The Daily

Statistics Canada

Thursday, July 2, 2009

Released at 8:30 a.m. Eastern time

Releases

New products	6
Electric power statistics, April 2009	5
Canadian Health Measures Survey: Vitamin D blood plasma concentrations in the population, 2007/2008	2





End of release

Canadian Health Measures Survey: Vitamin D blood plasma concentrations in the population

2007/2008 (preliminary)

This release presents preliminary data on blood plasma levels of vitamin D from the Canadian Health Measures Survey (CHMS), the most comprehensive direct health measures survey undertaken on a national scale in Canada.

Results show the mean concentration of Vitamin D in blood plasma for the Canadian population aged 6 to 79 was 66.9 nanomoles per litre (nmol/L) in 2007/2008. Children aged 6 to 11 had the highest concentration (76.0 nmol/L) followed by older Canadians aged 60 to 79 (73.5 nmol/L).

The national estimates reflect measures from one-half of the CHMS sample (slightly more than 2,600 Canadians aged 6 to 79) that is representative of the national population.

Data were collected across Canada during a one-year period from March 2007 to February 2008, covering all seasons. These are the first national data on the vitamin D status of Canadians available in over 35 years.

Vitamin D is a nutrient that helps the body use calcium and phosphorus to build and maintain strong bones and teeth. The CHMS measures vitamin D levels as part of the assessment of chronic disease risk factors and nutritional status.

The CHMS preliminary national estimates of vitamin D in plasma concentrations, by age and sex, are being released today to provide baseline estimates to researchers and other organizations interested in nutrition.

Normal population reference ranges for plasma vitamin D, and possible health effects, are not well-defined in Canada or the United States. A

comprehensive review jointly funded by the American and Canadian governments is currently underway to review the 1997 Dietary Reference Intakes values for vitamin D.

Note: The CHMS measures plasma 25-hydroxyvitamin D, or 25(OH)D, a circulating metabolite that reflects different forms of vitamin D in our bodies that we get through dietary sources or through skin exposure to sunlight. The release of full CHMS data will begin in January 2010 with information related to this topic such as outdoor activity, sunscreen use, and food consumption of fish and milk. Additional information on nutrition and supplement intake is available from the Canadian Community Health Survey (2004) and comparative American data are available from the National Health and Nutrition Examination Survey.

Nanomoles per litre (nmol/L) is a concentration measure that reflects the number of vitamin D molecules per litre of blood. Because molecules are small, we would have to add multiple zeros to each nmol measure to actually show the concentration of vitamin D molecules per litre of blood.

Definitions, data sources and methods: survey number 5071.

For more information about this preliminary CHMS data release on vitamin D status in the Canadian population, or to enquire about the concepts, methods or data quality of this release, contact Renée Langlois (613-951-0878; renee.langlois@statcan.gc.ca), Statistics Canada, or Media Relations (613-957-2983), Health Canada.

For additional information about vitamin D, see *Vitamin D: Recommendations and Review Status* on the Health Canada website (www.hc-sc.gc.ca/fn-an/nutrition/vitamin/vita-d-eng.php).

Vitamin D (nmol/L): Plasma concentration, by age and sex, household population, Canada, 2007/2008

Age	Number	Me	lean		5th percentile			
		Estimate	Low	High	Estimate	Low	High	
			95% confidence interval			95% confi		
Both sexes		•			•			
6 to 11	435	76.0	67.4	84.6	38.5 ^E	17.0	60.0	
12 to 19	428	64.0	58.9	69.1	26.5	21.6	31.4	
20 to 39	611	63.5	60.5	66.5	29.4	26.3	32.4	
40 to 59	683	66.1	61.1	71.1	28.8	23.0	34.5	
60 to 79	516	73.5	70.8	76.3	33.9	25.8	42.0	
Total 6 to 79	2,673	66.9	63.2	70.7	29.5	24.8	34.2	
Males	·							
6 to 11	223	77.2	72.8	81.6	42.2	35.0	49.4	
12 to 19	225	64.6	58.7	70.5	25.8	20.6	30.9	
20 to 39	260	59.8	56.6	62.9	27.3	24.9	29.6	
40 to 59	310	65.5	59.2	71.8	27.8	22.4	33.1	
60 to 79	259	72.4	68.2	76.6	33.0	28.4	37.6	
Total 6 to 79	1,277	65.7	61.8	69.7	28.9	26.6	31.2	
Females	,							
6 to 11	212	74.9	60.2	89.6	F	F	F	
12 to 19	203	63.4	56.7	70.2	26.5 ^E	16.9	36.1	
20 to 39	351	66.6	63.4	69.8	32.0	24.2	39.8	
40 to 59	373	66.6	62.6	70.6	30.8	25.1	36.4	
60 to 79	257	74.9	72.2	77.5	36.8 ^E	24.6	48.9	
Total 6 to 79	1,396	68.0	64.4	71.6	30.8	23.6	37.9	

Vitamin D (nmol/L): Plasma concentration, by age and sex, household population, Canada, 2007/2008

Age	Number	10th pe	percentile		25th percentile				
		Estimate	Low	High	Estimate	Low	High		
			95% confidence interval					95% confidence interval	
Both sexes		•							
6 to 11	435	45.5	32.2	58.8	61.8	51.1	72.5		
12 to 19	428	32.0	25.3	38.7	43.4	39.7	47.0		
20 to 39	611	35.2	32.0	38.5	45.1	41.5	48.7		
40 to 59	683	36.3	31.1	41.5	47.7	43.7	51.6		
60 to 79	516	42.6	37.8	47.3	55.3	53.1	57.5		
Total 6 to 79	2,673	36.6	32.5	40.8	48.0	43.9	52.1		
Males									
6 to 11	223	53.0	42.5	63.5	65.1	58.7	71.4		
12 to 19	225	32.8	26.7	38.8	43.3	37.3	49.2		
20 to 39	260	32.8	31.1	34.5	42.6	40.4	44.7		
40 to 59	310	36.3	29.9	42.6	47.8	43.1	52.6		
60 to 79	259	41.3	35.0	47.5	55.1	51.7	58.6		
Total 6 to 79	1,277	35.8	32.9	38.7	47.3	43.5	51.2		
Females									
6 to 11	212	41.8 ^E	17.1	66.5	58.4	41.1	75.7		
12 to 19	203	30.8	21.3	40.4	43.4	35.7	51.1		
20 to 39	351	36.7	31.2	42.2	47.5	42.2	52.8		
40 to 59	373	36.5	31.7	41.3	47.3	43.1	51.4		
60 to 79	257	45.0	39.3	50.7	57.0	52.0	62.0		
Total 6 to 79	1,396	37.5	32.3	42.7	49.4	45.2	53.7		

use with caution

use with caution too unreliable to be published

Vitamin D (nmol/L): Plasma concentration, by age and sex, household population, Canada, 2007/2008

Age	Number	50th pe	percentile		75th percentile		
<u> </u>		Estimate	Low	High	Estimate	Low	High
			95% confidence interval			95% confidence interval	
Both sexes		-			-		
6 to 11	435	76.0	70.6	81.5	88.1	82.2	94.0
12 to 19	428	60.4	56.3	64.5	78.9	71.3	86.5
20 to 39	611	61.0	56.0	65.9	78.8	75.0	82.5
40 to 59	683	66.1	59.7	72.5	80.7	73.8	87.7
60 to 79	516	74.0	70.5	77.4	90.9	88.7	93.1
Total 6 to 79	2,673	66.3	61.9	70.6	82.8	79.8	85.8
Males	·						
6 to 11	223	76.8	74.2	79.3	88.1	82.2	94.0
12 to 19	225	63.5	57.2	69.8	80.0	71.1	89.0
20 to 39	260	56.6	52.8	60.4	73.0	69.2	76.8
40 to 59	310	64.9	58.2	71.6	81.1	70.7	91.5
60 to 79	259	71.8	65.5	78.0	90.3	84.9	95.7
Total 6 to 79	1,277	65.1	59.8	70.4	81.9	77.9	86.0
Females	,						
6 to 11	212	72.4	62.0	82.7	88.6	77.2	100.1
12 to 19	203	58.6	53.8	63.3	76.8	67.4	86.3
20 to 39	351	64.3	58.8	69.7	82.6	80.1	85.0
40 to 59	373	67.2	60.4	74.0	80.7	76.6	84.9
60 to 79	257	75.0	72.5	77.5	91.7	89.0	94.3
Total 6 to 79	1,396	67.0	63.1	70.8	83.5	81.3	85.8

Vitamin D (nmol/L): Plasma concentration, by age and sex, household population, Canada, 2007/2008

Age	Number	90th	percentile		95th percentile			
		Estimate	Low	High	Estimate	Low	High	
		95% confidence interval			95% confidence interval			
Both sexes		,						
6 to 11	435	107.8	97.4	118.2	121.0	109.5	132.5	
12 to 19	428	98.3	88.6	108.0	107.7	97.8	117.6	
20 to 39	611	93.8	88.3	99.3	108.3	97.2	119.3	
40 to 59	683	96.8	90.8	102.7	110.9	100.6	121.2	
60 to 79	516	103.0	100.1	105.9	112.3	106.7	118.0	
Total 6 to 79	2,673	98.6	93.9	103.3	111.5	106.4	116.7	
Males	,-							
6 to 11	223	99.8	90.8	108.8	112.2	103.5	120.8	
12 to 19	225	99.3	87.4	111.3	108.5	98.3	118.7	
20 to 39	260	90.5	84.4	96.6	95.5	80.2	110.8	
40 to 59	310	95.8	88.1	103.4	105.2	84.7	125.7	
60 to 79	259	101.7	97.4	106.1	110.7	100.2	121.1	
Total 6 to 79	1,277	95.5	89.7	101.3	106.1	96.8	115.4	
Females	,							
6 to 11	212	114.2	97.4	131.1	123.8	107.3	140.3	
12 to 19	203	97.1	87.2	106.9	107.5	88.2	126.9	
20 to 39	351	100.8	94.4	107.1	118.2	104.9	131.4	
40 to 59	373	98.0	94.4	101.7	111.9	106.1	117.7	
60 to 79	257	108.0	103.5	112.4	112.4	109.6	115.2	
Total 6 to 79	1,396	101.3	97.4	105.3	113.6	108.3	118.8	

4

Electric power statistics April 2009

Data on electric power are now available for April.

Available on CANSIM: tables 127-0002 and 127-0003.

Definitions, data sources and methods: survey number 2151.

For more information, or to enquire about the concepts, methods or data quality of this release, contact the dissemination officer (toll-free 1-866-873-8789; 613-951-9497; energ@statcan.gc.ca), Manufacturing and Energy Division.

New products

Periodical Publishing, 2007
Catalogue number 87F0005X (PDF, free; HTML, free)

All prices are in Canadian dollars and exclude sales tax. Additional shipping charges apply for delivery outside Canada.

Catalogue numbers with an -XWE, -XIB or an -XIE extension are Internet versions; those with -XMB or -XME are microfiche; -XPB or -XPE are paper versions; -XDB or -XDE are electronic versions on diskette; -XCB or -XCE are electronic versions on compact disc; -XVB or -XVE are electronic versions on DVD and -XBB or -XBE a database.

How to order products

To order by phone, please refer to:

The title • The catalogue number • The volume number • The issue number • Your credit card number.

From Canada and the United States, call:

From other countries, call:

To fax your order, call:

For address changes or account inquiries, call:

1-800-267-6677
1-613-951-2800
1-877-287-4369
1-877-591-6963

To order by mail, write to: Statistics Canada, Finance, 6th floor, R.H. Coats Bldg., Ottawa, K1A 0T6. Include a cheque or money order payable to **Receiver General of Canada/Publications**. Canadian customers add 5% GST and applicable PST.

To order by Internet, write to: infostats@statcan.gc.ca or download an electronic version by accessing Statistics Canada's website (www.statcan.gc.ca). From the Our products and services page, under Browse our Internet publications, choose For sale.

Authorized agents and bookstores also carry Statistics Canada's catalogued publications.



Statistics Canada's official release bulletin

Catalogue 11-001-XIE.

Published each working day by the Communications and library Services Division, Statistics Canada, 10G, R.H. Coats Building, 100 Tunney's Pasture Driveway, Ottawa, Ontario K1A 0T6.

To access *The Daily* on the Internet, visit our site at http://www.statcan.gc.ca. To receive *The Daily* each morning by e-mail, send an e-mail message to listproc@statcan.gc.ca. Leave the subject line blank. In the body of the message, type "subscribe daily firstname lastname".

Published by authority of the Minister responsible for Statistics Canada. © Minister of Industry, 2009. All rights reserved. The content of this electronic publication may be reproduced, in whole or in part, and by any means, without further permission from Statistics Canada, subject to the following conditions: that it be done solely for the purposes of private study, research, criticism, review or newspaper summary, and/or for non-commercial purposes; and that Statistics Canada be fully acknowledged as follows: Source (or "Adapted from", if appropriate): Statistics Canada, year of publication, name of product, catalogue number, volume and issue numbers, reference period and page(s). Otherwise, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form, by any means—electronic, mechanical or photocopy—or for any purposes without prior written permission of Licensing Services, Client Services Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.