



## Your Patient's BMI Matters



The Canadian Task Force on Preventive Health Care (CTFPHC) recommends measuring height and weight and then calculating Body Mass Index (BMI) at appropriate primary care visits (strong recommendation, very low quality evidence\*).

- Recommendations apply to most adults  $\geq 18$  years of age
- Recommendations do not apply to pregnant women or people with health conditions where weight loss is inappropriate
- Recommendations do not apply to people with BMI  $\geq 40$ , who will benefit from specialized bariatric programs

### WHAT IS YOUR PATIENT'S BMI?

Calculate BMI by measuring height and weight AND using BMI Chart

|  |  |
|--|--|
| BMI < 18.5<br>UNDERWEIGHT                              | This category is outside the scope of this guideline.  |
| 18.5 ≤ BMI ≤ 24.9<br>NORMAL WEIGHT                     | Do not offer formal, structured behavioural interventions aimed at preventing weight gain in adults ( <i>weak recommendation; very low-quality evidence</i> ).                             |
| 25 ≤ BMI ≤ 29.9<br>OVERWEIGHT                          | Have a discussion with your patient, and offer or provide referral to structured behavioural interventions aimed at weight loss ( <i>weak recommendation; moderate-quality evidence</i> ). |
| 30 ≤ BMI ≤ 39.9<br>OBESE                               | Have a discussion with your patient, and offer or provide referral to structured behavioural interventions aimed at weight loss ( <i>weak recommendation; moderate-quality evidence</i> ). |
| 30 ≤ BMI ≤ 39.9<br>OBESE AND AT HIGH RISK OF DIABETES† | Offer or refer the patient to structured behavioural interventions aimed at weight loss ( <i>strong recommendation; moderate quality evidence</i> ).                                       |
| BMI > 40<br>SEVERELY OBESE                             | This category is outside the scope of this guideline.  |

#### What are “appropriate primary care visits”?

- Routine visits, visits for medication renewal, and other visits where the primary care practitioner deems it appropriate

#### What are “structured behavioural interventions”?

- Programs focused on behaviour modification that involve several sessions over a period of weeks to months

#### Recommended programs should focus on:

- Modifying diet
- Increasing exercise
- Making lifestyle changes
- Any combination of these

#### Programs for obesity management may also include:

- Counselling
- Education or support
- Environmental changes (e.g., use of a smaller plate)

#### Can I instruct my patients to calculate their own BMI? Or can I estimate it?

- We recommend that physicians (or another member of the health care team) measure weight and height to calculate the patient's BMI.
- Adults tend to overestimate their own height and underestimate their own weight
- Visual estimation by clinicians is often inaccurate and will not detect the relatively small gains occurring among most adults.

\* For explanation of GRADE categories of recommendations and quality of evidence, please see: [www.canadiantaskforce.ca/methods/grade/](http://www.canadiantaskforce.ca/methods/grade/)

† High-risk status is defined by 10-year risk of diabetes of  $\geq 33\%$ , which can be assessed using the CANRISK or FINDRISC risk assessment tool available at: [www.canadiantaskforce.ca/ctfphc-guidelines/2012-type-2-diabetes/](http://www.canadiantaskforce.ca/ctfphc-guidelines/2012-type-2-diabetes/)

# BMI Chart



Weight (lbs)

Height (feet/inches)





|       | 95 | 100 | 105 | 110 | 115 | 120 | 125 | 130 | 135 | 140 | 145 | 150 | 155 | 160 | 165 | 170 | 175 | 180 | 185 | 190 | 195 | 200 | 205 | 210 | 215 | 220 | 225 | 230 | 235 | 240 |       |
|-------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 5'0"  | 19 | 20  | 21  | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30  | 31  | 32  | 33  | 34  | 35  | 36  | 37  | 38  | 39  | 40  | 41  | 42  | 43  | 44  | 45  | 46  | 47  | 152.5 |
| 5'1"  | 18 | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  | 26  | 27  | 28  | 29  | 30  | 31  | 32  | 33  | 34  | 35  | 36  | 37  | 38  | 39  | 40  | 41  | 42  | 43  | 43  | 44  | 45  | 155   |
| 5'2"  | 17 | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 27  | 28  | 29  | 30  | 31  | 32  | 33  | 34  | 35  | 36  | 37  | 37  | 38  | 39  | 40  | 41  | 42  | 43  | 44  | 157.5 |
| 5'3"  | 17 | 18  | 19  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 27  | 28  | 29  | 30  | 31  | 32  | 33  | 34  | 35  | 35  | 36  | 37  | 38  | 39  | 40  | 41  | 42  | 43  | 160   |
| 5'4"  | 16 | 17  | 18  | 19  | 20  | 21  | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 27  | 28  | 29  | 30  | 31  | 32  | 33  | 33  | 34  | 35  | 36  | 37  | 38  | 39  | 39  | 40  | 41  | 162.5 |
| 5'5"  | 16 | 17  | 18  | 18  | 19  | 20  | 21  | 22  | 22  | 23  | 24  | 25  | 26  | 27  | 27  | 28  | 29  | 30  | 31  | 32  | 32  | 33  | 34  | 35  | 36  | 37  | 37  | 38  | 39  | 40  | 165   |
| 5'6"  | 15 | 16  | 17  | 18  | 19  | 19  | 20  | 21  | 22  | 23  | 23  | 24  | 25  | 26  | 27  | 27  | 28  | 29  | 30  | 31  | 31  | 32  | 33  | 34  | 35  | 36  | 36  | 37  | 38  | 39  | 167.5 |
| 5'7"  | 15 | 16  | 17  | 17  | 18  | 19  | 20  | 20  | 21  | 22  | 23  | 23  | 24  | 25  | 26  | 27  | 27  | 28  | 29  | 30  | 31  | 31  | 32  | 33  | 34  | 34  | 35  | 36  | 37  | 38  | 170   |
| 5'8"  | 14 | 15  | 16  | 17  | 17  | 18  | 19  | 20  | 21  | 21  | 22  | 23  | 24  | 24  | 25  | 26  | 27  | 27  | 28  | 29  | 30  | 30  | 31  | 32  | 33  | 33  | 34  | 35  | 36  | 36  | 172.5 |
| 5'9"  | 14 | 15  | 16  | 16  | 17  | 18  | 18  | 19  | 20  | 21  | 21  | 22  | 23  | 24  | 24  | 25  | 26  | 27  | 27  | 28  | 29  | 30  | 30  | 31  | 32  | 32  | 33  | 34  | 35  | 35  | 175   |
| 5'10" | 14 | 14  | 16  | 16  | 16  | 17  | 18  | 19  | 19  | 20  | 21  | 22  | 22  | 23  | 24  | 24  | 25  | 26  | 27  | 27  | 28  | 29  | 29  | 30  | 31  | 32  | 32  | 33  | 34  | 34  | 177.5 |
| 5'11" | 13 | 14  | 15  | 15  | 16  | 17  | 17  | 18  | 19  | 20  | 20  | 21  | 22  | 22  | 23  | 24  | 24  | 25  | 26  | 26  | 27  | 28  | 29  | 29  | 30  | 31  | 31  | 32  | 33  | 33  | 180   |
| 6'0"  | 13 | 14  | 14  | 15  | 16  | 16  | 17  | 18  | 18  | 19  | 20  | 20  | 21  | 22  | 22  | 23  | 24  | 24  | 25  | 26  | 26  | 27  | 28  | 28  | 29  | 30  | 31  | 31  | 32  | 33  | 182.5 |
| 6'1"  | 13 | 13  | 14  | 15  | 15  | 16  | 16  | 17  | 18  | 18  | 19  | 20  | 20  | 21  | 22  | 22  | 23  | 24  | 24  | 25  | 26  | 26  | 27  | 28  | 28  | 29  | 30  | 30  | 31  | 32  | 185   |
| 6'2"  | 12 | 13  | 13  | 14  | 15  | 15  | 16  | 17  | 17  | 18  | 19  | 19  | 20  | 21  | 21  | 22  | 22  | 23  | 24  | 24  | 25  | 26  | 26  | 27  | 28  | 28  | 29  | 30  | 30  | 31  | 187.5 |
| 6'3"  | 12 | 12  | 13  | 14  | 14  | 15  | 16  | 16  | 17  | 17  | 18  | 19  | 19  | 20  | 21  | 21  | 22  | 22  | 23  | 24  | 24  | 25  | 26  | 26  | 27  | 27  | 28  | 29  | 29  | 30  | 190   |
| 6'4"  | 12 | 12  | 13  | 13  | 14  | 15  | 15  | 16  | 16  | 17  | 18  | 18  | 19  | 19  | 20  | 21  | 21  | 22  | 23  | 23  | 24  | 24  | 25  | 26  | 26  | 27  | 27  | 28  | 29  | 29  | 192.5 |
|       | 43 | 45  | 47  | 50  | 52  | 54  | 56  | 59  | 61  | 63  | 65  | 68  | 70  | 72  | 75  | 77  | 79  | 81  | 84  | 86  | 88  | 90  | 93  | 95  | 97  | 99  | 102 | 104 | 106 | 109 |       |

Height (centimeters)

Weight (kgs)

- Find your height on the left or right side
- Find your weight on the top or bottom
- Your BMI number is where the two numbers meet

(For example - someone who is 5'9" and 145 lbs has a BMI of 21)

-  Under healthy weight: BMI <18.5
-  Healthy weight: BMI 18.5–24.9
-  Overweight: BMI 25–29.9
-  Obese: ≥BMI 30



## Prevention and Management of Adult Obesity: FAQs for Primary Care Practitioners

**PREVENTION****1. What are the CTFPHC's recommendations for preventing weight gain?**

- We do not recommend offering programs aimed at preventing weight gain for healthy adults with a Body Mass Index (BMI) between 18.5 and 24.9, as evidence for such programs is limited.

**2. How do I implement this recommendation?**

- This is a weak recommendation, so clinicians should use their judgment in determining whether a particular patient might benefit from being offered or referred to a program.
- For example, if an individual expresses concerns about weight gain or is motivated to make lifestyle changes, the clinician should consider referral to a program consistent with the person's values and preferences.

**MANAGEMENT****3. What are the CTFPHC's recommendations for managing weight gain?**

- We strongly recommend that patients who are obese ( $30 \leq \text{BMI} < 40$ ) and who are at high risk of type 2 diabetes be referred to a formal diabetes prevention program.
- Such programs can reduce the risk of diabetes for some people who make lifestyle changes (modified diet and increased physical activity).
- We also recommend offering overweight and obese patients referral to programs aimed at weight loss. This is a weak recommendation.
- We don't recommend offering pharmacological therapies, such as orlistat or metformin, to overweight or obese patients for the purpose of weight loss. This is a weak recommendation.

**4. How do I implement the weak recommendations?**

- A weak recommendation implies that many overweight and obese individuals may benefit from formal diabetes prevention programs, but others may not (e.g., individuals who do not value the short-term benefits of these programs).
- Similarly, pharmacological therapy may not be appropriate for most individuals, but it may be suitable for some (e.g., individuals who are less concerned about the harms of medication).
- Management decisions should be consistent with patients' values and preferences.

**5. Which features should I look for when selecting a commercial or community program?**

- Commercial programs are largely unregulated, unless they include supplements that fall under Health Canada's *Natural Products Act*. The most effective interventions vary substantially, and availability of programs may vary from province to

**STRUCTURED BEHAVIOURAL INTERVENTIONS**

Programs focused on behaviour modification that involve several sessions over weeks to months.

province. Therefore, physicians should seek out local expertise to find reputable programs.

- According to our review, the most effective programs included the following elements:
  - were over 12 months in duration
  - focused on diet, physical activity, and lifestyle changes and were tailored to meet individual needs
  - included combinations of goal-setting and/or active use of self-monitoring
  - used multiple modes of delivery, such as a combination of group and individual sessions or a combination of individual sessions and technology-based components

**6. What are realistic weight loss goals for overweight or obese patients?**

- On the basis of the evidence review, we found an average weight loss of 3 kg over 12 months in mixed-weight populations.

**RECOMMENDATION****7. To whom do these recommendations apply?**

- These recommendations apply to adults  $\geq 18$  years of age.
- They do not apply to pregnant women and people with health conditions where weight loss is inappropriate.
- They do not apply to people with  $\text{BMI} \geq 40$ , who will benefit from specialized bariatric programs.

**BMI****8. Why does the CTFPHC recommend calculating BMI?**

- We recommend routinely measuring height and weight and then calculating BMI at appropriate primary care visits.
- Calculation of BMI is feasible, and there is evidence showing that it is the body composition measure most strongly associated with mortality.
- BMI can be used as a basis for weight management but should be considered in the context of a patient's overall health to inform clinical decision-making; it should not be used in isolation.
- For some patients, measurement of waist circumference will also be required as part of risk assessment for diabetes and/or cardiovascular risk.

**9. Are there different BMI cut-points for different racial or ethnic groups?**

- Currently, there is no strong evidence to support using different BMI cut-points for different groups.