

## Article

# Body Composition of Canadian Adults 2007 to 2009



January 2010

## How to obtain more information

For information about this product or the wide range of services and data available from Statistics Canada, visit our website at [www.statcan.gc.ca](http://www.statcan.gc.ca), e-mail us at [infostats@statcan.gc.ca](mailto:infostats@statcan.gc.ca), or telephone us, Monday to Friday from 8:30 a.m. to 4:30 p.m., at the following numbers:

### Statistics Canada's National Contact Centre

Toll-free telephone (Canada and United States):

Inquiries line	1-800-263-1136
National telecommunications device for the hearing impaired	1-800-363-7629
Fax line	1-877-287-4369

Local or international calls:

Inquiries line	1-613-951-8116
Fax line	1-613-951-0581

### Depository Services Program

Inquiries line	1-800-635-7943
Fax line	1-800-565-7757

## To access this product

This product, Catalogue no. 82-625-X, is available free in electronic format. To obtain a single issue, visit our website at [www.statcan.gc.ca](http://www.statcan.gc.ca) and browse by "Key resource" > "Publications."

## Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on [www.statcan.gc.ca](http://www.statcan.gc.ca) under "About us" > "The agency" > "Providing services to Canadians."

HTML version published: January 2010.

PDF version published: September 2010.



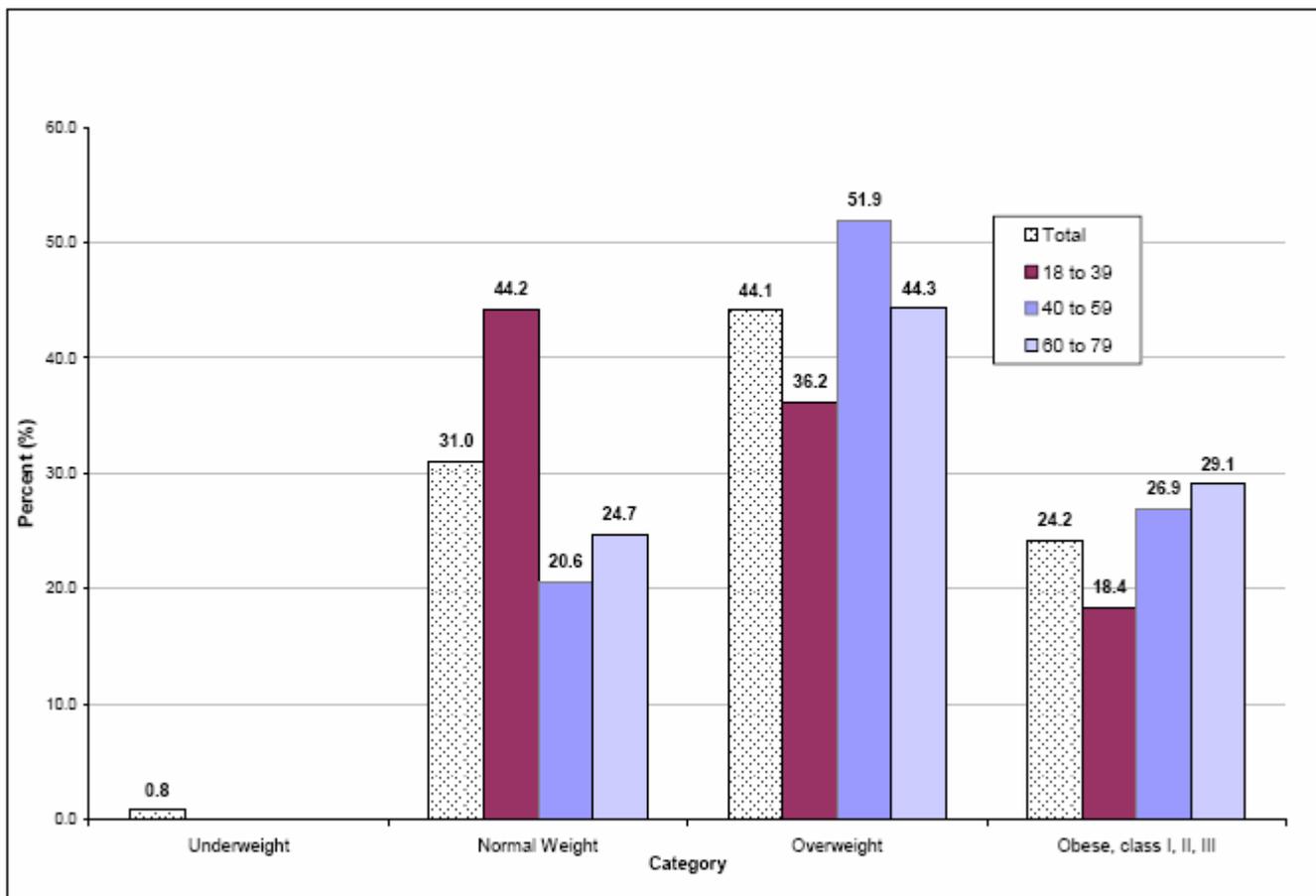
# Canadian Health Measures Survey

## Body composition of Canadian adults 2007 to 2009

Almost 45% of Canadian women aged 18 to 79 had a normal weight for their height as did 31% of men.

Body mass index (BMI) increases with age for both men and women, more so for men than for women. Among men, BMI increases most markedly between those aged 18 to 39 and 40 to 59, while among women, BMI increases across all ages.

**Chart 1**  
Distribution of men aged 18 to 79 among BMI categories



**Note:** Data for the underweight category is only published for the total population as the coefficient of variation was too high for smaller age groups.

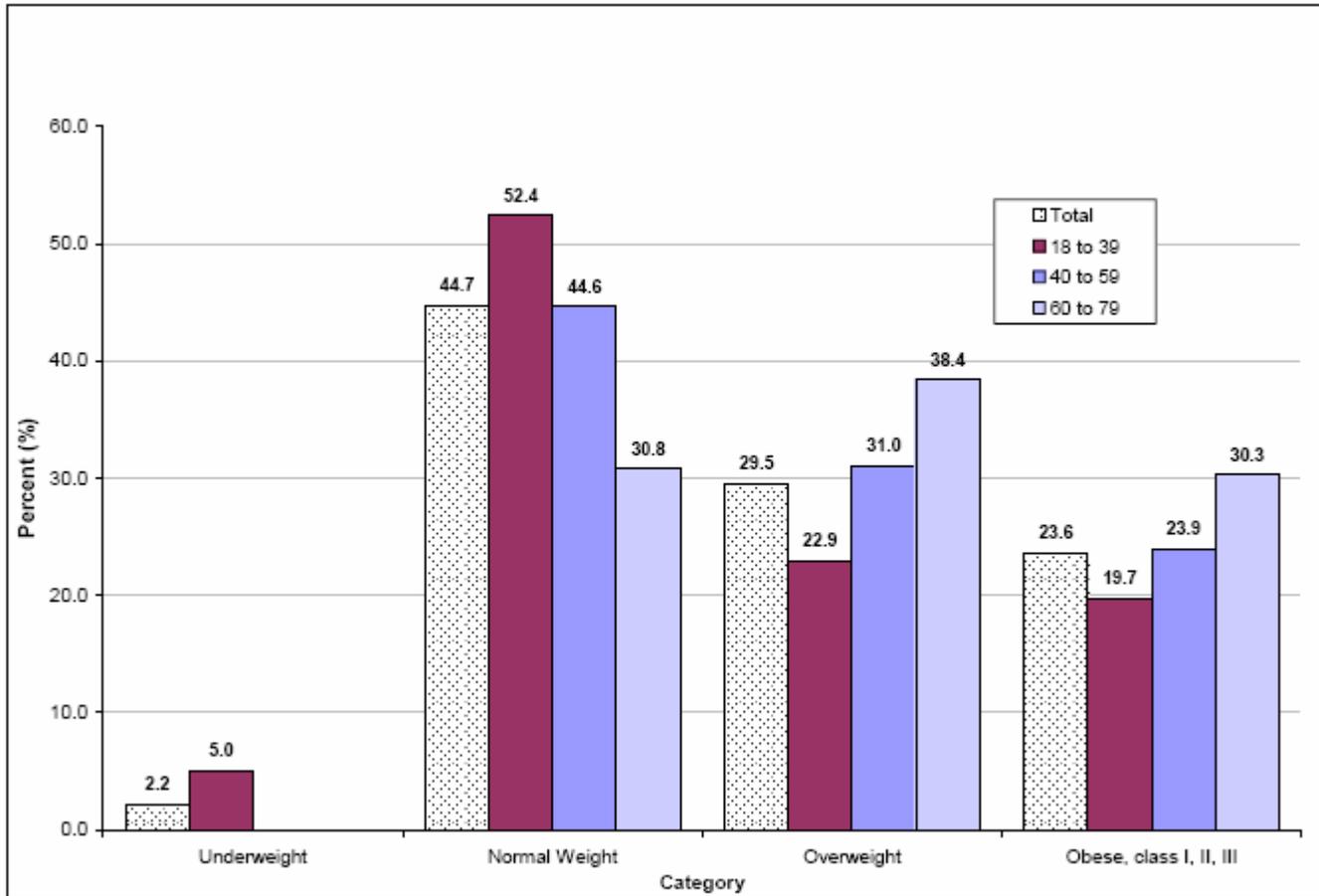
**Source:** Canadian Health Measures Survey, 2007 to 2009

More than 4 out of 10 men have a BMI in the overweight range, while 3 out of 10 have normal weight.

Among women, the inverse is true: more than 4 out of 10 women have normal weight, while 3 out of 10 have a BMI in the overweight range.



**Chart 2**  
Distribution of women aged 18 to 79 among BMI categories



**Note:** Data for the underweight category for two age groups were excluded because the coefficient of variation was too high.

**Source:** Canadian Health Measures Survey, 2007 to 2009

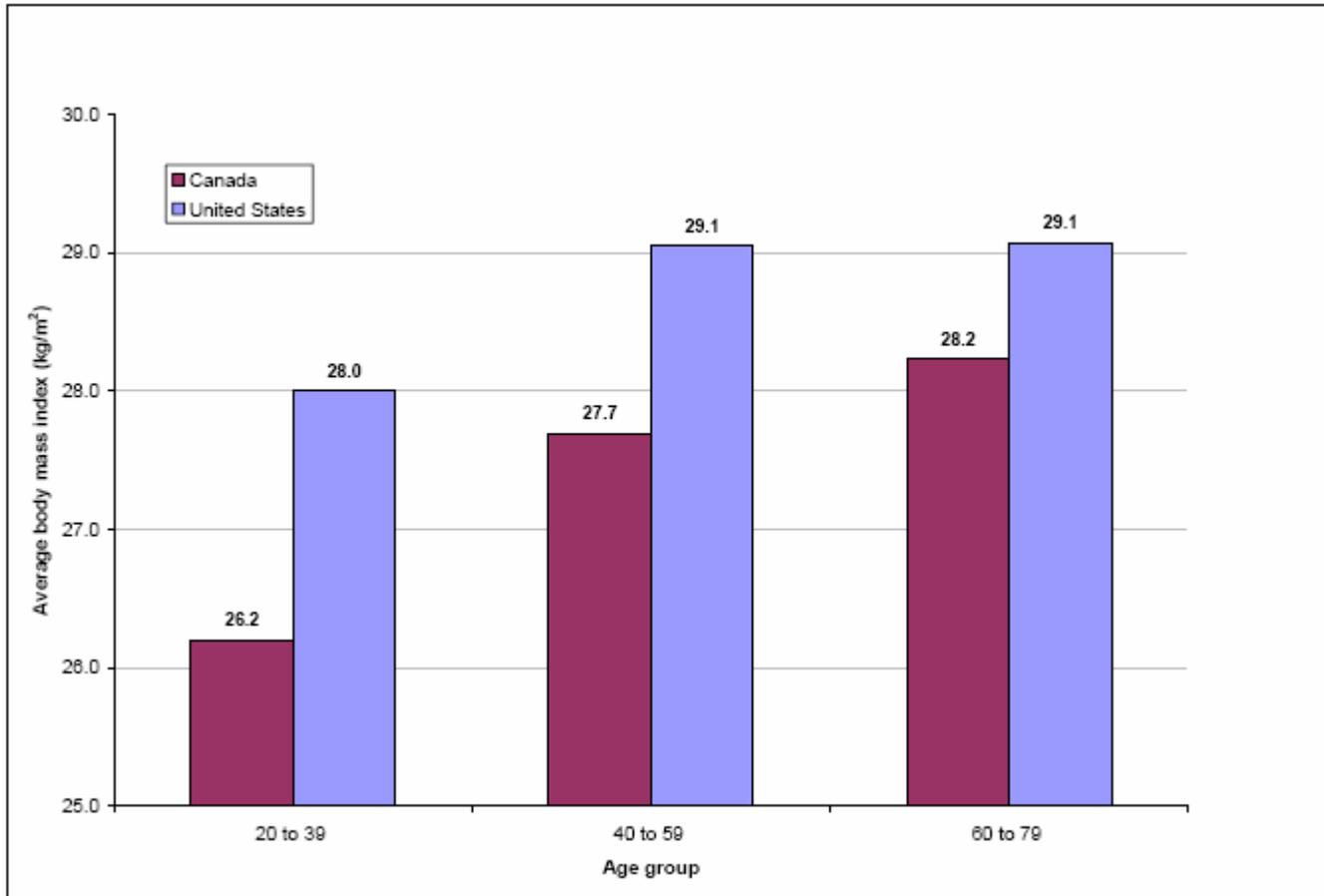
## BMI of Canadians and Americans

Average BMI is slightly lower among Canadian adults than among Americans. Canadians aged 20 to 39 have a significantly lower average BMI at 26.2 kg/m<sup>2</sup> than did Americans (28.0 kg/m<sup>2</sup>) in the same age group. Among people aged 40 to 59, Canadians have a significantly lower average BMI (27.7 kg/m<sup>2</sup>) than that of Americans (29.1 kg/m<sup>2</sup>). Among older adults, the difference in average Canadian and American BMI is not significant.



Chart 3

Comparison of average BMI among Canadian and American adults aged 20 to 79



Sources: Canadian Health Measures Survey, 2007 to 2009. National Health and Nutrition Examination Survey, 2007-2008.

## Waist circumference

Average waist circumference increases with age among both women and men. However, female waist circumference is associated with higher health risks at a younger age than is the average waist circumference for males.

Health Canada's health risk classification suggests that for men a waist circumference  $\geq 102$ cm (40 in) and for women  $\geq 88$ cm (35 in) leads to an increased risk for developing health problems such as type 2 diabetes, coronary heart disease, and hypertension.

In Canada, the average waist circumference of men presents a low risk among those aged 20 to 39 (90.7 cm), a moderate risk among those aged 40 to 59 (98.7 cm) and a high risk among those aged 60 to 79 (102.5 cm). For women, the average waist circumference presents a moderate risk for those aged 20 to 39 (82.9 cm) and a high risk for those aged 40 to 59 (88.1 cm) and 60 to 79 (93.0 cm).



## What is BMI?

Body mass index (BMI) is a ratio calculated using a person's weight in kilograms and height in metres squared ( $\text{kg}/\text{m}^2$ ) and is interpreted using a classification system developed by Health Canada in the following six categories:

Health Canada's BMI classification	
Less than 18.5	Underweight
18.5 to 24.9	Normal weight
25.0 to 29.9	Overweight
30.0 to 32.4	Obese, Class I
32.5 to 34.9	Obese, Class II
35.0 and over	Obese, Class III

## Body composition

Several anthropometric measurements were taken as part of the Canadian Health Measures Survey—height and weight, waist circumference, hip circumference and five skinfolds—on a sample of 3,700 adults aged 18 to 79 to obtain an overall picture of body composition, which can be linked to health benefits.

Further information on the physical health measures from the Canadian Health Measures Survey 2007 to 2009 is available at [www.statcan.gc.ca/chms](http://www.statcan.gc.ca/chms).