Weight Loss for Pain and Disease Management Workshop Booklet

CARING FOR THE BODY,
MIND & SPIRIT SINCE 1869

ST JOSEPH'S HEALTH CARE LONDON

Weight Loss for Pain and Disease Management

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This booklet is intended to complement the discussion had during the weight loss for pain and disease management workshops.

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What is Obesity?

When abnormal or excess body fat harms one's health and social well being.

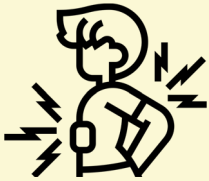
A traditional classification system involving body mass index (BMI) is a common way for health care providers to screen for risks or the presence of obesity.

BMI is a ratio of weight to height and can be viewed differently depending on ethnicity.

Recommended Classification of BMI from the 2020 Canadian Adult Obesity Clinical Practice Guidelines:

Category	BMI (kg/m^2)
Caucasian, Europid and North American ethnicity[45]	
Underweight	< 18.5
Normal (healthy weight)	18.5–24.9
Overweight	25–29.9
Obesity Class I	30–34.9
Obesity Class 2	35–39.9
Obesity Class 3	40–49.9
Obesity Class 4	50–59.9
Obesity Class 5	≥ 60
South-, Southeast- or East Asian ethnicity[53]	
Underweight	< 18.5
Normal range	18.5–22.9
Overweight—At risk	23–24.9
Overweight—Moderate risk	25–29.9
Overweight—Severe risk	≥ 30

Living with Obesity Affects Health and Wellbeing

The "4Ms"	The Negative Effects of Obesity Can Include:
1. Mental Health 	– Depression – Anxiety – Low self-esteem – Negative self-talk – Body dissatisfaction – Disordered eating/eating disorders
2. Mechanical Health 	– Obstructive sleep apnea – Gastroesophageal reflux disease (heartburn) – Osteoarthritis and back pain – Plantar fasciitis – Urinary/fecal incontinence – Skin-fold infections
3. Metabolic Health 	– Type 2 diabetes – High blood pressure and cholesterol – Gout – Fatty liver disease – Infertility – Cancer
4. Monetary Health 	– Education – Employment – Professional development – Increased cost of living (e.g., clothing, mobility aids) – Cost of weight-loss programs

Addressing Stigma in Obesity

- Do not shame and blame people for their weight
- Start treating obesity as the **chronic (long-term), relapsing** disease science says it is

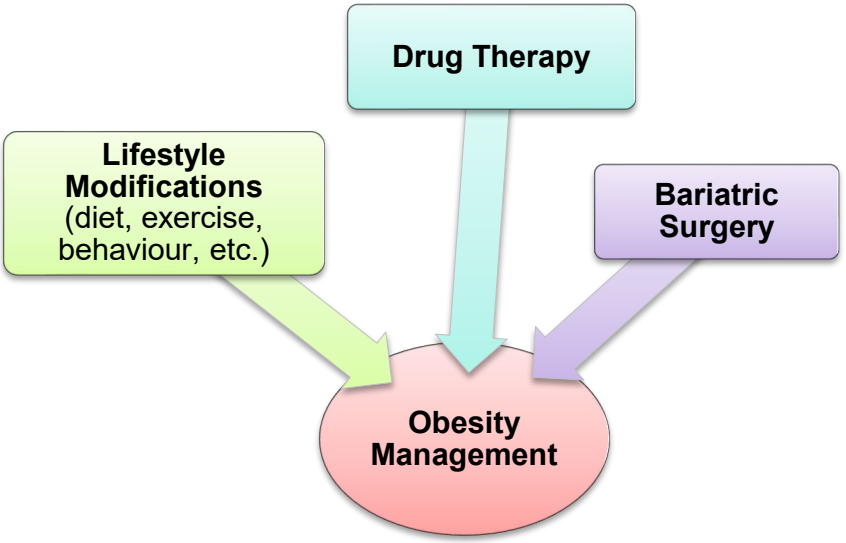
Science and research have made important advances in understanding what happens in the body with weight gain and who is more likely to experience to it:

Weight has more to do with genetics and what we are exposed to in the womb than individual choices about exercise or food.

Obesity is highly genetic (our genes influence a lot of our physical attributes). For example: 85% of height is genetic and 70-80% of BMI is genetic.

The hypothalamus in the brain regulates energy intake and usage to maintain weight, but its function can be disrupted and affect feelings of hunger and fullness (satiety).

Weight Loss Strategies: Piecing it All Together



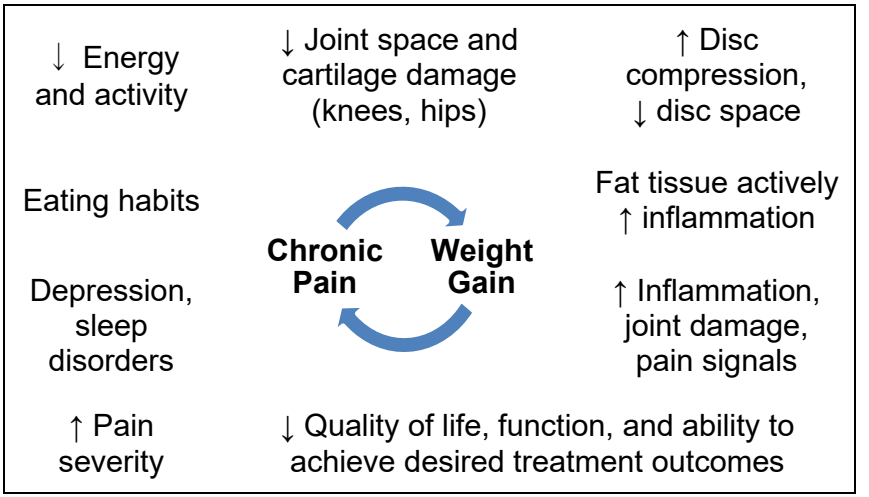
What is Bariatric Surgery?

An elective weight loss surgery that modifies the digestive/ gastrointestinal tract to restrict either:

- the amount of food the stomach can take in; or
- the amount of nutrients absorbed from the intestinal tract (malabsorption)

There are a few different types of bariatric surgery procedures (e.g., Roux en Y, sleeve). Although bariatric surgery is one of the most effective options for people with severe obesity, it is not without risk (as is the case with any surgical procedure).

The Chronic Pain and Weight Gain Connection



Weight Loss for Chronic Pain Management

Weight loss has been shown to reduce pain for:

- Osteoarthritis
    - 1 lb weight loss = ↓ 4 lbs load on knees!
- Low back pain
- Fibromyalgia
- Migraines

Connections Between Mental Health and Weight

Weight	⟷	Mental Health (and Chronic Pain)
• A stress hormone known as 'cortisol' causes increased fat storage (particularly in abdominal fat) • Cortisol also increases mood swings, worsens sleep, increases risk for depression, and slows digestion/ metabolism • Living with chronic pain causes more emotional and situational stress, and increases the risk for depression and anxiety		• Depression/anxiety makes coping worse • Emotional eating is a stress management strategy for many • Relationship between self-talk, depression, and anxiety • Some medications used to treat depression/ anxiety can cause weight gain

Managing your mental health is crucial in preventing and treating physical health issues (including weight gain).

Weight Loss Concepts and Facts

1. Success is NOT about reducing numbers on the scale

- Success should be measured by **improvements in health and well-being** rather than the amount of weight lost.
- Modest reductions in body weight can lead to significant gains in health and well-being.
- Losing weight is hard. Realistic and meaningful goals keep you motivated.

2. Obesity is a CHRONIC (long-term) condition

- Successful management requires realistic and sustainable treatment strategies.
- Short-term “quick-fix” solutions are not generally sustainable and are associated with high rates of weight regain.
- Making **lifestyle changes** is the most effective way to lose weight and keep it off.

3. Successful weight management requires identifying and addressing the causes of weight gain, as well as barriers to weight management.

Common Contributors to Weight Gain

The following are factors we **can influence**.

- **Chronic pain**
    - "I know I need to be more active. I know it's important to keep my joints healthy and to manage my weight, but I'm having a flare-up and it hurts to move… I just can't make myself exercise! I feel so discouraged and hopeless. I just want to "turtle" and go back to bed for the day. What's the use?"
- **Slow metabolism**
- **Lifestyle** (diet, eating habits, physical activity)
- **Mental health and sleep issues/disorders** (e.g., stress, depression, insomnia)
- **Underactive thyroid**

Age and genetics are barriers we cannot influence
(we call these non-modifiable factors).

Common Lifestyle and Mental Health Barriers

- Lack of motivation for weight loss
- A lifetime of bad eating habits
- Lack of confidence
- Overwhelmed by the amount of weight to lose
- Negative thoughts and feelings about food
- Eating to cope with stress, fatigue or pain
- Eating to soothe or regulate emotions
- Triggers for overeating
- Unrealistic goals

These are all factors we can influence and improve on!

Think About Your Reasons for Losing Weight

Post it on the fridge or somewhere you see daily to keep you motivated.

- ✓ Decrease strain on muscles/joints and reduce pain
- ✓ Share fun activities with family and friends
- ✓ Move easier and function better
- ✓ Be more active and productive
- ✓ Feel good
- ✓ Be healthier
- ✓ Have a better quality of life

The 'Mini-Habits' Approach to Lifestyle Changes

- Your current and past habits determine your current weight
- Successful weight loss requires a **new set of habits**

Internal change is important.
If you don't make **behaviour changes**, don't expect to see any change.

Creating Mini-Habits

Key point: one requirement with consistent action over time!

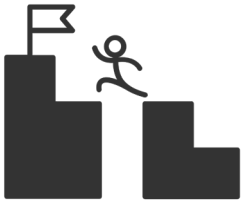
Habit Examples	More Achievable Mini Habit Examples
Lost 20 lbs over 1 year	Nutrition mini-habit: only ¼ of plate is a starch
Wrote 2 international bestselling books and 100 blog posts	Writing mini-habit: 50 words/day
Reads 12-20 books/year compared to reading 1 book/year	Reading mini-habit: 2 pages/day

Every mini-step/habit helps produce a healthier version of yourself!

Mini-Habits are the Starting Point!

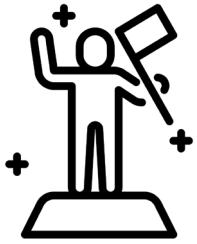
- Need to select something easy to do.
- Mini-habits begin the process of engagement.
    - For example, eating one raw vegetable/day can begin the process of eating more vegetables.
- By beginning a process, we are more likely to continue to do it. In other words, a mini-habit is a spark to help us start and continue adding on.
- So, pick a small mini-habit and aim to do this mini-habit every single day.
    - Try using a Habit Tracker to record your progress (see **Appendix A** for a Habit Tracker template)
    - Try not to miss even one day. If you miss a day, make sure you don't miss 2 days.
- You can add on to your mini-habit. It feels great to achieve goals, even small ones.
- We usually set high targets, falling short of them, and feeling inadequate when we do. When we achieve our **realistic and sustainable goals**, there is a psychological difference.

All of life's wins (such as achieving goals and losing weight) are based on **small daily decisions and actions**.



Success Cycling with Mini-Habits

- It feels great to win. When you start to win every day with your mini-habits, you will feel like a winner and successful.
- When we win frequently, we act more confidently. We expect more success and our success will fuel further success.



"The journey of a thousand miles begins with one step."
– Lao Tzu

How to Choose "SMART" Mini-Habits

Specific

Measurable

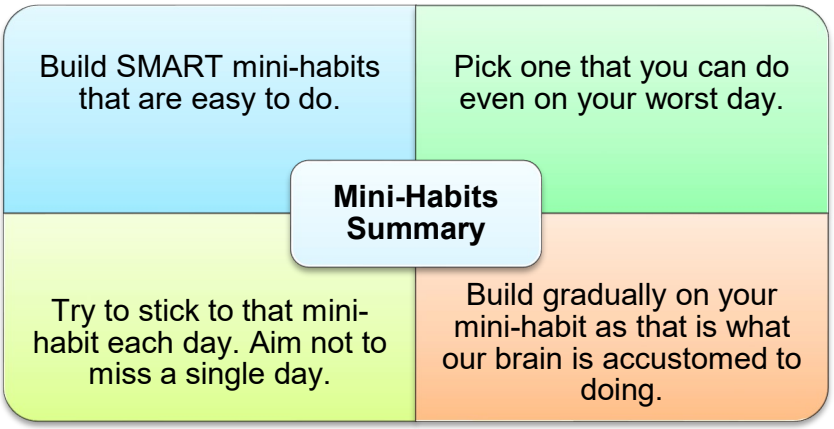
Attainable

Realistic

Timely

Examples:

1. You want to eat healthier. SMART habit: have one portion of vegetables with supper every day. Try writing your SMART habits down using the template in **Appendix B.**
2. You want to eat healthier. SMART habit: use a daily food diary to track and become more aware of what you eat. See **Appendix C** for an example of a food diary template.



Nutrition/Dietary Considerations

Many of us know what to eat, but struggle to change our diet.

If you need help to improve your food knowledge or to create a healthy eating plan, there are many excellent resources available such as: www.unlockfood.ca

Did you know OHIP funded registered dietitians are available in our community? Ask your primary care provider for a referral if you think a dietitian could help you.

Why Count Calories?

- Our calorie needs change with age and activity
- Our food environment has changed drastically over the years
- Food is everywhere (e.g., convenience/fast food, junk food)
- Snacking/eating on the go to compensate for busy schedules
- Large portion sizes served (e.g., supersizing)

Food Change Examples

20 Years Ago

140 calories
3-inch diameter

Today

350 calories
6-inch diameter

Calorie difference: 210 calories
(to burn off it would mean raking leaves for 50 minutes)

---

20 Years Ago
Coffee with whole milk and sugar

45 calories
8 ounces

Today
Tim Horton's mocha latte

330 calories
16 ounces

Calorie difference: 305 calories
(to burn off it would take 1 hour and 20 minutes of walking)

It's So Easy to Gain Weight…

Did you know that,
if you eat 100 additional calories/day,
you will gain:

- 10 pounds in a year
- 100 pounds in 10 years

100 calories/day equals…

- One apple
- 8 oz. lemonade
- 1/3 of a chocolate bar
- 1 oz. of cheese
- 8 oz. beer

But What If We Take a Different Approach?

Subtracting 100 calories/day from your diet
could result in 10 pounds of weight loss in a year!

Strategies to cut 100 calories:

- ✓ Replace the cream in your "double-double" with milk
- ✓ Replace 1 soda with mineral/zero calorie sparkling water
- ✓ Reduce 1 snack portion
- ✓ Replace 1 snack a day with fresh fruit or veggies
- ✓ Replace the butter on your potato with low fat sour cream

Counting Calories Requires Effort

Dieting is Inferior to the Lifestyle Changes Approach

Dieting	Lifestyle Changes
TEMPORARY weight loss	Provide real, lifelong **LASTING CHANGE**

Reflecting on Your Eating Habits

Understanding ourselves is the first step to changing our habits.

Do you have any troublesome eating habits?

Portion sizes: ○ I eat too much ○ I regularly have seconds ○ I eat until I'm uncomfortable ○ I eat everything on my plate ○ I can't stop eating food in front of me ○ I eat too many snacks ○ I nibble while I cook ○ I finish my kids' leftovers	My diet isn't so healthy: ○ I eat a lot of frozen dinners/pizza ○ I eat a lot of fast food ○ I don't eat enough fresh vegetables/fruit ○ I eat few whole grains ○ I don't eat enough protein ○ Most of my calories come from carbs
I consume empty calories: ○ Junk food (chips, etc.) ○ Candy/chocolate ○ Sweets/dessert ○ Soda ○ High calorie coffee drinks ○ Alcohol	I overeat in certain places: ○ In the car ○ In front of the TV ○ At work ○ In restaurants ○ I hide my overeating/eat in secret
My eating patterns are wonky ○ I don't eat regular meals ○ I skip meals or binge ○ I deprive/restrict myself ○ I don't notice when I eat ○ I eliminate certain foods ○ I snack after 8PM ○ I overeat with certain people	I have messed up thoughts about food: ○ Food is my only pleasure ○ I feel guilty about eating ○ I think about food a lot ○ I have no self-control ○ I celebrate/reward myself with food
Grocery shopping trouble: ○ I hate grocery shopping ○ I buy things I shouldn't ○ I shop without a plan ○ I buy in bulk	

What thoughts / feelings did this trigger?

- Think of troublesome habits as **opportunities for change**
- Acknowledge this is hard for you and there will be relapses
- Small, sustainable changes will make a difference

Tackling Troublesome Eating Habits

Snacking

"Snacking is my biggest calorie bomb. I eat a bag of chips pretty much every day."

Potential solutions:

- Portion out snack food rather than eat it from the bag
- Stop having chips in the house
    - Don't buy them
    - Avoid the chip aisle on grocery day
    - If you want it, you can walk to the convenience store to buy it. How badly do you want it?
- Allow yourself one treat each weekend
    - You can choose an individual sized chip bag as your one treat. No guilt.

"I eat a lot of junk and fast food in my car"

Potential solutions:

- Put your wallet and phone in the trunk so it's harder to go through the drive-thru
- Have a soothing drink to go, such as a cup of tea
- Bring an apple, granola bar, nuts, 100-calorie snacks

Socializing and Eating Out

Does this sound familiar? *"My friends want me to go out for wings and drinks. I won't even enjoy it because of the guilt…What's the use of dieting if I can't have a life?"*

Potential Solutions to This Situation

- Own it. "Okay, I'm going to exceed my calorie goal today."
- Budget calories for a guilt-free treat, night out, etc.
  - "I'm going out for wings and drinks tonight, so I skipped dessert last night and had a low-calorie lunch today to make up for it"
- Modify restaurant meals rather than avoid
  - Look at the menu ahead of time to prevent "impulse decisions"
  - Share an appetizer, entrée, or dessert.
  - Select two courses rather three (appetizer OR dessert)
  - Want a high fat dessert or wine? Compromise and choose a healthier entrée.
  - Ask the question – "is this worth the calories?" If yes, enjoy!

Meal Planning and Preparation

“I have no energy to prepare meals”
"I’m too tired and in too much pain to cook."
"The thought of cooking is totally overwhelming."
"I can’t even decide what to make/eat."
“I just grab what is easy to eat.”
"I end up eating prepared foods with lots of calories and fat."
“The fruit and veggies rot in my fridge.”

Potential solutions if the above sounds familiar:

- Own it. “I can’t prepare a home-cooked meal every day”.
- Plan and make two meals each week. Try doubling the recipe and portioning it out in containers.
- Cook a batch of grains for the week.
- Save frozen pizza for the worst day of the week.
- Find some 15-30 minute meal recipes (www.finecooking.com has some ideas)
- Find a good “chuck it in and simmer” soup recipe.
- Keep easy proteins on hand, such as eggs or nuts.
- Try 5 minutes of meal prep every hour throughout the day or do meal prep during TV commercial breaks.

Emotional Eating

Do the following statements sound familiar?

- *"Life sucks, I deserve a treat."*
- *"This has been a crappy day, week, month, year…"*
- *"There is no joy. Food is my only pleasure right now."*

Problem-solving idea:

- If these statements sound familiar, try focusing on mindful eating and moving away from eating to distract yourself from eating when you are emotional.
- Start by asking yourself if you eat when you are:
    - Bored
    - Stressed
    - Tired or in pain
    - Anxious
    - Sad or upset
- If you are someone who holds onto emotions, try talking it out with someone you trust.
- Reflect on whether you are actually hungry or just want to change the way you feel:

Stomach Hunger
Physically need food/stomach is growling
Blood sugar is low
Mouth Hunger
Have a food craving
Want salty, crunchy, creamy, sweet
Heart Hunger
Eating in response to thoughts/feelings
Use eating to cope
Learned eating behaviours (dessert after dinner, food rewards)

How Do You Comfort/Soothe Yourself?

Responding to rough days by eating is very common. It is a form of self-soothing and is often a pattern of behaviour that has developed over a period of time.

Activity:

Think about those times when you've had a rough day. Make a list of all the ways you choose to soothe yourself. How many of them involve food/eating/drinking? It might surprise you.

Find New Ways to Soothe and Nurture Yourself

Comforting yourself does not have to about food. Consider other ways you can "reward" yourself using all your senses.

Taste

- Focus on and enjoy your tea/coffee, a piece of candy, a popsicle or ice cube, fruit, pudding, etc.

Sound

- Listen to music, audiobooks, podcasts, etc.
- Sit on the back step and just listen

Smell

- Essential oils
- Flowers
- Herbs
- Citrus

Touch

- Wrap yourself up in your favourite sweater or blanket
- Relax with a heat pack or warm bath
- Snuggle with your pets, loved ones

Sight

- Look at a magazine, photos, art
- Borrow an art book from the library
- Look through your favourite photos and albums

Put Cravings on Hold

People describe cravings as feeling
like they've lost control…

By "riding out" the craving, the craving can become less intense over time. This can help people regain a sense of control over their cravings and avoid feelings of failure. A reasonable amount of time to try "riding it out" is 10 minutes.

When "riding it out", try to distract yourself using the following strategies:

- Have a glass of water or cup of tea (you may be thirsty, not actually hungry)
- Chew gum
- Do a few minutes of deep breathing or meditation
- Go for a walk
- Do a pleasurable activity

Address Negative Thoughts About Food and Yourself

Do the below statements sound familiar?

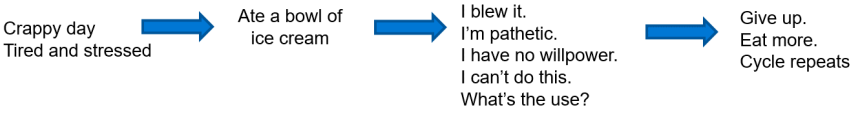
- *"I blew my diet. I'm a failure. Might as well eat whatever I want now…"*
- *"Eating is the only pleasure I have. What's life without pleasure?"*
- *"I have too much weight to lose. Why try?"*
- *"I'm so stressed and overwhelmed. Eating is the only thing that makes me feel better."*

Problem solving idea:
If these statements sound familiar, try the **"80/20 Rule"**:

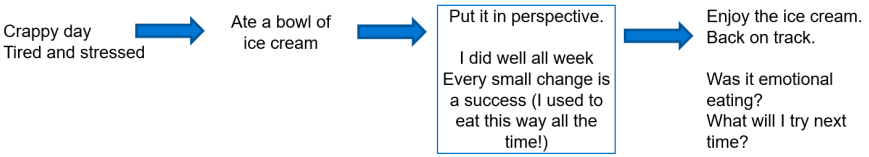
- 80% of the time you make healthy food choices
- 20% of the time you allow yourself some less healthy "guilt-free" options

Example scenario:

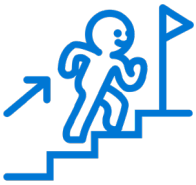
1. No “80/20 rule”



2. With “80/20 rule”



How Do I Get Started?



- ✓ Use mini-habits and realistic goal-setting with small behaviour changes.
- ✓ Start with a few small changes, build on them, and evaluate your progress.

✓ Ask yourself:

- What is one troublesome eating habit?
- What are three small changes that would make a difference?
- What barriers might I encounter making this change?
- How can I try to prevent the barrier from "de-railing" me?

Be prepared for relapses.
These are normal – hang in there!

Resources to Help Tackle Troublesome Eating Habits

Eat This Not That Website: www.eatthis.com
This website features 35 tips to eat healthy at restaurants.

Craving Change® Workshops (4 weekly sessions)

This workshop series is for adults who:

- struggle with their eating habits
- eat for comfort or in response to their emotions
- want to understand, change and ultimately overcome their food craving behaviours

Craving Change can help you:

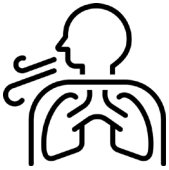
- ✓ Understand why you eat the way you do
- ✓ Change your thinking and eating
- ✓ Improve what, when, and how much you eat
- ✓ Comfort yourself without food
- ✓ Develop a healthier relationship with food

Speak with your primary care provider, local family health team or community health centre or visit www.cravingchange.ca to learn more about this resource.

Common Questions About Exercise/Weight Loss

Type	How am I going to do **any** type of exercise? What is the best **type** of exercise for me right now? Maybe it is just being more active than you currently are.
Duration	How **long** do I need to exercise for? How long **can** I exercise for?
Sustainability	What's a safe amount that I can keep doing again tomorrow and the next day?
Frequency	How **often** do I need to exercise? I have to make the correct choices so I can do the activities regularly.
Relapses	If I stop exercising, will I gain it all back? There can always be relapses. I will have a plan to be able to get myself back on track. Lifestyle changes are more likely to keep you on track!
Combinations	Do I **have** to exercise? Can I just change my diet? Can I just do exercise and not change my diet? I need to find out all of the components that will contribute to the success of my plan.

5 Physical Activity Recommendations for Adult Obesity Management

	**Aerobic ("cardio") physical activity**: 30-60 minutes of moderate-vigorous intensity most days of the week
	**Resistance training** (with resistance bands or weights)
	**Increasing exercise intensity** (less time but more intense)
	**Regular activity with/without weight loss** for cardiometabolic and overall health
	**Regular physical activity** for health-related quality of life, mood, and how we feel about ourselves

Strategies on Meeting Physical Activity Guideline Recommendations

Activities should be something more than your regular daily living activities.

Examples of how you can meet guidelines and increase your daily activity levels:

- Plan your exercise
- Schedule in your daily walk
- Get out of the house everyday
- Change how you travel: try walking or biking for your commute
- Commit to a program you enjoy in the community (e.g., recreational, volunteering, sports)
- During sedentary times, get up and stand or walk every 30 minutes
- Get up to get a drink of water and use the bathroom frequently
- Keep your exercise equipment where you can see and reach

Starting Your Exercise Program

When you have a medical condition or a disability:

1. **Consult** a health care professional to determine your starting point (e.g., type and amount of exercise).

2. Beginning below the recommended levels can be appropriate and still of benefit.

3. Duration, frequency and intensity can always be **increased gradually** while working toward meeting the guidelines.

4. Be careful with impact loads such as jumping.

> You don't have to go fast, you just have to go!

Types of Recommended Exercises

Aerobic (AKA Cardio) Exercise

A. Continuous Exercise

- Such as walking, cycling, jogging, swimming that **elevates heart rate and breathing**
- Can be done in bouts with necessary rest intervals as needed
- Example: Does a short walk each day sound achievable? How about alternating between walking for 5 minutes and resting for 5 minutes?
- Pool classes offer less joint loads

B. Interval Training

- Short vigorous periods of exercise such as running or cycling
- Alternating with 30 second or 3-minute recovery periods at low-moderate intensity or rest
- Likely not the first choice for many when there might be a negative post-exercise outcome

Where did the recommendation to do 10,000 steps a day come from?

A 2017 Harvard study reported the average woman over age 60 took 4,000 steps/day and the most sedentary in the study 2,700 steps/day. **4,400 steps** reduced the risk of death over the course of the study by 41%. Increasing that to **7,500 steps/day** continued to reduce mortality and then it levelled off.

Resistance (AKA Strengthening) Exercise

Why is this important?

- Muscles have a higher metabolic rate, even at rest, so building muscle mass can increase your energy output
- Find strengthening exercises to do at least twice a week to increase your muscle strength and mass (and build stronger bones too)
- Strong muscles are better for our joints
- Picking something functional can help too!

Note: Lifting weights load the joints, so resistance bands can be used as a substitute.

Do I Need BOTH Exercise and Dietary Changes to Be Successful?

- Yes! The **combination of dietary changes + aerobic/cardio + resistance/strengthening exercises** is more effective than each strategy alone.

Why Should I Do Two Types of Exercises on Top of Dietary Changes?

- Reducing caloric intake alone may result in a loss of total body mass, fat mass… and lean body mass.
- Aerobic/cardio exercise helps lose the fat mass, as well as helps preserve the lean body mass, BUT…

The addition of strength exercises 2-3 times per week
to cardio (and healthy dietary changes)
will preserve **AND build** lean muscle mass

Strong muscles are **better for our joints and bones.**

Many Things Contribute to Our Level of Physical Fitness

- Cardiorespiratory endurance (AKA stamina)
- Skeletal muscle endurance, power and strength
- Flexibility
- Balance
- Speed and reaction time
- Body composition

Waist Circumference and Visceral Obesity/Fat

- Waist circumference is used as another screening tool in addition to BMI
- Elevated waist circumference can be an indicator of "visceral obesity"
- Female ≥ 88 cm (35 inches), Male ≥ 102 cm (40 inches)
- Visceral refers to our internal organs
- All fat is not equally unhealthy…**fat around our organs is NOT good**

All This Work and My Weight is the Same…

You are still most likely healthier if you are:

- ✓ Exercising and are feeling more "fit"
- ✓ Reducing belly fat
- ✓ Reducing waist circumference
- ✓ Reducing visceral fat (with aerobic exercise)

- Success is not just about reducing numbers on the scale
- Most of the benefits of exercise come from improvements in body composition, overall fitness, function, and all aspects of health (e.g., mental, cardiorespiratory, metabolic)!

Creating a Physical Activity Plan

- Make physical activity a priority and stick to it
- Start low and build slow!
- Be regular with activities you already do
- Do an activity you enjoy
- Use or develop your support network
- Set and celebrate small attainable goals
- Try using a step counter
- Watch less TV or set less screen time
- Don't sit too long → get up every 20 or 30 minutes
- Do not let your disability be a barrier
- Remember it will become easier with time as your fitness levels improve
- Losing weight will make it easier on your joints but is not the sole marker of success - stronger muscles also help
- Get good shoes
- Modify the plan to be successful

Helpful Tips and Tools for Lifestyle Changes

1. **Use the** habit tracker to record your progress
2. **Have** a healthy eating or exercise buddy
3. **Book** an appointment with a community dietitian, physiotherapist, psychiatrist, psychologist, therapist, etc.
4. **Try** a "habit" app on your cellphone

Weight Gain from the Pharmacist's Perspective

The pharmacist asks 2 questions:

1. Is the current problem **caused by a drug**?
2. Can the problem be **treated with drug therapy**?

What About Drugs That Cause Weight Gain?

It may be important to re-assess the value/benefit of potential medication culprits that have been reported to cause weight gain.

Examples may include:

- Prednisone
- Gabapentin, pregabalin
- Tricyclic antidepressants (TCAs) (e.g., amitriptyline, nortriptyline)
- Antipsychotic medications (e.g., olanzapine)

Drug Therapy Management of Obesity

Key concepts:

1. Drug therapy is **NOT** stand-alone obesity treatment.

2. Drug therapy is meant to be used **TOGETHER with lifestyle modifications** to achieve the best results.

3. **NO** approved weight loss medication promotes long-term weight loss.

   Weight will gradually rise again when the medication is stopped **unless** dietary changes are made and activity level is increased.

Who Qualifies for Weight Loss Drug Therapy?

Weight loss drug therapy as a supportive strategy can be considered in individuals with either:

1. BMI ≥ 27 kg/m^2 + obesity-related medical conditions
2. BMI ≥ 30 kg/m^2

…who did not achieve meaningful and/or sustained weight loss from lifestyle changes alone.

Body Mass Index (BMI)	Lifestyle Modifications	Drug Therapy	Bariatric Surgery
25 kg/m^2 and above	X		
27 kg/m^2 and above + obesity-related medical conditions ***OR*** **30 kg/m^2 and above**	**X**	**X**	
35 kg/m^2 and above + obesity-related medical conditions *OR* 40 kg/m^2 and above	X	X	X

Obesity-related medical conditions: high blood pressure, diabetes, abnormal cholesterol, etc.

What are the Weight Loss Drugs Used and Their Outcomes?

Approved Health Canada Weight Loss Drugs 	Average Weight Loss (Above Diet and Lifestyle Alone) 
Xenical® (Orlistat)	2.9-3.4 % at 1 year
Saxenda® (Liraglutide)	5.4 % at 56 weeks
Contrave® (Bupropion + Naltrexone)	4.8 % at 56 weeks
Wegovy® (Semaglutide)	12.4 % at 68 weeks
Zepbound® (Tirzepatide)	11.9 % (5 mg) 16.4 % (10 mg) 17.8 % (15 mg) At 72 weeks

Interesting fact:
Zepbound® (Tirzepatide) is the newest weight loss medication to come to market in Canada. It is a unique medication because it is a dual GIP/GLP-1 agonist.

How Do Weight Loss Drugs Work?

1. Influence Appetite and Feeling of Fullness (Satiety)

- Saxenda® (Liraglutide)
- Contrave® (Bupropion + Naltrexone)
- Wegovy® (Semaglutide)
- Zepbound® (Tirzepatide)

2. Reduce Dietary Fat Absorption

- Xenical® (Orlistat)
  - Fats from foods need to be broken down before they can be absorbed into the body. To break down fat, your body uses protein enzymes called lipases.
  - When taken with meals, Xenical® (orlistat) prevents these enzymes from working. This blocks absorption of about 30% of the fat in food.
  - Fat that is not absorbed passes out of the body in stool. When you absorb less fat, you take in fewer calories which leads to weight loss.

3. Prevent Reabsorption of Sugar/Glucose

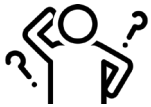
How are the Weight Loss Drugs Taken/Used?

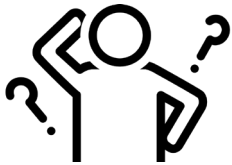
Approved Health Canada Weight Loss Drugs	Method of Administration
Xenical® (Orlistat)	Oral pill 
Saxenda® (Liraglutide)	Injection 
Wegovy® (Semaglutide)	Injection (Once weekly) 
Contrave® (Bupropion + Naltrexone)	Oral pill 
Zepbound® (Tirzepatide)	Injection (Once weekly) 

Weight Loss Drug Dosing

In general, the weight loss medication dose is **gradually** increased based on effectiveness and tolerability to the recommended maximum dose.

Weight Loss Drug Side Effects and Considerations

Common Side Effects 	Considerations 
Xenical® (Orlistat)	
– Less absorption of fat-soluble vitamins (A, D, E, K) – Fatty stools, oily spotting	✓ Recommended to **take a daily multivitamin** ✘ Do **NOT** take orlistat for at least 2 hours before/after taking vitamins or fat-soluble drugs
GLP-1 Analogs: Saxenda® (Liraglutide), Wegovy® (Semaglutide), and Zepbound® (Tirzepatide)	
– Nausea – Constipation – Diarrhea – Vomiting	GLP-1 analogs should **NOT** be used if you are already taking the following for diabetes treatment: ✘ **Victoza®** ✘ **Byetta®** ✘ **Trulicity®** ✘ **Ozempic®** ✘ **Rybelsus®** ✘ **Mounjaro®** Saxenda® and Victoza® both contain liraglutide. Ozempic®, Rybelsus®, and Wegovy® all contain semaglutide. Zepbound® and Mounjaro® both contain tirzepatide. Byetta® (exenatide) and Trulicity® (dulaglutide) are the “brother” medications.

Common Side Effects	Considerations
	
Contrave® (Bupropion + Naltrexone)	
– Nausea – Constipation – Headache – Dry mouth – Dizziness – Diarrhea	Do **NOT** take Contrave® if you: ✘ **Are taking opioids or have taken opioids in previous 7 days** ○ Naltrexone use with opioid therapy can put patients into opioid withdrawal because naltrexone's action blocks the binding of opioid medication to the opioid receptor. ✘ **Have a seizure disorder** ○ Bupropion can make seizures more likely, especially if you already have a seizure disorder."

Interesting Fact About Bupropion:

Bupropion is used on its own to treat depression and help people quit smoking.

Duration of Weight Loss Drug Use

Only if the weight loss drug therapy is **effective** may it be continued "long-term":

1. Weight loss of at least 4-5% of body weight after 3-4 months of use **AND**
2. Is safe/tolerable

Otherwise, the drug should be stopped as it would be considered a failed therapy.

Costs of Weight Loss Drugs

Government Drug Coverage:

- Weight loss medications are not currently covered by provincial, territorial, or federal public drug benefit programs. This may change as generic products become available and product costs are lowered.

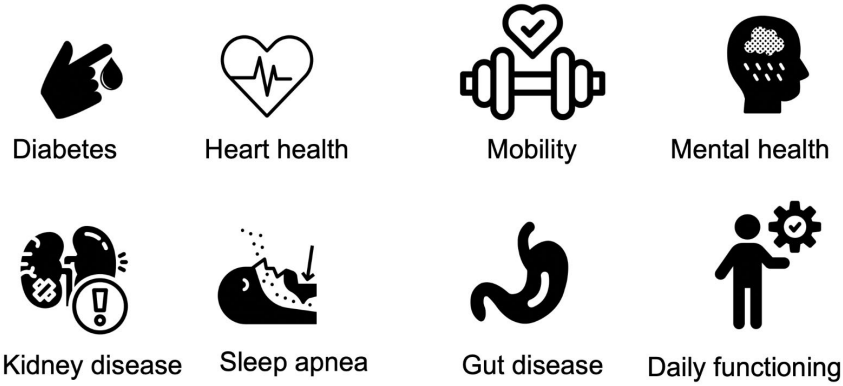
Private Insurance:

- Less than 20% of individuals with private drug plans have coverage for weight loss medications.

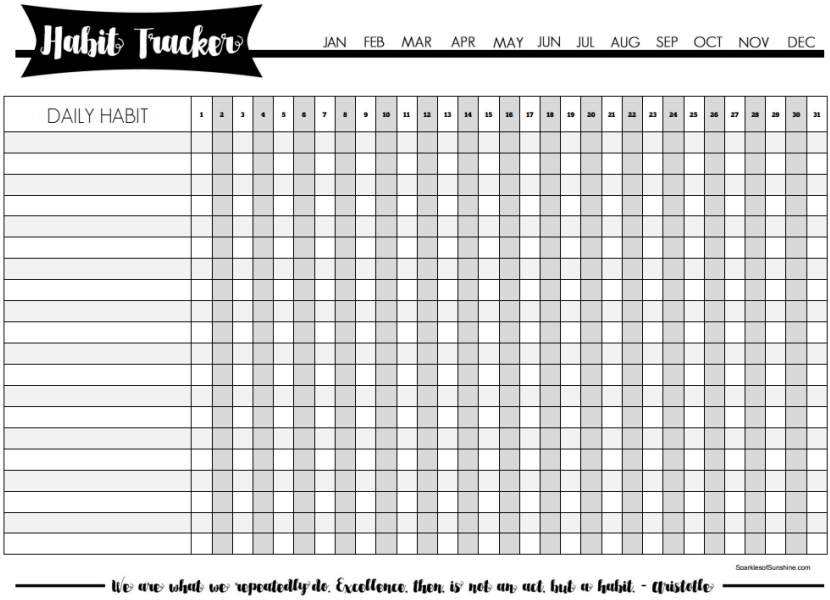
Approved Weight Loss Drug	Brand Name Drug Cost Estimate for 1 Month Supply
Xenical® (Orlistat)	$150 to $210
Saxenda® 3 mg daily (Liraglutide)	$510
Wegovy® 0.25-2.4 mg weekly (Semaglutide)	$460
Contrave® 2 tablets twice a day (Bupropion + Naltrexone)	$330
Zepbound® up to 5-15 mg weekly (Tirzepatide)	$440 to $840

What Other Health Effects Should We Consider with Weight Loss Drug Therapy?

The focus of obesity management with drugs should not solely be weight reduction – other parameters should also be considered, including:



Appendix A: Habit Tracker Template



Appendix B: SMART Habits for Nutrition and Exercise Template

1.

2.

3.

4.

5.

NOTES

Appendix C: Food Diary Template

3-Day Food and Activity Journal

Meal	Day 1: _____	Day 2: _____	Day 3: _____
Breakfast (First Meal)			
Snack			
Lunch (Second Meal)			
Snack			
Dinner (Third Meal)			
Snack			
Activity			

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