

Your Nutrition Connection

This publication provides information about how to assess your body weight and the link between body weight and breast cancer risk.



How to Assess Your Body Weight

What is a “healthy body weight”?

Health Canada has created body weight recommendations based on the evidence linking body weight to health risks such as diabetes, cancer, and heart disease. “Healthy body weights” are weight ranges that are linked to the lowest risks for these chronic diseases. These recommendations are based on two tools: body mass index (BMI) and waist circumference measurement.

However, many factors affect your body weight, such as your ancestry, cultural influences, the type of work you do, your health, where you live, your income and access to food and physical activities, and the lifestyle choices you make (such as food choices and level of physical activity and so on). Due to these differences, your healthy body weight may be different than your friend's, even if she is your age and height.

In our society female beauty is often reflected by images of “perfect” or “ideal” bodies found in magazines, movies, on TV and the Internet. These images of “ideal” body sizes and shapes change over time because they reflect some peoples’ shared ideas about what is beautiful and desirable. Body size *ideals* such as these are not linked to health and should not be confused with healthy body weights.

Body weight and breast cancer risk

According to experts, maintaining a healthy body weight throughout your life may be the single most important way to protect against cancer. Since breast cancer risk is hormone related, this cancer differs among premenopausal (before the onset of menopause) and postmenopausal (after menopause has occurred) women. Menopause is the stage of woman's life (usually around age 52) when she stops having monthly menstrual periods. While this stage may last one or more years, when

a woman has not had a menstrual period for 12 consecutive months, menopause has occurred. The most recent and complete review of the research about body weight and breast cancer risk says:

Before menopause:

- *Higher levels of body fat probably decrease breast cancer risk in premenopausal women*—Research linking overall body fat (based on body mass index) and breast cancer risk shows that there is likely a link between higher body mass index values and lower breast cancer risk in premenopausal women. Scientists do not know why higher levels of body fat may protect against breast cancer before menopause. You may be asking yourself, if a premenopausal woman increased her body weight, would she reduce her breast cancer risk? The answer is no. The best advice for women is to maintain healthy body weights both before and after menopause since a higher body mass index increases breast cancer risk after menopause.

After menopause:

- *Higher levels of body fat are strongly linked to higher breast cancer risk in postmenopausal women*—Research on overall body fat (based on body mass index) and breast cancer risk offers convincing evidence of a

link between higher body mass index values and higher breast cancer risk in postmenopausal women. This is not true for premenopausal women.

- *Higher levels of abdominal fat probably increase breast cancer risk in postmenopausal women*—Research showed that there is likely a link between higher levels of fat around the abdomen (stomach, tummy, or belly) and increased breast cancer risk in postmenopausal women.
- *Weight gain as an adult probably increases breast cancer risk in postmenopausal women*—There is likely a link between higher amounts of weight gained as an adult and increased breast cancer risk in postmenopausal women. Since weight gained as an adult is typically fat, not muscle, adult weight gain increases total body fatness. As noted above, higher total body fat is strongly linked to increased breast cancer risk in postmenopausal women.

What does all this mean?

The bottom line is this—achieving and keeping a healthy body weight will support your health before and after menopause.

Using body weight to assess your overall health risk

Two tools can be used to assess the general health risk that may be linked to your body size: 1) waist circumference



(the distance around your waist) is used to assess general health risk and 2) body mass index (BMI) gives you an idea of how healthy you are based on your body weight in relation to your height. Used together, these two tools give the best idea of your overall health risk.

Waist circumference

Your waist circumference tells how much body fat is located in your abdomen (your waist or stomach area). People who have more body fat around their abdomen may be at higher risk for diabetes, high blood pressure, and heart disease.

How to measure your waist circumference

Use a flexible (but not stretchy) measuring tape. Stand comfortably and breathe normally. Place the tape around your waist halfway between your lowest rib and the top of your pelvic bone (you can feel these bones with your fingers). The tape should be snug, but should not dent your skin. If your waist circumference is equal to or higher than the values below, the amount of fat located in your abdomen may increase your disease risk.

WAIST CIRCUMFERENCE	AFFECT ON HEALTH RISK
Women: 35 inches (88 cm) and greater	Increased
Men: 40 inches (102 cm) and greater	Increased

Body mass index (BMI)

Body Mass Index (BMI) is a tool that gives you a general idea of the level of health risk that may be linked with being overweight or underweight. There are 3 ways to find your BMI value: 1) calculate it yourself by dividing your weight (in kilograms) by your height (in metres) squared; 2) look it up on the chart under Step 1; or 3) use an online BMI calculator to figure it out (see Helpful Resources section on back page). Then, find the range in which your BMI value falls from Table 1 below to estimate the health risk linked to your body size. For more accurate results, BMI should always be used with waist circumference, as is done in the Canadian Guidelines for Body Weight Classification in Adults (see Table 2):

TABLE 1: HEALTH RISK CLASSIFICATION ACCORDING TO BODY MASS INDEX

BMI VALUE RANGES	CLASSIFICATION	RISK FOR HEALTH PROBLEMS
Less than 18.5	Underweight	Increased health risk
18.5 to 24.9	Healthy weight	Least health risk
25.0 to 29.9	Overweight	Increased health risk
30.0 to 34.9	Obese Class I	High health risk
35.0 to 39.9	Obese Class II	Very high health risk
40.0 or higher	Obese Class III	Extremely high health risk

Source: http://www.hc-sc.gc.ca/fn-an/nutrition/weights-poids/guide-ld-adult/cg_quick_ref-ldc_rapide_ref-eng.php

Can you use BMI?

BMI should not be used to assess health risk for people who are:

- 18 years old and younger
- Pregnant or lactating

BMI may not accurately assess health risk for people who are:

- Aged 65 and older
- Very lean
- Very muscular

Assessing your risk

Two measurements—BMI and waist circumference—can give you an idea of the extent to which your height, weight, and the amount of fat stored around your waist may be linked to health risks, including certain cancers, heart disease, diabetes, high blood pressure, and sleep apnea. Both of these measurements must be used together to get a correct idea of your health risk. Here's how to assess your own risk:

STEP 1: Use this chart to see which weight category you fit in. See the example below.

HEIGHT*	HEALTHY WEIGHT BMI = 18.5 TO 24.9	OVERWEIGHT BMI = 25.0 TO 29.9	OBESE BMI OVER 30.0
5'0"	97 – 123 lbs	128 – 148 lbs	over 148 lbs
5'2"	104 – 131 lbs	136 – 158 lbs	over 158 lbs
5'4"	110 – 140 lbs	145 – 169 lbs	over 169 lbs
5'6"	118 – 148 lbs	155 – 179 lbs	over 179 lbs
5'8"	125 – 158 lbs	164 – 190 lbs	over 190 lbs
5'10"	132 – 167 lbs	174 - 202 lbs	over 202 lbs

*If your height falls in between these numbers, use the next highest value shown. For example, if you are 5' 9" tall, use 5' 10".

EXAMPLE

Susan weighs 138 lbs and is 5' 7" tall. First, find Susan's height in the first column—you will need to use 5'8". Now, look across that row to find Susan's weight (138 lbs). Susan's BMI value falls in the 125-158 lb range, which means that her BMI is between 18.5 and 24.9. This falls in the "healthy weight" category.

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5'4"	110 – 140 lbs	145 – 169 lbs	over 169 lbs
5'6"	118 – 148 lbs	155 – 179 lbs	over 179 lbs
5'8"	125 – 158 lbs	164 – 190 lbs	over 190 lbs
5'10"	132 – 167 lbs	174 – 202 lbs	over 202 lbs

To get clear picture of Susan's overall risk, we need to measure her waist circumference – see below.

STEP 2: Measure your waist circumference using the instructions above.

STEP 3: Find your BMI classification and waist measurement on Table 2 below to see how these factors may influence your overall health risk.

TABLE 2: HEALTH RISK CLASSIFICATION ACCORDING TO BODY MASS INDEX AND WAIST CIRCUMFERENCE

WAIST CIRCUMFERENCE	BODY MASS INDEX VALUE (BMI)		
	HEALTHY WEIGHT	OVERWEIGHT	OBESE
Women: Less than 35 inches (88 cm) Men: Less than 40 inches (102 cm)	Least risk	Increased risk	High risk
Women: 35 inches (88 cm) and greater Men: 40 inches (102 cm) and greater	Increased risk	High risk	Very high risk

Source: http://www.bc-sc.gc.ca/fn-an/nutrition/weights-poids/guide-ld-adult/cg_quick_ref-ldc_rapide_ref-eng.php

EXAMPLE

Susan's waist measures 36 ½ inches. Her BMI value is classed as "healthy weight". By locating these two values on Table 2, we can see that Susan may be at increased health risk, based on her waist circumference and BMI value.

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Women: Less than 35 inches (88 cm) Men: Less than 40 inches (102 cm)	Least risk	Increased risk	High risk
Women: 35 inches (88 cm) and greater Men: 40 inches (102 cm) and greater	Increased risk	High risk	Very high risk

While Susan's BMI alone is not linked to an increased health risk, her waist circumference shows that the amount of fat located around her waist may increase her risk of disease.

What does this mean?

Health Canada recommends that we try to lower our overall health risk by reaching and keeping a healthy body weight. This means keeping your weight within the "healthy weight" range (based on BMI) and having a waist circumference of less than 88 cm (35 inches) for women and less than 102 cm (40 inches) for men. Together, healthy BMI and waist circumference are linked to the lowest health risk.



Where can I go for help and support?

- The registered dietitians at the **Odette Cancer Centre** are happy to answer your questions about your healthy body weight. They can also support your weight loss or weight gain efforts and refer you to programs or services to help you reach your goals.
- Find a registered dietitian in your area using the online list on the **Dietitians of Canada website**. Go to <http://www.dietitians.ca/> and click on “Looking for a Nutrition Professional? Find a Dietitian”. You can search for a dietitian in your area who specializes in weight control.
- **EatRight Ontario website** (<http://www.eatrightontario.ca/Doorway.aspx>) offers two ways for you to contact a registered dietitian for advice on healthy weight loss. You can email (anytime) or call toll free (1-877-510-5102)

Helpful resources

- **Canadian Guidelines for Body Weight Classification in Adults**. Health Canada. (2003). Available from http://www.hc-sc.gc.ca/fn-an/nutrition/weights-poids/guide-ld-adult/bmi_chart_java-graph_imc_java_e.html.
- **BMI Calculator**. Enter your height and weight and this handy tool will figure out your BMI value. Go to http://www.hc-sc.gc.ca/fn-an/nutrition/weights-poids/guide-ld-adult/bmi_chart_java-graph_imc_java-eng.php
- **WebMD® Portion Size Guide** gives great examples of reasonable portion sizes. Download it at <http://www.webmd.com/diet/printable/portion-control-size-guide>
- **EATracker** will let you track your daily food and activity and show you how you stack up based on Canada’s Food Guide and Canada’s Physical Activity Guide. Go to http://www.dietitians.ca/public/content/eat_well_live_well/english/eatracker/index.asp
- **Other Your Nutrition Connection brochures** available at ync.sunnybrook.ca: **Dietary Fat and Breast Cancer Risk; Fibre and Breast Cancer Risk; Physical Activity and Breast Cancer Risk; Your Healthy Body Weight and Breast Cancer Risk**

*To contact a Registered Dietitian, call the Patient & Family Support Program
Odette Cancer Centre, at 416-480-4623*

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