresented or presented in a deceptive way to consumers. Perhaps a RIAS procedure should precede any further proposals. There is also plenty of scope for a consumer information programme on cuts of meat and how to buy and cook them.

REGULATIONS OF INTEREST AND BENEFIT TO MORE THAN ONE SECTOR

In the meat industry official grades are not assigned to the final products which the consumer buys, but rather are placed on complete carcasses in the packing plant. On large roasts of beef, for example, standing rib, the grade marking stamp may still be visible at time of sale. On pre-packaged pork products the original carcass grade identity is not maintained.

The grading system for pork and beef which were instituted more than 50 years ago, while of particular interest to meat packers and livestock producers, since they are a factor in the settlement of livestock, are also of broader interest and benefit. Retailers and consumers also benefit from a sound, well-conceived grading system which provides an incentive for desirable carcass quality and a relatively high yield of lean meat, especially in the most desirable cuts. Payment for livestock by grade, providing the grades recognize market preferences, provides a quality incentive in producing for the market. Thus in the long run animal agriculture and the national economy benefits which meat is of desirable quality and in demand.

Consumers have in the past complained that pork and beef grades do not adequately carry through to the retail level and also that, when grade standards are being revised, they are not sufficiently consulted.

With regard to the first point, the extensive processing which meat undergoes, especially pork, makes it impractical to maintain the original grade identity. In the case of a product like eggs, it is relatively easy to grade them as they are marketed by the producer and this grade can readily be maintained until final sale.

A pork carcass is indexed at time of initial sale according to weight, backfat measure and other factors. During processing the various cuts are separated, the skin is taken off, fat is trimmed, some or all bones may be removed and the product may be cured, smoked, cooked or sliced. The economic value and eating quality of the final product may thus not be closely correlated with the original grade.

In the case of beef, with much of the carcass meat being sold fresh as roasts, steaks, sundry cuts and ground beef, there tends to be a little closer retention of grade identity in the major cuts. However there is considerable trimming and boning done before retail sale. The purchaser mainly needs to be assured that the final steak or roast is from a youthful class of animal which may be expected to be relatively tender.

Canadian pork and beef grades have each been the subject of major revisions within the past 10 or 11 years. In each case the producers and processors negotiated the new standards, with the federal government assisting with research and playing a co-ordinating role.

HOG GRADING REGULATIONS

A sound grading system for market hogs has been a basic factor in quality improvement of Canadian hogs over the past 60 years. The successive steps which led to the introduction of a unique hog indexing system at the beginning of 1969 makes an interesting story of industry teamwork.

Earlier History

The initial grading system for Canadian hogs came about as a result of a National Swine Conference convened in Ottawa on November 2, 1921. The motivation for the Conference was the generally unsatisfactory quality of Canadian pork and bacon, demonstrated during World War I in shipping Wiltshire bacon to the United Kingdom.

As a direct result of the Conference, the following steps were taken:

1. Grading of live market hogs at stockyards and subsequently at plants was instituted by the Federal Department of Agriculture through amendments to the Live Stock and Live Stock Products Act (P.C. 2035, Oct. 6, 1922). Graders began their duties October 30, 1922.
2. Processors agreed to pay a premium for the top grade of 'Select Bacon' hogs.
3. A continuing Joint Swine Committee was set up to recommend longer term policies and strategies for the industry.

Thus in the 1920's the foundations were laid for a re-vitalized Canadian bacon hog industry. The grading system brought important changes in breeding, feeding and management in the swine industry.

A decade later, at the Imperial Economic Conference convened in Ottawa, Canada secured a greatly stepped up annual quota of 280 million lbs. of Wiltshire bacon in the British market - more than could be immediately supplied.

During the decade of the 1930's an optional system of carcass or 'rail' grading was established. This dual system functioned until 1940. At that time, with a war in progress and Canada the prime supplier of British bacon, the Government of Canada discontinued live hog grades, making rail grading the official system.

Post-War Developments

While Canada supplied record volumes of bacon overseas from 1940-45, after the war this market disappeared due to Britain's financial problems, and Canadian pork adjusted to a new competitive role in the North American economy. By this time the former, U.S. 'lard type' hog was being succeeded by the newer 'meat type'.

In 1964 the Canadian Federation of Agriculture convened a National Hog Improvement Conference at which new targets for production and grading were discussed.

Further conferences continued in 1965 and 1966 and the producer segment of the industry organized the National Swine Council to represent it.

From 1966 to 1968 an intensive series of discussions on the design of a revised hog grading system took place between representatives of the Swine Council (later called the Pork Council) and the pork processing industry as represented by the Meat Packers Council. Background data for these discussion was provided from an extensive cut-out test of various weights and qualities of hog carcasses carried out in 1967 by Agriculture Canada in co-operation with the Meat Packers Council.

Out of this dialogue came the concept of an entirely new hog carcass indexing system, with the indices acting as both an indicator of quality and yield of saleable meat, and a relative pricing factor. Processors submitted price bids on a basis of 100 index hogs. Carcasses with low backfat in relation to weight, providing there were not quality demerits, would command indices ranging above 100 e.g. an index of 108 would be priced 8% above the 100 base, while an index of 95 would be priced at 95% of the base.

After extensive negotiations between the Canadian Pork Council and the Meat Packers Council on fat-weight specifications for the various indices, the two groups submitted a joint recommendation to Agriculture Canada for the revised system. The Department then prepared amended regulations under the Agricultural Standards Act and the new indexing system became effective December 30, 1968. Right from its inception it was favourably viewed by all segments of the industry.

Ten years later, on January 1, 1978 the first major revision in the indexing system occurred. This followed an extensive period of producer-processor negotiation.

The main thrust of this change was to provide higher indices for heavier carcasses weighing up to 199 pounds. Processors agreed to the revision on a trial basis and pending the results of a further extensive cut-out test, including the heavier end of carcasses. The Federal Department of Agriculture arranged for an agreement to be signed by the Canadian Pork Council and the Meat Packers Council, whereby each party consented to a review of the changes, should documented concern be registered respecting the proportion of heavier pork carcasses.

During 1978 the proportion of heavier carcasses increased dramatically. Those weighing 180 lb. or more increased from 9.2% in 1977 to nearly 30% in 1978. This led processors to request a review of the indices, and tri-partite and bi-partite discussions took place in December, 1978. It was finally agreed to amend the index table effective January 2, 1979. The revisions provided more incentive to market 160-179 lb. carcasses, and reduce the incentive to market in the 180-199 lb. range. It was agreed to review the situation as the year progressed.

During 1979 the index changes coupled with higher feed costs achieved the desired result of reducing average hog weights significantly.

For the past 10 to 15 years, therefore, the main initiative for regulatory changes in hog grading has come from the joint consultation of the organizations representing the producer and processor segments, with the federal government acting on their joint recommendations and co-operation in the research and test work needed to evaluate carcass quality. This effective working relationship seems to work well for this type of regulation.

BEEF GRADING REGULATIONS

Official beef grades, on a carcass basis, were first promulgated in Canada in 1929, which was about 7 years after hog grading operations first commenced in November, 1922. However, unlike hogs, where grading started out on a live basis, beef grading was from the outset on a carcass basis, applied at the wholesale level. Through the years the majority of cattle have continued to be sold by the cattle producers on a live basis, although settlement on the basis of carcass grade and weight is an option when sales are made direct to a beef processor, rather than selling the cattle liveweight by auction in the open market. In the case of hogs since 1940 sales and settlement has been exclusively on a carcass grade and dressed weight basis.

Initial Beef Grades

The initial beef carcass grading system, developed in the latter 1920's, grew out of a realization that some standard of beef quality was necessary both for the wholesale trading of beef and toward which the primary segment of the industry - the cow-calf men or ranchers, and the cattle feeders - could aim in their breeding and finishing programs, and for the benefit of beef consumers. At this time many cattle were still being fed out on grass, and grain-finishing in feedlots was still in its infancy.

The initial carcass grade standards were developed from tri-partite discussions between cattlemen, beef processors and the Live Stock Branch of the Federal Department of Agriculture. A Joint Advisory Committee recommended a roller branding system for beef carcasses, whereby the top grade of relatively youthful carcasses of good beef conformation and quality were identified with a Red ribbon brand rolled on the carcass. The second quality, a notch below the Red in finish and conformation, was identified with a Blue brand. There were further grades for older animals, cows and bulls.

These initial grades for beef initiated in 1929 helped to point the whole industry, as well as beef consumers, toward a concept of consistent beef quality, as the Red and Blue brands were in many cases still discernible on the final steaks and roasts. As commercial cattle feedlots developed, an increasing proportion of carcasses qualified for the Red brand.

During World War II, with a shortage of oils and fats, and price controls and rationing for meat in effect, the defatting of beef carcasses and removal of kidneys and attached fat became mandatory under Wartime Prices and Trade Board Order No. 788. From that point forward, and continuing after the war, Canadian beef carcasses were defatted more extensively than those in the United States, where feedlot cattle received heavy rations of corn and other grains.

After World War II the trend toward commercial finishing of cattle in feedlots continued to accelerate in both Eastern and Western Canada. Also the specialized beef industry was developing, with attention to thick, meaty, rapid-gaining strains of cattle, both of the traditional Hereford, Shorthorn and Angus breeds, as well as newer breeds and cross-breds. These trends resulted in new attention to beef carcass quality and grading.

By the early 1960's the U.S. beef grading standards were beginning to make provision for yield-grading or 'cutability'. Under this concept a carcass was graded for quality (tenderness, flavour and appearance) plus its cutability, or the relative amount of lean muscle it contained.

At this time in both Canada and the United States grain was in surplus supply and relatively cheap. This contributed to over-finish in beef carcasses, at a time when consumers were becoming more and more averse to fat in the diet.

In 1966 the Federal Department of Agriculture, in co-operation with the cattlemen, beef packers and other segments of the beef industry, convened a National Beef Industry Conference to consider desirable changes in the production, grading and marketing of beef. Previous to this Conference, in 1965, the Live Stock Division of the Department, in co-operation with the Meat Packers Council had conducted a test on 26,420 beef carcasses, recording considerable data including the area of rib-eye, and the fat thickness over the rib-eye and at a point between the 11th and 12th ribs. This test highlighted the over-finish problem and the variation in lean meat yield.

At this Conference it was agreed to form a Joint Committee on Beef Grading and Quality to consider desirable grading changes. Subsequently an expert sub-committee was instrumental in planning a Beef Carcass Research Project which assembled basic data needed for updating the grading system. In 1967 and 1968 fact-finding and discussions continued.

From 1969 until substantially revised beef grading standards were implemented in September, 1972, most of the dialogue was in the form of negotiations between cattle producers, jointly represented by the Canadian Cattlemen's Association (beef cattle) and the Canadian Federation of Agriculture (dairy and dual purpose cattle) and beef processors, primarily represented by the Meat Packers Council of Canada. Successive proposals and counter proposals submitted in the form of detailed position papers were debated. Agriculture Canada closely observed the proceedings with interest but without intervening unduly in the dialogue.

Both the producers and processors agreed that revised grades should try to evaluate the carcass yield of saleable meat as well as reflect basic quality factors. It was also recognized that the grading system had to be not excessively complex, and capable of being carried out efficiently on the plant rail. At an early state a proposal involving 6 fat classes and 4 rib-eye area classes (a total of 24 categories) was abandoned as being too complex.

After extensive discussion, producers and processors made a joint submission to Agriculture Canada in October, 1971, recommending a set of revised beef grade specifications, incorporating the measurement of external fat and a partial ribbing operation to allow examination of the rib eye for meat quality and relative area. The top or 'A' grade, including both steers and heifers, was to be divided into four categories (A1, A2, A3, and A4) ranging from relatively lean to relatively fat. Carcass conformation requirements was de-emphasized significantly.

Subsequently regulations covering the new grades were drawn up by the Department, circulated to the various sectors, published in the Canada Gazette and grading commenced under the new standards September 4, 1972.

One result of the revised grades, with the market showing a preference for A1-A2 light fat classes, together with the leanest end of A-3, was to discourage over-finished cattle. The rising price of feed grain acted in the same direction.

In 1975 Agriculture Canada convened a meeting of all segments of the beef industry, from producer to consumer, to review experience with the revised grades which in general seemed to be working well, with relatively minor problems. It was agreed at this meeting to set up a Joint Committee to keep the standards under continuing review, as required.

In conclusion, it may be noted that the consultative process for beef grade revision in Canada as above detailed puts most of the initiative in the producer-processor segment. The government acts as a catalyst and implements the recommendations after a final review. This is quite a different procedure from that followed in the United States. In that country the government maintains the major initiative, publishes proposals and invites comment from the interested sectors.

The Canadian pattern appears to have worked effectively. One precaution is the need at all times to recognize the preferences of consumers in beef finish and quality, even when the carcass grades do not carry through directly into retail pricing. However, consumer beef preference is reflected back through the marketing system to the producer through the demand for, and relative pricing of, the A1, A2, A3 and A4 carcasses as well as the preferred weight of carcasses. This is what a national system should do, resulting in the grading of carcasses in relation to their intrinsic value.

OBSERVATIONS ON REGULATORY CASE HISTORIES

The foregoing case histories it is believed are reasonably representative of various types of federal and provincial regulations affecting livestock and/or meat within a fairly recent period. They include some of the more significant regulatory matters, and there are examples where meat consumers, livestock producers, society at large or a combination of sectors appear to be the contemplated beneficiaries.

It seems appropriate to summarize what is shown by these examples with respect to the consultative process, the amount of advance notice, the degree to which there was prior assessment, what evidence there is of periodic evaluation and any indications of co-ordination of regulatory approaches to avoid excessive sudden burdens on any sector.

CONSULTATION

A full degree of consultation involves, in the case of new regulations or major amendments to existing ones, discussion at an early stage by the regulatory authority with all groups with a major interest in, or who are affected by, the proposals. Some distinction needs to be made between consultation relative to new statutes and consultation as to regulations when the legislative body has previously approved the bill or act.

In the case of a new law, experience shows the degree of consultation may vary extensively. If there is not a high degree of urgency and a number of differing viewpoints to reconcile, the appointment of an investigative Commission, the holding of hearings by a Committee of Parliament or a Legislature, or the issuance of a White Paper for comment, are all appropriate approaches.

In the case histories cited, only these relating to humane slaughter, beef import regulations and possibly financial protection for livestock produced (Ontario) involved new legislation. The others entailed regulatory changes, or proposed changes, vis-a-vis existing legislation.

In more cases than not, there may not be a high degree of consultation prior to a decision to proceed with legislation. For example, in the case of humane slaughter of meat animals legislation, meat packers were, by and large, not consulted in advance as to their views on the legislation. They would hardly expect to be. There was, however, practical consultation on the regulatory implementation as to methods and timing. The industry co-operated in research by lending their facilities and securing some knowledgeable and experienced people to do test work.

When the Consumer Packaging and Labelling Act (Bill C-180) was being considered by Parliament in 1970-71 there was an opportunity for interested groups to comment on it at the Committee stage. A bill of this nature, however, only reveals the intent in broad outline, and the most meaningful consultations are only possible at the stage when regulations are subsequently being drafted. In this case a fair

degree of consultation was permitted and especially in determining the most feasible effective date for implementation considering the massive amount of package re-design work involved, submissions for prior approval in the case of meat, and trying to set a date which would avoid excessive waste of current stocks of packaging materials. Eventually, March, 1976 was agreed on as a changeover date.

Regulations in recent years which left a good deal to be desired in the way of consultation (i.e. too little and/or too late) or not a fully effective type of consultation included the imposition of 'Best Before' dating, the developing of effluent regulations for meat and poultry processing plants and regulations of certain types made by producer hog marketing boards in some provinces.

In the case of 'Best Before' dating there was considerable discussion before the programme was implemented in March, 1976, but the chief difficulty was that processors and retailers were not consulted early enough about the type of date which would be most practical and appropriate. In the the trade there was wide support for a date of production, or packaging, informing everyone concerned as to when the product was made, or prepared for sale. Instead of this an 'expiry' type of date was earlier decided on, which introduced complications since shelf life vitally depends on temperature and the nature of handling. The retail trade continues to feel that different problems arise in dating pre-packaged products compared to products packaged in the store at point of sale. For the latter, they feel the packaging date should suffice.

In the past 5 or 6 years, since food dating was brought under regulation, the consultative process appears to have improved, especially at the federal level. This is exemplified in the approach to nitrite regulation, the control of salmonella, the sulfa residue problem and the question of microbiological standards for ground beef. In these various cases the approach has been along the following lines.

1. State the problem, at an early stage of consideration to the sectors most concerned.
2. Propose a regulatory approach or option for discussion, or convene a meeting with interested groups to discuss the various options from a cost/benefit standpoint.

3. If appropriate, set up a joint study group or task force to report and recommend an action programme in a certain timeframe, specifically having in mind costs and benefit.
4. Take appropriate actions to meet the problem.

A rather unique type of consultation has become accepted with respect to grading regulations for pork and beef carcasses. The initial primary consultants are representatives of livestock producers and representatives of the meat packing industry. Agriculture Canada provides a co-ordinating function, aids with research and scientific input, and receives the final recommendations. This format has worked effectively. Some questions which may be raised about it include - are the retailer and consumer sectors afforded adequate input? Are the producer and processor negotiators fully representative of their respective industries? Are animal and meat scientists afforded adequate input? Is every reasonable effort made to keep grade standards constantly in line with changing requirements of the marketplace?

Where regulations are made under subordinate legislative authority, such as by a producer marketing board operating under powers delegated under a marketing act, there is considerable evidence that such bodies tend to issue regulations affecting other parties with minimal consultation with such parties. The corrective to this situation is to require agencies operating under delegated powers to be more accountable politically as are executive branches of government, and, as well, to provide effective appeal procedures against their decisions. Regulations made under subordinate powers should, many feel, be subject to approval by Order-in-Council, as are government regulations.

ADVANCE NOTICE

It seems eminently reasonable, that barring some emergent health hazard or similar crisis, proposals to institute new regulations should be publicized well in advance. To quite an extent notice is tied in with the consultative process. In most cases if there is effective consultation this also makes for reasonable advance notice being assured.

Assuming there is consultation, and a decision to institute a regulation is made and proceeded with, there is always a certain segment of the affected sectors which will require adequate public notice, since they may not have been involved in the discussion. A reasonable lead time is generally necessary to permit those who must comply to take the necessary steps to be ready.

The following is an example of the form of notice which may be given for a proposed regulation. On February 16, 1980, the Department and Consumer and Corporate Affairs published this notice:

"Public notice is hereby given, pursuant to section 19 of the Consumer Packaging and Labelling Act, that the Governor-in-Council proposes to make the following regulations under Section 18 of the Consumer Packaging and Labelling Act amending the Consumer Packaging and Labelling Regulations. Any consumer, dealer or other interested person who wishes to make representations with respect to these proposed regulations may forward such to the Assistant Deputy Minister (Consumer Affairs) Department of Consumer and Corporate Affairs, 1 Place du Portage, Ottawa/Hull K1A 0C9 within 60 days of the date of this publication."

This was followed by the text of proposed changes to Subsec. 33 (2) of the Consumer Packaging and Labelling Regulations, to require, where a dealer imports pre-packaged meat or other products, or packages and labels product in Canada derived from imported product, that the package must show that its origin is imported, in a way stipulated. No Regulatory Impact Analysis Statement (RIAS) seems to have been prepared or published on this proposal.

In the majority of the case histories cited, extensive advance notice appears to have been given, even when, as previously noted, there was not fully effective initial consultation. Where packaging changes were involved, which would make current supplies of packaging materials obsolete or illegal at the date of implementation, there are cases on record where a further period of grace was given to allow surplus stocks of supplies to be used up. The bacon package changeover to show most of a complete slice, was a case in point.

PRIOR ASSESSMENT

To date there have been very few instances of regulatory changes affecting meat in which any thorough-going prior assessment or RIAS procedure has been followed. Perhaps the nearest approach to this occurred in the case of the discussion relative to nitrite in bacon and other cured meats. In this case an effort was made to evaluate the monetary loss if a nitrite ban was imposed. The processing industry co-operated in making this evaluation.

The regulation requiring durable life dating of perishable foods would have provided an interesting test case for prior assessment. A major imponderable in this case would have been to try to estimate the product losses on outdated product, since this was partly dependent on the degree to which consumers would take the freshest product on display, and pass over perfectly good product with a little earlier date.

The initial Regulatory Impact Analysis Statement preceding a new meat regulation is yet to appear, but will be awaited with interest. It is of interest to note that the Food Policy Group of Consumer and Corporate Affairs Canada sponsored a retrospective study of the costs of the food packaging and labelling changes implemented in 1976. 1/

PERIODIC EVALUATION

Longstanding regulations such as Meat Inspection have been reviewed and updated periodically, the latest revision having been completed and gazetted in 1979. 2/ The Humane Slaughter regulations have also been undergoing review, in the light of advancing technology.

In 1976-77 the United States Department of Agriculture engaged the management consulting firm of Booz, Allen and Hamilton, Inc. to make an extensive evaluation of their meat and poultry inspection system 3/ This was the first such study done in the 70 years U.S. federal meat inspection has been in operation. The Executive Summary (Vol. 3) contains 63 pages of detailed recommendations.

No similar independent review of the Canadian federal meat inspection system has yet been attempted. If it were deemed advisable to conduct such an evaluation, it would first seem useful to review the applicability of the Booz, Allen, Hamilton study's conclusions to the Canadian system, since the U.S. and Canadian federal inspection systems operate along similar lines, although there may well be real differences in administrative efficiency and integrity.

1/ M.D. Beckman and R.M. Knudson "Food Packaging and Labelling Costs and the Cost Effects of Recent Government Legislation 1977 published by Department of Consumer and Corporate Affairs.

2/ P.C. 1979-2123, Aug. 9, 1979

3/ Booz, Allen and Hamilton - Study of the Federal Meat & Poultry Inspection System Vols. I, II and III

CO-ORDINATION OF REGULATORY ACTIONS

While there is no clear-cut evidence of formal machinery at the federal level to avoid a sudden proliferation of regulatory actions on any one sector, there are indications that the three departments administering major regulations affecting meat viz. meat inspection, food and drug and consumer packaging and labelling do maintain reasonably close communications. Durable life dating requirements became effective in March, 1976 co-incident with the extensive changes in packages and labels required under C.P.L.A. regulations. At this same time dual weight designation came in, at the same time metric conversion plans and discussions were getting underway. Had metric conversion co-incided with packaging and labelling changes, this would have resulted in a massive and costly change all at once. While it can be argued that one big change is more efficient than two successive ones, each fairly sizeable, a metric conversion by March, 1976, coupled with the other extensive changes including the politically sensitive bilingual labelling aspect, would have been formidable.

While there has been agitation in certain quarters for nutritional labelling, the extensive other packaging and labelling changes in the 70's, coupled with microbiological, food additive and residue issues, has probably led to the official decision that nutritional labelling be assigned a lower scale of priority. In the meantime consumer education in food matters leaves plenty of scope for constructive effort.

One suspects that consideration of proceeding to a single national standard of meat inspection is in part explainable by a conclusion that the meat industry has had enough regulatory changes to digest in the past decade, as well as presenting more constitutional difficulties than the enactment of the U.S. Wholesome Meat Act of 1967 under which state inspection systems could be taken over federally, unless they were brought up to the federal standard. There would be political problems in following a similar route in Canada, despite the additional assurance it might provide to consumers that all the meat products they might buy anywhere were required to conform to one consistent standard.

III

CONCLUSIONS AND RECOMMENDATIONS

As has been indicated in this report, the industry sectors concerned with the slaughtering of meat animals, the processing and distribution of meat to retailers and the institutional trade, and the sale of meat to the ultimate consumer, are subject to a relatively high degree of regulation and this has been true for many years. This does not necessarily lead, however, to the immediate conclusion that it would be in either the industry's or public's interest to plunge into major de-regulation of the meat industry, permitting it either to operate without regulation in areas previously regulated, or alternatively to embark on a much higher degree of self-regulation. It does indicate, however, that any further regulations should be rigorously scrutinized in future.

It is generally recognized that:

- (a) Meat, especially when sold in fresh or ground form, is highly perishable and must be adequately refrigerated and given special handling to ensure continuing wholesomeness, until it is cooked and consumed.
- (b) Being derived from the slaughter of meat animals, the wholesomeness of meat is dependent on the health of the animal at time of slaughter as ascertained by veterinary inspection, and the freedom of carcasses from undesirable chemical or other residues carrying over from the production stage;
- (c) Anything done to, or added to meat, during its processing must not detract from its wholesomeness or safety as a protein food;
- (d) Sick or fallen animals must not be allowed to enter the meat supply;
- (e) Imported meat must conform to standards not lower than domestic supplies.

For the above reasons, the meat system is subject to extensive regulation, and particularly at the processing stage and the final point of sale. These are the two key areas of regulation.

With rising income levels in recent years, coupled with expansion of animal agriculture and meat production in Canada, annual meat consumption has risen

substantially to 160 lb. per capita, even with significantly higher livestock and meat prices. In the past half century, with ever increasing numbers of consumers eating more meat, total meat consumption in Canada has tripled.

This indicates not only that meat has a strong appetite appeal, but enjoys a good image, in as varied forms, as a wholesome and nutritious food. The regulatory system for meat, it can be assumed, has contributed to this demonstrated consumer confidence. A significant part of this confidence revolves around the federal meat inspection system whose legend consumers see on packages and may also see on carcass meat from time to time. Despite periodic controversies about meat in the diet, the relation of fat to diseases of the heart and circulatory system, adverse publicity about certain processing additives, and occasional criminal prosecutions of unfit meat distributors, on the whole consumers continue buying meat in steady volume for home use and increasingly consume it in meals or lunches eaten out. This bespeaks confidence in it.

RECOMMENDATIONS

1. The ultimate objective should be to bring the whole Canadian commercial meat supply under a single, efficiently administered inspection system.

There is a strong and constantly growing body of support for the above goal. The federal meat inspection system is now the central hub of the meat trade with over 80% of the commercial meat supply monitored under the federal system. In addition Agriculture Canada now has agreements with seven provinces to perform contract inspection services in domestic plants licensed provincially to engage in intra-provincial operations.

In 1979 the federal meat inspection system included 490 establishments slaughtering or processing meat animals and poultry. In addition there were 332 storages under federal inspection, 56 domestic plants receiving contract inspection and 23 inedible rendering plants. Federal inspection services involved 291 veterinarians and 1137 primary product inspectors (a total of 1428 inspectors) and the federal meat inspection expenditures by Agriculture Canada totalled \$39,264,000. Growth in the past decade is shown by the fact that in 1970 the number of establishments was 398, the total number of inspectors 1122 and the total budget \$13,333,000. The tripling of administrative costs in a decade is attributable mainly to a sizeable increase in the volume of meat handled, an expansion in the programme (more establishments,

storages and contract domestic services) and a progressive increase in staff salary rates and other expenses.

In 1967 the United States enacted the Wholesome Meat Act and in 1968 the Wholesome Poultry Products Act. This federal legislation was designed to remove the disparities between federal and state meat and poultry inspection standards. It gave the U.S.D.A. authority to take over meat and poultry inspection programs in a state if they were not brought up to federal standards, or alternatively a state could either voluntarily request such a takeover or decide to operate its own system on a standard 'equal to' federal, which the latter would monitor. By 1976 24 states in the case of poultry inspection programs and 17 for meat inspection programs had been designed as 'equal to' federal standards. 1/ The trend has been for more and more states to voluntarily elect to come under federal inspection, due to the mounting costs of providing the service.

Rather paradoxically, the meat and poultry from state-supervised plants, even with the designated 'equal to' status, is still restricted to intra-state distribution, and only federally-inspected product is certified for inter-state and export shipment.

In Canada there would appear to be constitutional constraints militating against the Federal Government enacting the equivalent of the U.S. Wholesome Meat Act. However, the existing Meat Inspection Service Agreements which Agriculture Canada has signed with 7 provinces (all except Alberta, Ontario and Quebec) in effect provide a uniform standard of post mortem inspection in domestic slaughtering plants in the 7 provinces, although the product is confined to intra-provincial distribution. Federal-Provincial consultation in meat inspection matters and animal health, probably aids in keeping the country moving toward the ultimate objective of one uniform, consistent standard of inspection, covering both post-mortem inspection at slaughter, the construction and sanitary standards for plants and the monitoring of all meat processing operations.

If this goal of a uniform national standard and system of meat inspection can eventually be attained, the frequently discussed objective of a 'single

1/ Booz, Allen, Hamilton - "Study of the Federal Meat & Poultry Inspection System" Volume III, Exhibit 4, page 23.

inspection agency' would also be much easier to achieve. All of the existing regulations under the Meat Inspection Act, the Food and Drugs Act, and the Consumer Packaging and Labelling Act could be monitored at the processing stage, as they now are in the case of federal establishments. This would make for greater efficiency of inspection and uniformity in standards for the benefit of consumers and all concerned.

A single co-ordinated system of inspection, if it could be achieved, would still require an adequate degree of monitoring at the point of final sale, since not all meat products are pre-packaged. Both fresh and processed meat products and edible by-products may be prepared, processed, packaged and weighed at the point of sale. This includes minor processing such as the preparation of ground meat.

For maximum consumer assurance, one dependable standard of inspection denoting quality and wholesomeness ought to encompass the whole meat processing and distribution system. Given the perishable nature of meat, it must be well handled and protected throughout the complete marketing chain. This includes the way it is handled and stored after final purchase, but this is the consumer's responsibility.

There are many practical problems to overcome before Canada could hope to achieve, by some means, a system whereby meat inspection was brought into a single, efficiently administered system, with a single inspection agency monitoring both inspection and grading. However, from the standpoint of both meat consumers and the meat industry, it would seem to be a sound objective and one which would facilitate efficient co-ordination of regulatory aspects to best advantage. 1/

2. The present very extensive degree of regulation by government of meat and its processing, distribution and sale, suggests, rather than resorting to a sudden, major de-regulation, that this would better be corrected over time by adopting definite objectives. These would include:
 - (a) In future subjecting further regulatory proposals to more intensive prior assessment;

1/ In practical terms this would seem more readily achieved through agreement among various parties and agencies rather than through establishment of a single central authority.

- (b) Establishing a schedule for systematically evaluating existing regulations in the light of existing conditions and needs, considering the possibility of eliminating superfluous and out-dated requirements;
- (c) Exploring the possibilities of more industry self regulation in matters where this seems feasible and practical.

Historically meat has been the subject of extensive regulation, and in addition the industry shared in what Stanbury and Thompson refer to as the 'regulatory explosion of the 1970's 1/ In the latter period long-established regulations such as Meat Inspection and Food and Drug were being extended and updated and after the establishment of the Department of Consumer and Corporate Affairs was established, major new regulations were enacted, particularly packaging and labelling and food dating. This was also a period of concern with additives and residues and the introduction of meat simulations (analogs) and extenders was taking place. Metric conversion was also being promoted as a major exercise.

Since many of the regulations concerning meat were originally imposed in the interests of consumer health or safety, or to improve the marketing of the product, a process of de-regulation would seem more advisable by degrees, and with adequate consultation. A report in the May 13, 1980 issue of the Toronto Star headed "Business promised fast de-regulation" could hardly be taken literally for meat. 2/

Prior Assessment

The first step in the process of avoiding wasteful and uneconomic types of regulation concerning meat should be from now on to insist that regulatory proposals be subjected to competent prior economic assessment. In this the authors agree with the R3 recommendation in the Interim Report of the Economic Council of Canada 3/

This has ostensibly been part of established federal public policy since August 1, 1978. The Administrative Policy Manual of the Treasury Board states:

1/ W.T.Stanbury and Fred Thompson "The Scope and Coverage of Regulation in Canada and the United States" Chap. 2, p.29 'Government Regulation - Scope, Growth Process' 1980 - Institute for Research on Public Policy.

2/ A press report of an Address by Ontario Minister of Consumer and Commercial Relations Frank Drea to the Ontario Chamber of Commerce. The Minister was reported as saying 'the government intends to step up de-regulation and apply it to more and more industries...but business will have to co-operate and not be afraid to take back responsibility which has been in government hands for years.'

3/ Responsible Regulation-Interim Report by Economic Council, November 1979, page 83.

"It is the policy of the government to require that major new regulations, or amendments to existing regulations, relating to health, safety or fairness (HSF) be subjected to a socio-economic impact analysis (SEIA). The analysis shall be made publicly available for comment by non-government groups prior to promulgation". 1/

The first SEIA relating to a meat regulation is yet to be published, but this procedure, properly used, promises to serve as a check on unjustified regulations being imposed in future. It requires, as Cornell stated at the Economic Research Conference on U.S. Food Industry Regulation, in April, 1979 that a regulatory decision (like the nitrite/nitrate in bacon decision) should be based on a clear understanding of the costs and benefits: What it will cost if we take them out, versus what we will gain if we take them out". 2/

One rather important point re the SEIA procedure concerns consultation. As we will be discussing in a succeeding section there should be consultation at an early stage before any specific regulatory options, including no regulation at all, are decided on. Thus a SEIA should not be attempted before there is a clear consensus on a regulatory option. It should be prepared and published at the time the proposed regulation is put out for public comment, thus permitting a reaction to both the regulation and the analysis of current and future costs and benefits.

While the SEIA procedure is now prescribed for HSF regulations at the federal level, similar prior assessment routines are not generally required in provincial jurisdictions, or in the case of bodies with subordinate legislative powers. This is a matter which we would commend to legislators at the sub-federal levels, since the principle involved is identical for similar types of regulation.

Systematic Evaluation

Coupled with the use of SEIA procedures for proposed new regulations or amendments, should be more definite provision for the systematic evaluation of existing regulatory programmes on a definite schedule. 3/

1/ Chapter 490, Administrative Policy Manual, Treasury Board Canada 'Socio-Economic Impact Analysis', December, 1979.

2/ Nina Cornell, 'The Politics of Policy Analysis' - page 752 American Journal of Agricultural Economics, Vol. 61, No. 4 Part 2, November, 1979. Proceedings from the Economic Research Conference on the U.S. Food System Regulation

3/ See Interim Report, Economic Council of Canada, November, 1979. They suggest a periodic evaluation every 4 to 10 years, with which the authors agree.

In most cases this should involve more than the regulatory agency simply sitting down with interested parties and reviewing the regulations in their present form for the purpose of minor streamlining or updating. The evaluation should objectively consider whether the regulation is any longer required, and if it is whether major changes in the whole approach should be considered.

An example of the most far-reaching type of periodic evaluation of a regulatory system, in this case in the United States, was the Booz, Allen and Hamilton 'Study of the Federal Meat and Poultry Inspection System' we mentioned earlier in this report. This study critically examined the U.S. system for possibilities of greater efficiency, cost reduction and transfer of some responsibilities back to the industry. The necessity of continuing veterinary ante mortem and post-mortem inspections of the total slaughter was considered. Obviously this type of evaluation is expensive and probably can only be considered at fairly lengthy intervals.

An example of one aspect of the inspection system which may merit re-assessment, is the routine of prior approval of all packages and labels. The costs and benefits of this procedure could be compared, along with the implications of the inspection legend appearing on every package. Both the government and industry may be strongly in favour of continuing the system of prior approvals, but this should not preclude a realistic assessment of it at intervals.

In 1977 the Food Policy Group of Consumer and Corporate Affairs commissioned an independent study by Beckman and Knudson of the experience with the extensive packaging and labelling changes which became effective in March, 1976. ^{1/} This study, in some respects resembling a SEIA in retrospect, was conducted too soon after the fact to qualify as systematic, periodic evaluation. It is possible, however, to envisage a similar independent assessment of 'Best Before' dating, after say five years of experience by March, 1981.

^{1/}'Food Packaging and Labelling Costs and the Cost Effects of Recent Government Legislation' by Dale Beckman and R.M.Knudson, Faculty of Administrative Studies, University of Manitoba, November, 1977 (Study for Food Policy Group, Consumer and Corporate Affairs, Ottawa.

A number of the regulations under the Food and Drugs Act define product standards. A decision handed down by the Supreme Court of Canada on December 21, 1979 ^{1/} involving standards for 'light beer' has brought into question the authority of the Food and Drugs Act to regulate quality standards, unless fraud or hazard is implied.

In the case of meat, the Canada Meat Inspection Regulations in Schedule IV prescribe the same standards, for inspected establishments, as are contained in the Food and Drugs Act. A simple example are the standards for ground beef. If the product contains not over 17% fat it may be designated as 'Lean', if not over 23% fat as 'Medium' and if not over 30% fat as 'Regular'.

Leaving the legal aspects of product standards regulation aside, there is obviously need to review periodically the need for official standards to be continued, as well as to review the standards per se and the effectiveness of compliance and enforcement at all levels.

There needs to be greater recognition in principle that regulations, having been promulgated after an appropriate consultative and prior assessment process, ought not to be considered as graven in stone. There is a natural tendency for regulations to persist, on the apparent assumption that if a regulation was originally justified, it still is. This may not be the case at all. Regulations should have no claim on 'tenure' and should be subject to justification at specific intervals, or as frequently as required.

A clear understanding that there is to be an automatic, objective review of each major regulation at stated maximum intervals would go a long way to controlling the proliferation problem.

Self-Regulation

Charles Schultz in his book 'The Public Use of Private Interest,' in discussing the pros and cons of government intervention, suggests that 'we usually tend to see only one way of intervening - namely, removing a set of decisions from the

^{1/} Labatt Breweries of Canada vs Attorney General of Canada and Attorney General of Quebec, Supreme Court of Canada, December 21, 1979.

decentralized and incentive-oriented private market and transferring them to the command-and-control techniques of government bureaucracy.....instead of creating incentives so that public goals become private interests, private interests are left unchanged and obedience to the public goals is commended". 1/

It is sometimes argued that the extensive public regulation of the meat industry exists because the industry has not demonstrated the ability or capability of regulating itself. Another line of argument is that many types of regulation would be unnecessary, such as for example minimum product standards, if the competitive marketplace were given freer rein, so that the makers of sausage who incorporated too much filler, or too little meat protein or excessive meat by-products, would have to risk loss of consumer franchise or accept lower prices.

Industry self regulation involves a number of problems, including the question of micro and macro interests. It is difficult, in the first place, for either meat processors or retailers, both legally and practically, to regulate themselves. Self regulation is hardly feasible on an individual firm basis. Trade Associations such as the Canadian Meat Council or the Retail Council of Canada could in certain cases assist in promoting product standards, product nomenclature, agreeing on a range of product package sizes and the like, but membership in these groups is voluntary and a significant segment of the industry do not elect to belong.

In a sense the development of grade standards for beef and pork now approaches self regulation. Livestock producers and meat packers, in recent years have negotiated major revisions in grades, with the opportunity for some input from retailers, consumers, and scientists. The Department has generally accepted joint producer-processor recommendations and implemented them.

It is much more difficult to envisage the industry taking over post-mortem veterinary inspection of carcasses, or regulating the input levels of processing additives such as nitrite/nitrate useage in cured meats. Lesser problems would be involved in a voluntary code of production dating for pre-packaged meats, or a voluntary packaging code for sliced bacon satisfactory to consumers.

1/ Schultze, Charles L. 'The Public Use of Private Interest' Brookings Institution, Washington, D.C. 1977, page 6.

A practical problem that always arises with self regulation is how to maintain general compliance with a voluntary code. Some independent firms will always tend to cut the price and not adhere to the standard. On the other side of the coin, the imposition of a minimum government standard tends to bring products to a common denominator and reduce the incentive for superior quality and performance.

Despite the difficulties, a greater degree of industry self regulation, especially in the matter of non-safety-related quality standards, is undoubtedly a sound objective. To proceed far in this direction, however, may require legislative assistance to facilitate or even encourage self regulation in appropriate areas. Mutually agreed trade standards and practices generally have created legal uncertainties under competition policy, from the standpoint of a possible relation to pricing.

Suggestions as to how incentives might be used in encouraging the private sector to take positive action to correct situations now covered by regulations have been advanced by Hildreth. 1/

Referring to the problems of employee safety, Hildreth suggests that "an injury tax would create incentives for the employer to improve safety programs and control a whole range of factors which contribute to accidents, including safety training, rather than just correcting the limited number of physical conditions directly regulated". He thus concludes that "safety could be made to pay for the employer and the employee by modification of workmen's compensation".

In Canada the meat industry, prone to employee injury due to the extensive use of knives, saws and choppers, coupled with slippery floor conditions, has for a number of years undertaken accident prevention activities through industry safety councils. Workmen's compensation levies are related to industry group accident experience. Employers however have complained of abuses in the administration of the compensation system which make it possible for employees to malingering, or claim injury at work when the condition may be caused or exacerbated by outside circumstances, or by the negligence of the employee.

1/ Hildreth, R.J. 'Economists, Regulation and Public Policy' - American Journal of Agricultural Economics, Vol. 61, No. 4, Pt.2, November, 1979, p. 758.

Positive incentives no doubt can motivate more industry self regulation in certain matters and should be considered wherever feasible.

3. Three of the prime essentials for a sound regulatory system are:
- (a) Effective Consultation.
 - (b) Adequate notice.
 - (c) Competent prior research and investigation, particularly where the economic impact is likely to be highly significant.

Consultation

As suggested in Part II of this report dealing with some regulatory case histories, there is evidence of a more effective consultative approach on regulations developing in Canada in the 70's at the federal level at least.

The first requirement for effective consultation is that it start early enough. ^{1/} This means it should be underway before a decision is made as to whether a regulation is necessary, and before official thought has begun to be locked in on any specific regulatory option. This simply means that the regulatory authority should meet with interested parties, jointly or severally, and solicit their views on the matter in advance.

The consultative pattern which is exemplified federally in Canada by the approach to problems related to nitrites, the microbiology of ground meats, salmonella or sulfamethazine residues in pork, or provincially (in Ontario) in the matter of financial protection for livestock producers against processor insolvency, all indicate considerable efforts to explore the facts thoroughly before proposing any specific and final regulatory solution. Where warranted, the use of a joint task force may round out the consultative process, especially where considerable preliminary research and investigation is indicated.

The established federal pattern in the United States is to publish a proposed regulation in the Federal Register and to give interested parties a short period, generally in the 30-90 day range, to comment. While ostensibly this is a democratic process, it has some shortcomings, and the consultative pattern followed in Canada, as for example in the salmonella case, is generally much more satisfactory.

^{1/} The Interim Report of the Economic Council, November, 1979 recommends (page 82) that consultation should start as 'early as possible' with those with an interest in regulatory changes. We strongly agree. See also the consultative timetable on page 74 of the Interim Report of the E.C.C. (Responsible Regulation).

Seevers, in his paper at the 1979 Economic Research Conference on U.S. Food System Regulation 1/ advances several reasons for so much regulation proceeding without first getting all the facts.

1. He notes that when a proposed regulation is published in the Register for public comment, this very process tends to commit the regulator, possibly not in possession of all the facts, to the proposed approach. This by-passes the desirable first step of exploring alternative approaches in depth with interested parties.
2. Secondly there tends to be a general attitude of concern about industry representatives having too much to say on prospective regulations. This leads to a proposal being published without prior ex-government consultation. Even if the regulatory proposal is impractical or insufficiently thought through, a formal adversary atmosphere is generated right from the start.
3. A third reason is that regulatory agencies tend to try to do too much, too fast, without setting out a rational regulatory timetable based on priorities. The government budgetting process contributes to this.

Among the economic questions which Seevers suggests should be put in considering a regulation, are the following 2/

- (a) Is a regulation really necessary or will competition provide satisfactory performance?
- (b) If a regulation is justified, would it be better done by industry self-regulation?
- (c) How much burden will the regulation impose on those being regulated?
- (d) Is the regulation enforceable, and at what cost?
- (e) Does it provide economic incentives to achieve the desired objective?
- (f) Does it provide useful information to the buyer or beneficiary of the regulation?
- (g) Will it actually contribute to the objective being sought, or does it only give the appearance of contributing?

1/Seevers, Gary L. - "A Regulator's Perspective on Regulatory Research" - American Journal of Agric. Economics, Vol. 61, No. 4, Pt 2, Nov. 1979 p.p. 787-790

2/Opcit page 788

(h) How will it affect industry structure and competitive incentives among firms?"

It would appear that every one of the foregoing questions are logical ones to which answers should be sought before a specific regulation is proposed. It is suggested a further one should be added, namely - will the economic benefits to the beneficiary or beneficiaries of the regulation clearly exceed, significantly, the costs of complying with, and enforcing, it over time? This is what the SEIA procedure sets out to answer.

With the exception of emergency regulations imposed because an apparent sudden health hazard developing, there seems much to be gained from regulatory bodies first getting the facts by consulting with all interested parties before formulating even a draft regulation. The parties concerned can, naturally be expected to hold biases and special interest positions, but it is the responsibility of the public agency to weigh the arguments objectively in the light of the evidence. Publication of a draft proposal after a full initial consultation may then be the rational way to proceed.

Where the problem is complex and requires considerable special research to establish the facts, provision should be made for this during the consultative process, rather than after a proposal is published, unless the period allowed for comment is extensive.

Some federal agencies have from time to time published preliminary regulatory proposals in trade information bulletins or similar informal releases. This practice is open to a similar type of criticism as the U.S. practice of publication in the Federal Register, suggesting that the regulating agency may be already committed to move in a certain direction, without sufficient preliminary dialogue on the various alternatives in possession of adequate back-up facts. Thus the practice cannot be commended, unless it follows naturally from a fairly thorough initial consultation, or deals with fairly straightforward, uncomplicated issues which would not seem to require much advance discussion.

In summary, it can hardly be stressed too highly that effective consultation with interested parties before any fixed opinions on a potential regulation are reached, and with a full examination of the facts and options provides the best assurance of co-operation and compliance options.

Advance Notice

Except in the small percentage of cases where a regulation must be imposed on a 'crash' basis to meet a critical emergency endangering health or safety, it seems entirely reasonable that adequate advance notice of a new regulation or a major regulatory change, should be given. This is particularly the case where compliance involves considerable preparation and planning by the complying parties, with possibly equipment changes and other procedural adjustments. The extensive packaging and labelling changes which became effective in March, 1976 are an example. Substantial lead time was required to re-design packages, secure advance approval in the case of meat packages, have new plates engraved and package supplies printed and delivered. Avoiding excessive waste of existing packaging materials was a further consideration.

To an important extent advance notice ties in with the consultative process. ^{1/} Early consultation is the first step in providing notice, even if a final decision is not yet made. The consultative process gives the opportunity to the affected parties to start thinking about the changes required under the apparent options. The metric conversion programme was approached in this way, despite the final constraints which developed.

When the regulatory changes follow new legislation, such as for example when the Humane Slaughter of Food Animals Act was enacted in 1959, it is possible to envisage the type of regulation which will follow, and in the case just referred to, research and testing of various humane slaughter techniques preceded the formulation of draft regulations under the Act.

Assuming that there has been consultation and a regulatory decision has been made to proceed along a certain line, it is still necessary to publish notice of the intended regulation well in advance of the proposed effective date. No consultative process is likely to sufficiently alert all interested parties and not all firms belong to trade associations who will be aware of and publicizing, the prospective changes.

Federal and Provincial Throne Speeches do give notice of impending legislation. There seems no reason this should not be supplemented by the executive arms of government indicating, from time to time, the timetables they have in mind for considering various regulatory changes. For example, let us say that the

^{1/} See Responsible Regulation: Interim Report of the Economic Council of Canada, November, 1979, page 83.

advisability of having more nutritional information on pre-packaged foods is being considered. It would be helpful to indicate the relative priority for this matter, whether manufacturers are to be first encouraged to do this voluntarily, and how far down the road any regulations may be considered.

Advance notice is further facilitated where there is an advance public policy dialogue. An example of this is proposed beef (or meat) import regulations. Extensive public hearings have taken place on this matter, so that when a final decision is made, interested parties should be well aware of developments, leaving only the matter of acceptable notice before implementation to be resolved.

Regulatory Research and Investigation

Under Point 2 in this final summary, reference has been made to the advisability of conforming to the policy of completing Socio-Economic Impact Analyses (SEIA) of proposed new regulations where the compliance costs are indicated as substantial. Such studies should try to accurately quantify the estimated compliance and administrative costs and weigh these against the estimated benefits to the beneficiaries of the regulation.

Some potential regulatory matters, however, require considerable fact-finding to establish the precise nature of the problem and the urgency of regulation. The issue of nitrites and nitrosamines is a case in point. Research was required to establish the kind and quantity of nitrosamines found in bacon, ham, and various other types of processed meats, the relation of nitrosamine formation to nitrite concentrations and cooking methods and the effectiveness of various blocking agents to nitrosamine formation. The effect of nitrosamines on laboratory animals such as rats was also examined.

In introducing durable life food dating, it was desirable to secure data on the rapidity of the selling cycle for various types of products, the extent to which individual packages of over-age product remained in counters and the normal durable life of products in various environments and types of packaging.

Regulatory research is a major field which appears not yet to have received the attention or resources it deserves in Canada. Dahl, in his paper at the U.S. Food System Research Conference in 1979 stressed the contribution which economists may make in helping legislators and administrative bodies to regulate more rationally.

He said:

"The substantial array of agricultural and food statutes, administrative rules and court decisions require systematic analysis by agricultural economists. At least four types of studies can be undertaken, most of which employ traditional micro-economic models and quantitative methods:

- (a) pre-legislation research; (b) post-legislation research; (c) administrative agency studies; and (d) cumulative impact investigations". 1/

An example of pre-legislation research would be the extensive studies now being taken of the salmonella problem under the direction of the expert study group set up to research this problem. An example of post-legislation research was mentioned earlier in this report viz. the study by Beckman and Knudson of the University of Manitoba on "Food Packing and Labelling Costs and the Cost Effects of Recent Government Legislation".

Exemplifying administrative agency studies, drawing on U.S. experience, is the "Study of the Federal Meat and Poultry Inspection System by Booz, Allen, Hamilton Inc., which was also referred to earlier.

Studies of the cumulative or aggregate effects of regulation might be exemplified by an analysis of the manner in which various regulations act together to increase price pressures and sustain inflation momentum. Another type of study particularly relevant would be the relation of regulation and declining productivity trends. U.S. studies have shown that proliferation of regulations has been an important contribution to a slowdown in productivity growth, and this certainly needs to be checked out in Canada.

There is a need for more research on basic regulatory policy issues; such as for example food protection, which takes in both safety and quality aspects. Boehm, in his paper 'Food Protection: A Research Agenda' suggests three areas where economic research and policy analysis can play a useful part. These are the economics of information (i.e. the delivery and interpretation of product information), research on the concept of relative risk, and policy studies to help

1/ "Regulation Analysis as a Research Focus in Agricultural Economics" by Dale C. Dahl, professor of agricultural and applied economics and Adjunct Professor of Law, University of Minnesota. American Journal of Agricultural Economics Vol. 61, No. 4, Pt. 2, November, 1979, page 772.

define and assess the consequence of proposed regulations 1/. There are many examples of basic issues of specific regulatory policy which are fruitful areas of research and having a backdrop of various studies available would be of great value at the consultative stage. Researchers would, however, have to exercise considerable foresight in selecting priorities.

With a good proportion of food industry regulation in recent years having the general consuming public as intended beneficiaries, representative consumer input into the regulatory process is important. This is increasingly provided through organized consumer groups with professional back-up. To supplement this, more research on consumer attitudes and preferences would be desirable to verify that the official consumer viewpoints expressed at public hearings and during the consultative process generally, fairly represent the general views of the consuming public.

4. In regulatory matters, the principle of political accountability should be preserved to the maximum. 2/

In the enactment of acts or statutes, which must be approved by Parliament or a Legislature, there is no question of political accountability since the legislation is openly debated and at the committee stage opportunity is commonly provided for testimony by interested sectors of the public.

At the next stage, when regulations under a statute are to be promulgated, we have already discussed the desirability of effective consultation and adequate notice. Political accountability is ensured because the regulations must receive assent by Governor-in-Council and they are then administered by a Department or Ministry headed by a Minister of the Crown who is responsible to Cabinet and his actions are subject to debate in Parliament or the Legislature. Departmental officials who have administrative authority are responsible to their Minister.

A third tier of regulation occurs when particular regulations are spelled

- 1/ W. T. Boehm: 'Food Protection: A Research Agenda' - American Journal of Agricultural Economics November, 1979, Vol. 61 No. 4 p. 801
- 2/ For a full and extensive discussion of accountability considerations see Chapter 5, pp. 53-68 of Interim Report, Economic Council of Canada, November, 1979 entitled Responsible Regulation.

out in greater detail, or interpreted, by administrative bulletins or circulars. An example of this is the detailed manual setting out "Requirements for Construction and Other Facilities Under the Canada Meat Inspection Act and Regulations". 1/

This manual spells out in greater detail what is covered under Section 6 of the Meat Inspection Regulations under "Standards of Registered Establishments". Other circulars issued by the Branch (presently called the Food Production and Inspection Branch) elaborate on other regulatory aspects.

This whole administrative process preserves political accountability because the public servants who are charged with the enforcement of regulations are subject to the supervision and control of Ministers who are in turn responsible to Parliament or a Legislature in the exercise of statutory powers conferred on them. Relief can always be sought by appealing administrative decisions to the ministerial level.

One of the problems that arises, is where subordinate legislative powers are exercised by statutory regulatory agencies or by special interest statutory bodies, such as for example producer marketing boards. If such bodies are permitted to enact regulations without the approval of Governor-in-Council or without prior notice and publication, the principle of political accountability is seriously prejudiced. Relief to aggrieved parties from the decisions or actions of such agencies should be afforded through independent appeal tribunals, and of course the courts. Such agencies, in receiving subordinate legislative authority, should also be encouraged to undertake advance consultation and give prior notice of regulatory proposals.

In any regulatory system the path of political accountability should remain clear and unconstrained, and administrative decisions should always be subject to true right of appeal to safeguard fundamental rights under the constitution.

5. Positive efforts should be made to ensure consistency of administration and interpretation of meat regulations.

1/ Manual published October, 1977 by Meat Inspection Division, Health of Animals Branch, Agriculture Canada to supplant Circular 47.

A characteristic of meat industry regulation is the economic importance which is attached to the decisions of government inspectors at the location of the complying establishment. This is particularly true in the case of meat inspection and carcass grading in slaughtering plants. In the case of post mortem inspection and inspection in the cutting room, inspection decisions alter the tonnage of approved, edible product, and determine the percentage of rejected or condemned material. In the case of grading, the grading officer's decision determines the market value of the carcass.

This simply means that consistency of inspection standards from plant to plant, and one part of the country to another, are important competitive factors, just as uniform enforcement of weights and measures regulations, sanitary regulations and so forth, are a like concern of both the complying firms and the beneficiaries of the regulations.

The agencies who administer regulations are known to have their own standards officers, whose job it is to see that inspection and grading standards are uniformly enforced. In the main those subject to the regulations have to trust the effectiveness of these in-house efforts to ensure consistency. There are few, if any, independent checks available.

At the retail level, firms are subject to unscheduled visits from a variety of inspectors operating under federal provincial or municipal auspices. These may include federal inspection staff from Consumer and Corporate Affairs, the Health Protection Branch of Health and Welfare Canada, Agriculture Canada inspectors and Weights and Measures. Provincial staff inspectors may include Health Departments, Industrial Safety Agencies, Agriculture or Consumer Affairs. Municipal health inspectors may also make visits. A complaint heard from retailers is that inspectors are not always fully briefed on the regulations they are enforcing, or do not interpret them consistently and rationally.

It is probably natural that various firms and individuals who operate under a regulatory system have an important concern that enforcement be fair and equal throughout the system at all times. This requires special efforts to train

inspectors and endow them with a uniform philosophy and interpretation of the regulations. Perhaps also it requires periodic checking of performance, with reasonable proof available for public view.

6. Some further sundry recommendations on meat regulations:

- (a) The standards for various meat products under the Food and Drugs Act (also covered in Schedule IV of the Meat Inspection Regulations, Canada) should be reviewed in consultation with all interested parties. Such factors as continuing relevance, possibilities of self regulation, needed changes, cost/benefit aspects, enforcement efficiency, etc., should be considered.
- (b) An active joint continuing advisory committee on carcass grades should be maintained. Points for current consideration might include grading of veal and lamb, grade categories for dairy animals, grading of young bulls and boars, etc.
- (c) The long-established prior approval system for meat packages and labels in inspected establishments should be evaluated, even if both the industry and the government mutually agree on its continuance. The merits of the system should be reviewed in relation to costs. Recently Agriculture Canada proposed deleting the inspection legend on shipping boxes and cartons, which was a cost-reducing move toward simplification.
- (d) A survey of consumer opinion relating to food additives was conducted by the Health Protection Branch, Health and Welfare Canada in 1979. If such research is to be used as a determinant in regulatory policy, it seems advisable to have a mechanism for independent checking of the results. A regulatory agency may have difficulty in being completely objective in designing and conducting the survey, although undoubtedly interested in the attitudes revealed.
- (e) The practice of appointing and using Expert Advisory Committees as part of the pre-regulation consultative process is to be commended. Information Letter 575 issued by the Health Protection Branch. 1/which proposed

a wider use of such committees in connection with Food and Drug Regulations,

1/ I. L. No.575, Health Protection Branch, Health & Welfare Canada, Jan. 16,1980

is to be commended. Such advisory bodies are to be used to consider complex issues in specific technical/scientific fields.

- (f) Canada has moved slowly in establishing and funding an independent Meat Research Institute, as for example the organizations in Great Britain and Denmark. The Canada Expert Committee on Meats (formerly the Canada Committee on Meats) has performed a useful function in the absence of a permanent Institute. It has contracted research projects which have a bearing on potential regulatory changes. An example of this is further study of the feasibility of reduced nitrite levels in cured bacon. Independent fact-finding with a competent scientific base is an important adjunct to the regulatory process.

A CONCLUDING NOTE

After completing an inventory of the extensive regulations affecting the PDR sectors of the Canadian red meat industry, and appraising the practicalities of a cross section of various types of regulatory experience, in consultation with processor and retailer associations, the authors of this report appear to have reached conclusions and recommendations which are closely compatible with those in the Interim Report entitled 'Responsible Regulation' which the Economic Council of Canada published in November, 1979.

The latter Report said in conclusion:

"The message of this Interim Report is that there should be increased accountability by governments on the conduct of regulation through statutory agencies, a full appraisal of the potential benefits and costs of major new regulations, and periodic, systematic evaluation of all regulatory programs, with full disclosure of the findings. There is also a need for statutory regulatory agencies to be fully accountable to the legislature for the regulations they now administer, while also continuing to contribute their expertise to policy making in regulation".^{1/}

The authors of this report feel that the PDR sectors of the meat industry, who are highly regulated, would strongly agree with the essentials of the above message.

As we have noted in this report, the consultative approach seems to have been working effectively in meat industry regulation, particularly at the federal level, but continuing efforts to improve it further are desirable. The prior economic assessment of regulatory proposals should be pursued competently and responsibly. To supplement this, continuing research priorities must be established and acted on if there is to be a rational regulatory policy. Regulations must be based on correct facts.

If there is one word which is vital in regulation that word is 'accountability'. Where subordinate legislative powers are exercised which they are frequently in the modern state, the maintenance of accountability is a paramount consideration.

Another twin key is consultation. Just as an early precept of British democracy was 'no taxation without representation' a modern dictum is 'no regulation without consultation'.

With a rational, common-sense approach there seems no good reason why effective regulation cannot be carried out with minimal disruption of normal channels of production, distribution and marketing. This should at all times be the goal.

^{1/} Interim Report, op.cit., page 90.

APPENDIX I

LIVESTOCK AND MEAT TARIFFS

Canadian Tariff Item	Commodity	Unit	British preferential	Australia New Zealand	M.F.N. (includes U.S.A.)	U.S. Tariff on Canadian product
100-1	Animals, purebred for improvement of stock		free	free	free	free (a)
500-1	Cattle n.o.p. than 200 lb.	lb	free	free	1½¢	1½¢ first 200,000 head/yr. 2½¢ over quota.
	200-699 lb	lb	free	free	1½¢	2½¢
	700 lbs and over (excl. dairy cows)	lb	free	free	1½¢	1½¢ first 400,000 head/yr. max . 120,000/quarter 2½¢ over quota
504-1	Dairy cows	lb	free	free	free	0.7¢
600-1	Hogs	lb	free	free	0.5¢	0.5¢
502-1	Sheep and Lambs	head	free	free	\$2.00	free
701-1	Beef and Veal fresh or frozen (b)	lb	3¢	3¢	3¢	3¢-10% (c) (d)
1002-1	Beef, pickled	lb	free	free	1C	3¢-10% (c)
1002-2	Beef, salted in barrels	lb	free	free	free	3¢-10% (d)
800-1	Beef, canned	15%	free	15%	7.5% (d)	
707-1	Edible meat of all animals	lb	0.5¢	0.5¢	0.5¢	0.5¢-2.5
855-1	Extracts of meat and fluid beef not medic- ated	lb	10%	10%	20%	1C
704-1	Pork, Fresh or Frozen (d)	lb	0.5¢	0.5¢	0.5¢	0.5¢

APPENDIX I continued

Canadian Tariff Item	Commodity	Unit	British preferential	Australia New Zealand	M.F.N. (includes U.S.A.)	U.S.Tariff on Canadian product
1001-1	Bacon and ham not canned, cooked or boned	1b	free	free	1.75¢	2¢
	Other	1b	free	free	1.75¢	2¢
1001-2	Pork, salted in barrels -not boned	1b	free	free	free	2¢
	- boned	1b	free	free	free	3¢
805-1	Pork, canned	1b	15%	free	15%	3¢
810-1	Hams, canned	1b	15%	free	15%	3¢
703-1	Mutton, fresh or frozen	1b	4¢	½¢	6¢	2.5¢
703-1	Lamb, fresh	1b	4¢	½¢	6¢	1.7¢
1205-1	Sausage, skins & casings cleaned		free	free	10%	free
1400-1	Tallow	1b	free	free	10%	0.43¢
59900-1	Cattle hides		free	free	free	free-2% (g)

(a) The U.S. accepts as 'purebred' only animals appearing in a herd book recognized by the U.S.D.A. Some new or exotic breeds may not be covered.

(b) Canada includes fresh beef sprinkled with salt but not cured.

(c) U.S. tariff - 3¢ per lb when 30¢ per lb or less; 10% when over 30¢.

(d) U.S. definition covers prepared or preserved in 'airtight' container.

(e) U.S.A. tariff - 0.5¢ per lb when 20¢ per lb or less; 2.5% when over.

(f) Canada includes fresh pork sprinkled with salt but not cured.

(g) Free TSUS item 120.14; 2% TSUS 120.17.

(h) U.S. tariff items for prepared or preserved, includes fresh, chilled or frozen meats even if no further processing such as curing, smoking or cooking has taken place, if it has been prepared for use by the consumer with no further intermediate processing.

SOURCE: Agriculture Canada, Livestock Market Review, Annual.

APPENDIX II

MAJOR FEDERALLY INSPECTED BEEF PROCESSORS BY TYPE OF OPERATION AND PROVINCE

I Beef Slaughterers

i) Atlantic Provinces

Canada Packers, Charlottetown
Chippen Bros., Fredericton
Hub Packers, Moncton
Larsen Packers, Berwick

ii) Quebec

Abattoir du Nord, Ville Laval
Cantel
Abattoir V Joyal et Fils, Ma-sueville
La Chaîne Co-op du Saguenay, Lac St-Jean
Legrade, Princeville

iii) Ontario

Burns Meats, Kitchener
Canada Packers, Toronto
Canadian Dressed Meats, Toronto
Dorr Packers, Hamilton
Crabtree Packers, Ottawa
Comfort & Tylee, Niagara
Dee's Beef, Guelph
Better Beef, Guelph
F.W.Fearman, Burlington
Grace Meats, Toronto
Metropolitan Packers, Toronto
Norstern Packers, Kitchener
Paletta Bros., Burlington
Prime Packers, Toronto
J.M.Schneider, Kitchener
Windsor Packers, Windsor

iv) Manitoba

Burns Meats, Winnipeg
Burns Meats, Brandon
Canada Packers, Winnipeg
East-West Packers, Winnipeg
O.K.Packers, Winnipeg
Herb Best Beef, Winnipeg

APPENDIX II continued.

- v) Saskatchewan
 - Canada Packers, Moose Jaw
 - Intercontinental Packers, Saskatoon
- vi) Alberta
 - Burns Meats, Calgary
 - Canada Packers, Lethbridge
 - Canada Packers, Calgary
 - Canada Packers, Red Deer
 - Canadian Dressed Meats, Lethbridge
 - Dvorkin Packers, Calgary
 - Lakeside Packers, Brooks
 - Swift Canadian, Lethbridge
 - Swift Canadian, Edmonton
 - XL Beef, Calgary
 - Gainers, Edmonton
 - Grande Prairie Packers, Grande Prairie
- vii) British Columbia
 - Coaspac Meats, Abbotsford

II Beef Boners

- i) Quebec
 - Canada Packers, Montreal
 - Montreal Meat Brokers, Montreal
 - Lepine-Laurier, Montreal
 - Levinoff Meat Products, Montreal
 - Interstate Meat, Montreal
 - United Packing, Montreal
 - Bovitel, Trois-Rivieres
 - La Chaine Co-op du Saguenay, Lac St-Jean
 - Legrade, Princeville
 - Abattoir du Nord, Ville Laval
 - Bighorn Packers, Montreal
 - Northern Packers, Montreal
 - Trans-Canada Beef, Montreal
- ii) Ontario
 - Canada Packers, Toronto
 - Burns Meats, Kitchener
 - F.W.Fearman, Burlington
 - Metropolitan Packers, Toronto
 - Palette Bros., Burlington
 - Northern Packers, Kitchener
 - Prime Packers, Toronto
 - J.M.Schneider, Kitchener

APPENDIX II continued.

- Canadian Dressed Meats, Toronto
- All-Lean Beef, Burlington
- Mueller Meats, Niagara
- Windsor Packers, Windsor
- Glencoe Meats, Burlington
- Erie Meats, Toronto
- Grace Packers, Toronto
- iii) Manitoba
 - Canada Packers, Winnipeg
 - Burns Meats, Winnipeg
 - Burns Meats, Brandon
 - O.K.Packers, Winnipeg
- iv) Saskatchewan
 - Canada Packers, Moose Jaw
 - Intercontinental Packers, Saskatoon
- v) Alberta
 - Canada Packers, Calgary
 - Canada Packers, Red Deer
 - Montagne Meats, Lethbridge
 - Burns Meats, Calgary
 - Gainers, Edmonton
 - Swift Canadian, Edmonton
 - Grande Prairie Packers, Grande Prairie
 - Centennial Packers, Calgary
- III Boxed Beef Processors
 - i) Quebec
 - Canada Packers, Montreal
 - Lepine-Laurier, Montreal
 - Steinbergs, Montreal
 - ii) Ontario
 - Canada Packers, Toronto
 - Better Beef, Guelph
 - F.W.Fearman, Burlington
 - Paletta Bros., Burlington
 - Lang's Foods, Stoney Creek
 - iii) Manitoba
 - Burns Meats, Brandon
 - Burns Meats, Winnipeg
 - Canada Packers, Winnipeg

APPENDIX II continued

iv) Saskatchewan

Intercontinental Packers, Saskatoon

v) Alberta

Burns Meats, Calgary
Canadian Dressed Meats, Lethbridge
Swift Canadian, Edmonton
Canada Packers, Calgary
Gainers, Edmonton
Centennial Packers, Calgary
Grande Prairie Packers, Grande Prairie
Lucerne Foods, Calgary

vi) British Columbia

Intercontinental Packers, Vancouver
Gainers, Vancouver
Meteor Meats, Vancouver
Chuckwagon Foods, Vancouver

IV Beef Patty Manufacturers

i) Ontario

Cara Foods, Toronto
J.M.Schneider, Kitchener
Canadian Packers, Bramalea
Caravelle Foods, Toronto
Belmont Meat Products, Toronto
Cardinal Meats, Toronto
Agincourt Foods, Agincourt
F.G.Bradley, Toronto
Tasty Chip, Toronto
Quinte Meats, Toronto
Peter Macgregor, Toronto
McIver & Lines, Toronto
Whitefield Meat Packers, Toronto

ii) Alberta

Caravelle Foods, Edmonton

SOURCE: Meat Industry Research Services Ltd.

APPENDIX III

FEDERALLY INSPECTED PORK SLAUGHTERERS AND PROCESSORS BY PROVINCE

i) Atlantic Provinces

Canada Packers, Charlottetown
Swift Canadian, Sydney
Hub Meat Packers, Moncton
Larsen Packers Limited, Berwick
Newfoundland Farm Products Corporation, St. John's, Cornerbrook
Salaision Gauvin Ltd., Paquetteville
Chippin Bros. Limited, Fredericton

ii) Quebec

Canada Packers, Montreal
Abattoir Du Temis Inc., Temiscouata
Abattoir Felicien, St. Felicien
Legrade Inc., Princeville, Quebec, Rimouski
Les Abbatoirs Z. Bellette Inc., St. Louis de Gonzague
La Chaine Co-operative du Saguenay, St. Bruno
Abattoir Dube Inc., Saint Cyrille de Wendover
L'Abattoir St. Jacques, St. Jacques
Les Abbatoirs R. Roy Inc., St. Charles, St. Anselme
Abattoir Labbe & Fils Inc., St. Georges Ouest
Abbatoirs Laurentides Inc., St. Esprit
Abattoir V. Joyal et Fils, Massueville de St. Aime
Abattoir A. Trahan Inc., Yamachiche
Abattoir Fortin et Fils Ltee, St. Blaise
Salaision Olympia Ltee, St. Simon
Abattoir Ste Claire Ltee, La Plaine
Hygrade Foods Inc., Montreal
Abattoir St. Valerien Inc., St. Valerien
Abattoir du Nord Ltee, Ville Laval
Abattoir St Jean Ltee, La Providence
Abattoir a Cote et Fils, Stoke Centre
H. St. Jean et Fils, St. Hyacinthe
Salaision Andre Claude Ltee, Rosemont
Corporation Salaision, Melrose, Montreal
Products Le Boucan, Inc., St. Jean
Les Salaisons V. Courchesne & Fils Ltee, St. Dominique
Montpak Ltee, St. Germain de Granthem
Olivier Bienvenue Ltee, St. Valerien
Abattoir Ouellet Inc., St. Perpetue
Lester Foods Ltd., Laval
Les Salaisons Brochu, St. Henri
Abattoir de la Mauricie Inc., St. Louis de France
Les Salaisons Milton Ltee, Ste. Cecile de Milton
Bovitel Inc., St. Pierre Les Becquets
Frigorifique Quebec, Lachine

APPENDIX III continued

J.O.Gonthier Inc., St. Jerome
Abattoir Gerard Fugere Ltee, St. Stanislas
Les Empaquetages Capital Ltee, Iberville
Les Viandes Lepine Inc., Montreal
Abattoir Turcotte & Turmel Inc Vallee Jonction
Le Cheptel de Berthier Inc., Berthieville
Abattoir Outaouais Inc., Ferme Neuve
L'Abattoir Regional de Valleyfield, St. Stanislas De Kosta

iii) Ontario

Burns Meats, Kitchener
F.W.Fearman, Burlington
Canada Packers, Toronto
Swift Eastern, Toronto
Quality Meat Packers, Toronto
J.M.Schneider Inc., Kitchener
Windsor Packing Company, Windsor
Aliments R & R Foods Limited, Windsor
Hoffman Meats Limited, Kitchener
Quinte Meat Products, Wellington
Bruce Packers, Paisley

iv) Manitoba

Burns Meats, Winnipeg
Canada Packers, Winnipeg
East West Packers, Winnipeg
J.M.Schneider Inc, Winnipeg
Jack Forgan Meats, Winnipeg
Winkler Wholesale Meats, Winkler

v) Saskatchewan

Empire Meat, Saskatchewan
Intercontinental Packers, Regina
M.P.C. Abattoir, Moosomin

vi) Alberta

Burns Meats, Calgary
Canada Packers, Edmonton
Swift Canadian Company, Edmonton
Gainers Limited, Edmonton
Grande Prairie Packers Limited, Grande Prairie
Capital Packers, Edmonton
Fletchers Limited, Red Deer

APPENDIX III continued

vii) British Columbia

Burns Meats, Burnaby
Borsato Meats, Langley
Canada Packers, Vancouver
Swift Canadian Company, Richmond
J.M.Schneider, Burnaby
J.P.L. Meats, Surrey
Intercontinental Packers Limited, Vancouver
Richmond Packers Limited, Richmond
Fletchers Limited, Vancouver
Meteor Meats, North Vancouver

APPENDIX IV

PROCESSED MEATS AND SAUSAGE MANUFACTURERS BY PROVINCE

i) Atlantic Provinces

Blue Boy Foods Limited, St. John's, Nfld.
Chan Food Products, St. John, N.B.
Eastern Meat Purveyors, Halifax
Claude Acadian Fricot Ltd., St. Anthony, N.B.
Philip Parsons Ltd., St. John's, Nfld.
Greco Donair Franchise Ltee, Dieppe, N.B.

ii) Quebec

La Deliceuse Ltee, Montreal Nord
Leong Jung Co. Ltd., Montreal
Green Giant of Canada, St. Remi
Bovril Canada Ltd., Pointe Claire, Montreal
S. Coorsh and Sons, Montreal
Catelli Ltd., Montreal
La Maison Paris Pate Inc., St. Laurent
J.A.Ferland & Fils Ltee, Berthierville
Wm. Underwood Canada Ltee, Dorion
Cordon Bleu Ltd., Montreal
Moo Sange Food Company Ltd., Montreal
Aliments Martin Inc., Montreal
Provincial Cannery Ltd., Outremont
Gaza Products Inc., Montreal
Hygrade Foods Inc., Montreal
Dominion Provisioners Ltd., Montreal
Salaire Norpak Inc., Montreal
Alcide Gaston (Charcuterie) Ltee, Chicoutimi
Tastee Bite Foods Ltd., Templeton
Empaquetage J.B. Inc., St. Hyacinthe
Steinbergs Limited, Montreal
No. Bourassa Ltee, Montreal
Charcuterie Raymond Roy, St. Anselme
Herpak Inc., Montreal Nord
Wong Wing Food Products, Montreal
Produits Alimentaires PPB Inc., Sherbrooke
John Mader Inc., Montreal
Hamel Inc., St. Romuald
Les Produits Alimentaires Berthelette Inc., Ville de Laval
Salaire Rivard Ltee, Rouyn
Dubrisson Ltee, St. Hubert
Produits Roberto Inc., St. Damase
Kraft Foods, Montreal
Les Aliments Guisso Inc., St. Martine
Les Produits Alimentaires Viau Inc., Montreal Nord
Supreme Packers, Montreal
Provines Alanac Inc., Quebec City

APPENDIX IV continued

Les Aliments C.J.D. Inc., Cap de la Madelaine
Or-Fil Inc. Laval
Gattuso Corporation Ltd., Montreal
Interstate Meat Company, Montreal
Aliments E.D.Ltee. Foods, Dorval
La Bonne Humeur (1975) Ltee., Magog
M & D Picory Ltee, St. Hubert
Taillefer Ltee., Magog
Charcuterie La Dyonnaise Inc., St. Leonard
Salaision G. Lauzon Packages Inc., Montreal
Bilopage Inc., Vanier
Les Aliments da Vinci Food Products, Montreal
Coq Hardi Products Canada Ltd., Ville St. Antoine
Sodor Inc., Val-Belair
Corp. d'Aliments Buffet Ltee., Montreal
Les Aliments Bologna Food Ltee., Montreal
Nor Packers Ltd., Montreal North
United Packing Co., Montreal
Les Cuisines Mirobon Ltee., St. Jerome
Produits 4 Etoiles, Inc., Chicoutimi
Les Aliments Papinea Inc., Montreal
Emond & Cote, Quebec City
Les Aliments Roche Ltee., Chicoutimi
Bovitel Inc., Trois-Rivieres
A. Lassonde & Fils, Rougement
Alpina Salami Inc., Chomedey
Les Aliments Salamina Ltee., Montreal
Charcuterie la Fernandiere Inc., Trois-Rivieres
Levinoff Meat Products Ltd., Montreal
Morel Inc., Montreal Nord
L.P.Thibault Inc., Montreal
Les Specialities Prodal (1975) Ltee, St. Leonard
San Marco Salami Inc., Montreal Nord
Les Produits Coq d'Or Ltee, Marieville
Charcuterie Parisienne Inc., Montreal
Salaision Rock Forest, Magog
Magnani Inc., St. Leonard
O. Gauthier Ltee., Montreal
Quebec Packers Inc., Montreal
Les Produits du Chef Syl Inc., Quebec City
Provigo (Distrib) Inc., Ville de Laval
Artel Inc., Terrebonne
Les Produits Alimentaire Galazie Inc., St. Jerome
Les Produits Alimentaire Marage Inc., Rimouski
Boulangerie Samson Inc., St. Leonard
A.P.B. Packing Inc., St. Leonard
Buddha Chinese Foods Products Inc., St. Leonard
Charcuterie Tour Eiffel Inc., Laval
Paul Vennenc, Ville Vanier
Produits Gano Ltee, Victoriaville
Salaision A.E.L.E. Packing Inc., Montreal Nord

APPENDIX IV continued

Marcel Bonneau Inc., Mont St. Gregoire
Les Produits Zolfo, Montreal

iii) Ontario

Canadian Home Products Ltd., Niagara Falls
J.M. Schneider Inc., Kitchener
Select Food Products, Toronto
Campbell Soup Company, Toronto
H.J. Heinz Company, Leamington
Libby McNeil & Libby, Chatham
Oxo Foods Division, Belleville
Gerber Canada Inc., Niagara Falls
Shopsy's Foods Ltd., Weston
Darrigo's Italian Food Products Ltd., Toronto
Lee's Food Products Ltd., Toronto
Belmont Meat Products Ltd., Weston
Metro Provisions, Downsview
Aliments R & R Foods Ltee., Windsor
Tasty Chip Steak Products Ltd., Toronto
Roman Cheese Products Ltd., Niagara Falls
G. Brandt Meat Packers, Mississauga
Ontario Ravioli Limited, Hamilton
Specialty Food Products Division, Peterborough
Stuart House Canada Ltd., Toronto
Lawry's Foods of Canada Ltd., Toronto
Primrose Meat Products, Mississauga
Stratford Foods Limited, Toronto
Bamford Meat Company, Mississauga
Z.P.W. Foods Limited, Don Mills
Morrison Lamothe Foods Limited, Toronto
Dorset Food Products, Mississauga
Holiday Farms Limited, Niagara Falls
Erie Meat Products Limited, Toronto
Magic Pantry Foods Inc., Hamilton
F.G. Bradley Company Toronto, Edmonton, Winnipeg

iv) Manitoba

Ready Foods Limited, Winnipeg
Smith's Corned Beef and Sausage Manufacturing Co., Winnipeg
Glacier Food Services Ltd., Winnipeg

v) Saskatchewan

Fuhrman Meat Limited, Regina

vi) Alberta

Edmonton Meats Limited, Edmonton
Trans Canada Freezers, Calgary
Montagne Meats, Lethbridge
Van's Sausage Co., Edmonton

APPENDIX IV continued

Westpac Meat Proc. Ltd., Edmonton
Alberta Fancy Sausage, Calgary
Philet Meats, Red Deer
Lucerne Foods, Calgary
Davco Processors Company, Lethbridge

vii) British Columbia

Thos. J. Lipton Ltd., Burnaby
Kohler's European Sausage Ltd., Aldergrove
Nalleys Canada, Burnaby
Caesar Canning Company, Richmond
Wing Wing Co. Ltd., Vancouver
Vancouver Fancy Meats Co. Ltd., Vancouver
B.C. Fancy Sausage Ltd., Richmond
HRI Meat Purveyors Ltd., Vancouver
Swan Valley Foods Ltd., Richmond
The Snackery Foods Ltd., Richmond
Jimmy's Find Foods, Vancouver
Bar 111 Foods Limited, Burnaby
J.D. Sweid & Co., Vancouver
Freybe Sausage Manufacturing, Vancouver
T. & N. Processing Corp., North Vancouver

APPENDIX V

FEDERAL GOVERNMENT ACTS AND REGULATIONS AFFECTING THE RED MEAT INDUSTRY

ACT	REGULATION	CHAPTER NUMBER & DIRECT AMENDMENTS	INDIRECT OR CONSEQUENTIAL AMENDMENTS
Agricultural Products Board Act		C. A-5-1970	C.22 1977-78 (miscellaneous Statute Law Amendment Act, 1978)
Agricultural Products Cooperative Marketing Act		C. A-6-1970 C. 1 (1st Supplement 1970) C. 85 1974-75	C.22 1977-78 (miscellaneous Statute Law Amendment Act, 1978)
Agricultural Products Marketing Act	Alberta Hog Order Manitoba Hog Order Nova Scotia Hog Order Ontario Hog Order Ontario Pork Producers Marketing Order PEI Hog Marketing Levies Order	C. A-7-1970 C.130-CRC-1978 C.154-CRC-1978 C.167-CRC-1978 C.214-CRC-1978 SOR-79-418 C.229-CRC-1978 SOR/78-761 79-71 79-312 79-516 C.228-CRC-1978 C.272-CRC-1978 C.276-CRC-1978 C.273-CRC-1978 C.277-CRC-1978 C.727-CRC-1978	
	PEI Hog Order Saskatchewan Hog Farm Reg- istration (Interprovincial & Export) Regulations Saskatchewan Hog Information (Interprovincial & Export) Regulations Saskatchewan Hog Licensing (Interprovincial & Export) Regulations Saskatchewan Hog Marketing Leview Order Saskatchewan Hog Marketing (Interprovincial & Export) Regulations		

Agricultural Products Marketing Act (contd)	Saskatchewan Hog Order Saskatchewan Hog Service Charge (Interprovincial & Export) Regulations	C.271-CRC-1973 C.74-CRC-1978
Agricultural Products Standards (Canada) Act	Beef Carcass Grading Regulations Hog Carcass Grading Regulations Lamb and Mutton Carcass Grading Regulations Veal Carcass Grading	C.A.-8-1970 SOR/78-563 SOR/78-313 SOR/79-109 SOR/78-861 SOR/78-564
Animal Disease Protection Act	Animal Disease & Protection Regulations	C.A.13-1970 C.86, 1974-75-76 C.296-CRC-1978 SOR-78-69 78-205 78-597 78-911 79-77 79-295 79-296
Agricultural Stabilization Act	Beef Calf Stabilization Regulations	C.A.-9-1970 C.63, 1974-75-76 SOR-78-204
Agriculture Dept. of Act.		C.A-10-1970
Canada Business Corporations Act		C.33, 1974-75 C.9, 1978-79
Canada Water Act		C.5 (1st Supplement, 1970)
Clean Air Act		C.47, 1970-71-72
		C.14 (2nd Supplement, 1970) Government Organization Act 1970
		C.22 1977-78 (miscellaneous Statute Law Amendment Act, 1978)

Cold Storage Act

Cold Storage Regulations
C.22,1970
SOR-54-725
58-56

Combines Investigation

C.23,1970
C.76,1974-75-76

C.10 (1st Supplement,1970)
C.10 (2nd Supplement, 1970)
C.28, Miscellaneous Statutes
Law Amendment Act, 1977)

Restrictive Trade
Practices Commission Rules

C.416-CRC-1978

Consumer & Corporate
Affairs, Department
Act

C.C.-27-1970

Consumer Packaging &
Labelling Act

C.41,1970-71-72

C.28,1976-77 (Miscellaneous
Statutes Law Amendment Act,1977)
C.55, 1976-77 (Statute Law
(Metric Conversion)
Act, 1976)

Consumer Packaging &
Labelling Regulations

C.417-CRC-1978
SOR 78-171
78-46
79-223
79-318

Criminal Code

C-C34,1970
C.11 (1st Supplement, 1970)
C.2 (2nd Supplement, 1970)
C.13, 1973-74 c.c. 17,38,50
c.c. 19,48,105,1974-75-76

Customs Act

C.40,1970
C.32 (2nd Supplement, 1970)
C.39, 1973-74
C.5, 1974-75-76
C.475-CRC-1978

Release of Imported Goods
Regulations
Special Exporter Declaration
Regulations

C.477-CRC-1978

Customs Tariff Act

C.41, 1970
C.61, 1970, 71, 72
C.22, 1973
C.10, 1973-74
C.6, 1974
C.23, 1974, 75, 76
C.70, 1974, 75, 76
C.5, 1976-77
C.14, 1976-77
C.40, 1977-78

Tariff Regulations
Customs & Excise Regulations

Electricity Inspection
Act

E-4-1970
C.6 (2nd Supplement, 1970)

Employment Support
Act

C.56, 1970-71-72

Employment Tax Credit
Act

C.4, 1977-78

Energy, Mines & Resources
Department of, Act

C.E-6-1970

C.14 (2nd Supplement, 1970)
Government Organization Act,
1970
C.13, 1978-79

Energy Supplies
Emergency Act

C.17, 1978-79

Environment, Department
of the, Act

C.14 (2nd Supplement, 1970)
C.13, 1978-79

Environmental Contam-
inants Act

C.72, 1974-75

Export Act

C.E-16, 1970

Export and Import
Permits Act

C.E-17, 1970
C.9, 1974

Export & Import
Permits Regulations

Export Development Act	C.E.18,1970 C.8 (2nd Supplement, 1970) C.13, 1973 C.17,1974-75-76 C.17,1976-77 C.38,1977-78		
Farm Products Marketing Agencies Act	C.65,1970-71-72		
Fisheries Act	C.F.-14,1970 C.17 (1st Supplement, 1970) C.48, 1974-75 C.35,1976-77 C.41,1977-78 C.41,1977-78 C.11,1978-79	Meat and Poultry Products Plant Liquid Effluent Regulations	C.28,1976-77 (Miscellaneous Statutes Law Amendment Act 1977)
Food and Drug Act	C.818-CRC-1978 C.F.-27-1970		C.55,1976-77 (Statute Law (Metric Conversion) Amendment Act, 1976)
Gas Inspection Act	C.G-2-1970	Food and Drug Regulations	
Government Organization 1979 Act	C.13,1978-79		
Hazardous Products Act	C.H-3-1970	Hazardous Products (Hazardous Substances) Regulations	
Humane Slaughter of Food Animals Act	C.H-10-1970 C.937-CRC-1978	Humane Slaughter Regulations	C.28,1976-77 (Miscellaneous Statutes Law Amendment Act)

Industry, Trade and
Commerce, Department
of, Act

C.1-11-1970
C.59, 1974-75-76

Labour Code Canada
Act

C.993-CRC-1978

Canada Accident Invest-
igation and Reporting
Regulations

SOR/79-399

Canada Boiler and Pressure
Vessel Regulations

C.995-CRC-1978

Canada Building Safety
Regulations

C.996-CRC-1978

Canada Confined Spaces
Regulations

C.997-CRC-1978

Canada Dangerous Sub-
stances Regulations

C.998-CRC-1978

Canada Electrical Safety
Regulations

(Under the Canada Electrical
Safety Regulations, the
safety of employees using
electrical facilities is
achieved, to a large degree,
by prescribing that all
electrical facilities comply
with the Canada Electrical Code,
otherwise known as Canadian
Standards Association Standard
CPP.1 (available through the
Canadian Standards Association
Rexdale 603, Ont.)

SOR/79-401

Canada Elevating Devices
Regulations

C.1000-CRC-1978

Canada Fire Safety Regul-
ations

C.1001-CRC-1978

Canada First-Aid Regul-
ations

C.1002-CRC-1978

Canada Hand Tools Regul-
ations

C.1012-CRC-1978

Canada Industrial Rela-
tions Regulations

SOR-78-252

78-873

79-284

Labour Code Canada Act (contd)	Canada Industrial Relations Remuneration Regulations Canada Labour Relations Board Regulations, 1978 Canada Labour Standards Regulations Canada Machine Guarding Regulations Canada Materials Handling Regulations Canada Motor Vehicle Operators Hours of Service Regulations Canada Noise Control Regulations Canada Protective Clothing and Equipment Regulations Canada Safe Illumination Regulations Canada Sanitation Regulations Canada Temporary Work Structures Regulations	C.1013-CRC-1978 SOR/79-400 SOR/78-499 C.986-CRC-1978 SOR/78-560 79-309 C.1003-CRC-1978 C.1004-CRC-1978 C.1005-CRC-1978 C.1006-CRC-1978 C.1007-CRC-1978 C.1008-CRC-1978 C.1998-CRC-1978 C.1010-CRC-1978
Labour, Department of, Act		C.L-2-1970
Labour, Fair Wages and Hours of Act		C.L-3-1970
Livestock and Livestock Products Act		C.L-8-1970 C.1025-CRC-1978
Livestock Shipping Act	Stockyards Regulations	C.86, 1974-75-76
Lord's Day Act		C.L-13-1970
Meat and Canned Foods Act		C.M-6-1970

Meat Inspection Act	C.M.-7-1970	C.28 (Miscellaneous Statutes Law Amendment Act, 1977)
Meat Inspection Regulations	SOR/79-579	
Metric Conversion (Statute Law Amendment Act, 1976)	C.55, 1976-77	(Statutes affected include: Consumer Packaging & Labelling Act, Gas Inspection Act, Regional Development Incentives Act, Weights & Measures Act)
Miscellaneous Statutes Law Amendment Act	1977 C.28, 1976-77 1978 C.22, 1977-78	
Motor Vehicle Safety Act		
Motor Vehicle Fire Act		
Motor Vehicle Transport Act		
National Energy Board Act	C.N.-6-1970 C.27 (1st Supplement, 1970)	
National Harbour Boards Act		
Berthage, Buoyage & Anchorage Charges Tariff By-Law	C.1061-CRC-1978 SOR-78-40 78-353 79-94 79-307	
Elevator Charges By-Law	C.1062-CRC-1978	
Harbour Dues Tariff	C.1063-CRC-1978	
By-Law	SOR-78-41 78-354 79-95 79-432	

National Harbour Boards Act (contd)	National Harbour Boards Operating By-law	C.1064-CRC-1978 SOR 78-30 78-558 79-179 79-510 SOR-78-921 79-231 79-375 79-376 79-495
	Water Service Charges By-law	SOR-78-921 79-231 79-375 79-376 79-495
	Wharfage Charges By-law	C.1066-CRC-1978 SOR-78-50 79-96 79-434 79-669 (13)
National Energy Board Act		C.N-6-1970 C.27 (1st Supplement, 1970)
National Health and Welfare, Department of, Act		C.N-9-1970 C.14 (2nd Supplement, 1970)
National Revenue, Department of, Act		C.N-15-1970
Patent Act	Patent Rules	C.P-4-1970 C.1250-CRC-1978 SOR-78-673 78-790 79-257
Pest Control Products Act	Pest Control Products Regulations	C.P-10-1970 C.1253-CRC-1978 SOR-78-864 79-180 79-181
Pesticide Residue Compensation Act		C.P-11-1970
		C.28, 1976-77 (Miscellaneous Statutes Law Amendment Act 1977)
		C.10 (2nd Supplement, 1970) Federal Court Act

Pesticide Residue Compensation Aft (contd)	Pesticide Residue Compensation Regulations	C.1254-CRC-1978 SOR-78-865	
Prairie Grain Advance Payments Act		C.P-18-1970 C.24 (2nd Supplement, 1970) C.34, 1974-75 C.64, 1974-75	C.55, 1976-77 (Statute Law (Metric Conversion) Amendment Act, 1976)
Provincial Subsidies Act		C.P.-26-1970	
Public Works Act		C.P-138-1970	
Quarantine Act	Quarantine Regulations	C.33 (1st Supplement, 1970) C.97, 1974-75-76 C.1368-CRC-1978 SOR-78-406	
Railway Act		C.R-2-1970 C.35 (1st Supplement, 1970) C.12, 1974 C.41, 1974-75-76 C.49, 1974-75-76 C.21, 1976-77 C.34, 1977-78	C.10 (1st Supplement, 1970 Canada Corporations Act, An Act to Amend the C.10 (2nd Supplement, 1970 Federal Court Act C.28, 1976-77 (Miscellaneous Statutes Law Amendment Act 1977) C.41, 1977-78 Maritime Code.
Regional Development Incentives Act		C.R-3-1970 C.25 (2nd Supplement, 1970) C.84, 1974-75-76	C.54, 1976-77 Employment and Immigration Reorg- anization Act C.55, 1976-77 (Statute Law (Metric Conversion) Amendment Act, 1976)
	Regional Development Incentives Regulations Regional Development Incentives Regulations 1974	C.1386-CRC-1978 C.1388-CRC-1978 SOR-78-893	
Regional Economic Expansion Department of, Act		C.R-4-1970	

Shipping, Canada, Act

C.5-9-1970
C.38 (1st Supplement, 1970)
C.27 (2nd Supplement, 1970)
C.41, 1977-78

C.10 (2nd Supplement,
1970) Federal Court Act
C.48, 1974-75-76 (Judges
Act, an Act to Amend the
C.28-1976-77 (Miscellaneous
Statutes Law Amendment Act)
C.38, 1976-77 (An Act to
Amend the Currency and
Exchange Act)
C.52, 1976-77 (Immigration Act
1976)
C.11, 1978-79 (Judges Act
Amendment)
C.13 1978-79 (Government
Organization Act, 1979)

Shipping Conferences
Amendment Act, 1979

C.15, 1978-79

C.43, 1970-71-72 (An Act
Respecting the Income Tax
Act)

C.63 (Income Tax Act)
C.4, 1976-77 (An Act to
Amend the Income Tax Act)

158

Standards Council of
Canada Act

C.41 (1st Supplement, 1970)

Statistics Act

C.15, 1970-71-72

C.28, 1976-77 (Miscellaneous
Statutes Law Amendment Act
1977)

Statutory Instruments
Act

C.38, 1970-71-72
C.20, 1974-75-76

C.28, 1976-77 (Miscellaneous
Statutes Law Amendment Act
1977)

Tariff Board Act

C.T-1-1970

C.28, 1976-77 (Miscellaneous
Statutes Law Amendment Act
1977)

Trade Marks Act

C.T-10-1970
C.43, 1974-75-76
C.101, 1974-75-76

C.10 (2nd Supplement, 1970
Federal Court Act
C.28, 1976-77 (Miscellaneous
Statutes Law Amendment Act
1977)

Transport Act	C.T-14-1970	C.41, 1977-78 Maritime Code
Transport, Department of, Act	C.T-15-1970	
	C.1566-CRC-1978	
Unemployment Assistance Act	C.U-1-1970	C.34, 1976-77 (Auditor General Act)
Unemployment Insurance Act	C.48, 1970-71-72 C.2, 1973-74 C.66, 1974-75-76 C.80, 1974-75-76 C.54, 1976-77 C.7, 1978-79 C.1572-CRC-1978 SOR-78-732 79-104 79-363 C.1573-CRC-1978 SOR-78-709 C.1574-CRC-1978 C.1575-CRC-1978 SOR-78-143 79-43 79-64 79-287 79-509 C.1576-CRC-1978 SOR-78-233 78-366 78-516 78-695 78-696 78-710 78-809 78-810 79-52 79-81 79-85	C.33, 1976-77 (Canadian Human Rights Act) C.22, 1977-78 (Miscellaneous Statutes Law Amendment Act, 1978)
	Delegation of Powers (Part IV Unemployment Insurance Act, 1971) Regulations National Employment Service Regulations Umpire Rules of Procedure Unemployment Insurance (Collection of Premiums) Regulations	
	Unemployment Insurance Regulations	

Unemployment Insurance
Act (contd)

Unemployment Insurance
Regulations (contd)

C.1976-CRC-1976
SOR 79-168
79-348
79-421
79-465
79-481
79-572

Wages Liability Act

C.W.-1-1970

Weights and Measures
Act

C.36-, 1970-71-72
C.55, 1976-77

C.28, 1976-77 (Miscellaneous
Statutes Law Amendment Act,
1977)

Weights and Measures
Fees Regulations
Weights and Measures
Regulations

1606-CRC-1978
1605=CRC-1978
SOR-78-152
78-623
78-792
79-390

Western Grain Stabil-
ization Act

C.87-1974-75-76
C.3, 1976-77

C.28, 1976-77 (Miscellaneous
Statutes Law Amendment Act,
1977)

C.56, 1976, 77

C.52, 1976-77 (Immigration
Act, 1976)

Western Grain Stabiliza-
tion Regulations

C.1607-CRC-1978
SOR-78-125
79-135

APPENDIX VI

ONTARIO PROVINCIAL ACTS AND REGULATIONS AFFECTING THE RED MEAT INDUSTRY

ACT	REGULATION	CHAPTER NUMBER	ADMINISTERED BY
Beef Cattle Marketing Act		C 30 R.S.O. Reg. 69/70	Ministry of Agriculture and Food Livestock Branch
Brucellosis Act		C 57 R.S.O.	Ministry of Agriculture and Food Veterinary Services Branch
Business Corporations Act			Ministry of Consumer and Corporate Relations - Companies Division (Service Branch)
Business Practices Act			Ministry of Consumer and Corporate Relations - Business Practices Division
Commodity Board and Marketing Agencies Act		C 30 R.S.O.	Farm Products Marketing Board Milk Commission
Consumer Protection Act			Ministry of Consumer and Corporate Relations
Consumer Protection Bureau Act			Ministry of Consumer and Corporate Relations
Construction Safety Act (1973)			Ministry of Labour Occupational Health and Safety Division
Corporations Tax Act			Ministry of Revenue Corporations Tax Branch

Dead Animals Disposal Act	C105 R.S.O. Reg 161/70	Ministry of Agriculture and Food Veterinary Services Branch
Elevators and Lifts Act		Ministry of Consumer and Corporate Relations Technical Standards Division
Employees Health and Safety Act (1976)		Ministry of Labour Occupational Health and Safety Division
Employment Agencies Act		Ministry of Labour
Employment Standards Act (1974)		Ministry of Labour Employment Standards Branch
Environment Protection Act		Ministry of the Environment Environmental Assessment Branch
Farm Products Grades and Sales Act	C 161 R.S.O. Reg. Oct/1975 Reg. Oct/1975 Reg. Oct/1975 Reg. Oct/1975	Ministry of Agriculture and Food Livestock Branch
Farm Products Marketing Act	C 162 R.S.O.	Ministry of Agriculture and Food Farm Products Marketing Board
Farm Products Payments Act (1977)	C 163 R.S.O.	Ministry of Agriculture and Food Livestock Branch Milk Commission

Income Tax Act of Ontario		Ministry of Revenue
Industrial Safety Act		Ministry of Labour
Industrial Standards Act		Ministry of Labour
Livestock and Livestock Products Act	C251 R.S.O.	Ministry of Agriculture and Food Livestock Branch
Livestock Branding Act	C252 R.S.O.	Ministry of Agriculture and Food Livestock Branch
Livestock Community Sales Act	C253 R.S.O. Reg. 568	Ministry of Agriculture and Food Veterinary Services Branch
Livestock Medicine Act (1973)		Ministry of Agriculture and Food Veterinary Services Branch
Meat Inspection Act (Ont.)	C266 R.S.O. Reg. 574	Ministry of Agriculture and Food Veterinary Services Branch
Ministry of Labour Act		Ministry of Labour
Occupational Health and Safety Act (1978) (to be proclaimed)		Ministry of Labour Occupational Health and Safety Division
Ontario Building Code		Ministry of Consumer and Commercial Relations
Ontario Energy Board Act		Ministry of Energy Ontario Energy Board
Ontario Energy Corporation Act		Ministry of Energy Ontario Energy Corporation

Ontario Highway
Traffic Act

Ontario Highway Transport
Board Act

Ontario Human Rights
Code

Ontario Labour Management
Arbitration Commission
Act

Ontario Labour Relations
Act

Ontario Water Resources

Pesticides Act

Pressure Vessels
Safety Act

Ministry of Transportation and
Communications
Transport and Regulation Division

Ministry of Transportation and
Communications
Ontario Highway Transport Board

Ministry of Labour
Ontario Human Rights Commission

Ministry of Labour
Ontario Labour Relations Board

Ministry of Labour
Ontario Labour Relations Board

Ministry of the Environment
Water Resources Branch
Pollution Control Branch
Waste Management Branch
Waste Management Advisory Board

Ministry of the Environment
Environmental Assessment Board
Pesticides Advisory Commission
Pesticides Appeal Board

Ministry of Consumer and Corporate
Relations
Technical Standards Division

Public Health Act
(being revised as
Health Protection Act)

Slaughter and Meat
Processing Plants Regula-
tions
Food Premises Regulations

Reg 719

Reg 972/75

Ministry of Health
Community Health Services Branch

Community Health Services Branch
Local Municipal Health Agencies

Public Commercial
Vehicles Act

Ministry of Transportation
and Communications

Railway Act

Ministry of Transportation
and Communications

Retail Sales Tax Act

Ministry of Revenue
Retail Sales Tax Branch

Rights of Labour Act

Ministry of Labour
Ontario Labour Relations Board

Workmen's Compensation
Act

Ministry of Labour
Workmen's Compensation Board

Workmen's Compensation
Insurance Act

Ministry of Labour
Workmen's Compensation Board

APPENDIX VII

ALBERTA PROVINCIAL ACTS AND REGULATIONS AFFECTING THE RED MEAT INDUSTRY

ACT	REGULATION	CHAPTER NUMBER	ADMINISTERED BY
Agriculture, Dept of Act		C94, RSA, 1970	Alberta Agriculture
Alberta Department of Labour Act			Department of Labour
Alberta Labour Act		C33 SA 1973	Department of Labour
Alberta Income Tax Act	Tax Deductions Regulations amended amended	C182, R.S.A. 1970 AR317/72 AR196/73 AR238/71	Alberta Treasury
Alberta Uniform Building Standards Act			Department of Labour
Animal Protection Act		C5 SA 1967	
Boiler and Pressure Vessels Act, 1975	Codes Exempt from Publications Regulations Design, Construction & Installations, Regulations amended amended Engineer's Regulations amended amended Pressure Welders' Regulations, amended	C4, R.S.A. 1975 (2) AR126/78 AR227/95 AR 75/78 AR 444/78 AR 319/75 AR 76/78 AR 445/78 AR 229/75 AR 77/78	Department of Labour
Brand Act, The	No Regulations	C33, S1, R.S.A. 1970 amended C101, SA 1972	Alberta Agriculture

Clean Air Act	Clean Air Regulations Clean Air (Maximum Levels) Regulations Clean Air (General Regulations) Stop Order Appeal Regulations	C16 SA 1971 AR 33/73 AR 213/75 AR 216/75 AR 9/74	Department of the Environment
Clean Water Act	Fluoridation Regulations Clean Water (General) Regulations Amended Clean Water (Municipal Plants) Regulations Clean Water (Industrial Plants) Regulations Stop Order Appeal Regulations	C17 SA, 1971 AR 38/73 AR 35/73 AR 217/75 AR 37/73 AR 36/73 AR 9/74	Department of the Environment
Companies Act	Fees Regulations General Regulations Amended Amended Amended Amended Amended Amended Amended	C60, R.S.A. 1970 Amended C5, R.S.A. 1979 AR 386/78 AR 227/67 AR 287/67 AR 370/67 AR 166/69 AR 204/170 AR 263/75 AR 198/77 AR 387/78	Department of Consumer & Corporate Affairs
Cooperative Marketing Associations Guarantee Act		C68, R.S.A. 1970 Amended C19 SA 1971 C23 SA 1972 C83 SA 1973 C4 SA 1974 C1 SA 1975	Department of Consumer & Corporate Affairs

Electrical Protection Act, The

Elevator and Fixed Conveyances Act			
Environment, Department of, Act		Department of Environment	
Feeder Associations Guarantee Act		Alberta Agriculture	
Fire Prevention Act, The		Department of Labour	
Frozen Food Act		Alberta Agriculture	
Ground Water Control Act		Department of the Environment	
Highway Traffic Act		Department of Transportation Department of the Solicitor General	
Horned Cattle Purchases Act (inoperative)		Alberta Agriculture	
Land Surface Reclamation and Conservation Act		Department of the Environment	
Licensing of Trades and Businesses Act		Department of Consumer and Corporate Affairs	
Livestock and Livestock Products Act		Alberta Agriculture	
	Livestock & Livestock Products Acts Definition Regulations Regulations Governing the Bonding of Livestock Dealers and Livestock Dealers' Agents Regulations Respecting the Ribbon Branding of Beef, Veal, Lamb and Mutton Carcasses		
		C215, R.S.A. 1970 Amended C36 (proc) SA 1973 AR 90/77 AR 366/66 AR 139/73	
		C141, R.S.A. 1970 Amended C3, SA 1974	
		C150 R.S.A. 1970 Amended C3 SA 1974 C9 SA 1975 (2)	
		C162 R.S.A. 1970 Amended C88 (1975 (2)	
		C173 R.S.A. 1970	

Livestock Patron's Assurance Fund Regulations Stock Yard Licensing Regulations	AR91/77 AR 92/77	
Stockyard Operations Licensing regulations Weighing of Beef Carcasses Regulations	AR 93/77 AR 12/77	
Livestock Brand Inspection Act	C63, S.A. 1971 Amended C62 SA 1972 C56 SA 1975 C63, SA 1975 AR 50/76	Alberta Agriculture
Livestock Diseases Act	C64 SA 1971	Alberta Agriculture
Livestock Assembling Station Regulations Livestock Market Regulations	OC 726/79 OC 1004/79	
Livestock Injury (inoperative)	C217 SA 1970	Alberta Agriculture
Marketing of Agricultural Products Act	C225, R.S.A. 1970 Amended C65 SA 1972 C38 SA 1973 Bill 31, 1976	Alberta Agriculture
Meat Inspection Act	C117, R.S.A. 1972 AR 51/73	Alberta Agriculture
Motor Transport Act, The		
Municipal Government Act	C246, R.S.A. 1970 Amended C1 SA 1971 C20 SA 1971 C36 SA 1971	Department of Municipal Affairs

Municipal Government Act
(contd)

C49 SA 1971
C20 SA 1972
C89 SA 1972
C93 SA 1972
C41 SA 1973
C54 SA 1973
C61 SA 1973
C69 SA 1973

C83 SA 1973
C85 SA 1973
C27 SA 1974
C34 SA 1974
C41 SA 1974
C62 SA 1974
C63 SA 1974
C10 SA 1975
C12 SA 1975
C13 SA 1975
C15 SA 1975
C16 SA 1975

Occupational Health and
Safety Act

Plumbing and Drainage Act

Planning Act

Public Health Act

C294, R.S.A. 1970
Amended C16 SA 1971
C17 SA 1971
C24 SA 1971
C25 SA 1971
C87 SA 1971
C20 SA 1972
C89 SA 1972
C46 SA 1973

Department of Labour - Occupational
Health and Safety Division

Department of Labour

Department of Municipal Affairs
Provincial
Planning Board

Department of Social Services
and Community Health

	C47 SA 1973	
	C69 SA 1974	
	C12 SA 1975 (2)	
	C14 SA 1975 (2)	
Provincial Board of Health	AR 400/70	Department of Labour
Regulations Respecting Food	Amended 346/71	
and Drink	208/72	
	355/73	
	346/73	
	22/75	
	326/75	
	74/77	
	343/77	

Public Health Act

Provincial Board of Health Regulations Respecting Abattoirs	AR 108/74
Regulations Respecting the Preparation, Manufacture, Processing and Site of Canned Meat or Canned Meat Food Products	AR 572/57 Amended AR 75/77
Provincial Board of Health Regulations Respecting the Keeping of Livestock and Poultry	AR 297/72 Amended AR 170/76

Statistics Bureau Act,
The

Alberta Treasury

Unfair Trade Practices Act

Department of Consumer and Corporate Affairs

Water Resources Act

Department of the Environment

C388, R.S.A. 1970	
Amended CC49, 113, SA 1971	
C89 SA 1972	
C27 SA 1974	
CC10, 13, 88, SA 1975 (2)	
General Regulations	AR 91/58
Amended	AR 328/62
Amended	AR 187/65
Amended	AR 38/66
Ice Cutting Regulations	AR 93/58

- 172 -

Provincial Water Power
Regulations
Amended
Amended

AR 284/57
AR 306/74
AR 388/72

Workers' Compensation
Act

Department of Labour
Workers' Compensation Board

APPENDIX VIII

EDMONTON CITY BY-LAWS AFFECTING THE RED MEAT INDUSTRY

BY-LAW	NUMBER	AMENDMENTS	DATE
Assessment and Taxation of Business by-law	BL4273	BL5031 BL5068 BL5437	April 9, 1974 May 24, 1977 February 27, 1979
Tax Differentials for Residential and Business Properties By-law	BL1539		February 26, 1980
Edmonton Building Permit By-law 1979	BL5023	BL5678	February 13, 1979
Business Area By-Law	BL30	BL31 BL6 BL7 BL12	1925 1928 1929 1930 1930
Canada Packers:Fixed Assessment	BL870		1937
Court of Revisions 1980 By-law	BL5930		February 26, 1980
Development Control By-law	BL4949		March 9, 1977
Fire By-Law	BL2500	BL2535 BL2948 BL3137 BL3293 BL3573 BL4078 BL4187 BL4305 BL4378	December 9, 1963 April 13, 1964 February 27, 1967 March 25, 1968 February 17, 1969 June 29, 1970 June 11, 1973 December 11, 1973 August 13, 1974 December 24, 1974
Food By-law	BL62		1923

Freedom of Information by-law

BL5132

October 12, 1977

Garbage by-law

BL5173

March 14, 1979

Installation and Maintenance of
Natural Gas by-law

BL2290

BL2298
BL3151
BL3578
BL3666
BL4301
BL4730
BL4864
April 23, 1962
May 7, 1962
June 10, 1968
June 29, 1970
February 23, 1971
May 27, 1974
June 8, 1976
September 8, 1976

Health By-law

BL9

BL31
BL4
BL23
BL41
BL35
BL28
BL14
BL13
1917
1921
1922
1922
1922
1926
1928
1930
1931

(filed Jan. 25, 1932)

BL13
BL16
BL885
(Horses and Cows)
BL918
Pasturing of Cows
BL1002
(Cows and Goats)
BL1046
BL1054
(Cows and Chickens)
BL1060
(Cows and Chickens)
BL1073
(Cattle in Inner Zone)
BL1258
1932
1933
1935

1939

September 26, 1949

BL1313
BL1501
BL1464
BL1663
BL2646
BL3815
BL4694
BL5825

November 8, 1954
April 13, 1965
December 23, 1971
February 24, 1976
March 13, 1980

Heating, Ventilation and Air-Conditioning Code

BL3083

January 8, 1968 (effective
March 1, 1968)
February 23, 1970
June 19, 1970
February 23, 1971
August 27, 1973
March 25, 1974

BL3083
BL3572
BL3668
BL4125
BL4257

Hide Warehouses by-law

BL37

1917
1924
1925
1928
1930
1930

BL14
BL30
BL31
BL7
BL12

- 175 -

Holiday By-law

BL1436

BL1527
BL2904
BL2923
BL3946
BL3802

November 15, 1966
November 28, 1966
March 9, 1970
(all motions lost on
November 8, 1971

By-law to require the closing of shops
businesses and industries on Remembrance
Day

BL5783

September 12, 1979

Fixed Assessment on Improvements of Industries	BL18	BL6	1928 1930
Inspection of Meat and Slaughter-houses	BL11	BL38 BL48 BL1047	1917 1930 1930
Interest Charges on Overdue Accounts by-law	BL5150		September 8, 1977
License By-law	BL25	BL54 BL25 (Butchers Shops) BL929 (Butchers Shops) BL967 (Butchers Shops)	1917 1926 1931 1940
	BL1050 (Revision and Consolidation of License by-laws) BL1808 (Revision and Consolidation of License by-laws)		
	BL2796 (Grocery Stores) BL2984 (Grocery Stores)		January 13, 1958 February 14, 1966 March 27, 1967
	BL4780 (License by-law) BL4948 BL5214 BL5337		September 21, 1976 July 13, 1977 January 24, 1978 June 13, 1978
Lord's Day Act by-law	BL5442		August 1, 1978
Markets by-law	BL13		1917

Provision for Conversion to Metric Measurement by-law	BL5129	BL15 BL1094	1919
Minimum Property Standards by-law	BL4087		July 13, 1977
Municipal Planning Committee by-law	BL5372	BL5745 BL5811	May 27, 1974 June 28, 1978 August 15, 1979 September 24, 1979
Noise By-law	BL23 BL4110 (A by-law to prohibit, eliminate or abate noise within the City of Edmonton)		1925
Nuisances and Unsightly and Untidy Premises	BL4118	BL4177 BL4292 BL4496 BL4915	October 23, 1973 April 22, 1974 March 25, 1975 May 24, 1977
Imposition of Penalties for Infractions of City by-laws	BL2101	BL2367 BL3549 BL5396 BL5481	July 10, 1973 July 25, 1960 May 27, 1963 May 27, 1974 July 11, 1978 September 19, 1978
Plumbing Permit by-law 1979	BL5236		September 24, 1979
Rates by-law	(yearly by-laws are enacted to provide for collection of rates to meet current expenses)		
Sewers by-law	BL8 BL3875	BL4264 BL4447 BL4654 BL4746 BL4931 BL5228 BL5574	April 14, 1972 March 25, 1974 January 28, 1975 November 26, 1975 May 13, 1976 December 22, 1976 December 13, 1977 December 13, 1978

Storm Sewer Change by-law	BL5391	BL5847 BL5858	November 27, 1979 November 27, 1979
Cleaning of Sidewalks by-law	BL2697	BL5437	July 11, 1978
Streets by-law	BL3110		October 12, 1965
Stockyards by-law	BL54	BL3205 (sidewalk safety measures, including snow removal)	
		BL757 (repealed by BL1050, now included under licenses by-law)	1926 1934
Traffic and Streets by-law	BL5590	BL5687 BL5843 BL5842 BL5906 BL5841	February 13, 1979 April 25, 1979 December 11, 1979 January 8, 1980 February 12, 1980 March 13, 1980
Provision of a Uniform Rate for Water and Sewer and Improvements for 1980 by-law	BL5858		November 27, 1979
Weights and Measures by-law (now looked after by Federal Government)	BL33		1933
Zoning by-law		BL2135	October 2, 1961 (effective November 28, 1961)
		BL4882	January 11, 1977

APPENDIX IX

Questionnaire Distributed to Members of Canadian Meat Council at Annual Meeting, February, 1980.

1. Ques. - At present time the major part of the meat industry operates under federal inspection standards; a smaller portion of the industry is provincially inspected, and some local processors, as well as food handlers, are subject to municipal inspection under provincial health legislation. Should the eventual goal be one national standard of inspection for all?

Response-95.8% of respondents answered affirmatively.

2. Ques. - While Meat Inspection, Food and Drug and Packaging and Labelling regulations overlap, and involve different federal agencies, in actual practice there is presently reasonable co-ordination of the above through the Food Production and Inspection Branch of Agriculture Canada. Do you agree?

Response-91.7% of respondents agreed.

3. Ques. - It has been suggested that a single Food Inspection Agency should be established to enforce the regulations of all departments impacting on the system (e.g. Agriculture Canada, Health and Welfare, Consumer and Corporate Affairs). What do you think of this idea?

Response-57.7% of respondents felt the idea had merit while the balance felt more study was required.

4. Ques. - It has been suggested that a single Food Regulatory Authority should be established to assume statutory responsibility for all aspects of the system (e.g. Meat Inspection Act, Grading, Food and Drug Act, Packaging and Labelling Act). What do you think?

Response-66.7% of responsibilities felt the idea had merit, while 33.3% felt more study was needed.

5. Ques. - It has been suggested that, because federally inspected firms in the industry have made sizeable investments to comply with existing regulations, particularly meat inspection regulations, any sudden major move to de-regulate would be more costly than living with the existing circumstances. Do you agree?

Response-78.9% respondents agreed and 21.1% disagreed. A number commented on how de-regulation might affect costs.

6. Ques. - The federal meat inspection system has constantly become more expensive for government to administer and for industry to comply with. Are there practical ways to reduce inspection costs without prejudicing standards unduly and affect the wholesome public image of meat?

Response-15 firms offered suggestions.

APPENDIX IX - cont'd

7. Ques. - Is subjective interpretation and administration of regulations at the plant level much of a problem, re

% answering no

a)	Meat inspection regulations	72%
b)	Grading "	57%
c)	Food and Drug "	90%
d)	Packaging and Labelling "	79%

8. Ques. - Do you find your plant inspector lacks authority to make required decisions?

Response-29% said rarely, 46% said occasionally and 25% said frequently.

9. Ques. Do you find your plant inspector is not able to render a satisfactory interpretation?

Response-33% said rarely, 54% said occasionally and 13% said frequently.

10. Ques. - If the point of subjective interpretation and administration of meat inspection regulations was moved from Ottawa to your province, how do you feel service would be affected?

Response-61% thought this would make things worse, 22% felt it would be better and 17% foresaw no change. 75% felt such a change would make for greater inconsistency across the industry.

11. Are there aspects of regulatory interpretation or administration that could be effectively de-centralized, re:

% responding no

a)	Meat Inspection	70%
b)	Grading	78%
c)	Food and Drug	74%
d)	Packaging and Labelling	75%

12. Ques. - Do you feel the mass of general meat industry regulation constitutes a considerable barrier to the entry of new firms?

Response-71% believed this was possible.

13. Ques. - Does the present regulatory system create management and planning uncertainties for your firm?

Response-79% did not feel this was the case.

14. Ques. - What areas of government regulation are in greatest need of evaluation as regards continuing relevance, cost-benefit aspects, etc?

Response-Some 3 dozen comments were received.

15. Ques. - Do you feel advance consultation and notice is reasonably adequate re:

APPENDIX IX - cont'd

		<u>% answering yes</u>
a)	Meat Inspection	83%
b)	Grading Standards	68%
c)	Food and Drug	57%
d)	Consumer and Corporate Affairs	60%

(95% of respondents felt the Meat Council kept its members in consultation and informed re regulatory matters).

APPENDIX X

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5. Report by the Secretary of Agriculture to the Committee on Agriculture of the House of Representatives and Committee of Agriculture and Forestry and the Senate, with respect to the Administration of Sec. 20 of the U.S. Federal Meat Inspection Act, February, 1973.
6. The Role of Competition Policy in a National Food Policy. W.T.Stanbury - Proceedings of Fourth Agricultural and Food Marketing Forum on National Food Policy, University of Manitoba, January 16-17, 1978.
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9. Government Regulation - Scope, Growth and Process ed. by W.T.Stanbury, Institute for Research on Public Policy, Montreal, 1980.
10. Case Studies on Government Regulatory Activity, Nos. 1-8, Treasury Board of Canada and Consumer and Corporate Affairs, Canada, 1979-80.
11. Royal Commission of Inquiry into Civil Rights, Ontario, Hon. J.C.McRuer, Commissioner (Reports 1 and 2, Vols. 1-4) 1968-69.
12. Administrative Policy Manual, Treasury Board of Canada, Chapter 490, Socio-Economic Impact Analysis, December, 1979.
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14. Legislation Chronologies - Agriculture Canada
Federal Agricultural Legislation up to 1977
Provincial Legislation (Ontario) up to 1977
Provincial Legislation Pertinent to Agriculture (Quebec)
Provincial Agricultural Legislation up to 1977 (Western Provinces)

APPENDIX X - cont'd

REFERENCES continued :

15. Health Protection and Food Laws - Department of National Health and Welfare, Educational Services Pamphlet.
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17. Food Packaging and Labelling Costs and the Cost Effects of Recent Government Legislation - M.D.Beckman and R.M.Knudson, Dept. of Consumer and Corporate Affairs, 1977.
18. Reference Listing of Registered Establishments Operating Under the Canada Meat Inspection Act and Regulations, Meat Hygiene Division, Food Production and Inspection Branch, Agriculture Canada.
19. Report of the Commission of Inquiry into the Marketing of Beef and Veal, April, 1976 - Minister of Supply and Services.
20. Responsible Regulation - Interim Report by the Economic Council of Canada, November, 1979.

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