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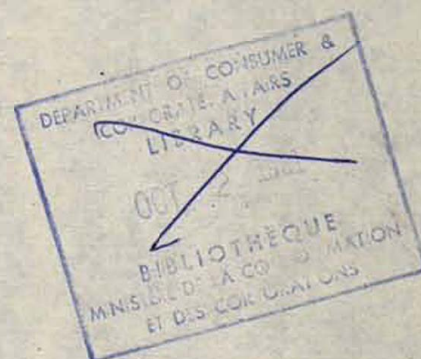
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Consumer Food Behavior

- an Annotated Bibliography



Consumer and Corporate
Affairs Canada

Food Policy Group

August 25, 1978

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CONSUMER FOOD BEHAVIOUR - AN ANNOTATED BIBLIOGRAPHY

INTRODUCTION

In its Report on Food Consumption and Nutrition, the Canadian Consumer Council recommended that the basic knowledge of human nutrient requirements and food selection motivation be considerably improved. In particular, the Council recommended that "Consumer & Corporate Affairs Canada initiate a program, in cooperation with all parts of the food system, to determine the factors motivating consumer food selection and to propose measures to improve consumer behaviour relating to food selection."* More recently, the Consumer Initiatives Subgroup of the Interdepartmental Steering Group on Food Policy, after considering the results of the February 1978 National Food Strategy Conference, has identified the knowledge required to choose food wisely as one of the priority consumer issues requiring a response by government. The Subgroup has expressed a concern, however, that the lack of knowledge on consumer motivation could militate against progress being made in this area. Finally, the government is committed to the achievement of dietary change in Canada, including the use of information programs. It is clear that better knowledge of the factors motivating consumers in their food selection practices would be helpful in the design of appropriate and effective programs.

This bibliography represents an initial response by Consumer & Corporate Affairs Canada to the need to improve knowledge and understanding of the motives affecting the food choices and food consumption patterns of consumers. The first step in any new research study is to review the existing literature in the field. The literature search, the results of which are presented in this bibliography, was undertaken for the Food Policy Group during the summer of 1978 by two students hired under the COSEP program.

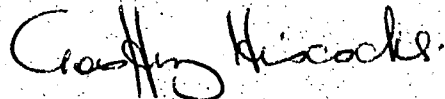
The central purpose of the search was to gain an overview of the types and extent of studies undertaken to date on consumer behaviour with regard to food. The results have been classified into four major categories which indicate the scope of the articles unearthed during the study. The categories are:

- i) consumer use and perception of information;
- ii) sensory awareness;
- iii) food purchase and consumption habits;
- iv) research methodologies used to study consumer food behaviour.

*Canadian Consumer Council, Report on Food Consumption and Nutrition, Consumer & Corporate Affairs Canada, January 20, 1978.

These headings, while perhaps not as rigorous or specific as some social scientists might prefer, should allow the reader to employ the bibliography as a reference point.

In the first instance, the bibliography is being distributed on a limited basis to those Federal Departments where it is considered that the material it contains could have a potential, perhaps even immediate, application in on-going work or in the design of new policies and programs. In addition, an assessment of the quality and comprehensiveness of the study is required to determine if dissemination to a wider audience is merited. A number of experienced consumer behaviour researchers are therefore being asked to evaluate the bibliography. However, all those to whom the bibliography is being sent are invited to comment and in particular to offer suggestions where improvements may be required.



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October, 1978

In the field of consumer behavior there is a need to develop a more comprehensive analysis of the motives affecting food choice and consumption. These studies must be food specific because of the cognitive differences between food and other elements of the field of consumer behavior. For example, food is basic in the hierarchy of needs, has different elasticities of demand, involves different cost payouts over time i.e. (in a weekly cycle rather than in a one shot manner) as compared to consumer durables. All these three factors could hinder the ability of drawing analogous conclusions from other behavioral studies. As a result, the central purpose of this literature search has been to gain an overview of the types and extent of studies on consumer behavior with regard to food.

The readings have been organized into four major headings which explain the scope of all the articles that were encountered. These categories are; consumer use and perception of information, sensory awareness, food purchase and consumption habits, and research methodologies used to study consumer food behavior. While these distinctions may not satisfy the rigorous nomenclature of the psychologist, we feel that they adequately express the main points of the articles reviewed, in such a manner as to allow the decision maker to employ it as a reference point without having to resort to an index of interdisciplinary semantics.

Virtually all of the readings are empirical studies, with a key word identifying a particular issue or concept raised in the article. Some theoretical work is included when it forms the basis of subsequent empirical works.

CONSUMER USE AND PERCEPTION OF INFORMATION

This section on consumer use and perception of information is composed of literature pertaining to all aspects of consumer use of information, from its initial intake, through its assimilation, to the impact on behaviour. The articles have been key-worded with four category titles describing the range and scope of the readings:

- information seeking;
- information provision;
- information overload; and
- attitude formation.

Information Seeking

Information seeking refers to the overt search activities of consumers in pursuit of additional data on which to base a purchasing decision. The principal motivation underlying the search is risk avoidance (Bettman 1970, 1972; Cunningham 1966). This risk may be perceived or real, and includes any consequence of a purchase decision considered unpleasant by the individual consumer.

Berning (1974) reported that impersonal sources tend to be consulted for information before friends, and that innovators desire more information than non-innovators, probably because of the additional risk associated with trying something new. Miller and Zikmund (1974) found that middle-aged females deliberate more, and more actively pursue information than any other segment of the population. Still, recent data indicated a rise in shopping information usage for all consumers (USDA, Nov. 1976 B; Kaitz 1977).

There appears to be certain trends in media usage by different segments of consumers (USDA, Nov 1976 A). Older consumers depend on newspapers for food shopping information while younger consumers employ food labels, and rural consumers use more magazines. For food safety information, television would appear to be the principal information source for all segments.

Readings

Berning (1974)
Bettman (1970)
" (1971)
" (1972)
" (1976)
Burnkrant (1975)
Cunningham (1966)
Coney (1975)
Fisk (1959)
Friedman (1972)
Handy (1977)
Jacoby (1966)
Kaitz (1977)
Kelly (1967)
Miller (1974)
Nayak (1975)
Nelson (1970)
Perry (1969)
Swan (1972)
USDA (Nov. 1976)

Information Provision

For the purposes of this paper, information provision refers to specific product and price data available at the point of purchase, which is not part of a promotional effort. This would include unit pricing, nutrient labelling, beef grading, base pricing and open dating.

Unit pricing appears to have been well received by consumers (Lenahan 1972). Gatewood and Perloff (1973) found that it significantly speeds up the decision-making process, and Houston (1972) showed unit pricing to be effective in reducing the family food budget. Isakson (1973) also found benefits accruing to unit pricing but it would seem that low income consumers don't (or can't) make use of this shopping aid, a result supported by Kilbourne (1974). Nonetheless, it appears that knowledge and use of unit pricing has increased from 35-40 percent in 1973 (Carmen) to over 50% in 1976 (USDA). From a retailer's point of view, unit pricing does not seem to generate severe negative externalities - sales volume is unaffected, and consumer purchasing patterns remain unchanged (Block 1972).

While unit pricing reduces the need for computation to make cost comparisons, in effect reducing the pieces of information with which the consumer must work, nutrient labelling adds a whole new (i.e. previously unencountered) range of factors to process into some decision rule. As a result, nutrient labelling has been in the forefront of the information overload controversy. A study by Lambert (1976) found that consumers, using current label information, have a great difficulty in obtaining adequate nutrition at minimum cost. Scammon (1977) also mentions the processing difficulties when showing that evaluative adjectives are better employed by the consumer than more precise information. Unfortunately, because the labelling rules are made by experts, the information provided tends to that viewed as useful by the experts, which, in turn, may serve to defeat the purpose of the label in upgrading the average consumers' awareness of their nutritional needs (Lenahan 1973). Nevertheless, a study by Kaitz (1977) claims that consumer's knowledge and use of nutrient labelling is increasing. One reason for this increased awareness may be a motivation for better nutrition spurred by the recent cancer and food scares (Mahoney 1978).

Miller (1976) found that current beef grading standards are ineffective tools in communicating product quality to consumers. In like fashion, Wilkes (1973) discovered that, not only do consumers not use base pricing, but virtually all are ignorant of its purpose. The literature for open dating, however, is not quite so clear. A Nayak (1975) study had consumers placing a very low priority on open dating as a source of purchase information, a result which was backed by Price (1976). A USDA survey (Sept 1976), on the other hand,

found that 90 percent of consumers use open dating and find the information useful. It is difficult to reconcile these two viewpoints, and one can conclude only that either one side of the arguments is relying on biased data, or that a dramatic shift toward usage of open dating occurred as consumers became aware of its value over time.

Readings

Asam (1973)
Block (1972)
Carmen (1973)
Friedman (1972)
Gatewood (1973)
Handy (1977)
Houston (1972)
Isakson (1973)
Kaitz (1977)
Kilbourne (1974)
Lambert (1976)
Lamont (1973)
Lenahan (1975)
McLaughlin (1977)
McFadden (1973)
Mahoney (1978)
Miller (1976)
Nayak (1975)
Price (1976)
Scammon (1977)
USDA (Sept. 1976)
Wilkes (1975)

Information Overload

Information overload is said to occur at the point where the exposure to additional information will cause a deterioration in the quality of decision-making. The earliest study, in this regard, of this bibliography was by Anderson (1966). He concluded that the advantages of new information being supplied were outweighed by the time and effort required to process this information into a correct decision. More recently, Jacoby (1974A) found that an increase in information resulted in poorer purchase decisions despite an increase in consumer satisfaction and a decrease in perceived confusion. In a replication of the experiment (Jacoby 1974B) he came to the same conclusions and noted that more emphasis was put on impulse buying as information increases. Since then, Jacoby's position has been supported by Bettman (1975) in his discussion of information processing limitations, and by a Federal Drug Administration (1975) study on nutrition knowledge since the advent of nutrient labelling. The results indicated that, while consumer confidence in their knowledge was high, their actual knowledge was significantly less than they thought.

On the other side of the coin, Russo (1974) replicated Jacoby's experiment, but concluded that more information will improve the consumers decision-making if sufficient time is given to assimilate the new knowledge. Kaitz (1977) found that consumer awareness and use of informational aid has increased in recent years, and that better shopping habits had developed. The implication of these findings is that information overload is a static concept which loses significance as experience and additional exposure fortify the retention and processing of information over time. As a result, consumer information programs should aim at overcoming the short-run difficulties associated with information overload. Winter (1975), Asan (1973), and Scammon (1977) point out that information adoption is hastened through the use of simplified forms of presentation (e.g. the use of evaluative adjectives vs. use of numerical data). Bush (1977) and Scammon (1977) further indicate that information programs should be continued over time, as a one shot effort is insufficient to change attitudes and/or behaviour. The critical issue for further study in this area is the relationship between time and an individual's threshold level of information retention.

Readings

Anderson (1966)	Jacoby (1974A)
Asan (1973)	Jacoby (1974B)
Bettman (1975)	Kaitz (1977)
Bush (1977)	Lambert (1976)
Coney (1975)	Lenahan (1973)
Day (1976)	Russo (1974)
Federal Drug Administration (1975)	Scammon (1977)
Friedman (1972)	Winter (1975)
Handy (1977)	

Attitude Formation

Attitude formation refers to the development of perceptions, correct or incorrect, about concepts or products. It is this facet of consumer behaviour which is of most interest to the private sector as it is an integral component of promoting; store image (Anderson 1970; Burke 1975); product lines (McLaughlin 1973); and brand loyalty (Bettman 1974).

Television has the greatest effect, of any form of media, on attitude formation, especially in the case of children (Golberg 1978) who use television advertising as role models for behaviour as consumers (Ward 1971). Radio was found to be effective primarily for inducing repeat purchases (Woodside 1973). The differences in media effects on attitude formation were studied by Rossiter (1975) who found that verbal and visual memory differ in a way such that either of two distinct behaviours is possible depending on the type of memory that is situationally retrieved.

A major goal of many marketing programs is to induce loyalty to a store or product, nevertheless the means to this end are quite often out of the marketers' direct control. A study by Kelly (1967) showed patronage to be primarily a function of information flows between consumers. Day (1974) specifically mentions the relationship between word-of-mouth testimonials and brand success, a finding echoed by Burnkrant (1975) who demonstrated the importance of the product evaluation of other consumers on an individual's attitude formation. Finally, Park (1976) found that attitude formation was a function, not only of prior familiarity, but also of product complexity.

Readings

Anderson (1970)
Bettman (1974)
Burke (1975)
Burnkrant (1975)
Day (1974)
Fisk (1959)
George (1975)
Golberg (1978)
Kelly (1967)
McLaughlin (1973)
Maffei (1961)
O'Brien (1970)
Park (1976)
Perry (1969)
Rossiter (1976)
Scammon (1977)

Skimp (1976)
Van O'Brien (1970)
Ward (1971)
Woodside (1973)
Wright (1975)

Anderson, L.K., Taylor, J.R.,
Halloway, R.J.; "The Consumer and
His Alternatives: An Experimental
Approach"; Journal of Marketing
Research, vol.3 (1966); p. 62-67.

The authors' purpose was to study how the number of choices involved in a purchase decision influences the consumer's decision process. In one experiment using 144 homemakers and cake mixes the authors found that an increased number of alternatives is associated with concentration upon the most frequently chosen alternative and that consumers in a multi-alternative situation may not be sensitive to changes offered by the marketing system. In a second experiment 118 college students evaluated products in a conflict or preference situation and the authors found that consumers will experience a greater degree of dissonance reduction the greater number of items in the decision. The authors conclude that consumer's information per item appears to decline as the number of items increases; the advantages of new sources of information for a purchase decision are outweighed by the disadvantages of time and effort involved in the decision.

information overload.

Anderson, R.C., Scott, R.A.:
"Supermarkets: Are They Really Alike?";
Journal of Retailing, vol.46 (Fall 1970);
p. 16-24.

The authors interviewed 262 housewives and found that while the images of different supermarkets might vary, each appears to be projecting a well-defined and consistent image to consumers, regardless of their age, education, income or occupation.

attitude formation

Asam, E.H., Bucklin, L.P.; "Nutrition
Labelling for Canned Goods: A Study of
Consumer Response"; Journal of Marketing,
vol.37 (April 1973); p. 32-37.

This study of 200 shoppers in four supermarket locations indicates that promotional terms such as "sweet" and "succulent" engender the same consumer confidence as do more detailed nutrition labels. Labels with a great deal of information and labels with only a general description of contents produce the highest levels of consumer preference. The study used canned peas as the product analyzed.

nutrient labelling, information overload.

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Berning, C.A.K., Jacoby. J.; "Patterns of Information Acquisition in New Product purchases"; Journal of Consumer Research, vol.1, no.2 (September 1974); p. 18-22.

The decision making process (e.g. problem recognition, search for and evaluation of alternatives, etc.) is somewhat different for a new product. 82 housewives were interviewed on the purchase of 5 different products; cake mixes, frozen vegetables, electric toasters, spray deoderants, lipsticks. More information is requested from innovators than from non-innovators and the information from friends is requested after impersonal sources.

information seeking

Bettman, J.R.; "Perceived Risk: A Measurement Methodology and Preliminary Findings"; In Proceedings: Third Annual Conference Association for Consumer Research; Venkatesan, M. (ed.); (Illinois: Center for Continuing Education; 1972); p. 394-404.

An empirical study was undertaken in order to establish a theoretical perspective for a more precise measurement of perceived risk. The measurement methodology used to measure both inherent and handled risk was the extended paired comparison method. A convenience sample of 97 housewives was selected. Inherent and handled risk was tested by the paired comparison method in nine product categories; paper towels, dry spaghetti, furniture polish, toothpaste, instant coffee, aspirin, margarine, fabric softener and beer. Certainty and danger questions were also employed. The results showed that criteria measures for risk can be established; however, in view of the small sample size caution is advised.

information seeking

Bettman, J.R.; "Information Processing Models of Consumer Behaviour"; Journal of Marketing Research, vol.7 (August 1970); p. 370-376.

Using Newell, Shaw and Simon postulates for an information processing theory of human problem solving, decision net models were constructed for two individual consumers' choices of grocery products for five housewives. The internal cue measure was risk. The models were tested against actual data and the resulting predictions were highly accurate.

~~processing model~~ information seeking

Bettman, J.R.; "The Structure of Consumer Choice Processes"; Journal of Marketing Research, vol.8 (November 1971); p. 465-471.

Comparing different information processing models of the same consumer's decisions and utilizing findings from clinical judgment, studies give information about the structure of consumer choice processes. Cue consistency and conditional models are discussed and a general paradigm for choice under certainty is proposed.

~~information seeking~~
~~processing models~~, theoretical

Bettman, J.R.; "Relationship of Information-Processing Attitude Structures to Private Brand Purchasing Behaviour"; Journal of Applied Psychology, vol.59, no.1 (February 1974); p. 69-73.

This article presents research in which variables related to consumer information processing models and consumer attitude structures were used to discriminate between private and non-private brand purchases. In general, variables reflecting lower risk and greater information were associated with private brand choices. Approximately 80% of the subjects in the three product classes were correctly classified. Arguments for the general usefulness of an information-processing and decision-structure-oriented approach were advanced.

attitude formation.

Bettman, J.R.; "Issues in Designing Consumer Information Environments"; Journal of Consumer Research, vol.2 (December 1975); p. 169-177.

Results of information processing research of particular importance for designing consumer information environments are reviewed and used in analyzing a proposal for provision of nutritional information by the Federal Trade Commission. An example of an alternative proposal is developed which is more congruent with human processing limitations.

information overload

14
Bettman, J.R., Jacoby, J.; "Patterns of Processing in Consumer Information Acquisition"; in Anderson, B.B. (ed.); Advances in Consumer Research, vol.3 (Atlanta: Association for Consumer Research; 1976); p.315-320.

Patterns of information acquisition from a brands x information dimension matrix were studied for sixty subjects. Three major patterns were found for those subjects seeking information: processing by attributes, by brands, and a hybrid form, feedback processing. Classification procedures for these patterns were developed. Relating these patterns to other variables was explored.

informal seeking.

Block, C.E., Schooler, R., Erickson, D.; "Consumer Reaction to Unit Pricing: An Empirical Study"; Mississippi Valley Journal of Business and Economics, (Winter 1971-1972); p. 36-46.

The authors studied four different Columbia, Missouri, supermarkets and analyzed the effects of unit pricing on the sales of five grocery products in each store. The results indicate that there is little correlation between unit price and sales volume before or after the introduction of unit pricing information. Unit pricing does not prompt a shift in consumer purchasing patterns.

information provision unit pricing

Burke, M.C., Berry, L.L.; "Do Social Actions of a Corporation Influence Store Image and Profits?"; Journal of Retailing, vol.50 (Winter 1974-1975) p. 62-72.

The authors studied 148 respondents in Washington, D.C. The results indicate that consumers do use consumer information programs in choosing a supermarket. One supermarket improved its image significantly through consumer education programs.

attitude formation

15
Burnkrant, R.E., Cousineau, A.;
"Information and Normative Social
Influence in Buyer Behaviour";
Journal of Consumer Research, vol.2,
no.3 (December 1975); p. 206-215.

An experiment involving students was conducted to clarify the nature of the influence active in most prior marketing research on the social influence process. Evidence was provided to indicate that people use others' product evaluation as a source of information about the product. It appears that, after observing others evaluating a product favourably, people perceive the product more favourably themselves than they would have in the absence of this observation. They use the evaluations of others as a basis for inferring that the product is, indeed, a better product.

attitude formation, information seeking

Bush, M.A.A.B., Sabry, J.H.; "Consumer
Acceptance of Mailed Nutrition and
Health Information"; Canadian Journal
of Public Health, vol.68, no.4 (July/
August 1977); p. 296-300.

A study of consumer acceptance of mailed nutrition and health information was undertaken. A questionnaire designed to measure awareness, claimed readership, and effectiveness of nutrition and health information pamphlets received monthly with family allowance cheques was administered by personal interview with a sample of 152 married urban mothers. Of this sample 86% were aware that they received the pamphlets. 29% of the respondents claimed they always read the pamphlets, and 35% that they did so sometimes. Claimed readership was positively correlated with socio-economic status, degree of mother's community participation, and her educational level, and negatively correlated with number of children in the family, age of oldest child, and stage in the family life-cycle. No correlation was found between pamphlet readership and mother's age or employment status. Some oral message diffusion resulted from receipt of the pamphlets. For two pamphlets, one on the food guide and one on overweight, no evidence was found to indicate that reading the pamphlet significantly increased the proportion of women able to answer, correctly, a content-based question.

~~promotion~~
mailed information; Canada.

overload

14
Carman, J.E.; "A Summary of Empirical Research on Unit Pricing in Supermarkets"; Journal of Retailing, vol.48 (Winter 1972-1973); p. 63-71.

This analysis of major studies on unit pricing leads to the conclusion by the author that over 60% of consumers are aware of the special pricing labels; among these, 56%-65% use them. Costs for large stores of using unit pricing are about 0.1% of sales; 4% for small stores,

Information provision - unit pricing.

Cunningham, S.M.; "Perceived Risk as a Factor in the Diffusion of New Product Information"; in Haas, R.M. (ed.); Science Technology and Marketing; (Chicago: American Marketing Association; 1966); p. 698-721.

In this telephone survey of 1200 housewives evidence suggests that consumers perceiving high risk in the purchase of an unknown brand, may try to reduce this risk through the informal discussion of the product category. High risk perceivers appear to reduce risk through information seeking, as well as being more likely than low risk perceivers to claim that others come to them for advice.

information seeking

Coney, K.A.; "Levelling-Sharpening: A Cognitive Control Approach to Consumer Information Recall"; in Mazze, E.M., Stillman, W.P. (eds.); 1975 Conference Proceedings; (Chicago: American Marketing Association; 1975); p. 162-166.

Empirical study of 40 males and females on various brands. Some consumers are "levellers" of information, making no use of additional information, while others are "sharpeners" and utilized more information in their choices.

information seeking, information overload.

17
Day, G.S.; "Attitude Change and the Relative Influence of Media and Word-of-Mouth Sources"; in Sheth, J.N.; Models of Buyer Behaviour; (New York: Harper and Row; 1974); p. 199-217.

This article studies the differences between word-of-mouth versus media exposure in their influence of attitude change and formation about new and established products. The study used two panels of 1100 households and was concerned with a new branded convenience food product. Advertising was found to play an essential role in the acceptance of a new and established brand. Ultimate success rests on the ability of the brand to generate favourable word-of-mouth communication.

attitude formation, ~~word-of-mouth~~.

Day, G.S.; "Assessing the Effects of Information Disclosure Requirements"; Journal of Marketing, vol.40 (April 1976); p. 42-52.

More information enhances confidence in the choice, and possibly satisfaction with the purchase. The buyer is assured that the product is correct and that the price is justified.

information ^{seeking} ~~search~~, information overload, theoretical, Canada

Fisk, G.; "Media Influence Reconsidered"; Public Opinion Quarterly, vol.23 (1959); p. 83-91.

The effects of information received from (1) social groups, (2) mass media, and (3) during personal searches by the principal meal planner are modified by individual propensities to communicate. In this study the underlying assumption is that the propensity to communicate is a personality trait which modifies the effect of market communication.

information seeking, attitude formation

Federal Drug Administration;
Consumer Nutrition Knowledge Survey:
Report II; 1975; pub. 76-2054.

Confidence in one's knowledge about nutrition and actual knowledge do not necessarily coincide. 40% of shoppers scoring low on a nutritional knowledge test believed they knew little or nothing about nutrition, but about 20% believed that they knew a great deal. About half those scoring high were aware of their knowledge, but 40% felt they knew little or nothing. The most overconfident were those under 34; the most underconfident were those over 50. Nine out of ten principal grocery shoppers felt that they had no problem providing a nutritious diet for their families. Half of those admitting a problem said that prices were too high, yet, when asked to define a nutritious diet most did so in terms of meat and vegetables as principal components, and ignored choice based on nutrient content.

information overload

Friedman, M.P.; "Consumer Responses to Unit Pricing, Open Dating, and Nutrient Labeling"; in Venkatesan, M. (ed.); Proceedings of the Third Annual Conference of the Association for Consumer Research; (Illinois: Association for Consumer Research; 1972); p. 361-369.

This paper reviews recent research relating to 1) unit pricing; 2) open dating; and, 3) nutrient labeling. The literature reviews are followed by a discussion of the relevance of the research findings to public policy decisions relating to the adoption of these information displays.

information provision - unit pricing, open dating, nutrient labeling, theoretical.

Friedman, M.P.; "Consumer Use of Informational Aids in Supermarkets"; Journal of Consumer Affairs, vol.11 (1977); p. 78-89.

The behavioural science literature relating to consumer use of informational aids in supermarkets is reviewed. Also examined is research concerned with more general issues such as information overload. The public policy implications of these various research findings are drawn and discussed. The paper concludes with a consideration of three proposed measures to facilitate shopping decisions for consumers concerned with economy and nutritional value.

information overload, information seeking, theoretical

19
Gatewood, R.D., Perloff, R.; "An Experimental Investigation of Three Methods of Providing Weight and Price Information to Consumers"; Journal of Applied Psychology, vol.57, no.1 (February 1973); p. 81-85.

This article presents research which simulated a supermarket setting to evaluate three methods of presenting information to consumers: current supermarket method (total price and net weight); current supermarket method but adding a computational device to aid in price calculations; and current supermarket method but providing also price per ounce of net weight of the product. 75 undergraduates were randomly assigned to one of the three methods of presentation and asked to choose the most economical package for each of nine product groups. Results indicate that presenting the additional information of price per ounce of net weight produced a significant increase in accuracy of choices, while significantly reducing the time required to make such choices.

information provision - unit pricing

George, S.G., Jennings, L.B.; "Effect of Subliminal Stimuli on Consumer Behaviour: Negative Evidence"; Perceptual and Motor Skills, vol.41, no.3 (December 1975); p. 847-854.

This article reports research which presented the words "Hershey's Chocolate" to an experimental group of eighteen college students below their forced-choice detection threshold. Fourteen control subjects had a blank slide superimposed over the same background media. The same experiment was replicated and no support was found for the superior effect of subliminal stimuli.

~~subliminal stimuli~~, attitude formation.

Goldberg, M.E. et al.; "The Effects of TV Messages for High and Low Nutritional Foods on Children's Snack and Breakfast Food Choices"; in Hunt, H.K. (ed.); Advances in Consumer Research, vol.5; (Ann Arbor: Association for Consumer Research; 1978); p. 540-545.

This study investigated the capacity for food messages, developed for television, to influence the nature of children's snack food and cereal selections. In a controlled experiment children were exposed to varying numbers of commercials for highly sugared snack foods and cereals, or Public Service Announcements (PSAs) for less sugared, nutritious fruits and vegetables. In addition, a 24 minute edition of the "Fat Albert" program starring Bill Cosby called "Junk Foods" was utilized. After exposure to one or another of these stimuli, children were presented with a number of snack food or cereal choices. Exposure to the "Fat Albert" program (even when it was interrupted by commercials for snack foods) was most effective in reducing the number of highly sugared foods selected and increasing the numbers of fruits and vegetables chosen. Exposure to the PSAs or the snack food commercials was also capable of creating differences in the foods selected by children. These differences were noted even though children, in all the conditions, were aware of which foods were "Healthy" or "Unhealthy". The conclusion was that television has a great influence on children's attitude formation.

attitude formation.

Handy, C., Hager, C.; "Changes in Consumer Satisfaction With Food Products and Services"; National Food Situation-159, (March 1977); U.S.D.A.; p. 24.

Results of this survey show a moderate increase in consumer satisfaction with food products, stores and shopping information from labels and ads. However, the amount of change in satisfaction differed widely among food products and services. Food stores generally received high marks from consumers. Three of every four respondents said that they were always, or almost always, satisfied with the food store where they most often shop. Price information was found to be slightly more satisfactory than in an earlier 1974 survey. Seventy percent of food shoppers indicated that they used this information to compare costs between food items. Still, forty percent of the participants expressed moderate to strong dissatisfaction with how food stores presented prices. Food ads sponsored by manufacturers have a low reliability rating. Nearly one third said that they were rarely or never satisfied with manufacturer ads. Information on labels concerning freshness (open dating), nutrition, and ingredients are important shopping aids. Despite the perceived usefulness of these aids, consumers have expressed considerable confusion about what the various types of dates mean. The study further analyzed the satisfaction with the various components of the food industry.

information provision - open dating, *seeking* nutrient labeling, information ~~search~~, information overload

Harrell, G.D., Hutt, M.D., Allen, J.W.; Universal Product Code: Price Removal and Consumer Behaviour in Supermarkets; (Michigan State University: Graduate School of Business Administration; 1976).

This study was particularly significant in persuading the UPC (Universal Product Code) ad hoc committee of the supermarket industry to recommend to its members that they do not remove the item prices when they introduce electronic scanning checkout equipment.

information seeking

Heimbach, J.T.; "The Zeigarnik Effect in Advertising"; in Venkatesan, M. (ed.); Proceedings of the Third Annual Conference Association for Consumer Research; (Illinois: Association for Consumer Research; 1972); p. 746-758.

The Zeigarnik Effect states that incomplete tasks are better remembered than complete tasks. Therefore, the prevention of the completion of a task will leave the subject with an improved memory for the incomplete task. In advertising, this would mean that hearing only the beginning of a message would drive the person to hear the rest of it. The resultant tension would lead to improved memory for the message. This empirical study tests the hypothesis that incomplete messages would be better remembered than complete messages. Two experiments were set up. The first experiment used 30 subjects-- 15 high and 15 low in need for achievement (n Ach). The second experiment used 24 subjects.

The first experiment used uninterrupted commercials and had the subjects complete an advertisement recall measure. The second experiment interrupted the commercials and used the pretest-post test measurements. The experiment did not provide strong support for the application of the Zeigarnik effect to broadcast advertisements.

~~Zeigarnik Effect.~~ attitude formation

Houston, M.J.; "The Effect of Unit Pricing on Choices of Brand and Size in Economic Shopping"; Journal of Marketing, vol.36 (July 1972); p. 51-54.

The author, based on a convenience sample of 53 surveyed housewives, notes that the consumer is better able to determine the most economical item in a product class at stores with unit pricing. The products used in the study were toilet tissue, apple sauce, peaches, peas, tuna, cheese, sugar, coffee, detergent, soda, mayonnaise, peanut butter, paper towels and potato chips.

information provision - unit pricing

Isakson, H.R., Maurizi, A.R.; "The Consumer Economics of Unit Pricing"; Journal of Marketing Research, vol.10 (August 1973); p. 277-285.

The introduction of unit pricing in food stores makes it easier for shoppers to choose cheaper items. Low income shoppers, however, do not appear to make significant use of unit pricing in contrast to the middle-income and high-income shoppers who do. The explanation could lie in their lower ability to understand the unit price labeling system making it difficult to capture the benefits of its use.

information provision - unit pricing

Jacoby, J., Speller, D.E., Kohn, C.A.; "Brand Behaviour as a Function of Information Load"; Journal of Marketing Research, vol.11 (February 1974); p. 63-69

A currently popular position among consumer advocates and many public policy makers is that more product information is better. A 3 (number of brands) x 3 (number of items of information per brand) factorial experiment which tested this contention revealed that, while consumers do feel more satisfied and less confused, they actually make poorer purchase decisions with more information. This experiment involved 153 students.

information overload

Jacoby, J., Speller, D.E., Berning, C.K.; "Brand Choice Behaviour as a Function of Information Load: Replication and Extension"; Journal of Consumer Research, vol.1 (June 1974); p. 33-42.

This article presents research which tested the hypothesis that finite limits exist to the amount of information consumers can effectively use. 192 paid housewife volunteers were given a maximum information load of 256 bits on the products rice and prepared dinners to determine if these limits exist. From the results the authors concluded that: 1) much package information can result in poorer purchase decisions, (i.e. when choice is difficult, choice may be made impulsively); 2) consumer choice behaviour under these circumstances may be more impulsive than previously realized; 3) subjects feel more satisfied and certain, less confused, and desire less additional information as the total amount of information increases despite poorer purchase decisions. The authors suggest that processes and strategies are used to reduce the amount of information actually utilized in making a decision.

information overload

Jacoby, J., Chestnut, R.W., Weigl, K.C.,
Fisher, W.; "Pre-Purchase Information
Acquisition: Description of a Process
Methodology, Research Paradigm and Pilot
Investigation"; in Anderson, B.B. (ed.);
Advances in Consumer Research, vol.3;
(Atlanta: Association for Consumer Research;
1976); p. 306-314.

This article presents research which, using a methodology which captures consumer information acquisition as a dynamic behavioural process, identified four relatively clear-cut search strategies: brand name reliance, within brand search, within dimension search, and complex search. Analysis suggests search strategy to be partially determined by brand loyalty and consumption frequency. The subjects were 60 students and the task involved food items.

information seeking.

Kaitz, E.; "Food Shopping Behaviour";
National Food Situation-160; (June 1977);
U.S.D.A.; p. 17.

Consumers have an impact on the market system and should have a greater impact as they make their demands known. The purpose of this study was to assess how food behaviour is influenced by knowledge about, and awareness of, the available tools to help make better food purchase decisions. The study indicated that there was a small increase in the percentage of respondents doing most of their food shopping at a supermarket. Approximately 60% said each time they do their main food shopping they usually shop in one store, around 30% used two stores, and slightly less than 10% use three or more stores. Around 56% of those surveyed did their food shopping once a week and about 20% shopped every other week. Compared to 1976, shopping at more than one store to find the best food prices had increased by 15%. Findings of the survey support the conclusion that, in general, consumers are interested in more information to help them make better food purchase decisions. They are more aware shoppers and are checking the ads before doing there shopping. They are reading labels and express a need for additional label information. They are saving and using food coupons, and they are buying food in volume when they can get it at a lower price.

information provision

information seeking; -nutrient labeling

Kelly, R.F.; "The Role of Information in the Patronage Decision: A Diffusion Phenomenon"; in Moyer, M.S., Vosburgh, R.E. (eds.); Marketing for Tomorrow...Today: (Chicago: American Marketing Association; 1967).

The manner in which both formal and informal information flows among prospective customer groups has a profound influence on the patronage decisions process associated with any new retail outlet. A study of milk shoppers indicates personal influence is second only to personal, in-store experience in the determination of patronage decision outcomes. Newspaper ads are less important than either personal influence or in-store experience.

information seeking, attitude formation.

Kilbourne, W.E.; "A Factorial Experiment on the Impact of Unit Pricing on Low-Income Consumers"; Journal of Marketing Research, vol.11 (November 1974); p. 453-455.

The availability of unit pricing did not result in a statistically significant reduction in the cost of a selected set of grocery products for 200 low-income consumers.

information provision - unit pricing.

Lambert, Z.V.; "A Look at Some Processing and Decision-Making Difficulties"; in Perreault, W.D. (ed.); Advances in Consumer Research, vol.4; (Atlanta: Association for Consumer Research; 1976); p. 126-131.

The study, using simulation techniques, explored the information manipulation complexities and results associated with selecting foods for a day's menu employing (1) an optimizing choice rule using nutritional labeling information, and (2) a food group rule ignoring labeling data. The findings suggested that consumers will experience substantial difficulty in attempting to use current labeling information to buy adequate nutrition at minimum cost.

information provision - nutrient labeling, information overload.

Lamont, L., Rothe, J., Slater, C.; "Unit Pricing: A Positive response to Consumerism"; European Journal of Marketing, vol.6 (Fall 1972); p. 223-233.

A Colorado survey of 2330 shoppers and 177 grocery product manufacturers concluded that unit pricing has been well received by consumers. This acceptance is confirmed by the attitudes of consumers toward the programme and by the large percentage of shoppers that reported using the information during the shopping process to switch product sizes and brands. Preliminary evidence suggests that unit pricing will have an unfavourable impact on the manufacturer. Package and label changes will have to be made to accommodate it pricing and some products will have to be reformulated to be price competitive.

information provision -

unit pricing.

Lenahan, R.J. et al.; "Consumer Reaction to Nutritional labels on Food Products"; Journal of Consumer Affairs, vol.7 (1973); p. 1-12.

In order to design the most useful instruments of consumer protection, it is necessary to understand how consumers perceive and use such instruments. Often, basic consumer rights are considered more extensively in the design of consumer protection policies than basic patterns of consumer behaviour and motivation. We are more likely to make labels on labels complete as viewed by the expert than useful in the normal behaviour of the consumer. This study is devoted to discovering how consumers perceive nutritional labels on food products. It draws conclusions about their meaning and usefulness to consumers.

information provision -

nutrient labeling, information overload.

Liefeld, J.P.; "Product Information Preference of Disadvantaged Consumers"; Consumer Research Council; Consumer and Corporate Affairs Canada; 1975.

A sample of 184 disadvantaged consumers were asked to rate the importance of product information, in the area of (1) food, (2) clothing, and (3) appliances, in their decision criteria. The evidence suggests that these consumers would not pay attention to many of the types of product information being advocated simply by making such information available.

information seeking, Canada.

McLaughlin, D.J.Jr., Reilly, P.J.; "Retail Experiments in Frozen Food Merchandising"; Quick Frozen Foods, (August 1973); p. 34-36.

This study was conducted in four independent supermarkets in the middle and upper income suburbs of Philadelphia. The results indicate that point-of-purchase promotions are more effective for new products and very slow moving items. Tie-in promotions appear to be more effective for national brands.

attitude formation.

McLaughlin, J. et al.; "Consumer Acceptance of Nutritional Values Depends on Information and Experience"; Arizona Review, (June/July 1977); p. 1-7.

Nutritional attributes in food are difficult for consumers to perceive; thus there has been a public policy move toward nutritional labeling.

Two studies are discussed which examine the nature of consumer response to two nutritional products. The effect of product familiarity on preference for egg substitutes is examined for a group of nutritionally trained subjects, and the impact of product class information is examined for high-fiber bread.

Results indicate that use of a product can have a marked impact on preference and product preferences. However, increasing perceived nutritional quality did not appear to increase preference for the product. With high-fiber bread, subjects utilized texture as a direct surrogate for nutritional value. When perceived texture varied, perceived nutritional value changed in a corresponding direction and magnitude.

nutrient labeling, attitude formation.

McFadden, G.P.; "An Analysis of Unit Pricing"; Business and Economic Dimensions, (July/August 1973); p. 22-23.

The results of this study indicate that unit pricing allows consumers to make accurate comparisons of price for varying sizes of product. In addition, unit pricing has great value in terms of consumer psychological response, and is useful as a means of inventory control.

unit pricing

information provision -

information provision -

Mahoney, M.J., Cagguila, A.W.;
"Applying Behavioral Methods To Nutrition Counseling";
Journal of the American Dietetic Association,
vol. 72
(April 1978)

When dealing with the problem of altering maladaptive eating patterns, it is clear that the goal is not simply education, it is also a form of persuasion. The average person is not steeped in the appreciation of the seriousness of their problem. A motive for change must first be provided by presenting a potential danger or threat connected with maintaining their current behavior. This threat must be made personal to the individual. Only after he accepts the need for change can these changes be facilitated by building a structure for action which should include exact specifications of where, when, and how. These changes must consider the three environments which act upon each individual and influence their behavior. These environments are the physical, social, and private. One of the most critical can be the influence of the social environment. For example, many spouses are less than supportive in a patient's attempts at diet-self control, or in another case, food is often offered as a token of affection, but these gifts can at times endanger health. The drinking buddy social mate is a very similar concept which can often result in alcoholism. The professional should not advance criticisms to their patient, but often a mild form of scare tactics is more effective in producing change. It must be remembered that each individual is influenced by his private environment which can cause him to possess feelings of ignorance, bias, or misinformation. In any case a change of eating behavior must always realize the impact of a person's personal ability, personal goals, preferred method for goal attainment, and self evaluate patterns.

Information provision

Maffei, R.B.; "Can the Effect of Advertising on Brand Preference Be Predicted?"; Journal of Retailing, vol.37 (Spring 1961); p. 17-24.

The author used three supermarkets and two brands of an unspecified food product in this study. The results indicate that much advertising activity may be wasteful if the advertiser does not combine his advertising strategy with a meaningful link to product quality

attitude formation.

Miller, J.A. Topel, D.G.; Rust, R.E.; "USDA Beef Grading: A Failure in Consumer Information?"; Journal of Marketing, vol.40 (January 1976); p.25-31.

This article presents a study of how much beef grading really tells the consumer about the quality of meat purchased. 200 homemakers participated in the study. The results indicate a poor effectiveness of the system. A number of tentative recommendations for beef grading are offered for consideration.

information provision - beef grading

Miller, S.J., Zikmund, W.G.; "A Multivariate Analysis of Prepurchase Deliberation and External Search Behaviour"; in Schlinger, M.J. (ed.); Advances in Consumer Research, vol.2; (Chicago: Association for Consumer Research; 1974); p. 187-196.

The purpose of this paper was to discover profiles of personal characteristics of households that significantly relate to various pre-purchase deliberation and search behaviour processes. The households "chief marketer" was asked questions about; brand purchase behaviour, shopping behaviour, media exposure characteristics, and household personal characteristics. The authors found that middle-age females deliberate more and use shopping information; that income is positively related to external search activity; and that education is positively related to income utilization.

information seeking

Nayak, P., Rosenberg, L.J.; "Does Open Dating of Food Products Benefit the Consumer?"; Journal of Research, vol.51 (Summer 1975); p. 10-20.

Consumers often perceive open dating as an assurance of product freshness, although confusion exists as to what the open date means. Among other marketing practices, consumers give a very low priority to open dating, and few are willing to pay very much for it.

information provision - open dating, information seeking.

Nelson, P.; "Information and Consumer Behaviour"; Journal of Political Economy, vol.80 (March/April 1970); p. 311-329.

This article contends that limitations of consumer information about quality have a profound effect on the market structure of consumer goods. In particular, monopoly power for a consumer good will be greater if consumers know about the quality of only a few brands of that good.

information seeking, theoretical.

O'Brien, T.V.; "Information Sensitivity and Consumer Choice"; in Sparks, D.L. (ed.); Broadening the Concept of Marketing; (Chicago: American Marketing Association; 1970); p.97.

This paper presents the findings of research involving 636 respondents over 6 months. The study investigates the accuracy of the hierarchy of effects description of consumer decision processes and examines the nature of information inputs to such a process.

attitude formation

Park, C.W.; "The Effect of Individual and Situation-Related Factors on Consumer Selection of Judgemental Models"; Journal of Marketing Research, vol.13 (May 1976); p. 144-151.

The study reported in this article tests the hypothesis that the consumer's use of a specific judgemental model in evaluating a product is a function of prior familiarity and product complexity. The subjects were 74 undergraduate students on seven products including hamburgers. The results show that the two factors influence the selection of judgemental models.

attitude formation.

Perry, J., Hamm, B.C.; "Canonical Analysis of Relations Between Socio-economic Risk and Personal Influence in Purchase Decisions"; Journal of Marketing Research, vol.6 (August 1969); p. 351-354.

This article reports a study of 101 students that investigates the relationship between the importance of personal influence as an information source and degree of risk in 25 purchase decisions.

information seeking, attitude formation.

Price, C.C.; "The Consumer and Open Dating Labeling"; National Food Situation-157; (September 1976); U.S.D.A.; p. 24.

A national survey of over 1,400 food shoppers indicates that although there is extensive awareness and use of open dates on food packages, shoppers are not very knowledgeable about the meaning of the several kinds of dates used. A significant number regard some open dates as throw out dates. A minority of shoppers admit to problems with finding, reading and interpreting the meanings of dates. Although pull dates are the most commonly used by food processors and retailers, shoppers prefer types of dates that indicate the last day that the product should be used. Only a minority of shoppers want open dating expanded to other products. Standardization of the date types, presentation methods, and use of explanations of dates on packages would eliminate most of the problems of shoppers.

information
division - open dating.

Rossiter, J.R.; "Visual and Verbal Memory on Children's Product information Utilization"; in Anderson, B.B. (ed.); Advances in Consumer Research, vol.3; (Atlanta: Association for Consumer Research: 1976); p. 523-527.

The study confirmed the existence of a rich data base in children's visual memory for cereal brands, demonstrated that visual information differs from verbal information and that children's choices may differ depending on which of the two types of information is situationally retrieved, and pointed out measurement biases favouring verbal memory in contemporary consumer research. The subjects were sixty school boys.

attitude formation.

Russo, J.E.; "More Information Is Better: A Reevaluation of Jacoby, Speller, and Kohn"; Journal of Consumer Research, vol.1 (December 1974); p.68-72.

The author's purpose was to reanalyze the conclusions drawn in an earlier study that substantial amounts of information can result in poorer purchase decisions. In reviewing the data the author found that more information helps the consumer and no detrimental effect of information overload occurred because the subjects took enough time to process the presented information.

information overload.

Scammon, D.L.; "Information Overload and Consumers"; Journal of Consumer Research, vol.4, no.3 (December 1977); p. 148-155.

This study tested consumer reactions to information and how it affected their decision-making. Focused groups, differing with respect to nutrient information provided (8 vs. 4 vs. 0 nutrients; numbers vs. adjectives), with respect to two peanut butters, a national brand and a new brand. The test was intentionally biased so that the new brand appeared to be objectively the better of the two. The author found that almost all choices centred on the national brand, but with some information there was an increase in the "correct" choice of the new brand. The most correct group was that which was supplied information as adjectives. Two prescriptive conclusions were drawn; that a one time shot of information is insufficient to change attitudes and/or behaviour; and that evaluative adjectives are more easily processed than more precise information.

information processing, ^{vision-nutrient labeling} attitude formation.

Shimp, T.A., Dyer, R.F.; Divita, S.F.;
 "An Experimental Test of the Harmful
 Effects of Premium-Oriented Commercials
 on Children"; Journal of Consumer Research,
 vol.3 (June 1976); p. 1-11.

This article presents a study which constitutes experimental test of the Federal Trade Commission's proposed ban of child-directed television commercials promoting premiums. These preliminary results are generally non-supportive of the FTC's position and question the legitimacy of the proposed guide. 197 children were employed and the product class was cereal.

attitude formation.

Swan, J.E.; "Experimental Analysis
 of Predecision Information Seeking";
Journal of Marketing Research, vol.6
 (May 1969); p. 192-197.

A simulated consumer choice experiment involving 80 students showed that where the same brands appeared across a set of trials, prechoice information seeking declined as the subjects evidently learned to choose by brand. Information seeking was also lower for satisfactory, as compared with optimal choice.

information seeking.

Swan, J.E.; "Search Behaviour Related to
 Expectation Concerning Brand
 Performance"; Journal of Applied
 Psychology, vol.56 (August 1972);
 p. 332-335.

This study examined consumer search behavior by studying choice activities between alternative brands of the same goods. The hypotheses tested were: (1) search would be less if a cost was imposed as compared to a no-cost treatment, and (2) brand loyalty would be achieved under the cost condition as compared to a no-cost treatment. The first hypothesis was verified, the second was not.

information seeking.

United States Department of Agriculture;
 "Consumers Compare Sources of Food Safety
 Information"; National Food Situation-158,
 (November 1976); p.34.

The purpose of this study was to survey consumers on their use of sources of food safety information. It was found that consumers prefer getting food safety information from newspapers, television, and food labels. Television attracted nearly the same preference percentages for all social and economic groups in the survey. Newspapers were favoured by older persons, those in metropolitan areas, and those with higher incomes. Food Labels were more often cited by younger and more educated respondents. Magazines and publications through the mail were most often named by those living in rural areas.

information seeking.

U.S.D.A.; "Food Shoppers are
 Changing Habits"; National Food
 Situation-158, (November 1976); p. 38.

1,400 U.S. households were asked to compare their food buying habits with those of the year before. About 30% of the consumers who bought the most food said that they had begun checking newspaper ads more frequently for specials, saving and using more coupons, and buying more food in volume. One-tenth felt that they had made fewer trips to food stores, mainly to save gasoline. more than one-third said they were preparing food from scratch more often so as to economize on the total food bill. One-fifth of the shoppers never saved or used coupons or bought food in volume. Nearly a third never went to more than one store to find best food buys. Sixty percent of the consumers surveyed said they try to shop in uncrowded stores.

information seeking.

U.S.D.A.; "Food Shoppers Rate
Usefulness of Label information";
National Food Situation-157,
(September 1976); p. 27.

In this survey shoppers were asked to rate the usefulness of nine types of labeling information. Results show that 90% of the shoppers believe prices and freshness, or open dates on pack are very useful. Less than five percent regard them as being of little or no use. Uniform names and descriptions of meat cuts in all stores are considered to be very useful by 70% of shoppers. 65% of the respondents believe that ingredient information and storage instruction are very useful. Only slightly more than half of shoppers interviewed found much use for the name of the manufacturer, nutrition information, or unit pricing. Drained weight information on foods packed in liquids was regarded as extremely useful by only 30% of shoppers, while almost 50% believed that it would be of little or no use.

information provision - open dating, beef grading, unit pricing, nutrient labeling.

Van O'Brien, T.; "Information Sensitivity and the Sequence of Psychological States in the Brand Choice Process"; Dissertation Abstracts International, vol.31 (October 1970); p. 1438.

The purposes of the research were to investigate the accuracy of the hierarchy of effects description of consumer decision processes and to examine the nature of information inputs to such a system, along with information sensitivity feedback effects over time from cognitive stages. Data on two brands of a grocery item- a milk additive- were collected from a panel of 636 respondents over six months. The basic concept of a hierarchy of effects was supported in that cognitive activity generally precedes the affective which generally precedes the cognitive. However, while a probable sequence of stages was demonstrated there is clearly not a rigid hierarchy, numerous bypasses and feedback were observed.

~~hierarchy of effects.~~ *attitude formation*

Ward, S., Robertson, T.S., Wackman, D.;
"Children's Attention to Television
Advertising"; in Gardner, D.M.;
Proceedings on the Second Annual
Conference; (College Park: Association
for Consumer Research; 1971); p. 143-156.

This paper presents findings from an empirical study of the nature of children's commercial viewing behaviour: its extent and nature, its determinants and short-term consequences. Attention to television commercials seems to be a necessary condition for learning from them, although the low involvement learning of commercial viewing makes this learning gradual, subtle and covert. Young children seem to be especially susceptible to the formation of impressions and attitudes about products, services and people by television advertising. They may use advertising as a role model in the acquisition of orientations and skills relating to behaviour as a consumer. 135 children between 5 and 12 years of age were observed.

attitude formation

Wilkes, R.E.; "Consumer Usage of Base
Price Information"; Journal of Research,
vol.48 (Winter 1972-1973); p. 72-85.

A survey of 151 shoppers regarding their use and awareness of base pricing. Two broad conclusion implied from this study are: (1) consumers are largely unaware of the meaning of base pricing; (2) consumers rarely exercise their option to request base price information even when they are familiar with base pricing.

information
provision - base pricing.

Winter, F.W.; "Laboratory Measurement of
Response to Consumer Information";
Journal of Marketing Research, vol.12
(November 1975); p. 390-401.

This article presents an experiment conducted to study consumer responsiveness to price information. The subjects used were females belonging to church, social and political groups, and the product class was food. Findings suggest that information adoption is facilitated when the information is perceived as new and is presented in a simplified format.

~~understanding~~, ^{information overload} information overload.

Woodside, A.G.; "Patronage Motives and Marketing Strategies"; Journal of Retailing, vol.49 (Spring 1973); p. 35-44.

Fifty Columbia, South Carolina patrons were interviewed immediately after they had made their purchase at a nationally franchised take-out chicken outlet. Radio advertising appears to have been more effective for inducing repeat purchases than for securing new patronage.

attitude formation.

Wright, P.L.; "Factors Affecting Cognitive Resistance to Advertising"; Journal of Consumer Research, vol.2 (June 1975); p. 1-9.

This article examines the relationship between three personal characteristics of adult females and their cognitive responses to a commercial message under different reception conditions. Two trait-type characteristics, general social confidence and information-processing confidence, and one acute characteristic, peer-designated topical opinion leadership were studied. These factors did affect counterresponse activities as hypothesized. The subjects were 160 adult housewives. The topic was a new type of food product.

attitude formation

Sensory Awareness:

Whereas the previous section dealt with external sources of information, the emphasis here is on the processing of information drawn internally from generated responses to sensory stimuli.

The studies contained within are almost exclusively related to taste and texture, with the exception of Moskowitz (1972). This seems rather surprising considering the wide use of sight and smell in food purchasing. Nevertheless, some interesting results have been obtained in taste and texture studies. Szczesniak (1972) found texture preferences in children to be directly tied to physiological development of the oral functions. As the child matures, these preferences are further modified by psychological, social and cultural factors. Jellinek (1973) saw these modifications leading to a food texture rule, employed by consumers, where the texture chosen reflects the mood of the consumer. Szczesniak (1971), also identified a set of relationships between taste and texture. As foods become blander, textures replace taste as a criteria for food selection. Finally, taste was found to be most associated with a reason for liking foods, whereas texture was the reason given most for disliking foods.

Allison (1969)
Daniels (1974)
Jellinek (1973)
Moskowitz (1972)
Reibstein (1975)
Szczesniak (1971) A
" " (1971) B
" " (1972)

Allison, R.I., Uhl, K.P.; "Influence of Beer Brand Identification on Taste Perception"; Journal of Marketing Research, vol.1 (August 1969); p. 80-85.

This article reports a study conducted about beer, on 326 randomly selected drinkers, which shows that the subjects were not able to discern taste differences among the various beer brands and that their perception of them is influenced by the marketing efforts.

taste.

Daniels, P., Lawford, J.; "The Effect of Order in the Presentation of samples in Paired Comparison Product Tests"; Journal of the Marketing Research Society, vol.16, no.2 (April 1974); p. 127-133.

The authors test for any order bias that may exist in empirical studies; specifically whether there is a tendency for the first product to rate consistently higher (or lower) than its counterpart in a paired comparison test. They conclude that there is an identifiable order bias, and suggest that a means for overcoming this distortion may be to increase the time interval between tests, such that each product tested is perceived as a test unto itself.

taste.

Jellinek, J.S.; "The Meanings of Flavours and Textures"; Food Technology, vol.27, no.11 (November 1973); p. 46-53.

It has long been known that foods differ in their meanings and in their perceived appropriateness. The data in this article and in the study by Szczesniak and Kahn (1971B) suggest that these meanings and associations are attached not only to complete foods but also to discrete food attributes, i.e. textures and flavours. It would appear that an understanding of the relationships between food attributes and food meanings is an important component of consumer behaviour.

taste, texture.

Moskowitz, H.R.; "Subjective Ideals and Sensory Optimization in Evaluating Perceptual Dimensions in Food"; Journal of Applied Psychology, vol.56, no.1 (February 1972); p. 60-66.

This article presents three studies in which a total of 115 subjects scaled various perceptual dimensions of food samples. Results indicate that with appropriate instructions, subjects were able to: make ratio-scale or category-scale judgements of intensity for a given food along one or more perceptual dimensions; perceive discrepancies between the food sample that they tasted and ideally acceptable samples; and estimate the magnitude and direction of change that they would make to one or more dimensions to increase its acceptability.

taste, texture, smell.

Reibstein, D.J., Youngblood, S.A., Fronkin, H.L.; "Number of Choices and Perceived Decision Freedom as Determinant of Satisfaction and Consumer Behaviour"; Journal of Applied Psychology, vol.60, no.4 (August 1975); p. 434-437.

A study of the influence of the number of alternatives on the perceived decision freedom, the satisfaction and the consumption level. 72 college students selected one soft drink flavour in two experimental conditions. Perceived selection freedom and consumption levels were significantly greater when selecting from a larger set but there was no significant difference in the stated satisfaction.

taste.

Szczesniak, A.S.; "Consumer Awareness of Texture and of Other Food Attributes II"; Journal of Texture Studies, vol.2, no.2 (May 1971); p. 196-206.

A word association test was given to 150 respondents drawn from three geographic locations and representing a sample balanced with respect to socio-economic class, sex and age, confirmed a previous test (Food Technology;27,74,1963) conducted with 100 General Foods employees. Frequency of free association indicated that texture is a discernible characteristic of foods and that, in general, its awareness equals that of flavour. Women and people in higher economic brackets showed a higher degree of texture awareness.

taste, texture.

Szczesniak, A.S., Kahn, E.L.; "Consumer Awareness of and Attitudes to Food Texture I"; Journal of Texture Studies, vol.2, no.3 (September 1971); p. 280-295.

Although awareness of texture appears to be present on a sub-conscious level, it plays a very essential role in determining peoples feelings about foods. Intensity of flavour, socially and culturally learned expectations, psychological and physiological factors, sex, socio-economic class, image of a food, and eating occasions, all influence awareness of, and attitudes to texture among adult consumers. Texture awareness is increased when expectations are violated, associations are made with non-food items, or unpleasant mouth sensations are experienced. Textural qualities are often linked with wholesomeness and excellence of food preparation.

texture.

Szczesniak, A.S.; "Consumer Awareness of and Attitudes to Food Texture II"; Journal of Texture Studies, vol.3, no.2 (May 1972); p. 206-217.

A discussion of childrens' and teenagers' attitudes to food texture is presented based on published data relative to growth and development and on information obtained from original consumer interviews. It is pointed out that, in this population group; physiological factors appear to be dominant in shaping attitudes to texture. These are modified by psychological, social, cultural and other factors in the adult consumer. With both teenagers and children, texture is an important attribute of foods, influencing their likes and dislikes. In the young child, attitudes to food texture follow the developmental sequence of oral functions, and textures are rejected which are difficult to manipulate in the mouth at a particular stage of physical development. The high degree of texture awareness of teenagers may possibly surpass that of adults. Teenagers also appear to have a better understanding of the concept of texture, suggesting that this attribute may assume greater importance with the oncoming generation of adult consumers.

texture.

Consumer Purchase and Consumption
of Food

This section of consumer purchase and consumption is composed of literature sources about consumer behavior from the store to the final influence of the family on food consumption. The topic is further sub-divided into five areas of study:

Purchasing Processes.

Store Selection.

Cultural Food Habits.

Low Income Shoppers.

Family Food Habits.

Purchasing Processes:

Purchasing Behavior and the forces influencing selection are very crucial aspects of food intake. It is imperative, for purposes of policy decisions, to realize how various store attributes and informational aids influence the purchase of a food item. This ultimately determines whether the individual's diet will be balanced or not.

Price Perception:

One study conducted was carried out in order to determine the influence of the Universal Product Code on consumer decision making. Because the price is removed from each individual item, the shopper is forced to seek other information sources. The researchers found that UPC shoppers had more difficulty in seeing prices; made fewer comparisons; made greater mistakes in price estimates; had lower "in home price awareness"; were more satisfied with check out speeds, and UPC shoppers tended to be less store loyal. (Allen 1976) In 1976 (Brown) concluded that shopping variables are more closely related with perceptual validity than socio-economic variables; education is slightly (positively) correlated with price perception; male shoppers perceive prices better than females; and single shoppers had more valid perceptions than married shoppers. For major food expenditures, price is of prime concern, but for minor expenditures, convenience was shown to be of the most importance. (Baron 1976) Chevalier (1975) found that products which belong to the same product category increase their sales by similar percentages when displayed with a price reduction. There were noticeable differences in display effectiveness in different product groups.

Store Set-up:

Cox (1970) reached the conclusion that there is no relationship between the amount of shelf space given to a staple product brand and total sales of that brand. Also for staple products and impulse brands with low consumer acceptance, the additional marginal revenue gained from additional shelf space was insignificant. In opposition, was Curhan (1974) observing that bonus space increased sales for all categories of products. Price reductions are not a significant factor in increasing sales except for raw fruit. Further, advertising appears to be significant for hard fruits and cooking vegetables but not for salad vegetables and soft fruit. Shelf arrangement has been found to influence the family branding effect. Homemakers have reported that decision making is simplified when product labels are available in product groupings. Homemakers appear to easily overcome any brand loyalty in order to take advantage of a bargain price. (Neuhaus 1972) Customer flow has been found to be concentrated along the store's perimeter; end aisle displays account for less than three percent of store purchases, whereas the same amount of space on regular shelves account for about six percent. The most frequently purchased foods are cookies and crackers, coffee and canned vegetables. Customers spend more time and money in the store Thursday through Saturday than Monday through Wednesday. Special island displays average fewer sales per square foot than regular displays. (Havas 1969) Another study which was conducted in four independent supermarkets in middle and upper income suburbs in the U.S. indicated that point of purchase promotions are more effective for new products and very slow moving items. Tie-in promotions appear to be more effective for national brands. (McLaughlin 1973)

Brand Choice Behavior:

In the area of choice behavior, there exists a need for variety. Brand switching tends to be characterized more by switching to similar brands than of dissimilar brands. (Bass 1972) This same author, (Bass 1974), argues that since consumer brand choice appears to be essentially stochastic in nature, that it will never be possible to provide good predictions of individual consumer brand choice behavior for separate choice occasions. The research of Frank (1965) lead to the conclusions that larger families, higher education of the household head, number of cars owned, and consumption rate of the product are all slightly positively related to private brand proneness. (Banks 1950) concluded that brand preference is most identical with purchase intention. Also the last purchase made and statements of purchase intentions are even better predictors of brand purchase. Self confidence is a key influence as results have indicated that generalized self confidence appears to affect persuasion. (Brown 1971) noted that 81% of the sample was loyal to private labels. 33% were found to be loyal to one store. Price and quality appeared to be the main factors in private brand loyalty; store loyalty seemed to be a minor factor in explaining loyalty to private brands. (Tucker 1964) concluded that some consumers will become brand loyal even when there is no discriminable evidence of a difference between brands other than the brands themselves.

Consumer Search;

In a comparison of search propensity for automobiles and food, results indicated that shoppers are more willing to go out of their way to purchase an automobile than they are to purchase food. (Bucklin 1971) (Webster 1965) explored the idea of deal proneness. His findings indicate that deal proneness tends to increase with age. Also, deal proneness is negatively correlated with the amount purchased. Further, deal prone consumers tend to buy more brands and devote a smaller share of their total purchases to a single, favoured brand. High deal prone consumers switch brands more often than other consumers. (Hammock 1966) concluded that the crucial factor involved in the tendency to increase one's evaluation of an eliminated choice alternative is the elimination of the freedom to have it.

Allen J.W. (1976)
Anderson E.V. (1974)
Banks S. (1950)
Barach J.A. (1967)
Baron P. (1976)
Bass F.M. (1972)
Bass F.M. (1974)
Brown J.D. (1972)
Brown F.E. (1971)
Bucklin L.P. (1971)
Bucklin L.P. (1966)
Cavallo G.O. (1969)
Chance W.A. (1972)
Chevalier M. (1975)
Cox K. (1970)
Cox K. (1964)
Cunningham R.M. (1956)
Cunningham R.M. (1961)
Curhan R.C. (1974)

Frank R.E. (1970)
Frieman P.M. (1972)
Gruber A. (1970)
Hammock T. (1966)
Havas N. (1960)
Houston M.J. (1972)
Hubbard C.W. (1969-1970)
Kollat D.T. (1966)
Kuehn A.A. (1962)
Lessig V.P. (1973)
Mackay D.B. (1972)
Mackay D.B. (1973)
McLaughlin D.J. (1973)
Neuhaus C.F. (1972)
Progressive Grocer (1971)
Ross I. (1975)
Russo J.E. (1975)
Seggev E. (1970)
Stafford J.E. (1966)

Tucker W.T. (1964)
Wilkes R.E. (1972-1973)
Webster F.E. (1965)
Weimer J. (1973)
Worchel S. (1975)

Store Selection:

The area of store selection is explored as a behavioral trait in order to evaluate the various qualities that consumers demand in the marketplace. In many ways this type of study is mostly of great concern only to marketing interests for purposes of increasing profits, but in reality the store selection of the individual can influence the amount of the income spent on food, shopping habits and final nutrient intake.

(Bishop 1969) arrived at results that indicate that the frequency of store trips is the only statistically significant factor in store selection. (Bucklin 1967) found that a new store with all of the latest facilities may be an insufficient inducement to shop there if prices are not comparable to other local stores. Also, weekly specials were not found to be as great an inducement to shop at a store as a general discount pricing policy. (Comish 1958), by questionnaire, found that consumers like the one stop shopping that self service stores provide. In another survey which analysed consumer's feelings about the relative importance of attributes of grocery store outlets, it was found that store perceptions precede specific buyer planning and budgeting strategies. It is noted that general beliefs about the benefits of store specials, brand names, and other shopping variables influence the specific shopping variables sought. (Monroe 1975) Propensity to search with regard to food items, was found more commonly in families with higher food budgets. Of this same income group, younger families tended to exhibit multistore food shopping habits less than others. (Prasad 1972) In another survey of criteria for supermarket choice, cleanliness and clear pricing were the first and second most important, respectively. (Progressive Grocer 1975)

Distance has proven to be an important variable in store selection practices. (Thompson 1967) The results of a research survey showed that small grocery stores function mainly as outlets for incidental food items. Consumers treated supermarkets more or less as isolated units as far as large purchase shopping is concerned. There was little influence on food purchasing practices when a shopping plaza was visited with the convenience added of combining several small trips into one. Market closeness to home was not as important a consideration as the quality of the market within a reasonable distance from home. (Thompson 1967) In Los Angeles, conclusions of a telephone survey indicated that a supermarket must keep consumers in its own trade area if it is to prosper. When store loyalty is practiced, consumers have been found to spend 2% more on food than they would have to at other competing stores. (Tigert 1977)

- Aaker (1971)
- Bishop (1969)
- Bucklin L.P. (1967)
- Comish N.W. (1958)
- Monroe K.B. (1975)
- Prasad V.K. (1972)
- Progressive Grocer (1975)
- Thompson B. (1967)
- Tigert D.J. (1977)

Cultural Food Habits:

Influence of culture on the food habits of an individual can be quite pronounced. The specific selection differences caused by food having a different interpretation is an area of concern because different selection practices can result in consumers paying higher prices to meet their cultural needs. Consumers can pay as much as (1%) more in smaller city stores as compared to the lower food prices in outlying urban regions. (Dixon 1971)

Difficulty also results when selection is minimal when trying to find foods which are termed acceptable to a cultural diet. When questioned, two thirds of a group of Mexicans, Blacks, Chinese and Anglo Saxons, in California, indicated that they often experienced problems with meal preparation, dietary monotony, digestion difficulty, and a general lack of knowledge about nutrition. (Baird 1978)

In relation to interpretation of the significance of food, cultural groups can be quite varied. Anglo Saxons generally feel that they eat to satisfy hunger, and maintain health in a socially acceptable and economically feasible manner. A positive value is placed on the concept of self-denial in Anglo Saxons for reasons of overweight and digestion difficulties. A more highly valued concept for Anglo Saxons is the use of food as a focus for social interaction, but this again is balanced out by self denial.

Members of cultural groups such as Blacks, Chinese, and Mexicans were found likely to turn to food as a self administered reward or as a comfort when depressed. In Blacks and Mexicans, self denial appears to be regarded not as a singular virtue, but as operating at a trade off with self indulgence. Maintaining an emotional and bodily equilibrium was also found to be of high value.

When presented with an assortment of commonly available foods, the Chinese found the fewest foods to be appropriate to them. This can result in serious selection difficulties. (Baird 1978)

Black shoppers had a different perception of food store characteristics as a result of age and residence, but not as a result of level of education. The Black consumer market was also found to be heterogeneous. (Hills 1978)

In attempts to modify behaviors which stem from cultural biases, outcomes usually reinforce previous findings which indicate that change in this manner is not only unsuccessful, but it often results in more negative attitudes,

Dixon D.F. (1971)

Baird P.E. (1978)

Hills G.E. (1978)

Lamb C.W. (1977)

Saegart J. (1978)

Whipple T.W. (1971)

Low Income Shoppers:

Low income consumers are an important study group in regard to consumer food behavior because, generally, findings indicate that although they have the least income to spend on the food category, their consumer decision making processes are the poorest of all groups of consumers.

Low income consumers depend more on advertising for information, and tend to equate quality with price, while middle income consumers purchase significantly more private brands, and are more conscious of price with less of a tendency exhibited towards being brand loyal. (Coe 1971)

Low income groups were found to consume fewer milk products, fruits and vegetables than more privileged consumers. Also there is a tendency of intake of more empty calories such as sweets, pastries, fats, and soft drinks. (Desaulniers 1978) By use of the weighted food market basket technique, it has been found that the poor do pay more for their food (2 - 4% in this study). (Donaldson 1971) Lower class families have shown a less than active tendency to seek consumer information. Lower class women shop less often, and are more likely to shop with their husbands than women in the other classes. (Foxall 1975) Whereas, in a survey conducted in 1974 (Sexton) indicates that the poor shop more often as a result of less planning and more income demands. Findings also indicate that area of residence, race, and income do not result in systematic differences in preferences for national or private brands. (Sexton 1974) When presented with pairs of priced branded products, results indicate that the lowest income group was the least respondent to noting price differences and choosing the most advantageous price. (French 1971-1972)

When informational aids such as unit pricing is introduced into a food store, a common assumption would be that it would aid consumers in obtaining the best dollar value. Low income consumer, however, do not appear to make significant use of unit pricing in contrast to the middle income and higher income shoppers that do. The explanation could lie in the fact that they have a lower ability to understand the unit pricing labelling system making it difficult to capture the benefits of its use. (Isakson 1973)

Also, from a retailer's point of view, results of a survey conducted indicate that supermarkets operating in disadvantaged areas do not enjoy the confidence of their customers and many of these customers shop outside of their local neighbourhood. (Petrof 1971) Upper middle and the upper social classes are more attracted to local chains; lower middle and lower social classes are more attracted to the discount national chain or regional chain organizations. (Scott 1968)

- Berry L.L. (1971)
- Coe B.D. (1971)
- Desaulniers M. (1971)
- Donaldson L. (1971)
- Foxall G.R. (1975)
- French N.D. (1971-1972)
- Isakson H.R. (1973)
- Petrof J.V. (1971)
- Scott R.A. (1968)
- Sexton D.E. (1974)

Family Food Habits:

This category of research study is often carried out to establish what factors affect family behavior in relation to food. The family concept is a very important framework in regard to studying behavior as it is the basic unit of socialization in most cultures. The influence upon the individual at the early stages of family life lead to a lifetime of food behavior practices. Therefore, it is crucial to direct research into the field which has the most predominant influence on the eating patterns of the individual.

Problem eating habits can be attributed to factors which act upon the individual in their home environment. Barlow (1978) found that obese people will eat a fixed percentage of whatever is fed to them, so a consistent pattern of excessive amounts of food can alter their physical state. This can also have a negative affect upon the social well being of the obese person. Barlow also conducted a test on small children, ages 1 to 3, who had not yet formed any set pattern of eating behavior. Investigators discovered that menus could be compiled which met the children's nutrient needs and which they accepted without difficulty even though amounts of fat, sugar, salt, and preservatives were drastically reduced. It is evident that the children were not, at this age, conditioned to practice harmful eating habits.

When tackling the problem of altering poor eating habits of the obese individual, it is not simply a matter of changing food intake. Evans (1978) reports that obese person's habits result from their responsiveness to food cues. "Cues" are hidden meanings of an individual to what a particular food means to them, (e.g. meat means masculinity to many males) therefore, if you remove meat from the diet, you not only reduce food intake, but you may threaten the definition a person depends on as to what meat signifies to them. (Sherif 1975) Evans (1978) indicates that eating behavior is cross conditioned to every variety of human activity - recreation - work - and social activities. Therefore it is necessary that any form of dietary change is far reaching and long term in nature. Our attitude of food as a social element can also have a detrimental effect on our food habits because our natural and cultural wisdom distorts our ability to form a balanced eating pattern. Haley (1977) conducted studies of changing food habits in early adolescents. He found that food habits deteriorated between ages 10 and 15, especially with regard to milk, fruit, cereals, and meats. It would appear that a higher level of parental education tends to result in improved food habits on the part of the children. Hawkins (1974) found influences of peer groups also affect a child's dietary intake. At this stage of a child's life, the peer group conformity is more developed than any form of brand loyalty.

Jones (1977) reported that older, poorer, smaller households and those with less schooling were less likely to change their diets to alleviate specific health problems. The Journal of the American Dietetic Association (1975) reported that homemakers with a higher education tend to use all of the basic food groups, but this does not ensure an adequate diet. The more educated tend to accept questions of food values more readily than others. Of any group, individuals accept food advice best from those they consider friends and/or allies, with family influence being the strongest motivator.

Pledge cards were found to be a strong motivator in making effective dietary alterations, by Lambert (1977). It was found when a pledge was taken there was a greater motivation to adhere than there was in a normal diet plan. These resultant changes were also found to be quite long term in endurance. Sherif (1975) indicated that the difficulty in dietary change is found in the patterning needs of the individual which causes that person to desire a stabilizing experience in his life. An individual develops stable patterns in his environment which he can consistently relate himself to. Any disruption of this stability is tension producing and leads to efforts to restore stability.

Lifecycle stage of lifestyle can drastically influence what foods will be purchased for a family. Frank (1967) cited study findings which indicated: the more adults in a family, the higher the proportion of small packages purchased; households living in high rise apartments purchase more small package articles; and single male household heads tend to purchase more small packages. A survey for the Journal of the American Dietetic Association (1975) showed the varied influence that the family lifecycle stage can have on the nutrient intake of a family. Generally, younger families with lower incomes had greater concerns with economy and convenience. Time saving was also of major importance because of the great demands placed on the homemaker's time. As the family lifecycle stage progresses, there is less concern for price and time spent on food and a greater emphasis on finding foods which are lower in their quantities of calories, cholesterol, and saturated fats. Younger families, through their efforts to save money on the food budget, tend to exhibit greater multi-store shopping habits than other family stage groups. Prasad (1972)

Poor food habits can be the result of the lack of knowledge or desire to spend time on food planning, etc. Bucklin (1969) found that the costs of search for virtually all households (250 in this particular survey) are considerably higher than the savings to be secured. Fry (1967) found that consumers have generalized preferences for family brands which indicated a conditioned influence from exposure to a product. Granger (1972) found that housewives do not have a clear idea of relative value, measured in terms of cents per unit, and when this information is specifically provided, subjects behave in a way suggested by economic theory, (consumers switched more heavily to larger package sizes.) Nutrition knowledge and perceived nutrition knowledge can lead to good or poor eating practices. Fusillo (1977) found that low nutrition knowledge was most prevalent among males and older shoppers with age having a stronger association. He concluded that there is a need for more effective and understandable education programs directed at the individuals noted above.

Hertzler (1976) indicated that a family may have access to information about good nutritional practices; may take that information home; and yet never put the suggestions into practice.

One factor found that can increase the chances of a family using this information is the "solidarity" of the family unit. Solidarity has been defined as the interco-operation, unity or cohesion of family members. A family will demonstrate high solidarity by doing activities together and presenting a solid front to others. This cohesion also was found to more easily precipitate dietary change.

Szybillo (1976) examined the decision making process of families in relation to an eating situation. According to the results, child participation with parents dominated across all categories except "how much to spend?", which was decided on a majority by the parents alone. As a result of these tests, the author stated that there is a need to incorporate the influence of children on family decision making in relation to food behavior. Green (1975) through a survey of randomly selected married women found that liberal wives are reported to play a greater role in purchase decisions than either moderate or conservative wives. Jacoby (1974) concluded that housewives can contend with larger amounts of informational output than university students.

When examining the influences which act upon the decision making processes, it has been determined that husbands exert the strongest pressure over a woman to try a new food as compared to others. Advertising was found to have the least effect, with children being slightly more influential. Women made the decisions and food purchases in 87% of the households, men shopped in 5% of the homes and a combination of buyers did the remaining 8% of the shopping. Journal of the American Dietetic Association (1975)

Shutz (1977) found a negative relationship between "conformity in children" and food knowledge. This may indicate that mothers who force their children to eat "good food", may not, in fact, know what foods are actually good. Women who purchase food products more often than the norm have a larger number of children, a higher income, prepare larger meals, are permissive towards their children, believe in snacking, are conscious of nutrition, and are aware about their feelings about the appropriate use of food.

Readings:

Barlow (1978)
Bucklin (1969)
Bucklin (1969)
Carman (1970)
Darden W.R. (1974)
Evans R.I. (1978)
Foxall G.R. (1975)
Frank R.E. (1967)
Fry J.N. (1967)
Fusillo A.E. (1977)
Szybillo G.J. (1976)
Granger C.W.J. (1972)
Green R.T. (1975)
Greeno D.W. (1973)
Haley M. (1977)
Hawkins D.I. (1974)
Hertzler A.A. (1976)

Jacoby J. (1974)
Jones J.L. (1977)
Journal of the American D. Assoc. (1975)
" " (1975)
Karamchandani (1978)
King A.J. (1971)
Lambert V.E. (1977)
McClinton P. (1971)
Phillips D.E. (1978)
Prasad V.K. (1972)
Schafer R.B. (1978)
Schutz H.G. (1977)
Sherif (1975)
Steinberg S.A. (1978)

52

Aaker, D.A., Jones, J.M.,
"Modeling Store Choice Behavior";
Journal of Marketing Research, vol.8.
(February 1971); p. 38-42.

This article presents a formal test of the linear learning model in the context of store choice behavior, using 15 data sets involving three product classes. The model is used as a vehicle in understanding this aspect of consumer behavior.

store choice behavior.

Allen, J.W., et.al...;
Summary Results of Consumer Shopping Behavior - Shopping Study.
Ad Hoc Committee of the Grocery Industry for the Development
of the Universal Product Code;
Washington, D.C.; (March 23, 1976)

The purpose of this study was to assess the affect of discontinuance of item price marking on shopper's ability to make food purchases effectively. In three phases, shoppers at stores employing the UPC (Universal Product Code) were compared to shoppers at regular supermarkets. The authors found that; UPC shoppers had more difficulty seeing prices; UPC shoppers made fewer comparisons; UPC shoppers made greater mistakes in price estimates; UPC shoppers had lower "in home" price awareness; UPC shoppers were more satisfied with check out speeds, and, UPC shoppers tended to be less store loyal.

universal product code.

Anderson, Evan. E.,
"The Effectiveness of Retail Price Reductions: A Comparison
for Alternative Expressions of Price",
Journal of Marketing Research, vol.11
(August 1974), p. 327-330.

An experimental treatment was applied to two product classes in each of two food stores. Neither the isolated nor joint effects of price levels and price expression seemed to have influenced the market share of the lowest priced brand of chili. However, there was considerable brand substitution in the case of peas. Also, for peas, the impact of a price reduction may be diminished when the magnitude of the reduction is given in absolute as well as unit terms.

price impact.

Baird, Pamela C.,
 "The Marketing Concept Applied to Selling Good Nutrition"
Journal of Nutrition Education. vol. 8. No. 1.
 (January to March 1978)

The "eat because it is good for you" approach to nutrition education, may not be as successful an approach as possible with individuals by whom food is perceived, for example, as a primary emotional support, a creative outlet, or a problem to be avoided. Little work has been done to develop a meaningful measure of food attitudes that discriminates among individuals. This study was based on the hypothesis that the marketing concept of tailoring products to consumer's needs and the techniques of attitude measurement employed in marketing studies may be of help to nutrition educators.

A special item by use questionnaire was constructed for four ethnic groups; Blacks, Anglo Saxons, Mexican, and Chinese. The results of this survey was to determine the frame of reference that various cultures use to refer to food and to gain some insight as to the different values which affect the choice of various foods by cultures including money, health, taste, status, and satiety value.

Value judgements.

54
Banks, Seymour,
"The Relationships Between Preferences and Purchases of
Brands",
Journal of Marketing, 15
(October 1950), p. 145-157.

The author, using a panel of 465 Chicago housewives, concluded that brand preference is most identical with purchase intention. Preference for brands is found to be a good predictor of purchases. Last purchase made and statements of purchase intentions are even better predictors of brand purchase. Scouring cleaner, coffee, icecream, peanut butter, potato chips, mayonnaise, and catsup were the products studied.

brand preference.

Barlow, D.H., Tillotson, J.T.,
"Behavioral Science and Nutrition"
Journal of the American Medical Association, vol. 72.
(April 1978)

Behavioral Science and Nutrition are inter-related as the behavioral science field is an effective mechanism for greater success in the field of dietary change. This particular study was focused on the amount of food intake by the individual. Tests were conducted to determine the effect of the size of the portion on food eating behavior. Other studies have shown that larger portions increased intake very consistently. Obese people have been found to eat a fixed percentage of whatever food was fed to them. These findings are not only physical in nature, but also have a social context acting upon them. This experiment was carried out on children aged 1-3 years who were making the transition from a child's to an adult's diet. Using precise measures of eating behavior, the investigators presented over 100 food items low in sugar, salt, preservatives, and saturated fats, and ranked them on the basis of acceptance. Through this ranking, the investigators discovered that menus could be compiled which met the children's nutrient needs and which they accepted without going through the difficulties often encountered in persuading or otherwise motivating children to eat nutritionally balanced meals. Other experiments have looked at the effects of temperature, colour combinations, texture familiarity, and the gentle social influence on children's acceptance of various foods.

nutrition communication.

55

Barach, Jeffery A.,
"Consumer Decision Making",
The Southern Journal of Business,
(April 1967), p.76.

The author studied consumer decision making with respect to purchases of regular and instant coffee, shampoo, margarine, and household wraps. Self-confidence was found to be a crucial factor as the results indicate that generalized self-confidence appears to affect persuasion.

purchasing processes.

Baron, P., Eskin, G.,
"Attribute Ratings as Predictors of Claimed and Actual Behavior",
Advances in Consumer Research, vol. 3.
(Atlanta Association for Consumer Research)
(1976) p.359-363.

In this study cash registrar tapes from grocery shopping trips and interview data about store attributes, e.g. price, location, quality, and behavior concerning grocery stores shopped were collected from 80 respondents over a five week period. Results indicated a high correspondence between claimed and actual behavior and similar, but not identical, regression translations between attribute scores and claimed and actual behavior. The grocery store tapes indicated the area of deviation between claimed and actual behavior (shows relevance of controls in assessing the importance of factors not directly perceived by respondents) - apparently there exists a price convenience trade-off. For major food expenditures, price is of prime concern (as reported), but for minor expenditures convenience was shown most important through analysis of grocery store tapes.

grocery tapes.

Bass, F.M., Pessemier, E.A., and Lehmann, D.R.,
"An Experimental Study of Relationships between Attitudes,
Brand Preference, and Choice",
Behavioral Science, vol. 17
(1972) p. 532-541.

This paper examines the effectiveness of models of preference and choice, based on specific product attributes. 280 students and secretaries selected a soft drink 4 days a week for three weeks from 8 alternatives. The paper primarily deals with understanding choice behavior and need for variety. Brand switching tends to be characterized more by switching to similar brands than of dissimilar brands.

alternative evaluation.

56

Bass, Frank M.,
"The Theory of Stochastic Preference and Brand Switching",
Journal of Marketing Research, vol. 11.
(February 1974), p. 1-20.

The author argues that since consumer brand choice appears to be essentially stochastic in nature, that it will never be possible to provide good predictions of individual consumer brand choice behavior for separate choice occasions. His conclusions are based on the preferences of 264 students and secretaries for 8 brands of soft drinks.

Purchasing processes.

Berry, Leonard L., Solomon, Paul J.,
"Generalizing about Low-Income Food Shoppers: A Word of Caution",
Journal of Retailing, vol. 47
(Summer 1971), p. 41-51.

The authors conducted interviews with 100 low-income Mexican Americans in Denver. In contrast with most previous studies, the authors note that most of the respondents shop large supermarkets, travel by car, make only two trips per week, and are favourably disposed towards the stores.

Low-income shoppers.

Bishop, Willard, R. Jr., Brown, Earl H.,
"An Analysis of Spacial Shopping Behavior",
Journal of Retailing, 45
(Summer 1969), p. 25-28.

The authors felt that the central place theory had been inadequately validated. Their results indicate that frequent store trips are the only statistically significant factors in store selection.

purchasing processes.

Brown, Joseph D.,
"Consumer Loyalty for Private Food Brands", Report No. 3,
Bureau of Business Research, Muncie, Indiana Ball State University,
(October 1972), p. 1-31.

Based on the results of interviews with 198 Muncie, Indiana shoppers, the author notes that 81% of his sample is loyal to private labels. One third of the sample is loyal to one store. Price and quality appear to be the main factors in private brand loyalty; store loyalty seems to be a minor factor in explaining loyalty to private brands.

Store loyalty.

57

Brown, F.E.,
"Who Perceives Supermarket Prices Most Validly?",
Journal of Marketing Research, 8.
(February 1971), p.110-113.

From an analysis of over 1000 shoppers in 27 different supermarkets in 5 major U.S. cities the author reached several conclusions: shopping variables are more closely related with perceptual validity than socio-economic variables; education is slightly (positively) correlated with price perception; male shoppers perceive prices better than females; single shoppers have more valid perceptions than married.

purchasing processes.

Bucklin, Louis P.,
"Trade Area Boundaries: Some Issues in Theory and Methodology",
Journal of Marketing Research, 8.
(February 1971), p.30-37.

The author studied 500 Oakland housewives, 249 Berkeley families and 1160 San Francisco Ford purchasers to show that there is an overlap in the trading areas of competing retail establishments. The study deals with search propensity for automobiles and food with the results indicating that shoppers are more willing to go out of their way for automobile purchases than food purchases.

search propensity.

Bucklin, Louis P.,
"Competitive Impact of a New Supermarket",
Journal of Marketing Research, 4.
(November 1967), p. 356-361.

The author used a 249 family research panel in Berkeley, California., to illustrate that a new store with all of the latest facilities may be an insufficient inducement to shop there if prices are not comparable. Also, the weekly special is not as great an inducement as a discount pricing policy.

store selection.

Bucklin, Louis P.,
"Consumer Search, Role Enactment, and Market Efficiency",
Journal of Business, 42
(October 1969), p.416-435.

The author studied a panel of 250 families in Berkeley, California and concluded that the forces controlling advertising readership are easier to detect than those responsible for interstore comparison. It is also noted that the costs of search may in fact outweigh the savings to be gained for food products.

Bucklin, L.P.,
 "Testing Propensities to Shop",
Journal of Marketing, 30
 (January 1966), p.22-27.

A survey of 506 consumers shopping for 891 items showed consumers respond to lower shopping costs by making more interstore comparisons. Consumers have a greater willingness to shop for higher priced items. Consumers with little or no information about product features shop more extensively than those with greater knowledge.

purchasing processes.

Bucklin, L.P.,
 "Consumer Search, Role Enactment, and Market Efficiency",
Journal of Business, 42
 (October 1969), p.416-438.

A survey of 250 households over a fifteen-week period on their grocery shopping patterns. In summary, the costs of search for virtually all of the households are considerably higher than the savings to be secured.

search propensity.

Carman, J.M.,
 "Correlates of Brand Loyalty: Some Positive Results",
Journal of Marketing Research, 7
 (February 1970), p.67-76.

The author utilized a 249 household panel to study food purchases by Berkeley, California housewives. The results indicate that a link exists between personal characteristics, the shopping process, and brand loyalty. Store loyalty appears to explain much of the variance in brand loyalty. Products considered were regular ground coffee, canned fruits, and frozen orange juice.

purchasing processes.

Cavallo, G.O., Temares, M.L.,
 "Brand Switching at the Point of Purchase",
Journal of Retailing, 45
 (Fall 1969). p. 27-36.

One hundred and thirty-seven randomly selected weekly shoppers in New York and Connecticut were personally interviewed. The results indicate that the more highly the product is rated by the shopper, the less likely is the chance of buying another brand. The emphasis of the study was on beverages, frozen and canned vegetables, soaps and detergents.

purchasing processes.

59

Chance, William A., French, Norman D.,
"An Exploratory Investigation of Brand Switching ",
Journal of Marketing Research , 9
(May 1972), p.226-229.

The authors used 136 women in an isolated community in the Midwestern U.S. in an experiment that illustrated large variations among product categories in brand switching behavior. Income and educational level were quite influential in determining the extent of brand switching behavior by the housewives. Products studied were pork and beans, ground meat, flour, salad dressing, tea bags, facial tissue, and whipped topping.

purchasing processes.

Chevalier, Michel,
"Increase in Sales Due to In-Store Display",
Journal of Marketing Research, 12
(November 1975), p.426-431.

The author tested 8 product groups in four Boston stores and found that products which belong to the same product category increase their sales by similar percentages when displayed with a price reduction. There are noticeable differences in display effectiveness for different product groups.

purchasing processes.

Coe, Barbara Davis,
"Private Versus National Preference Among Lower- and Middle-Income Consumers",
Journal of Retailing,
(Fall 1971), p.61-72.

The results of this study indicate that users of private brands typically are younger. Lower-income respondents depend more on advertising for information and tend to equate quality with price. Middle-income consumers purchase significantly more private brands, are more conscious of price, and exhibit less brand loyalty.

purchasing processes.

60
Comish, N.W.,

"What Influences Customer Choice of a Food Store?,"

Journal of Retailing, 34

(Summer 1958), p.90-100.

Five hundred and sixty-five respondents in Seattle, Washington, were interviewed by telephone indicating that consumers are motivated by a great many rather than just a few factors when they select a store in which to purchase food. Customers generally like the one stop shopping that self service stores provide.

purchasing processes.

Cox, Keith K.,

"The Effect of Shelf Space Upon Sales of Branded Products",

Journal of Marketing Research, 7

(February 1970), p.55-58.

Sales of two brands of salt and powdered coffee cream in six large supermarkets in Houston, Texas were studied leading to the conclusion that there is no relationship between the amount of shelf space given to a staple product brand and total unit sales of that brand. Also, for staple products and impulse brands with low consumer acceptance, the additional marginal revenue gained from additional shelf space is insignificant.

purchasing processes.

Cox, Keith,

"The Responsiveness of Food Sales to Shelf Space Changes in Supermarkets",

Journal of Marketing Research, 1

(May 1964), p.63-67.

The author utilized a latin square design in six Texas supermarkets and found that impulse items do not respond more to variations in shelf space than staples. Test products selected include baking soda, powdered orange crystals, hominy corn and powdered coffee cream.

purchasing processes.

61

Cunningham, R.M.,
"Brand Loyalty - What, Where, How Much?"
Harvard Business Review, 34
(January - February 1956) p.116-128.

The author studied the behavior of 244 families for seven food and household product classes. He notes that higher numbers of families report purchases of a single brand than random data would predict. He also notes that some reduction in brand loyalty appears to be the result of special deals and relatively high price activity in a product class.

purchasing processes.

Cunningham, Ross M.,
"Consumer Loyalty to Store and Brand",
Harvard Business Review, 39
(November - December 1961), p.127-137.

The author studied 50 Chicago families and found that those with high store loyalty are somewhat more loyal to the particular private brands they purchase than are families with low store loyalty. However, high store loyal families are not more likely to purchase all private brands. Families are found to vary widely in their first store loyalty. The purchases evaluated were for a range of grocery items.

purchasing processes.

Curhan, Ronald C.,
"The Effects of Merchandising and Temporary Promotional Activities on the Sales of Fresh Fruits and Vegetables in Supermarkets",
Journal of Marketing Research, 11
(August 1974), p.286-294.

Two-hundred and fifty-six observations of sales over seven months in various American grocery stores and supermarkets lead to the conclusion that bonus space increases sales for all categories of products. Price reductions are not a significant factor in increasing sales except for soft fruit. Further, advertising appears to be significant for hard fruits and cooking vegetables but not for salad vegetables and soft fruit.

purchasing processes.

62

Darden, Wm. R., Ashton, Dub,
"Psychographic Profiles of Patronage Preference Groups",
Journal of Retailing, 50
(No. 4, 1974), p.99-112.

116 middle class suburban housewives from a medium sized southern U.S.A. city were studied leading to the conclusion that there are groups of shoppers with distinctly different supermarket attribute preferences. Also, lifestyle and shopping orientations are found to differ among patronage attribute preference groups.

purchasing processes.

Desaulniers, M. & Beaudry-Darisme, M.,
"Les Habitudes Alimentaire des Adultes de Trois Milieux Socio-economique de la Ville de Québec";
Journal of the Canadian Medical Association, vol39, No.1.
(January 1978), p.38-45.

The dietary intake of the population of two disadvantaged and one privileged areas in Québec City was analyzed from three day food records. Foods consumed between meals were less concentrated in nutrients than those consumed at meal time. In the disadvantaged areas, the population consumed fewer milk products, fruits and vegetables than in the privileged area, and more sources of empty calories such as sweets, pastries, fats, and soft drinks were found. The amount of money spent on food could not explain the differences observed in the quality of the dietary intake of the different groups of the population studied.

Low-income shoppers.

Dixon, Donald F., McLaughlin, Daniel J. Jr.,
"Shopping Behavior, Expenditure Patterns and Inner City Food Prices",
Journal of Marketing Research, 8
(February 1971), p.96-99.

This analysis of the shopping behavior of 21 Negro and 18 Puerto Rican families indicates that there is a pronounced difference in shopping behavior between cultural groups. An additional finding is that, for grocery purchases, prices in inner city supermarkets are about 1% higher than prices in comparable supermarkets outside the area.

purchasing processes.

63
Donaldson, Loraine, Strangways, Raymond,
"Ghetto Food Purchases and Prices",
Mississippi Valley Review,
(Fall 1971), p. 65-73.

The authors used a weighted food market basket technique in Atlanta, Georgia. They found that the poor do pay more for their food (2% - 4% in this study).

Low-income shoppers.

Evans, Richard I., Hall Yolanda.,
"Social - Psychologic Perspective in Motivating Changes in Eating Behavior",
Journal of the American Dietetic Association,
(April 1978)

Social Psychologists regard the task of changing eating behavior as particularly difficult. According to Bruch, eating behavior is deeply imbedded in the early development of the individual and continues to be tied in with the psychodynamics of human development. Schachter relates eating behavior to cues in the individual's immediate environment. His/her internal physiological state - for example in the obese individual - may be related to his or her responsiveness to food cues. The very extensiveness of these cues makes it difficult to control the environment in enough situations to modify long term eating behavior, much less control the physiological conditions that respond to the food cues. Eating is a cross-conditioned response to every variety of human activity - recreation - work - and social activities.

The development of dietary imbalance comes about through the effect of economic and technological developments and increased per capita income on nutritional patterns and social preferences. Coincident with our agricultural success and the prevalence of foods high in fats or refined carbohydrates has been a remarkable drop in energy expenditure at work and play. In terms of individual development, as soon as a child is old enough to be influenced by information, such as a nutritional lifestyle, the "natural or cultural wisdom" of eating in a balanced manner is distorted by influences which encourage a nutritional imbalance. In regard to a change in eating behavior, the behavioral scientist can only suggest the employment of the same device as is used to assist patients in controlling their immediate environment. Motivation is the key to a successful and lasting result. If permanent modification is sought, "motivating" should be long term.

behavior modification.

64

Foxall, Gordon R.,
"Social Factors in Consumer Choice: Replication and Extension",
Journal of Consumer Research, 2.
(June 1975), p.60-64.

A study of 286 lower class and 298 middle class English families found middle class households are more active in seeking consumer information. It was also found that lower class women shop less often, older women shop more often than younger women, and lower class women are more likely to shop with their husbands.

purchasing processes.

Frank, Ronald E., Boyd, Harper W. Jr.,
"Are Private-Brand-Prone Grocery Customers Really Different?",
Journal of Advertising Research, 5.
(1965) p.27-35.

491 Chicago households were studied leading to the conclusions that larger families, higher education of the household head, number of cars owned, and consumption rate of the product are all slightly positively related to private-brand-proneness. 44 grocery product categories (e.g. canned corn, regular coffee and prepared cake mixes) were studied.

purchasing processes.

Frank, Ronald E., Douglas, Susan P., Polli, Rolando E.,
"Household Correlates of Package-Size Proneness for Grocery Products",
Journal of Marketing Research, 4.
(November 1967) p. 381-384.

The author studied the purchasing history of 491 Chicago households for each of 31 grocery product categories. Among the numerous findings cited are: the more adults in the family, the higher the portion of small packages purchased; households living in high rise apartments purchase more smallpackage articles; single male household heads tend to purchase more small packages; the tendency to purchase large packages increases as brand loyalty increases.

purchasing processes.

65

Frank, Ronald E., Massy, Wm. F.,
"Shelf Position and Space Effects on Sales",
Journal of Marketing Research, 7 .
(February 1970), p.59-66.

The authors conducted a field of study of 30 stores in a large U.S. metropolitan area and found that, within a range of 5-10 rows (facings) adding a row adds a proportionately greater increment to weekly product sales in high (but not low) volume stores regardless of the container size. Shelf level has only a modest effect on sales. The study was conducted using a commonly purchased grocery product that is heavily promoted by both retailers and manufacturers.

purchasing processes.

French, Norman D., Lynn, Robert A.,
"Consumer Income and Response to Income Changes: A Shopping Stimulation",
Journal of Retailing,
(Winter 1971-1972), p. 21-23.

The authors presented various pairs of branded products at different prices to women of various income levels. Results indicate that the lowest income group was least responsive to advantageous prices.

Low-income shoppers.

Friedman, P.M.,
"Consumer Price Comparisons of Retail Products : The Role of Pricing and Packaging Practices and Implications for Consumer Legislation",
Journal of Applied Psychology, 56
(No. 6 1972), p. 439-446.

Four hundred ninety-nine customers of an inner-city supermarket plus 562 customers of a suburban supermarket were studied. The results indicate that suburban shoppers are better able to judge food prices than inner-city store shoppers.

purchasing processes.

66

Fry, Joseph. N.,
"Family Branding and Consumer Brand Choice",
Journal of Marketing Research, 4
(August 1967), p. 237-247.

This analysis of 600 metropolitan Chicago households illustrates that consumers have generalized preferences for family brands. The products used in the study include canned fruits and vegetables, paper napkins, facial towels, flour, pancake mix, cake mix, biscuit mix, refrigerated rolls, coffee, gelatin and pudding, toilet soap and liquid detergent.

purchasing processes.

Fusillo, A.E., & Beloian, A.M.,
"Consumer Nutrition Knowledge and Self-Reported Food Shopping Behavior",
American Journal of Public Health, vol. 67 No. 9.
(September 1977, p.846-850.

The authors surveyed a sample population as to perceived nutrition knowledge, then marked these for correctness to determine what groups are particularly deficient in nutrition knowledge (i.e. positively associated). Low nutrition knowledge was most prevalent among males and older shoppers with age having the stronger association. The conclusions drawn were that there is a need for more effective and understandable education programs, and that these programs need most to be directed to the groups listed above.

nutrition communication.

Granger, C.W.J., Billson, A.,
"Consumer's Attitudes Towards Package Size and Price.",
Journal of Marketing Research, 9
August 1972), p. 239-248.

The authors used 200 housewives from a suburb of San Diego in an experiment to illustrate that prices are of clear importance in determining selection of package size. Their results also show that housewives do not have a clear idea of relative value, measured in terms of cents per unit and, when this information is specifically provided, subjects behave in a way suggested by economic theory (consumers switched more heavily to larger package sizes). Products studied were soft drinks and detergent.

purchasing processes.

67
Green, Robert T., Cunningham, I.C.M.,
"Feminine Role Perception and Family Purchasing Decisions",
Journal of Marketing Research, 12
(July 1975), p. 325-332.

A study of 257 randomly selected married women found that liberal wives are reported to play a greater role in purchase decisions than either moderate or conservative housewives. The study utilized decisions on several products and services including grocery items, furniture, major appliances, and automobiles.

purchasing processes.

Greeno, D.W., et al.;
"Personality and Implicit Behavior Patterns".
Journal of Marketing Research, vol.10.
(February 1973), p.63-69.

Q-sorts of 38 products were obtained from 190 housewives. A cluster analysis of the sorts produced six groups of housewives who differ in the emphasis they accord five implicit behavior patterns. Using these patterns as criterion, personality traits are used to account for the differences and socio-economic descriptions are used to establish the clusters as meaningful segments.

behaviorpatterns.

Gruber, A.,
"Purchase Intent and Purchase Probability",
Journal of Advertising Research, 10
(February 1970), p. 23-27.

An analysis of consumer responses to 16 new food product concepts using a sample of 400 women who were the principal female shopper in the household and had at least one child living at home. The author notes a high positive correlation between purchase intent and purchase probability.

purchasing processes.

68

Haley, M. et al.;

"A Comparative Study of Food Habits: Influence of Age, Sex, and Selected Family Characteristics, II,"

Canadian Journal of Public Health, vol. 68, No. 4.

(July/August 1977), p. 301-306.

Haley studies the changing patterns of food habits in early adolescence. He found that food habits deteriorated between ages 10 and 15 especially with regard to milk, fruit, cereals, and meat. Furthermore, while the relationship between family characteristics and food habits is not clear, it would appear that a higher level of parental education tends to result in improved food habits on the part of the children. Finally, Haley notes that at the commencement of the study (10 year olds in) there was nutrition education in elementary schools, whereas no such program existed in the high schools (13 year olds in 1973; 15 year olds in 1975). While no definitive conclusion is stated, it is mentioned that the cessation of nutrition education may be correlated with the deterioration of food habits.

nutrition communication.

Hammock T., and Brehm, J.W.,

"The Attractiveness of Choice Alternatives when Freedom to Choose Is Eliminated by a Social Agent",

Journal of Personality, vol. 34

(1966), p. 546-554.

It had been previously established that when an individual loses one of several choice alternatives because of an impersonal, chance event, his desire for that alternative increases the magnitude of this reactance is a direct function of the importance of the choice alternative. This importance is related to the absolute attractiveness of the choice alternative and its relative attractiveness to other choice alternatives. The author tested 12 boys and 15 girls, 7-11 years old to determine the effect of forcing an alternative and found that the eliminated alternative increased in attractiveness. The authors concluded that the crucial factor involved in the tendency to increase one's evaluation of an eliminated choice alternative is the elimination of the freedom to have it.

external search.

69

Havas, N., Smith, H.M.,
"Customer's Shopping Patterns in Retail Food Stores",
U.S. Department of Agriculture. Publication No. AMS-400,
(August 1960)

Among the numerous conclusions reached by authors following an observational survey of traffic in supermarkets are the following: customer flow is concentrated along the store's perimeter; end aisle displays account for less than 3% of store purchases, whereas the same amount of space on regular shelves account for about 6%; the most frequently purchased foods are cookies and crackers, coffee, and canned vegetables; customers spend more time and money in the store Thursday through Saturday than Monday through Wednesday. Special island displays average fewer sales per square foot than regular displays.

purchasing behavior.

Hawkins, D.I., Coney, K.A.,
"Peer Group Influences on Children's Product Preferences",
Journal of the Academy of Marketing Science,
(1974), p. 322-331.

The authors used packages of cookies differing only in the colour of the wrapping paper to study the influence of peer groups on children's product preferences. Results indicate that peer groups have an important influence in the development of the children's consumption patterns. It is also noted that few children appear to develop any significant brand loyalty in these patterns.

Children purchasing processes.

Hertzler, Anna A., Owen, Carol.,
"A Sociologic Study of Food Habits - A Review",
Journal of the American Dietetic Association, vol. 69. No.4.
(October 1976).

There are no vast explanations as to how or why food habits change. Much of this failure may be attributed to unresolved problems in comparing food habits at different time periods and with different cultures, and the wide variability in foods and in food preparation. There is also a need to place the study of food habits within a more general context of the family relationship. The family may have access to information about good nutritional practices; may take that information home; and yet never put it into practice. Solidarity (Young's Phenomenon) has been defined as intercooperation, unity, cohesion, concerted activity, and intercommunication. Factors allegedly supporting, or flowing from a relatively high degree of solidarity, might include dramatization, flexibility, fluidity, and stability. A family will demonstrate high solidarity by doing activities together, by presenting a solid front to outsiders - This more easily precipitates dietary change. A sharing of ideas, ideologies, and understandings results in few barriers to communication.

family behavior.

Hills, Gerald E., Granbois, Donald H., Patterson, James, M.,
 "Black Consumer Perceptions of Food Store Attributes",
Journal of Marketing, 37
 (April 1978), p.47-57.

The authors utilized 62 blacks Indianapolis housewives to illustrate that black shoppers have different perceptions of food store characteristics as a result of age and residence but not as a result of level of education. The results also support the premise that the black market is heterogeneous.

black shoppers.

Houston, Michel J.,
 "The Effect of Unit Pricing on Choices of Brand and Size in Economic Shopping",
Journal of Marketing, 36
 (July 1972), p. 51-54.

The author based the survey on a convenience sample of 53 housewives. He noted that the consumer is better able to determine the most economical item in a product class at stores with unit pricing. The products used in the study were toilet tissues, apple sauce, peaches, peas, tuna, cheese, sugar, coffee, detergent, soda, mayonnaise, peanut butter, paper towels and potato chips.

unit pricing.

Hubbard, C.W.,
 "The Shelving of Increased Sales",
Journal of Retailing, 45.
 Winter 1969-70), p. 75-84.

Tea sales in 83 Houston, Texas retail supermarkets were studied indicating that a direct relationship exists between the amount of shelf space allotted to particular brands and their sales performance. Decisions to place certain merchandise in "poor" or "preferred" shelf arrangements can create widely varying sales performance.

purchasing processes.

41

Isakson, H.R., Maurizi, A.R.,
"The Consumer Economics of Unit Pricings",
Journal of Marketing Research, 10
(August 1973), p. 277-285.

The introduction of unit pricing in food stores makes it easier for shoppers to choose cheaper items. Low income shoppers, however, do not appear to make significant use of unit pricing in contrast to the middle income and high income shoppers that do. The explanation could lie in their lower ability to understand the unit pricing labeling system making it difficult to capture the benefits of its use.

unit pr.

Jacoby, Jacob, Speller, Donald E., Berning, Carol Kohn,
"Brand Choice Behavior as a Function of Information Load:
Replication and Extension",
Journal of Consumer Research, 1
(June 1974), p. 33-42.

The subjects in this study were 192 paid housewife volunteers from Lafayette, Indiana. The authors conclude that housewives can contend with larger amounts of informational input than university students. The study suggests that there are finite limits to the consumer's ability to accommodate substantial amounts of package information within a limited time span. Two products (rice and prepared dinners) were used in this analysis.

purchasing processes.

Jones, Judith Lea.,
"Are Health Concerns Changing The American Diet?",
National Food Situation, U.S.D.A.
Publication - 159
(March 1977), p.27.

This component of a larger study on consumer food behavior was carried out to determine if health concerns are having any impact of change on the American diet. Generally there has been a positive impact by nutritionists, the media, and food processors, with their emphasis on "eating smart", "thinking thin" and "getting back into nature". In better than three out of five of all households surveyed (1,400), someone had a health problem (either diagnosed or self-ascribed) and in about two out of five homes, someone had changed their diet to meet the needs of their problem. Older, poorer, smaller households and those with less schooling were less likely to change their diets to alleviate specific health problems.

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The health problems most frequently mentioned were overweight, in 30% of the households, hypertension in 22% of the households, allergies in 20%, heart disease in 9%, kidney problems in 8%, and diabetes in 7% of the homes surveyed. A look at the health problems most likely to induce remedial dietary changes shows diet changes were found in 88% of households with persons having high cholesterol levels, in 75% of those with diabetes, in 64% of those who were overweight, and in 55% of those with high blood pressure. One quarter of the households surveyed reported diet changes to avoid potential health problems: about half of these households also made other diet changes to meet existing problems. As before, larger households, higher income households and those with homemakers with more schooling were more likely than others to introduce preventative dietary changes.

family food habits.

"The Affect of Family Life Cycle Stage on Concerns about Food Selection",

Journal of the American Dietetic Association, vol. 67.

(August 1975), p. 131.

The family classification has been found to provide insights into a wide variety of consumption patterns. It is a useful classification as the population is often divided by family type to establish target groups for action programs. Points to be explored are a) differences in dietary needs and preferences b) differences in the time and energy available for food shopping and meal preparation c) differences in patterns of eating away from home.

This particular survey was conducted by telephone questionnaires to female respondents of 1,000 suburban households of a median income level. Each respondent was asked a series of questions about her food selection practices, and whether these practices characterized her usual behavior under categories of health, economy and convenience. Seven stages of the family life cycle were examined. Generally, younger families with lower incomes were more concerned with economy, and convenience. Saving time was of major importance, because of the limitations of the wife's schedule. As family ages became older, there was less concern with price and time spent on food and a greater concern for decreasing calories and intakes of cholesterol and saturated fats.

family food habits.

13
"Food Choices of Women",
Journal of the American Dietetic Association,
(February 1975), p. 152.

Food habits have been defined as the way in which individuals, in response to social and cultural pressures, select, consume, and utilize the available food supply. General findings in relation to food habits which have been found are: a) educational attainment and nutritional knowledge correlate positively b) homemakers with a higher education tend to use all of the basic food groups c) but this does not ensure an adequate diet d) the more educated tend to accept questions of food value more readily e) average availability of nutrients is correlated with money spent on food f) average nutrient intake increases with expenditure g) individuals accept food advice best from those they consider friends and/or allies - with family influence being the strongest motivator. This particular study was developed to determine family composition, who purchased and prepared the meals, sources of food, eating frequency of the women, education and occupation of the adults, and income level. The statistical sample was 1% or 591 people from Johnson County Kansas, selected from census records. Alternate households were chosen within each subdivision. Three age groups were represented: 40% were 18-34 years, 43% were 35-44 years, and 17% were 55 years and older. The average household was composed of 3.8 people. A summary of the results showed that a woman purchased the food in 87% of the households, men shopped in 5% of the homes and a combination of buyers did the remaining 8% of the shopping. An attitudinal survey by Duncan's Multiple Range test determined that husbands exert the strongest pressure over a woman to try a new food as compared to others. Advertising had the least effect, with children being slightly more influential. Homemakers had the most confidence in professionals advice to try a new food product. It was found that meals easy to prepare or low in calories were the most popular among homemakers. Most women themselves were found to eat three meals a day in addition to two snacks.

Family food habits.

74
Karamchandani, D.,

"Family Expenditure Patterns in Canada According to Socio-Economic Characteristics."; Canadian Farm Economics.
vol. 13 No. 3. (June 1978); p.27.

Between 1969 and 1974 urban Canadians experienced a marked change in family expenditure patterns. Income after taxes increased 55 percent to \$12,044.00 and total current consumption rose 48 percent to \$10,536.00. The proportion of income allocated to essential goods and services decreased, while that spent on furnishings and equipment, recreation and miscellaneous expenses increased. Family size remained fairly constant at approximately three members a family. There were substantial variations in the averages among and within partitions. Married couples with children generally had higher incomes and total current consumption than couples without children. Unattached individual's income and total current consumption reached a maximum before 45 years of age. Although total current consumption per family closely followed income after taxes, total current consumption of those in the first and second quintiles exceeded income per family, while the opposite was true for those in all other income brackets. According to tenure class, average family income and total current consumption of homeowners with or without mortgages were much higher than for regular and other tenants. Average income after taxes and total current consumption rose as the age of head increased until consumers reach 65; then they dropped more than 50 percent.

In 1974 the Canadian consumer spent 66 percent of his income on food, shelter, travel and transportation, clothing and furnishing and equipment and 21 percent on other goods and services. The remaining 13 percent can be considered as savings. Compared with those of 1969 these figures indicate a substantial drop in the share of income attributed to shelter, clothing and medical and health care. Other commodity groups remained fairly stable and savings increased nearly 5 percent. This income sharing pattern was also affected by the socio-economic characteristics of the families. In life cycle groups with children, a larger share of income was spent on food, clothing and medical and health care than was spent in the other groups. The distribution of income shares among commodity groups differed considerably by income level. While the proportion of income devoted to food, shelter, household operation, personal care, medical and health care and smoking and alcoholic beverages tended to decrease as income increased, that attributed to clothing, furnishing and equipment and travel and transportation tended to increase. Except for shelter, income shares varied little by tenure class; spending units in the other tenant class allocated the largest share of their income to this essential commodity.

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Income shares for food and medical and health care rose as the age of the head increased, while shares allocated to furnishing and equipment, clothing, smoking and alcoholic beverages, travel and transportation, recreation and education decreased. From 1969 to 1974 spending units in all classes recorded an increase in nominal income after taxes of 55 percent and in total current consumption of 48 percent. The proportion of income attributed to essential goods and services such as food, shelter and clothing decreased while that allocated to furnishing and equipment, recreation and miscellaneous expenses increased. The classification of families in the first and second income brackets, the regular tenants and families whose head was less than 25 and 25 to 44, spent more on essential goods and services and less on luxury type items.

16
King, A.J.,
"Stress, Cigarette Smoking, and Snack Behavior in Adolescent Males",
Canadian Journal of Public Health, vol.62, No. 4.
(July/August 1971) p.297-301.

This study was intended to test the relationships between stress, cigarette smoking, and snacking behavior in adolescent males. Two schools were represented by thirty smokers and thirty non-smokers, who gave nightly reports on the previous 24 hours period in regard to consumption of food and/or cigarettes. The stress influence was represented by the fact that one school was in the middle of exams. No relationship was found to exist between stress and consumption, but smokers were found to consume more raw fruits and vegetables, and beverages. The author attributed this to "a high oral need" of the smoking population.

target group.

Kollat, D.T.,
"A Decision - Process Approach to Impulse Purchasing", in Haas, R.M.
Science, Technology, and Marketing.
Chicago: American Marketing Association.
(1966), p.626-639.

This study takes a customer oriented approach to grocery impulse purchasing. The basic objectives were to identify the impulse purchasing decision making processes, to determine if customers differ in their susceptibility to impulse purchasing and to identify customer characteristics associated with different purchases. The characteristics of the decision making phases of impulse purchases are presented. Sample size for store interviewing was 596 plus a control group of 196. Some variables that affect unplanned purchases were identified and explanatory hypotheses given.

problem recognition.

Kuehn, A.A.,
"Consumer Brand Choice - A Learning Process?",
Journal of Advertising Research, 2.
(December 1962), p. 10-7

A study of 600 families purchasing orange juice over a three year period. Results indicated brand shares may be predicted from the sequence, rhythm, and frequency of consumer's past purchases.

purchasing processes.

Lamb, C.W. & McNeal, J.V.,
 "Modifying Food Consumption Behavior: A Cultural Problem",
Marquette Business Review,
 (Summer 1977) p. 67-73.

This article reports on a study made to measure difficulties encountered in modifying human behavior in an area where the participants are influenced by their culture. It attempts to determine whether the attitudes of young people concerning fish as a menu item can be influenced by presenting them with favorable information. Standard experimental procedure was followed, using an experimental group and a control group. Attitudes towards eating the fish were measured by questionnaire before and after favorable information was presented. The questionnaire used a seven point semantic differential scale for measuring the intensity of the attitude. The results of the study: despite the intensive efforts made to improve the attitudes of the participants towards eating the fish, very little was accomplished; in fact, in many areas negative results were realized. The outcome reinforces previous findings which show the many problems encountered when an attempt is made to modify human behavior which is based on cultural bias.

cultural group.

Lambert, Verona. E., Schwab, Lois, O.,
 "Can We Change Our Food Habits?",
Journal of Home Economics - U.S.A.,
 (March 1977).

Most work in the field of nutrition presupposes that it is possible for people to change their food habits. The technique which is used in this survey was the use of pledge cards. This required a commitment on the part of the individual to improve their diet. The pledge cards were distributed after a strong community nutrition program which lasted one week. The participants were of any age group from a town populated at 14,500. From this number a sample of 992 was chosen. The survey was conducted by telephone one week after the nutrition information program was conducted. It was also carried out after an additional period of three months. In the first pledge week, 67% adhered 90-100% of the time. After a period of three months 59% still adhered 51-100% of the time. Of the sample, 51% adapted new habits, 46% eliminated old habits, and 3% did both. For the nutrition counsellor, this has important implications by indicating that there is a greater motivation towards change when a pledge has been taken towards achieving a final goal.

behavior patterns.

18

Lessig, V. Parker,
"Consumer Store Images and Store Loyalties",
Journal of Marketing, 38.
(October 1973), p. 72-74.

Data obtained from a panel of 91 Berkeley, California, households indicate that consumer's behavior towards a given store is greatly influenced by their images of alternative retail outlets. The items studied were grocery purchases.

purchasing processes.

MacKay, David B.,
"A Microanalytic Approach to Store Location Analysis",
Journal of Marketing Research, 9.
(May 1972), p. 134-140.

302 Chicago residents were studied and the results indicate that, on the average, 2.7 stops are made on shopping trips that include stops at supermarkets.

purchasing processes.

MacKay, David B.,
"A Spectral Analysis of the Frequency of Grocery Store Visits",
Journal of Marketing Research, 10.
(February 1973), p. 84-90.

The author studied 118 Indiana families and found that most demographic variables are not significantly related to the average number of shopping trips made by families. The study dealt with trips to supermarkets.

purchasing processes.

McClinton, P.,
"An Evaluation of Food Habits and Nutrient Intakes in Canada: Design of Effective Food Guides",
Canadian Journal of Public Health, vol. 62. No. 1.
(January - February 1971), p.139-146.

This study examines the degree to which Canadians adhere to the Food Guide. Provincial food records were used to construct a sample of 4,529 people and calculate each person's intake of nutrients. The best nutritional status was found in children under 9 years of age, and in adults between 20 and 60, but even then only 50% had satisfactory nutrient intakes. Even those whose intake was adequate did not have a consistent pattern of food use - they exhibited the tendency to compensate in other food groups when one group is consumed less than the recommended intake.

family food habits.

19
McLaughlin, Daniel J. Jr. Reilly, Paul J.,
"Retail Experiments in Frozen Food Merchandising",
Quick Frozen Foods,
(August 1973), p. 34-36.

This study was conducted in four independent supermarkets in the middle and upper income suburbs of Philadelphia, Pennsylvania. The results indicate that point-of-purchase promotions are more effective for new products and very slow moving items. Tie-in promotions appear to be more effective for national brands.

purchasing processes.

Monroe, Kent B., Gultinan, Joseph P.,
"A Path-Analytic Exploration of Retail Patronage Influences",
Journal of Consumer Research, 2 .
(June 1975), p. 19-28.

The authors analysed subject's feelings about the relative importance of attributes of grocery stores. Results indicate that store perceptions precede specific buyer planning and budgeting strategies. It is noted that general beliefs about the benefits of store specials, brand names, and other shopping variables influence the specific shopping variables sought.

purchasing processes.

Neuhaus, Colin F., Taylor, James R.,
"Variables Affecting Sales of Family-Branded Products",
Journal of Marketing Research, 9.
(November 1972), p. 419-422.

The authors, through a study of 90 homemakers in Ann Arbor, Michigan, conclude that shelf arrangement does influence the family branding effect. Homemakers report that decision making is simplified when product labels are available in product grouping. Homemakers appear to easily overcome any brand loyalty in order to take advantage of a bargain price. The products studied were canned vegetables, cake mix, canned fruits, frozen vegetables, soups and gelatin.

purchasing processes.

Petrof, J.V.,
 "Attitudes of the Urban Poor Towards Their Neighbourhood Supermarkets",
Journal of Retailing, 47 .
 (Spring 1971), p. 3-17, 90.

The author interviewed 964 poor adults in Atlanta, Georgia. The results indicate that supermarkets operating in disadvantaged areas do not enjoy the confidence of their customers and many of them shop outside their local neighbourhood. There also appears to be significant differences in attitude between white and non-white groups.

low income groups and cultural differences.

Phillips, Doris E., MaryAnn Bass, and Yetley, Elizabeth.
 "Use of Food and Nutrition Knowledge by Mothers of Preschool Children",
Journal of Nutrition Education, vol. 10, 2.
 (April-June 1978) p.73.

Thirty upper middle class mothers and their preschool children were interviewed to study the effect that food and nutrition knowledge of the mothers had on the use of pre-sweetened cereals. The sample was divided into subgroups of families with children older than the preschooler age group and families with no older children. In the first group, the mother's food and nutrition knowledge was positively associated with behavior regarding the use of pre-sweetened cereals. In the second group where the children were the oldest in the family, the mother's food and nutrition knowledge was not related to their cereal purchasing behavior. The food and nutrition knowledge test scores for both groups were similar. However, other factors appear to influence how the mothers from these two groups will apply this knowledge.

family food habits.

Prasad, V. Kanti,
 "Correlates of Multistore Food Shopping",
Journal of Retailing, 48 (No. 2,) (1972), p. 74-81.

It was found that families with higher food budgets generally tend to spread their food purchases among stores to a greater extent than do others in this study of 335 Michigan shoppers. Younger families tend to exhibit multistore food shopping less than others.

family food habits.

81

Prasad, V. Kanti,
"Store Perception Factors and Multi-Store Food Shopping",
The Southern Journal of Business,
(November 1972), p. 73-78.

The results of the author's analysis of 254 questionnaires indicate that store proximity is not a factor influencing multi-store shopping behavior. Prices and quality, however, do appear to motivate multi-store shopping.

purchasing processes.

"Consumer Behavior in the Supermarket",
Progressive Grocer,
(October 1975), p. 36-39.

This study of the criteria for supermarket choice involved following 800 customers and then interviewing them. Cleanliness and clear pricing were first and second most important, respectively.

purchasing processes.

"How the Basics of Special Displays Affect Sales and Profits",
Progressive Grocer,
(January 1971), p. 36-37.

This report is based on a five-month study of a panel of test supermarkets in the U.S.A. It was found that display help shape store image, pull traffic through the store, stimulate related item sales, launch new products, and make loss leader items profitable.

purchasing processes.

Ross, Ivan,
"Perceived Risk and Consumer Behavior - A Critical Review",
Advances in Consumer Research, vol. 2.
University of Illinois (1975)

Perceived risk was studied in this survey to determine consumer behavior with regard to new products. A coupon for a salt substitute was distributed among 100 elderly households (average age was 74). All households were sent the coupon at a value of 30 cents. The salt substitute was regularly priced at 59 cents. After 2 weeks, 17% had redeemed the household coded coupon. The female member of the household was interviewed about the coupon use. Generally, taste risk and health risks were measured in order to obtain a ranking of various risks and their interplay on consumer choice and motivation.

purchasing processes.

82

Russo, J. Edward, Krieser, Gene, Miyashita, Sally,
"An Effective Display of Unit Price Information",
Journal of Marketing, 39.
(April 1975), p. 11-19.

This 5 week survey of consumer buying patterns in a large chain of supermarkets in California illustrates that consumers of expensive national brands are not induced to switch to cheaper brands by unit pricing. However, consumers of more expensive local brands do switch to cheaper local brands when unit pricing is used. The products tested were dishwashing liquid, dog food and facial tissues.

unit pricing.

Saegart, J, et al.,
"Fad Food Use Among Anglo- and Mexican Americans;,
Advances in Consumer Research, vol 5.
(Ann Arbor; Association for Consumer Research, 1978), p.730-733.

To home economists, consumption of fad foods is a behavior inconsistent with nutrition research data. The dynamics of belief in food fad benefits have not been satisfactorily explained by demographic or psychographic studies. The present study compared fad food use in two American ethnic groups (Mexican and Anglo American). Suggestions for interdisciplinary cooperation in the study of food faddism are discussed.

culture groups.

Schafer, R.B.,
"Factors Affecting the Food Behavior and the Quality of Husband's and Wife's Diets.",
Journal of the American Dietetic Association,
(February 1978) p.138.

The purpose of this study was to determine how personal and socio-cultural factors affect dietary quality. These influences can be the symbolic meaning attached to food, economic factors, other family members, advertising, personal needs, and family life cycle stage. Previous research has indicated that the wife is the decision maker concerning food purchases and menus. It was the contention of this study that the husband had great influence over these decisions made by the wife. Influences explored were intrinsic; being personal preferences, internal influence of family members, and external influences such as groups, media, and educational influence. The studied respondents were married couples with one child under 18 years of age, with the wife under 36 years of age. The respondents were selected by random sample, based on population concentration, using 116 couples (232 people). The Christensen dietary history was used asking the respondent to estimate the frequency on a daily, weekly, monthly, or yearly basis of 67 various food items. The diets of husbands and wives were evaluated for nutrient levels

and the influence of various sources upon selection of food. Also value judgements with respect to food were made as to the importance of cost, nutrition, taste, health, and appearance.

Family food habits.

Schutz, H.G., Moore, S.M., Rucker, M.H..
 "Predicting Food Purchase and Use By Multivariate Analysis",
Food Technology, 31. 8:85
 (1977)

The study described uses of derived scores of consumer attitudes towards foods, the preparation of food, and the appropriateness of food items in different situations to predict food purchase and use. A positive correlation is usually expected between the variables of education and income. In this study, a higher education did not correlate with better food knowledge or more nutritious food behavior. There was, however, a positive association between income and food knowledge. It is noted that the questionnaire asked for the mother's education and the family's income. A negative relationship between "conformity in children" and food knowledge may be an indicator that mothers who are forcing their children to eat "good food" may not, in fact, know what foods are actually good. Women who purchase food products more often than the norm have a larger number of children, a higher income, prepare larger meals, are permissive towards their children, believe in snacking, are conscious of nutrition, and are aware of their feelings about the appropriate use of foods. The influence of advertising was indicated by the results that women with a large number of children were more likely to buy national brands, rather than less expensive store brands. Women who found it to be impossible to be creative in cooking use more semi-prepared foods.

Nutritional Knowledge.

Scott, Richard A.,
 "Consumer Selection of Retail Food Stores.".,
The Southern Journal of Business.
 (July 1968), p.236-244.

The author studied consumer's attitudes and shopping behavior towards the purchase of various foodstuffs from different food retailing organizations. The results indicate that the upper-middle and upper social classes are more attracted to local chains; lower-middle and lower social classes are more attracted to the discount national chain or regional chain organizations.

purchasing processes.

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Seggev, Eli.,
"Brand Assortment and Consumer Brand Choice",
Journal of Marketing, 34
(October 1970), p.18-24.

The data base for this study consisted of records maintained by the Chicago Tribune consumer panel for 1960-1961 in nine product categories. The author notes that the typical modern consumer shops at more than one store for these products. The results indicate that there are several types of brand-choice strategies. Products studied were toilet soap, frozen vegetables, margarine, cleaning tissues, frozen dinners, cooking oils, floor wax, fish sticks, and shortening.

purchasing processes.

Sexton, D.E.,
"Differences in Food Shopping Habits by Area of Residence,
Race and Income",
Journal of Retailing,
(Spring 1974), p.37-48.

The author examined Chicago Tribune panel data for 22 products. The results show that lower-income families make more shopping trips per week than higher-income families. Blacks in ghettos and suburban whites exhibit a higher tendency to shop in chain stores than do other city residents. Area of residence, race, and income do not result in systematic differences in preferences for national or private brands.

purchasing processes.

Sherif, & Sherif.,
"The Psychology of Food Faddism".,
Journal of the American Dietetic Association.
(February 1975).

Food behavior is a result of the mutual influence of environment, personal, and biological factors. The external influences consist of friends, other family members, advertising, television, and education. Internal influence originates within the individual through their attitude towards food, self concept, personal values, beliefs, sociogenic and biogenic needs. External and internal information is processed and interpreted by the individual in some patterned or structured way that is unique to itself. All individuals have a need for acceptance, security, health and power. These factors determine how the person processes external factors concerning food and predisposes him towards a diet which he perceives will meet his needs. The difficulty in dietary change is found in the patterning needs of the individual which causes that person to desire a stabilizing experience in his life. An individual develops stable patterns in his

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environment which he can consistently relate himself to. Any disruption of this stability is tension producing and leads to efforts to restore stability in the form of some definable pattern or relationship. Another difficulty in changing food habits is the definition which a person associates with food. For example, to many males, meat and eating of meat signifies masculinity. If you remove the meat from the diet, you threaten the individual's self concept who depends on this definition for security.

family food habits.

Stafford, James E.,
"Effects of Group Influences on Consumer Brand Preferences",
Journal of Marketing Research, 3,
(February 1966), p.68-74.

Interviews with 10 informal groups of housewives in Austin, Texas indicate that consumers are influenced by informal social groups. The extent and degree of brand loyalty behavior within a group is more closely related to the informal group leader than to the cohesiveness of the group. The product evaluated was white, sliced bread.

purchasing processes.

Steinberg, S.A. & Yalch, R.F.,
"When Eating Begets Buying: The Effects of Food Samples on Obese and Non-Obese Shoppers.",
Journal of Consumer Research, vol. 4. No. 4.
(March 1978) p.243-246.

Direct observation of the free food sample distribution in a supermarket demonstrated that consuming the sample differently affected the purchase of obese and non-obese shoppers. The results are explained using recent research investigating behavioral differences between overweight and normal weight individuals.

obese food habits.

86

Szybillo, G.J. & Sosanie, A.,
"Family Decision Making: Husband, Wife and Children.",
Advances in Consumer Research, vol. 4.
Atlanta Association for Consumer Research.
(1976), p.46-49.

In this study the author examined the decision making process of families in relation to two variables, dining at a fast food restaurant, and going on a family trip. Participation in decision making was then looked at for several steps of the decision making process, such as; type of service, when and where to go. According to the results, child participation with parents dominated across all categories except "how much to spend?", which was determined on a majority, by the parents alone. As a result of these tests, the author believes that there is a need to incorporate the influence of children on family decision making.

family food habits.

Thompson, Bryan,
"An Analysis of Supermarket Shopping Habits in Worcester, Massachusetts",
Journal of Retailing, 43
(Fall 1967), p. 17-29.

Interviews of 144 Worcester, Mass., shoppers were conducted. The results indicate that small grocery stores function mainly as outlets for incidental food items. Supermarkets can be treated more or less as isolated units as far as large purchase shopping is concerned; the advantage of combining trips at a shopping plaza appears to have little influence on where groceries are purchased. The important issue for shoppers does not appear to be which market is closest but rather the quality of the markets within reasonable distance from home.

purchasing processes.

Tigert, Donald J.; Ma, Sylvia, Cotter, Terry W.,
"Mom Always Liked Ralph Best: The Strategic Crisis for Safeway in California",
Marketing News, 10
(January 28, 1977), p. 1, 7, 19.

The authors interviewed 1,500 Los Angeles housewives by telephone and note that a supermarket must keep consumers in its own trade area satisfied and must draw trade from outside if it is to prosper. The study also "raises serious questions about multivariate statistical techniques, particularly in attitude research". The results also indicate that consumers will tolerate prices at their favorite stores which are as much as 2% higher than competing stores.

purchasing processes.

87

Tucker, W.T.,
"The Development of Brand Loyalty",
Journal of Marketing Research, 1.
(August 1964), p. 32-35.

The author used 42 housewives in a controlled experiment. He concludes that some consumers will become brand loyal even when there is no discriminable difference between brands other than the brand itself. The product used in this experiment was loaves of bread.

purchasing processes.

Whipple, Mas, W., Neidell, Lester A.,
"Black and White Perceptions of Competing Stores",
Journal of Retailing, 47,
(Winter 1971), p.5-20.

58 households (28 of which were black) in the city of Buffalo, N.Y., were studied leading to the conclusion that store image differences are more a function of social class than of race. It was also noted that stores that are the most highly regarded by consumers are not necessarily the same ones they shop in most often.

store selection.

Wilkes., R.E.,
"Consumer Usage of Base Price Information",
Journal of Research, 48,
(Winter 1972-1973), p.72-85.

A survey of 151 shoppers regarding their use and awareness of base pricing. Two broad conclusions implied from this study are:
1) consumers are largely unaware of the meaning of base pricing;
2) consumers rarely exercise their option to request base price information even when they are familiar with base pricing.

information search.

Webster, Frederick E. Jr.,
"The Deal Prone Consumer",
Journal of Marketing Research, 2,
(May 1965), p.186-189.

The author studied 366 families from a major U.S. metropolitan area. The results indicate that deal proneness tends to increase with age. Also, deal proneness is negatively correlated with amount purchased. Further, deal prone consumers tend to buy more brands and devote a smaller share of their total purchases to a single, favoured brand. High deal prone consumers switch brands more often.

purchasing processes.

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Weimer, J. & Stevens, P.,
"Consumer's Preferences, Uses and Buying Practices for Selected
Vegetables; A Nationwide Survey;
Marketing Research Report, No. 1019; Economic Research Service;
U.S.D.A.; (1973).

This study looked at the buying practices for, and perceived attributes of, selected vegetables. The random sample included both urban and rural areas, and respondents were those who usually decided food purchases. Vegetables were rated as the second most important foodstuff after meats. The most important factor in determining frequency of use was found to be taste. Finally, fresh produce was rated against canned and frozen goods. Overall, fresh scored consistently higher, with taste, nutrition and appearance being principle reasons given for preference. Canned and frozen were rated highest for price and convenience considerations.

Worchel, S., Lee, J., and Adewole A.,
"Effects of Supply and Demand on Ratings of Object Value",
Journal of Personality and Social Psychology, vol. 32 no. 5.
(1975), p. 906-914.

The purpose was to study the value and attractiveness of cookies that are in abundant or short supply. One hundred and forty-six female university students rated liking, attraction, cost, and taste of cookies under varying conditions of supply and participation. Scarcity of cookies had a value enhancing effect, possibly because it arouses reactance as the individual sees his freedom to have the item, is decreased. (Brehm, 1966 and Worchel, 1974). The results also extend commodity theory (Beock, 1968), i.e. "any commodity will be valued to the extent that it is unavailable". Cookies in short supply were rated more valuable than cookies not in short supply. Cookies are rated more valuable when supply changes from abundant to scarce than when constantly scarce. Cookies scarce because of high demand were rated higher than cookies scarce because of accident.

behavior patterns.

Research Methodologies:

This section deals with different research methods and procedures and their relative merits in food behavior studies. While this is by no means a comprehensive list of methodologies that may be applied, it at least provides a background to research approaches that have been applied to the study of consumer behavior with respect to food.

For convenience of reference, the readings have been key worded under 5 headings: situation analysis, supermarket shopping, model building, and survey research and bias problems.

Situation Analysis:

A new and somewhat unexplored area of research into human motivation can be found in situation analysis. The hypothesis underlying this technique is that a behavior is the result of an interaction between an individual, a stimulus object, and a given situation.

A person is characterized by observable features (e.g. age, height, sex) and unobservable features (e.g. personality, skills, intellect). Similarly, the stimulus object has directly perceived characteristics (e.g. colour, size, materials, texture). Any added significance attributed to the object, beyond its physical traits, derives from an interaction with the individual and the situation. The situation can be described as all factors particular to a time and place of observation which do not follow from a knowledge of personal (i.e. intra-individual) and stimulus (i.e. choice alternative) attributes.

A typical study would commence with a collection of demographic and personality data; the respondents would then be asked to assess the range of products (Belk 1975 A) or emotions (Pleasure, Arousal, Dominance - - From, Mehrabian, A. & Russell, J.A.; An Approach to Environmental Psychology: Cambridge: MIT Press; 1974) in relation to each of a series of questions on situations. The number of situations is then reduced to separate clusters (i.e. groups of similar situations in terms of response evoked) for ease of calculation. This is followed by a three mode factor analysis (essentially an examination of different planes in a three-dimensional matrix composed of the individuals, situations, and stimuli) which can describe interrelationships as vectors (with weights and direction). This method can provide classification of types of situations, as well as distinguishing kinds of individuals for whom elicited behaviors show different patterns over the set of situations.

Studies with situational variables (Belk 1975 A) have shown that regardless of the antecedent conditions, be they positive (e.g. having a nice chat and you don't want to cook), or negative (e.g. too tired to cook), a common situation cluster (e.g. relaxation seeking) for similar person factors leads to similar choice behavior. This finding was backed by Miller (1974) who found that situational variables were better predictors of consumer choice than traditional attribute models of consumer behavior. Sandell (1968) also found choice to be highly dependent on the choice situation.

There is not yet any rigorous rule for the selection of relevant situations. Belk (1975A) initially felt the situation should be as objectively described as possible as to represent a universal perception.

He then broadened the definition (Belk 1975 B) to physical and social surroundings, as well as including a temporal perspective.

The subject of several studies has been the processes by which situations affect behaviour. Park (1976) saw situations affecting behaviour through the judgemental models employed by consumers. Lutz (1975), on the other hand saw the basic emotions-- pleasure, arousal, dominance-- as the mediating influence between situations and behaviour. Rositer (1976) examined the difference between visual and verbal memory, and showed how different behaviours can result depending on which type of memory is situationally retrieved.

Readings:

Barker (1975)
 Belk (1974)
 _____ (1975 A)
 _____ (1975 B)
 _____ (1975 C)
 _____ (1976)
 Bonfield (1974)
 Kakkar (1975)
 Lutz (1975)
 Miller (1975)
 Park (1976)
 Rositer (1976)
 Sandell (1968)

Model Building:

The "model building" references demonstrate the use of mathematical models to predict consumer behaviour. The attribute models are, by far, the most commonly used in behaviour studies. They involve examination of perceived characteristics and the drawing of inferences for behaviour from them (Cottrell 1973). The technique has also been used for expressing large numbers of characteristic variables-- the multi-attribute model (Woodside 1974 B).

Other mathematical techniques employed in the literature surveyed were; a communication process model (Aaker 1974); use of the newell, Shaw, and Simon postulates (Bettman 1970); and judgemental rule models for consumers (Park 1976 A, 1976 B, 1975).

Readings:

Aaker (1974)	Miller (1975)
Bass (1972)	Park (1975)
Bettman (1970)	_____ (1976 A)
Cottrell (1973)	_____ (1976 B)
Doyle (1975)	Stanley (1976)
Lewison (1977)	Woodside (1974)

Survey Research:

There were four studies which employed food in tests of the merits of different forms of questionnaires; telephone surveys (Day 1974); mail surveys (Day 1974; Peterson 1975); in-store interviewing (Woodside 1973 A); and the "drop-off and pick-up" questionnaire (Loverock 1976). The paucity of work on data collection methods for food behaviour studies doesn't, however, necessarily imply a great void in research-- the cognitive differences between food and another good, which may cause different patterns of consumption, or a different demand function, do not extend to data collection. As a result, researchers who are interested in sampling problems and techniques, are directed to the special survey research issue of the Journal of Marketing (vol.14, no.3, August 1977).

Readings:

Day (1974)
Loverock (1976)
Peterson (1975)
Woodside (1973 A)

Bias Problems:

Bias occurs when the "true" value of a statistic is distorted through some flaw in the process of obtaining it. The presence of bias in the data can cause results to lose their significance in a way that may lead to incorrect conclusions. It is for this reason that much stress is placed on pretesting (Farley 1974), retesting, and control groups (Jacoby 1978).

One form of bias is sensitization, where the respondents are "tipped off" as to the purpose of a study-- they then tend to provide what they feel to be correct answers rather than the desired undirected response. This problem, however, is reduced if data collection is spread over a period of several months (Day 1974; Ring 1974).

Another common form of bias is the non-response bias, whereby a low response rate to a questionnaire results in a sample which is not random as originally planned. For example, Day (1974) found that better-educated housewives tend to be overrepresented in self-selected panels; and that "price-conscious" respondents are overrepresented if the participation incentive (e.g. money, gifts) is too large. Peterson (1975) found the response bias to be greatest for mail panels, while Loverock (1976) found that the smallest response bias occurs for the "drop-off and pick-up" questionnaire.

In sensory testing, Martin (1973) found biases resulting from lack of motivation, and from the order of presentation of foodstuffs.

The former may be remedied by employing some social group or organization for a nominal per person fee donated to charity; and the latter by increasing the time between sensory tests.

A final form of bias mentioned in the literature (Rositer 1976) is a measurement bias which occurs because verbal memory is better recalled than visual memory.

Readings:

Day (1974)
 Farley (1974)
 Jacoby (1978)
 Loverock (1976)

Martin (1973)
 Peterson (1975)
 Ring (1974)
 Rositer (1976)

Supermarket Shopping:

The inclusion of this "supermarket shopping" segment in the research methodologies may not satisfy a rigorous definition of "methodologies in that it is an environment rather than a methodology which is being researched. However, an analysis of observed patterns and types of activity in supermarkets may yield information which could better relate consumer food behaviour to shopping environment, in such a way as to shed light on the role of situational environments on behaviour. With the predominance of the supermarket as a supplier of food in our society, any relationship between the physical aspects of a supermarket and consumer food purchasing and/or consumption behaviour is bound to be an important consideration in any future decisions on food system research directions. Grossbart (1975) mentions this point in stating that there is a need for a determination of the relationship between consumer perceptions and the macro-shopping environment.

In a study of the reasons for variance in between-store performance, Cottrell (1973) concluded that most of the variance was explained by exogenous factors beyond the control of the local manager. Stanley (1976) defined two of these factors as store image and consumer driving time, as well as stating that store size did not affect patronage. The role of store image is also discussed by Doyle (1975), while Lord (1975) mentions the impact of travel time on supermarket competition. Finally, in researching consumer behaviour toward new products in supermarkets, Montgomery (1975) found private label, cost, category volume, packaging, competition, and newness to be most effective in predicting buyer behaviour.

Readings:

Anderson (1974)
 Cottrell (1973)
 Dixon (1970)
 Doyle (1975)
 Friedman (1977)

Grossbart (1975)
 Lord (1975)
 Montgomery (1975)
 Stanley (1976)

Aaker, D.A., Day, G.S.; "A Dynamic Model of Relationships Among Advertising, Consumer-Awareness, Attitudes and Behaviour"; Journal of Applied Psychology, vol.59, no.3 (June 1974); p. 281-286.

One of the models of the communication process is a hierarchy of effects that postulates a causal flow from cogn change to attitude change to behavioural change. In the study presented in this article, 19 telephone surveys, made at two month intervals to a national probability sample of 1200 households who were users of instant coffee, yielded aggregate measures of brand awareness, attitudes toward brands, and advertising exposure. The hierarchy model of communication effects was found to be only partially correct.

~~explanatory~~ model building

Anderson, E.E.; "The Effectiveness of Retail Price Reductions: A Comparison for Alternative Expressions of Price"; Journal of Marketing Research, vol.11, (August 1974); p. 327-330.

An experimental treatment was applied to two product classes in each of two food stores. Neither the isolated nor the joint effects of price level and price expression seem to have influenced the market share of the lowest price brand of chili. However, there was considerable brand substitution in the case of peas. Also, for peas, the impact of a price reduction may be diminished when the magnitude of the reduction is given in absolute as well as unit terms.

supermarket shopping

Barker, G.R., Wicker, A.W.;
 "Commentaries on Belk Situational
 Variables and Consumer Behaviour";
Journal of Consumer Research, vol.2,
 no.3 (December 1975); p. 165-167.

Barker agrees with Belk that the surroundings of a person ranges from a narrow situation, through behaviour settings to environment. However, he stresses that in addition the temporal and spacial dimensions of the situation should be viewed as dynamic. For Wicker, a better understanding of consumer behaviour through situational variables can only be realized by conceptual, theoretical and methodological advances suggested by this author.

theoretical, situation analysis

Bass, F.M., Talarzyk, W.W.;
 "An Attitude Model for the Study of
 Brand Preference"; Journal of
 Marketing Research, vol.9
 (February 1972); p. 93-96.

The authors found in this study of 2000 females that consumer's beliefs and values for product attributes substantially explain brand preference. Brand preferences for products such as frozen orange juice, mouthwash, and toothpaste, were studied.

~~attribute~~ model building

Belk, R.W.; "An Exploratory Assessment of
 Situational Effects in Buyer Behaviour";
Journal of Marketing Research, vol.11
 (May 1974); p. 156-163.

Circumstances, contexts, or situations are often cited but rarely examined as explanations for unpredicted behaviours. This article reports an exploration of the amounts and patterns of variance in selected purchase decisions as a function of consumption and purchase contexts. Results for the two product categories (meats and snack foods) studied reveal sizeable situational effects.

situation analysis

Belk, R.W.; "The Objective Situation as a Determinant of Consumer Behaviour"; in Schlinger, M.J. (ed.); Advances in Consumer Research, vol.2; (Chicago: Association for Consumer Research; 1975); p. 427-434.

Because the influence of situations is so pervasive, the notion that consumer behaviour depends upon the situation is as easy to embrace as it is difficult to extricate. The development of taxonomies of consumer situations is discussed as one essential step in obtaining an understanding of the role of situations in determining consumer behaviour. A means for developing such taxonomies based on similarities in behaviours elicited by objective situations is proposed and illustrated. Additional issues concerning the relationship between situations and behaviour are outlined, and the relevance of objective characterizations of situations to the study of these issues is discussed.

situation analysis

Belk, R.W.; "Situational Variables and Consumer Behaviour"; Journal of Consumer Research, vol.2, no.3 (December 1975); p. 157-164.

The explicit recognition of situational variables can substantially enhance the ability to explain and understand consumer behavioural acts. The following situation characteristics are offered: physical and social surroundings, temporal perspective, task definition and antecedent states. A review of existing research reveals summary details for several situational inventories: beverages, leisure activities, meat and snack products, fast foods and motion pictures.

situation analysis

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Belk, R.W.; "Situating the Situation:
A Reply to Barker and Wicker"; Journal
of Consumer Research, vol.2, no.3
(December 1975); p. 235-236.

Belk argues that his unit of study conditions is appropriate for a consumer choice. Barker's approach being too wide and Wicker's too narrow. Belk does not believe that behavioural settings should not be part of the situational characteristics, as Barker believes, but agrees with Wicker's place for more theory in developing situational characteristics. Belk then suggests the following research directions: a theory of situations should be developed to define situations, then proceed to a typology of situations and finally identify how properties of situations should be transformed into psychological forces.

theoretical, situation analysis.

Belk, R.W.; "Situational Mediation and
Consumer Behaviour: A Reply"; Journal
of Consumer Research, vol.3, no.3
(December 1976); p. 175-177.

Mediation variables as proposed by Russell and Mehrabian are potentially useful in seeking to understand the influences of consumer situations. However, these mediators offer only partial accounting of situational effects and fail to obviate the need to characterize situations in more objective terms. In consumer research, it makes more sense to use objective situational correlates.

theoretical, situation analysis

Bettman, J.R.; "Information Processing
Models of Consumer Behaviour"; Journal
of Marketing Research, vol.7 (August
1970); p. 370-376.

Using the Newell, Shaw and Simon postulates for an information processing theory of human problem solving, decision net models were constructed for two individual consumers' choices of grocery products. The models were tested against actual data, and the resulting predictions were highly accurate. Five housewives were interviewed over 6-8 weeks.

~~experimental~~ model building

Bonfield, E.H.; "Attitude, Social Influence, Personal Norm and Intention Interactions Related to Brand Purchase Behaviour"; Journal of Marketing Research, vol.11, no.4 (November 1974); p. 379-389.

The hypothesis that influences of attitude, social influences, personal norms and intentions are situation/bound was strongly supported. Consumers (261) who had previously purchased soft drinks were interviewed. Data indicated that the importance of social psychological influences on consumer behaviour varies according to the situation.

situation analysis

Cottrell, J.L.; "An Environmental Model for Performance Measurement in a Chain of Supermarkets"; Journal of Retailing, (Fall 1973); p. 51-63.

The author studied 37 supermarkets randomly selected from a nationally known food chain. Based upon an analysis of independent variables such as store size, neighbourhood, competition and trading area population, Cottrell develops a model and concludes that the majority of between-store variance in performance is attributable to factors beyond the store manager's control.

~~explanatory~~ model building, supermarket shopping

Day, G.S.; "A Description and Evaluation of the Design of the Buyer Behaviour Research Project"; in Howard, J.A. et al.; Consumer Behaviour: Theory and Application; (Boston: Allyn & Bacon; 1974); p. 33-43.

Day analyzes the problems of bias associated with telephone interviews and mail diaries. From his findings the author drew four conclusions: 1) sample recruitment should commence early-- about four weeks prior to the surveys, 2) a minimum eight month time frame for the interviews, 3) more brands should be employed to disguise researcher intent, and 4) avoid initial evaluations of specific brands.

bias problems, ^{survey research} ~~telephone surveys, mail surveys~~

Dixon, D.F., McLaughlin, D.J.;
 "Low income Consumers and the Issue
 of Exploitation: A Study of Chain
 Supermarkets"; Social Science Quarterly,
 (September 1970); p. 320-328.

The author studied the prices of 20 food products in all major chain supermarkets in Philadelphia. The results show that price competition among the major supermarkets is concentrated in outlying areas of the city. The charges of conscious price discrimination are not substantiated. Price differences appear to be related to variations in the competitive environment.

supermarket shopping.

Doyle, P., Fenwick, I.; "How Store Image
 Affects Shopping Habits in Grocery
 Chains"; Journal of Retailing, vol. 50
 (Winter 1974-1975); p. 39-52.

The authors provide a new method for measuring store image called "Individual Difference Scaling". The model provides an effective method of segmenting consumers according to the homogeneity of their perceptions.

~~individual difference scaling~~ *model building*, supermarket shopping.

Farley, J.U., Ring, W.L.; "A Simultaneous
 Equation Regression Test of the Howard-
 Sheth Model"; in Howard, J.A. et al.;
Consumer Behaviour: Theory and Application;
 (Boston: Allyn & Bacon; 1974); p. 207-223.

Data collection should concentrate particularly on measuring the endogenous variables and all exogenous market variables. Even a careful survey that asks all sorts of conventional market research questions fails to provide good measures for some of the variables that are key elements of the model.

Particular attention should be paid to precise definition and measurement of the exogenous marketing variables, as these will yield the key policy implications from the model. A complex structure like that implied by the theory should give a good opportunity to assess the influence of advertising, sampling, etc. When more precise estimates of the systems parameters are available for forecasting, these same control variables will be of paramount importance in evaluating a firm's or government's social marketing activities.

A great deal of attention should be paid to pretesting. Without aggregation, it is virtually impossible to clean up noisy data once they are collected. Careful work on data collection may mean that less data are needed than are now collected in many omnibus market research studies.

bias problems, theoretical

Friedman, M.; "Consumer Use of Informational Aids in Supermarkets"; Journal of Consumer Affairs, vol.11 (1977); p. 78-89.

The behavioural science literature relating to consumer use of informational aids in supermarkets is reviewed. Also examined is the research concerned with more general issues such as information overload. The public policy considerations of these various research findings are drawn and discussed. The paper concludes with a consideration of three proposed measures to facilitate shopping decisions for consumers concerned with economy and nutritional value in food.

theoretical, supermarket shopping.

Grossbart, S.L. et al.; "Environmental Sensitivity and Shopping Behaviour"; Journal of Business Research, (October 1975); p. 282-294.

Little is known about consumer perceptions, attitudes, and behaviours relating to shopping macro-environments, the collective external attributes of the facilities in the same shopping area. The author presents the argument that customers' perceptions of a retail area should partially explain their shopping behaviour. However, better predictions of shopping behaviour could result from taking both personality and perceptions into account than from considering either variable separately.

The study concluded that: 1) while customers form definite perceptions of a large, complex macro-environment, the perceptions vary among individuals; and 2) high sensation seekers are more sensitive to the nature of the environment, and consequently their shopping behaviour is affected to a greater degree.

supermarket shopping.

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Jacoby, J.; "Consumer Research:
A State of the Art Review";
Journal of Marketing, vol.42,
no.2 (April 1978); p. 87-96.

This article provides a review of pitfalls associated with consumer research techniques. Jacoby looks at problems of bias and statistical manipulation of data.

bias problems, theoretical

Kakkar, P., Lutz, R.J.; "Toward a
Taxonomy of Consumption Situations";
in Maze, E.M. (ed.); Combined
Proceedings; (Chicago: American
Marketing Association; 1975); p. 206-210.

Three different approaches (behavioural differential data, Mehrabian and Russell's PAD scale, and situation inventory) were used in an attempt to classify consumption situations. Ten situations involving choice of snack products were presented to 315 undergraduate students. The resultant taxonomic dimensions were compared and found to be relatively independent of each other.

situation analysis.

Lewison, D.M.; Pitts, R.E.,
Willenborg, J.F.; "Trade Area
Attributes, Store Patronage
Behaviour, and Retail Sales --
A Recursive Model"; Working Papers
in Marketing, vol.58 (February 1977);
p. 1-20.

The authors conducted 2,485 interviews with customers of ten mid-western U.S. convenience steak houses. Results indicate that a site's potential to attract both susceptible and generative consumers is, in part, a function of the number of residential and non-residential units within the restaurant's trading area.

~~attribute~~ model building.

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Lord, J.D.; "Locational Shifts in Supermarket Patronage"; Professional Geographer, vol.27 (August 1975); p. 310-314.

The author conducted a survey of 150 customers of a new supermarket in Charlotte, North Carolina and found that the factors of distance and mass are good predictors of the likely impact of a new supermarket on existing store competition. The new store's impact on competing supermarkets is inversely related to the distance of these stores from the new supermarket, and positively related to the sales volume of these stores.

supermarket shopping.

Loverock, C.H. et al.; "An Evaluation of the Effectiveness of Drop-Off Questionnaire Delivery"; Journal of Marketing Research, vol.13 (November 1976); p. 358-364.

The article describes and evaluates the effectiveness of personal delivery and collection of self-administered questionnaires as an alternative to mailing. The method appears most appropriate for lengthy or complex questionnaires requiring high mailing expense and considerable response effort. When delivered by lightly trained survey takers, advantages include; greater response rate, better nonresponse bias control, more control over sample design, and a source of feedback from survey personnel useful to the study of consumer attitude and behaviour.

survey research
~~drop-off questionnaire~~, bias problems.

Lutz, R.J., Kakkar, P.; "The Psychological Situation as a Determinant of Consumer Behaviour"; in Schlinger, M.J. (ed.); Advances in Consumer Research, vol.2; (Chicago: Association for Consumer Research; 1975); p.439-454.

The effects on behaviour of the situation in which that behaviour occurs have long been recognized, but seldom systematically investigated. The present study reviews some of the recent research on situational effects in marketing and suggests possible extensions. Specifically, a theory developed in environmental psychology by Mehrabian and Russell is applied in a partial replication of Belk's recent work in consumer psychology. This new framework relies on three internal state variables-- pleasure, arousal, and dominance--which are conceptualized as mediating the influence of the situation on behaviour. Present results indicate that the Mehrabian-Russell framework may be quite useful in the understanding and classification of consumption-related situations.

Martin, S.L.; "Selection and Training of Sensory Judges"; Food Technology, vol.27, no.11 (November 1973); p. 22-27

The author describes requirements for the selection and training of sensory judges, and examines the problem of bias involved in such testing. He found that a higher degree of motivation among respondents yields better test results with lower bias.

Survey research
sensory testing, bias problems.

Miller, K.E.; "A Situational Multi-Attribute Attitude Model"; in Schlinger, M.J. (ed.); Advances in Consumer Research, vol.2; (Chicago: Association for Consumer Research; 1975); p. 455-463.

Several researchers have discussed the promise of inclusion of situational variables in consumer research. Wicker states that measurement of attitude and behaviour should be carried out under similar situational conditions. This research investigates the variability of attitude scores when measured for different situations and the resultant efficacy in the prediction of consumer preference and choice.

The situational multi-attribute attitude model is utilized to predict situational preference and situational choice for each individual in the mail panel. For these same individuals the nonsituational (traditional) model is used to predict nonsituational (overall) preference and nonsituational choice.

The results from these sets of analyses are contrasted. The situational multi-attribute model, when used to predict situational choice, outperforms the traditional model, when used to predict overall choice. The success of the situational multi-attribute model is necessarily product specific, in this case the fast-food hamburger market in Columbus, Ohio. However, the success of the situational variables in improving prediction of brand choice for a specific product category certainly improves the promise of inclusion of these variables in consumer behaviour.

situation analysis, ~~attribute~~ model *building*

Montgomery, D.B.; "New Product Distribution:
An Analysis of Supermarket Buyer Decisions";
Journal of Marketing Research, vol.12
(August 1975); p. 255-264.

One hundred and twenty-four new grocery products were presented to three supermarket buyers. The following variables were found to be the most significant in predicting buyer behaviour: private label, cost, category volume, packaging, competition, newness.

supermarket shopping.

Park, C.W., Schaninger, C.M.; "The
Identification of Consumer Judgemental
Combination Rules: Statistical
Prediction vs. Structures Protocol";
in Anderson, B.B. (ed.); Advances in
Consumer Research, vol.3; (Atlanta:
Association for Consumer Research; 1976);
p. 184-190.

This article presents two approaches to the identification of consumer judgemental information processing rules; the statistical prediction method, and the modified structural protocol method. Both methods were used in a laboratory experiment, 284 junior and senior undergraduate students, involving various product classes: hamburger, cars, toothpaste, stereo cassette decks, paint, suntan oil and tires. A significant degree of consistency between the two methods was found.

~~explanatory~~ model building.

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Park, C.W., Sheth, J.N.; "Impact of Prior Familiarity and Cognitive Complexity on Information Processing Rules"; Communication Research, vol.2. no.3 (July 1975); p. 260-265.

This article presents an experimental study whose purpose was to test the hypothesis that the use of a specific judgemental rule in evaluating alternatives is a function of prior familiarity with the brand, and of cognitive complexity. The study used 294 respondents and concerned various products, one of which was hamburger.

~~explanatory~~ model building

Park, C.W.; "The Effect of Individual and Situation-Related Factors on Consumer Selection of Judgemental Models"; Journal of Marketing Research, vol.13 (May 1976); p. 144-151.

The study reported in this article tests the hypothesis that the consumer's use of a specific judgemental model in evaluating a product is a function of prior familiarity and product complexity. The subjects were 74 undergraduate students on seven products including one food stuff- hamburgers. The results show that the two factors influence the selection of judgemental models.

~~explanatory~~ model building, situation analysis

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Peterson, R.A.; "An Experimental Investigation of Mail-Survey Responses"; Journal of Business Research; (July 1975); p. 199-210.

Mail surveys are used in large part because of their low cost and ease of administration. The major disadvantage, low response rates, may result in imprecise data and the possibility of a non-representative bias. This study investigates the effect of selected response-inducement techniques on a general consumer survey sample of 3,840 mailed questionnaires. A five-part questionnaire was used, and five techniques were tested: 1) Source of the questionnaire (university vs. business letterhead), 2) Use of a stamped vs. a metered outgoing envelope, 3) Use of a stamped vs. business reply return envelope, 4) Use of a follow-up postcard, and 5) Typing in the respondents name vs. use of a label. Highest response rates resulted from the use of: 1) a university source, 2) a stamped outgoing envelope, 3) a stamped return envelope, 4) a follow-up postcard, and 5) an address label. Source was the dominant factor, accounting for 61.4% of the explained variance.

~~Sampling~~
mail surveys, bias problems.
survey research

Ring, W.L.; "Some Measurement Effects in Purchase Panel Data From the Test Market"; in Howard, J.A. et al.; Consumer Behaviour: Theory and Application; (Boston: Allyn & Bacon; 1974); p.44-62.

This study examines the problem of bias arising from respondents being "tipped-off" as to the purpose of a questionnaire. It was found that this bias loses its significance if data collection is spread over a period of over a month.

bias problems.

Rossiter, J.R.; "Visual and Verbal
Memory in Children's Product Information
Utilization"; in Anderson, B.B. (ed.);
Advances in Consumer Research, vol.3;
(Atlanta: Association for Consumer Research;
1976); p. 523-527.

The present experiment confirmed the rich data base in children's visual memory for cereal brands, demonstrated that visual information differs from verbal information and that children's choices may differ depending on which of the two types of information is situationally retrieved, and pointed out measurement biases favouring verbal memory in contemporary consumer research.

bias problem, situation analysis.

Sandell, R.G.; "Effects of Attitudinal and Situational Factors on Reported Choice Behaviour"; Journal of Marketing Research, vol.5 (November 1968); p. 405-408.

Choice behaviour was studied as a function of choice situation. Ten ratings in the choice of a drink were obtained from 31 subjects in seven situations. According to the author, the meaning of the results is clear: a person's choice is highly dependent on the situation. The attitude concept should be redefined and choice behaviour studied as the function of the choice situation.

situation analysis.

Stanley, T.J., Sewell, M.A.; "Image Inputs to a Probabilistic Model: Predicting Retail Potential"; Journal of Marketing, vol.40 (July 1976); p. 48-53.

The authors studied 93 housewives and seven supermarket chains. They note that store size is not a significant factor in estimating store patronage. Both driving time and store image contribute significantly and inversely to store patronage. The addition of an image measure to the Huff (1962) model significantly increases the model's ability to explain variations in retail food store patronage.

building
~~attribute~~ model; supermarket shopping.

Woodside, A.G.; "Patronage Motives and Marketing Strategies"; Journal of Retailing, vol.49 (Spring 1973); p. 35-44.

Fifty Columbia, South Carolina patrons were interviewed immediately after they had made their purchase at a nationally franchised take-out chicken outlet. The author concludes that in-store interviewing can be used to gain worthwhile information on store patronage motives. Radio advertising appears to have been more effective for inducing repeat purchases than for securing new patronage.

in-store interviewing.

Woodside, A.G., Clokey, J.D.; "Multi-Attribute/ Multi-Brand Models"; Journal of Advertising Research, vol.14, no.5 (October 1974); p. 33-40.

The authors' purpose was to 1) define a multi-attribute/multi-brand model and provide a rationale to support it; 2) define various reasonable formulations of the basic multi-attribute/multi-brand model; 3) suggest operational definitions of the constructs used in the models, and 4) define a procedure to analyze the data so as to test the predictive and descriptive efficacy of each of the models. Multiple discriminant analyses were run and the authors found that the multi-attribute/multi-brand attitude models offer more accurate predictions and more complete diagnostic interpretations of brand choice than multi-attribute models.

~~Multi-attribute/multi-brand attitude models~~ model building.