

Obesity is more than what you eat

OBESITY EDUCATION BOOKLET -1



Obesity is a disease where excess or abnormal fat tissue (adiposity) affects health.¹

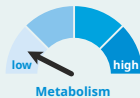
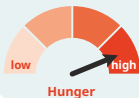
Obesity is a real medical condition and there are now real treatment options.¹



Our brain plays a central role in regulating our appetite and overall energy balance. Each of us inherits a unique appetite system or “**drive to eat**” that evolved to protect us **from losing weight** when food was scarce.¹



When we lose weight:





The potential causes for obesity will vary from person to person.¹



- There are **many genes** that play a role in body size and appetite.
- The **balance of hormones** in your body can affect your appetite, food choices and how much energy you use.
- **Stress** increases hunger in many people.
- How much and how well you **sleep** impacts your appetite.
- **Some medicines** can increase your appetite or affect your metabolism.
- Your ability to access food can be different depending on **where you live.**¹

Obesity is caused, in part, by a “mismatch” between our evolution (biology), genetics and the world we live in today.¹

Your genes determine your appetite system and metabolism.



The modern food environment significantly contributes to why obesity is so common today.¹

IN PREHISTORIC TIMES...

Food was scarce!
As hunter-gatherers, our ancestors' brains “learned” to hold on to every calorie.



IN TODAY'S SOCIETY...

Food is more convenient than ever before, but our brains continue to hold on to every calorie.



WHERE WE
CAME FROM



WHERE WE
ARE TODAY



There are real biological obstacles that prevent people with obesity from losing weight.¹

Obesity A Disease

The understanding of obesity has changed over time.

We are now learning **why many people gain weight** and how the brain plays an important role in our **appetite system** and overall weight management.

Three parts of the brain regulate when and how much we eat:^{2,3}

SOMEWHAT IN OUR CONTROL

DECISION-MAKING CENTRE

- Translates thoughts into actions

NOT IN OUR CONTROL

HOMEOSTATIC CENTRE

- Controls how hungry and full you are

REWARD CENTRE

- Controls how much you like, want, crave for food, and the pleasure you get from eating



We all inherit a unique appetite system, and the degree of our cravings how much we want certain foods **varies from person to person.**



Studies have found that people living with obesity have **a heightened activation of reward system when shown images of food.**



- **There is** a much stronger drive or wanting for food
- **Participants were** more sensitive to feelings of hunger

We cannot control our appetite system, but treatment is available and effective

HOMEOSTATIC CENTRE	Medications and bariatric surgery can access these two areas of the brain:
REWARD CENTRE	<ul style="list-style-type: none">• Makes you feel less hungry• Less "want to eat" in the brain's reward center.
DECISION-MAKING CENTRE	Behavioural therapy can help you build skills to support this area.

References

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**Scan to know more about
weight management**



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Finding your best diet

OBESITY EDUCATION BOOKLET - 2



**Finding
Your**

Best Diet

Research has shown that there is no “best” diet when it comes to long-term weight loss.¹

Losing weight by going on overly restrictive diets does not work long term.



To help you find the least number of calories that works with your lifestyle, start by tracking what and how much you are eating.¹

UNDERSTAND YOUR EATING PATTERNS

Measuring or weighing your food can help you be more aware of your portions¹

IDENTIFY CHALLENGES

Identify your high risk time(s) of the day

- The times you're more likely to eat or drink

TAKE NOTES

Pay close attention to the calorie content of various foods

Managing your weight is a lifelong journey, so finding a way of eating that you can stick with is important.



Studies have shown that when presented with ultra-processed foods, people tend to eat more calories. Whole foods can help reduce your overall calorie intake.³

	WHOLE FOODS/UNPROCESSED	PROCESSED/MINIMALLY	PROCESSED ULTRA-PROCESSED ³
EXAMPLES	Vegetables, grains, fruits, nuts, fish, meats, eggs and milk.	Bread, cheese, tofu, and canned vegetables, fruits, meat, or beans.	Soft drinks, chips, ice cream, chicken nuggets, hotdogs, and fries.

Find a way of eating that works for you, while focusing on whole foods and limiting ultra-processed foods as much as possible.³



Healthy eating is important for everyone, regardless of body size, weight, or health status.³

Diet plan

Set the Calorie Intake*

Daily-recommended caloric intake:

2400-2800

kcal/day



Men

2100-2200

kcal/day



Women

Choose a Balanced Diet*

A Balanced Diet Provides



Carbohydrates

50%-60%

calorie

Protein

10%-15%

calorie

Fats

20%-30%

calorie



Follow **healthy** eating plan⁶



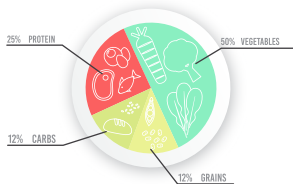
Emphasizes vegetables, fruits, whole grains, and fat-free or low-fat dairy products.



Includes lean meats, poultry, fish, beans, eggs, and nuts.



Limits saturated and trans-fats, sodium, and added sugar



Controls portion size

Portion Your Meal



Diet Recommendations

Breakfast
(570 Kcal)
8–10 am



Soaked & boiled whole grains- 90g;
Boiled red/ black beans, lobia/ chickpea- 35g;
Green leafy vegetables- 50g;
Vegetables- 50g;
Nuts- 20g

Lunch
(900 Kcal)
1–2 pm



Cereals (preferably whole grain)- 100g;
Pulses- 30g or meat;
Vegetables- 150g; Green leafy vegetables- 50g;
Nuts/ Oil seeds- add 20g in curries; with cooking oil (15g) for flavour;
Curd-150 ml;
Fruits-end your meal with 50 fruits

Evening beverage
(35 Kcal)
5 pm



Milk- 50 ml

Dinner
(590 Kcal)
7–8 pm



Cereals 80g;
Pulses- 25g;
Vegetables- 100g;
Oil 10g; Curd-100 ml;
Fruits-end your meal with 50 fruits

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Let's talk about physical activity

OBESITY EDUCATION BOOKLET - 3



Let's Get Moving

Physical activity is any kind of activity that moves our body and uses energy. Examples include cleaning the house, walking the dog, skiing, and cycling.



Regular physical activity is perhaps the greatest health behaviour available. Benefits include:^{1,2}



Disease risk reduction



Stress reduction



Improvements in mood



Maintaining your weight



Exercise alone has generally not been found to result in significant weight loss.¹

While there's no "right type" of activity/ exercise for everyone, guidelines recommend 30–60 minutes of moderate to vigorous physical activity most days of the week. Start with an amount of an activity that works for you and increase when you are ready.³



Brisk walking can be very beneficial for overall health.² If walking isn't right for you, then don't be afraid to try something new!



**Take breaks
from being still**

Stand more and move throughout the day.



Schedule it

Being realistic about when you can exercise.



All movement count

even 5 to 10 minutes of physical activity adds up!

Remember, physical activity and exercise are important for everyone's health and happiness but may not be the answer to weight loss. It can help you maintain your weight.



Make **exercise** part of your routine*

- Physical activity & resistance training helps with weight loss, preserves muscle mass, and boosts overall health.
- It works best alongside dietary changes to maintain a negative energy balance.



Aim for at least
60 minutes of daily
physical activity



Combine aerobic and
resistance exercise for
better results



Tailor exercise
routine to
individual needs



Incorporate
light-intensity
moments



Conduct
pre-exercise
health checks

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1. Wharton S, Law DW, Vallis M, et al. Obesity in adults: a clinical practice guideline. CMAJ. 2020;192:E875-91.
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Discovering your best weight

OBESITY EDUCATION BOOKLET - 4



Discovering Your Best Weight

Everyone's weight loss journey is unique. Your weight is a combination of your unique appetite system and the environment.¹

Obesity Treatment options



Healthy eating and physical activity are important for everyone's health. Treatment for obesity may include behavioural therapy, medications, and/or bariatric surgery.¹

WHAT IS BEHAVIORAL THERAPY²

Here are some ways that can help in changing our behaviour:



FIGURE OUT WHAT IS YOUR "WHY"

What is "worth it" to you can be a guiding compass.

Here's an example: "I want to be working in the direction where my weight doesn't prevent me from playing with my grand kids."



LEARN MORE ABOUT YOUR DAILY HABITS

Finding the times of the day when you are more likely to eat or drink extra calories or crave food is a great place to get started.



SETBACKS ARE PART OF THE JOURNEY

Setbacks will happen; what determines our success is how we learn from them and move forward. Try to focus on why you are on this journey.

How can

Medication Help³



Lifestyle interventions that include caloric restriction and portion control are insufficient in achieving long-term weight loss

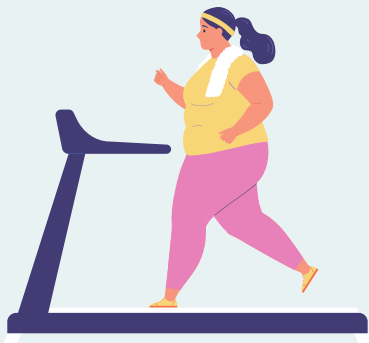


As with other chronic diseases like hypertension or diabetes, pharmacotherapy is needed to address the biology of obesity



There are new anti-obesity medications available that can

- Maximize the magnitude of weight loss
- Help overcome weight regain, promoting sustained weight loss



Surgery

Bariatric endoscopy & surgery can be considered in combination with lifestyle interventions in individuals with high BMI who are unable to achieve or maintain weight loss targets with lifestyle and pharmacotherapy alone

If bariatric surgery is an option for you, your healthcare provider will send you to a bariatric centre where you will get the proper support before, during and after your surgery.



Work towards a
happy, healthy you



**Success doesn't
have to be about
a number on
the scale**



**You know you're at your
"Best Weight" when you feel
your best physically, emotionally,
and mentally.**

References

1. Wharton S, Law DW, Vallis M, et al. Obesity in adults: a clinical practice guideline. CMAJ. 2020;192:E875-91.
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