

Bariatric Surgery Program

Single Anastomosis Duodeno-Ileal Bypass (SADI) Transition Handbook

For patients 18 months or more after surgery

Read this handbook to learn more about managing your:

- physical health
- diet and nutrition
- mental and emotional health

Disclaimer: This Transition Handbook has been created specifically for the patients and families of Toronto Western Hospital's Bariatric Surgery Program. It should not be shared or used for any other purposes or patients.

This handbook was created by the Toronto Western Hospital's Bariatric Surgery Clinical Team.

Introduction

Congratulations! You have made positive steps towards improving your health since your surgery.

This handbook has been created to provide you with tips, resources and things to watch for as you continue on your journey to wellness. This handbook is organized into 3 parts:

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Part 1: Your Physical Health

As a result of undergoing Bariatric surgery your physical health has improved by reducing the risk from potentially weight-related health conditions such as:

- Heart disease and stroke
- Diabetes
- High blood pressure
- Sleep apnea
- Fatty liver

Keeping healthy after surgery

It is important to take vitamin and mineral supplements daily as recommended by the Bariatric Surgery Program and your primary care provider (family doctor or nurse practitioner). Low levels, also called deficiency, of some vitamins and minerals can lead to problems with eye, bone, or nervous system health.

Lab and diagnostic tests

Blood tests

People who had bariatric surgery are at risk for having low blood levels of some vitamins and minerals. This happens because the body does not absorb them as before. The following blood tests should be reviewed every year by your family doctor or nurse practitioner.

- Albumin
- Alkaline Phosphatase (ALP)
- Alanine Aminotransferase (ALT)
- Bilirubin
- Calcium
- Complete Blood Count (CBC)
- Creatinine (eGFR)
- Electrolytes
- Fasting blood sugar (FBS)
- Ferritin
- Hemoglobin A1C (Hb A1c)
- Lipid Profile
- Magnesium
- Phosphate
- Parathyroid Hormone (PTH)
- Serum Iron
- Serum Zinc
- Total Iron Binding Capacity (TIBC)
- Transferrin Saturation
- Thyroid Stimulating Hormone (TSH)
- Vitamin A
- Vitamin B12 (Cobalamin)
- Vitamin D (25 – Hydroxyvitamin D)

Bone Mineral Density (BMD) Test

Osteoporosis is a disease that makes bones thinner, weaker, and more likely to break. Patients who had the SADI are at risk for osteoporosis because low vitamin D or calcium levels cause bone loss.

A BMD test measures how dense (thick) your bones are. The results show bone loss from osteoporosis and help you and your doctor decide the best steps for treatment or avoiding future broken bones. Patients should have a BMD test 2 years after their SADI.

Other tests

Your family doctor may order one of the tests below if you are having:

- stomach pain
- bloody stool (blood in poop)
- vomiting (throwing up)
- nausea (feeling like you want to throw up)
- vomiting that doesn't go away, or other problems

Abdominal ultrasound

An abdominal ultrasound exam uses sound waves to create images of the organs, tissues, and blood vessels in your abdominal area (belly).

CT scan

A CT scan uses special x-ray equipment to create many images of your body. These images give more detailed information than regular x-rays. They are usually painless, fast, and easy.

Gastroscopy

A gastroscopy is a procedure in which a scope (a thin tube with a camera at the end) is placed down the throat to look at the stomach pouch. It is important that the doctor who does the gastroscopy has experience with patients who have had a SADI.

Colonoscopy

A colonoscopy is a procedure in which a scope (a thin tube with a camera at the end) is placed into the colon to check for any problems in your large intestine.

Barium Swallow (also called an upper GI series)

This test looks at how food moves through the throat, esophagus, and into the stomach. A special liquid is swallowed, and an x-ray follows how the liquid moves through your digestive system.

Keeping your stomach healthy

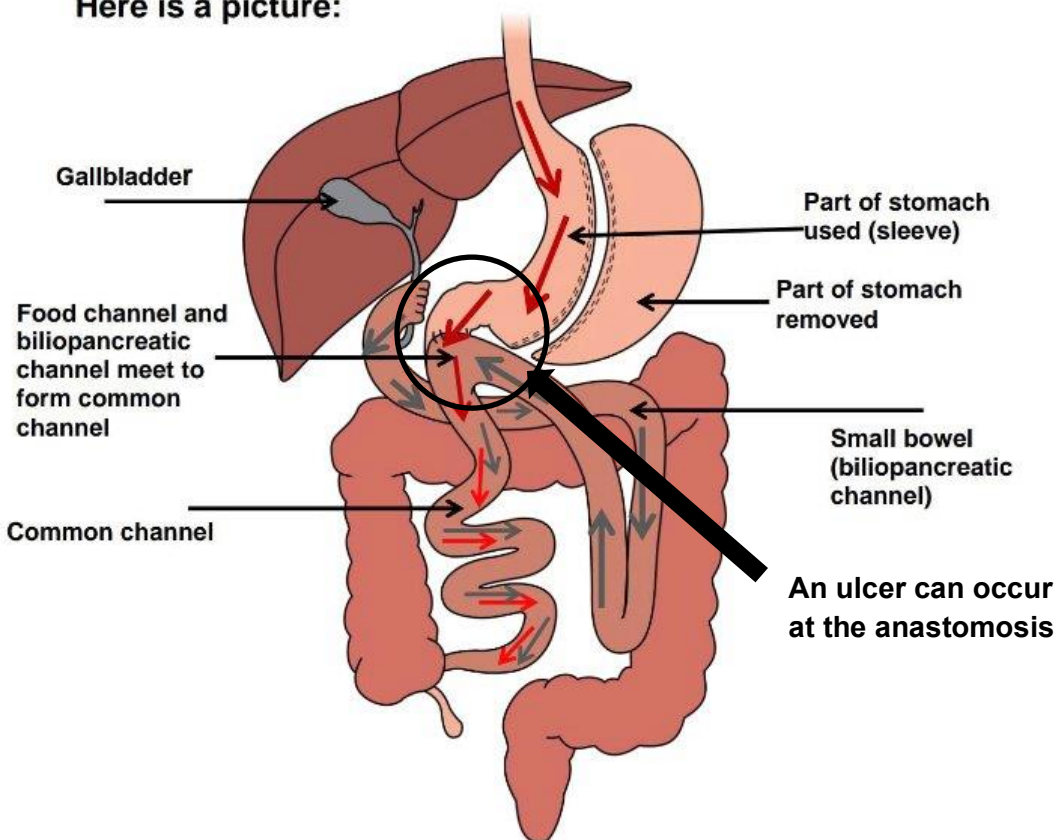
Introduction

With the SADI, a smaller stomach is created, i.e. sleeve and the small intestines are re-routed. Your stomach will still change in size over time, and this is normal. The size of the stomach after surgery does not determine your health and weight outcomes. It is important to continue to eat according to the bariatric nutritional guidelines. Please see nutrition section.

Marginal ulcers

After the SADI it is unlikely that there will be an ulcer in the sleeve portion of your anatomy. A marginal ulcer may occur in a specific area called the anastomosis where there is an attachment to the small bowel. A marginal ulcer may form in the anastomosis when the lining has eroded away and the layer beneath is sensitive to stomach acid. People may feel nausea and pain just below the ribs. Usually with medication, these ulcers heal in a few months. If you have symptoms of an ulcer, your doctor may order a gastroscopy.

Here is a picture:



Food moving through the stomach and common channel.



Bile moving through the biliopancreatic channel and common channel.

Smoking

You should not smoke after the SADI bariatric surgery. Smoking cigarettes, cigars, cannabis, vaping, shisha, and e-cigarettes can cause a marginal ulcer at the anastomosis area even years after your surgery.

Alcohol and caffeine

While alcohol and caffeine (such as coffee) are not known to cause marginal ulcers, they can make ulcers you have more painful and cause healing to take longer.

Medications

After SADI, the way your body processes some medications changes.

Pain relief

Non-steroidal anti-inflammatory drugs (NSAIDs) are a group of medications used to treat pain. This group includes naproxen (ALEVE), ibuprofen (Advil), indomethacin (Indocin), and Aspirin.

SADI surgery patients can use NSAIDs as the risk is very small of developing an ulcer in the anastomosis. You can also take other pain medications such as acetaminophen (Tylenol).

Slow-release medications

Slow-release medications release medication slowly as they move along in your intestines. These usually end in the letters CR, CL, XR, or XL.

After a SADI, the medication passes through the intestine more quickly and is not absorbed properly.

Medications that have a coating (called enteric coating) are also not absorbed well because they are released slowly in the small intestine. Some reflux and GERD medications or antibiotics such as erythromycin are enteric coated. Ask your pharmacist for medications that are immediate-release.

Birth control pills and pregnancy

Birth control pills, also called oral contraception, are not a reliable form of birth control for women who have had bariatric surgery. This is because your body will not be able to absorb the medication fully.

If you need birth control, speak to your family doctor about other options, such as:

- An intrauterine device (IUD)
- NuvaRing®
- Depo-Provera injection

Transdermal patch (Evra or Xulane) You can still use birth control pills for other reasons such as for regulating your period.

If you do become pregnant you should get a referral from your family doctor for a high-risk clinic to monitor you during your pregnancy. Please call the bariatric clinic if you become pregnant.

Psychiatric medications

Please see the Part 3: Mental Health and Psychosocial Support for detailed information about medications used to treat mood disorders.

Skin Care

Most people have extra skin from weight loss after bariatric surgery. Because of stretching and aging, the skin becomes less elastic and doesn't bounce back after surgery. Keeping your skin healthy may help lower the effects of loose skin.

Here are some tips for keeping your skin healthy:

Exfoliate

- Using a loofah and mild soap, gently rub your skin to remove dead skin cells and help blood flow
- Dry your skin very well, especially in the folds of your skin. Moist spots can lead to rashes and infections

Moisturize and hydrate

- Apply a moisturizer after showering or bathing, and before going to bed
- Do not use a moisturizer on the folds of your skin. Keep these areas dry to avoid irritation
- Drink at least 1.5 litres of fluid such as water each day to help keep your skin hydrated

Plastic Surgery

It is common for people who have lost a lot of weight to have extra skin. Plastic surgery for skin removal is not normally covered by OHIP, especially if the surgery is to improve appearance.

What can I do about extra skin?

A 'panniculectomy' is surgery to remove extra skin from the lower abdomen (belly). This surgery leaves a large scar.

It may be covered by OHIP if:

- there are serious symptoms that do not go away such as chronic skin infections
- the pannus (lower belly) hangs below your pubic bone
- your weight was stable for at least 6 months

Surgery to remove extra skin on other body areas, such as the arms and legs, is not covered by OHIP. Many people choose to pay for these procedures.

The first step of skin removal surgery is to get your primary care provider (family doctor or nurse practitioner) to refer you to a plastic surgeon. The plastic surgeon will assess you to see if your surgery will be covered by OHIP.

To help you choose a plastic surgeon, visit the Canadian Society of Plastic Surgeon's website at: plasticsurgery.ca/about/choosing-plastic-surgeon/

A list of plastic surgeons who specifically perform post-Bariatric body contouring can be found here:

<https://www.uoftplasticsurgery.ca/directory/faculty/> Click "Post-Bariatric Body Contouring" under the Clinical Focus heading and then click the Search button.

https://www.uoftplasticsurgery.ca/directory/faculty/?setSortingCriteria=lastname&setSortingOrder=asc&searchFor=Search+faculty+by+name+or+position&ul_filter_subspecialty=Post-Bariatric+Body+Contouring&wppb_page=1

UHN's Bariatric Body Contouring Plastic Surgeon:

You can ask your family doctor or a member of the bariatric team to refer you to UHN's post-bariatric body contour surgeon.

Dr. Stefan Hofer

Telephone: 416-340-3449

Fax: 416-340-4403

Administrative assistant e-mail: katrina.aquino@uhn.ca

Physical Activity and Exercise

Physical activity is important for your overall health. It helps you maintain your muscle mass, prevent weight regain and improve mental health.

Activity guidelines

- Aim to be active at least 2.5 hours each week total. This can be broken into 10 to 15 minute sessions.
- Include aerobic (cardio), resistance (strength) and flexibility (stretching) exercises into your routine.
- Focus on moderate to vigorous physical activity, which gets you breathing a bit harder and sweating a little bit.
- Include muscle strengthening exercises 2 days a week.

Try a variety of physical activities and exercise programs to find what is right for you. Start slowly and build up your strength, endurance, and flexibility over time.

Tips for staying active

At home:

- Spend less time doing sedentary (inactive) activities, such as watching TV, using a computer, playing video games, or browsing on your phone
- Use exercise videos to guide your workout at home
- Go for a walk in your neighbourhood, take a hike or ride your bike
- Do household chores like vacuuming or mopping the floors, gardening or yard work
- Turn on music at home and dance
- Get your family member or friends involved and do activities together

At work, school or in your community:

- Walk as often as possible. Park your car several blocks away from your workplace or get off the bus or subway a few stops early. Try using the stairs instead of an escalator or elevator whenever possible.
- Join a gym or fitness studio in your local community or use fitness facilities at your school or workplace. Try swimming, dancing, yoga, or other fitness classes to find what you enjoy.
- Set a reminder on your phone or computer to get up every 45 to 60 minutes for a short walk or stretch in your workplace.
- Find a walking or workout buddy to be physically active together
- Play sports like soccer, basketball, baseball, tennis, badminton or volleyball.

If you are having trouble getting started or staying motivated, you may find it helpful to talk with an exercise physiologist, physiotherapist, occupational health therapist or a certified physical trainer. They may be able to give you tips or set up an exercise program that suits your needs and interests.

Problems to watch for

The problems below are signs that you may have a major health problem and need to seek care right away. Do not ignore these symptoms.

Problem to watch for	Possible Causes	What To Do
Severe abdominal (stomach) pain	Severe abdominal pain after bariatric surgery could be caused by: • internal hernia • bowel obstruction (blockage) • gallbladder stones • Anastomosis ulcer	Talk with your family doctor if you have any abdominal pain. They may order some tests to help find the cause. For severe (very bad) abdominal pain that lasts longer than 1 hour , go to the nearest Emergency Department.
Blood in your stool (poop) or vomit	Bright red blood in your stool may mean that you have hemorrhoids. Dark, tarry stools may mean a problem in your stomach or intestine, such as a bleeding ulcer. Blood in your vomit usually means you have a bleeding ulcer.	If you have any blood in your stool or vomit, visit your family doctor. If the bleeding continues please head to the nearest emergency Department.
Nausea or vomiting that does not go away	There can be many causes for constant nausea or vomiting. Frequent nausea or vomiting that is not due to food choices or eating technique could mean you have a problem such as: • viral or bacterial illness • food poisoning • internal hernia • bowel obstruction (blockage) • gallbladder stones • stomach ulcer	If your nausea and vomiting that lasts more than 12 hours , or if you cannot keep fluids down , go to the nearest Emergency Department .

Part 2: Diet and Nutrition

Healthy Eating

Here are suggestions to help you eat well, get the vitamins and minerals you need, maintain your weight, and feel your best.

Make a plan

Plan ahead to help you prepare well-balanced meals and snacks. Write down what you plan to eat, a day, or a week ahead. Make your grocery list while meal planning to be sure you have all the ingredients you need.

- **Eat 3 meals each day**

Planning to eat breakfast, lunch and dinner will help make sure you get all the nutrients your body needs. Aim to eat every 3 hours to prevent hunger and unhealthy snacking.

- **Eat 2 to 3 healthy snacks each day**

Snacks are a good way to have energy between meals and help you get enough your proteins. Plan your snack foods and times in advance to prevent grazing and overeating.

Aim to have a well-balanced plate at each meal

Each meal should include a source of protein, vegetables or fruit and whole grains or starchy vegetables (e.g. potatoes, sweet potatoes, squash). Protein rich food sources include lean meats, fish, beans, lentils, eggs, dairy products, nuts, seeds, nut butters, hummus, tofu and edamame. Some examples of whole grains include brown rice, barley, quinoa, whole wheat pasta, multigrain breads and cereals. Choose a variety of foods for a balanced diet.

Aim to have at least 120 grams protein each day

Include a source of protein in each meal and snack every day and use protein supplements (e.g. protein shakes, protein powders, protein bars) as needed to meet protein requirement.

Measure your meals and use portion control

Measuring your food can help prevent overeating. Even healthy foods can affect your weight loss or long-term success if you eat large portions. Use scales and measuring cups to know how much you are eating.

Drink 1.5 to 2 Litres (L) of fluids each day

Choose mostly calorie-free fluids, such as water, to keep hydrated. Avoid sugary drinks like pop and juice. These extra calories can add up quickly and lead to weight gain.

Vitamins and supplements

Should I keep taking my vitamin and mineral supplements?

Yes. Take the vitamin and mineral supplements the Bariatric Program has suggested for the rest of your life.

What supplements should I take?

Sample Vitamin Schedule

Time	Option 1: Bariatric Advantage (USA)	Option 2: Over-the-counter products
Breakfast	ADEK Multivitamin x 1	Prenatal Multivitamin x 2 Vitamin A 10,000 units B12 1000 mcg
AM Snack	Calcium Citrate 600 mg	Calcium Citrate 600 mg Vitamin D 1000 units
Lunch	Calcium Citrate 600 mg	Calcium Citrate 600 mg Vitamin D 1000 units Vitamin E 400 units
PM Snack	Calcium Citrate 600 mg	-
Dinner	ADEK Multivitamin x 1	Calcium Citrate 600 mg Vitamin K 300 mcg
Bedtime	Iron 45mg	Iron (as per bloodwork)

****Do NOT take gummies or extended time release vitamins or minerals.***

How will I know if I need to take more vitamin and mineral supplements?

It is important that you have your blood tests done at least once each year with your family doctor so that your health care provider can make changes to your supplements if needed.

Listed below are some common signs and symptoms you may develop if you are not taking enough vitamins or minerals. Visit your family doctor if you notice any of these symptoms so that you can have your blood levels checked.

If your doctor is unsure of your vitamin and mineral requirements, or you require additional support, please feel free to reach out to the bariatric program

Vitamin or Mineral	Symptoms of Deficiency (Low Levels)
Vitamin B1 and/or Vitamin B12	• New or worsening muscle weakness • Little to no feeling in the arms and legs • Trouble walking, feeling off balance • Negative shift in mood • Low energy • Forgetfulness
Vitamin D/Calcium	• Softening of bones which could lead to breaks (fractures) • Dental problems • Muscle cramps • Fatigue and generalized weakness • Joint pain
Vitamin A	• Trouble seeing at night • Declining vision • Very dry skin • Lumps on the whites of the eyes (Bitot's spots) • Slow healing of wounds or cuts
Iron	• Fatigue, feeling tired • Light-headedness • Negative shift in mood • Restless leg syndrome • Shortness of breath • Weak, brittle finger or toenails • Craving for ice or non-food items

Your Best Weight

“Your best weight is whatever weight you can achieve while living the healthiest lifestyle that you can truly enjoy.”

- Freedhoff, Y. & Sharma, A. (2010). Best Weight: A Practical Guide to Office-Based Obesity Management. Canadian Obesity Network - Réseau canadien en obésité (CON-RCO).

At your best weight, you:

- are participating in the activities you enjoy
- can enjoy a variety of foods in moderation
- feel your healthiest
- quality sleep
- Effectively managing stress

Only you can determine your best weight.

Maintaining your best weight

Permanent lifestyle changes are needed to maintain your best weight.

These tips can help you decide where you may need to focus or make changes:

1. Keep a journal of your food and daily activities. This will help you to track if old habits are returning and make small changes right away.
2. Ask yourself:
 - Am I eating breakfast?
 - Am I eating more high-calorie foods?
 - Am I grazing or nibbling between meals and snacks?
 - Am I separating liquids and solids by 30 minutes?
 - Am I eating slowly and chewing my food well?
 - Am I getting enough sleep?
3. Get in touch with your feelings. Overeating is often related to your emotions. If you can understand your emotional triggers better, you can learn to deal with them in a healthy way.
4. Think about you. Take care of yourself by acknowledging what things in your life might be holding you back from weight loss success. Set boundaries to make yourself

and your health a priority.

5. Connect with others in the bariatric community. Join an online or in-person support group. Seek help from the resources listed below.

Resources

Online recipes

Bariatric Foodie	www.bariatricfoodie.com
The World According to Eggface	www.theworldaccordingtoeggface.com
UnlockFood	www.unlockfood.ca/en/Recipes

Cookbooks and nutrition manuals

Weight Loss Surgery Cookbook for Dummies by Brian Davidson, David Fouts and Karen Meyers.

Eating Well after Weight Loss Surgery by Pat Levine and Michele Bontempo-Saray.

Recipes for Life after Weight-loss Surgery by Margaret Furtado and Lynette Schultz

Bariatric Meal Prep Made Easy by Kristin Willard, RD

The Complete Guide to Weight Loss Surgery: Your Questions Finally Answered by Lisa Kaouk and Monica Bashaw.

Single Anastomosis Duodeno-Ileal Bypass with Sleeve Gastrectomy (SADI) Handbook by Registered Dietitians of the Toronto Western Bariatric Surgery Program (PDF):
https://www.uhn.ca/Surgery/Clinics/Bariatric_Clinic/Documents/SADI-Information-Handbook.pdf

Food tracking websites and apps

Baritastic: www.baritastic.com

My Fitness Pal: www.myfitnesspal.com

Lose it!: www.loseit.com

Support Resources

TWH Bariatric Support Group on Facebook

Obesity Canada: www.obesitycanada.ca

Obesity Help: www.obesityhelp.com

How do I find a Dietitian?

You may want to follow up with a registered dietitian to help you keep on track with your weight loss goals. You can find dietitians here:

- Connect with bariatric surgery dietitians www.BariatricSurgeryNutrition.com
- Community Health Centers
www.health.gov.on.ca/en/common/system/services/chc/locations.aspx
- Family Health Teams:
www.health.gov.on.ca/en/pro/programs/fht/fht_progress.aspx
- Diabetes Education Centers:
www.health.gov.on.ca/en/pro/programs/diabetes/dep.aspx
- Private practice dietitians may be covered by third-party insurance so check with your employer. www.dietitians.ca/Find-A-Dietitian.aspx

For more information on helpful books, websites, and community services, visit the Toronto Western Hospital's Patient & Family Library.

Location: 1st Floor - West Wing, Main Atrium

Phone: 416 603 6277

Email twpfl@uhn.ca

Part 3: Mental Health and Psychosocial Support

Mood and anxiety

Living well after bariatric surgery involves balancing physical and mental health. Similar to how you keep track of your vitamins, blood sugar levels, and your ability to do physical activity, it is also important to regularly check your mood and anxiety levels. It can sometimes be challenging to detect changes in your mood, inquiring with friends and/or family members can be a helpful method to recognize change.

Many patients notice that their overall mood and anxiety improves after bariatric surgery, especially during the first year. Other patients may notice that their mood changes quickly or worsens. This can happen for many reasons, such as medical complications, weight loss goals not being met, stressful life events, relationship conflicts, problems with absorbing psychiatric medications, or poor vitamin and nutrient levels.

Mental health challenges can make it harder to follow guidelines for staying healthy after surgery. This may lead to possible complications, such as; vitamin and/or mineral deficiencies, low energy/fatigue, worsening mood, or even lead to weight regain. In the long-term not following the guidelines may lead to poor muscle and bone health; for example, osteoporosis later in life. It is important to pay attention to any changes in your mood and talk with health care providers about any concerns you have so that you can get the help you need.

How do I know if I am depressed?

Some signs and symptoms of depression include:

- Feeling sad, down or miserable most of the time, which gets in the way of your daily life. For example, work, school, relationships, chores, exercise or hobbies.
- Losing interest in activities you usually enjoy
- Changes in your appetite (increase or decrease)
- Problems with sleep most nights
- Constant fatigue or loss of energy
- Feel that you are worthless, hopeless or have guilt
- Ongoing self-blame or anger towards self
- Trouble concentrating or making decisions

- Thoughts of harming yourself, suicide, or death

How do I know if I have an anxiety disorder?

Anxiety is when you feel nervous or tense. You may feel like your heart is beating very quickly and you can't catch your breath. Everyone has anxiety sometimes, like during a job interview or when writing a test. This kind of anxiety is normal. It's usually mild, and doesn't last a long time.

Some signs and symptoms of anxiety include:

- Feeling nervous, restless or tense
- Having a sense of impending danger, panic or doom
- Having an increased heart rate
- Breathing rapidly (hyperventilation)
- Sweating
- Trembling
- Feeling weak or tired
- Trouble concentrating or thinking about anything other than the present worry
- Having trouble sleeping
- Experiencing gastrointestinal (GI) problems
- Having difficulty controlling worry
- Having the urge to avoid things that trigger anxiety

You may have an anxiety disorder if your symptoms:

- happens often or continues for a longer time
- is very bad or intense
- gets in the way of your daily life

People with anxiety disorders may find it hard to get things done, go to work, or spend time with others.

What can I do to stay mentally and emotionally healthy?

- Take care of your physical health by eating healthy foods, taking your vitamins, getting enough sleep and physical activity, and limiting your use of alcohol and drugs.
- Be kind with yourself when coping with stressors and conflict. Write in a journal, read a book, or share your feelings of being stressed, anxious or depressed with a friend or family member.
- Spend time with people whose company you enjoy.
- Take up or revisit a hobby or a new activity that interests you.
- Ask for help from your health care providers or support systems when you are feeling overwhelmed.

Psychiatric medications

Be sure to let your Primary Care Provider (PCP) or Psychiatrist know that you have had bariatric surgery. Do not make any changes to your psychiatric medications without consulting your Primary Care Provider or Psychiatrist.

If you have a current or past history of depression or anxiety, have your primary care provider or psychiatrist continue to monitor your symptoms after bariatric surgery.

If you are thinking about taking, or already taking, medications for mood or anxiety, it is important to know that these medications may be absorbed differently after bariatric surgery. For example, your primary care provider may need to change the dose of antidepressants to have the same effect after bariatric surgery.

Long-acting (also known as; slow release, extended-release) or enteric-coated medications may not be absorbed well after bariatric surgery. For some of these medications, the delayed release will be a part of their name, such as XL, XR, SR. Other medications may be long-acting without any label. Ask your pharmacist for help if you are unsure.

General recommendations

Early research suggests that the body absorbs many antidepressants differently during the first year after bariatric surgery. Your body may adjust and resume regular absorption of medications again one year after surgery.

It is important that you and your primary care provider closely watch for signs that your body is not absorbing medications normally.

Lithium

Some patients take lithium as a mood stabilizer. This medication is affected by changes in fluid and pH levels in the stomach. After bariatric surgery, patients may have higher levels of lithium in their body, which can cause problems in their nervous system.

Some symptoms include:

- tremor
- nausea
- vomiting
- drowsiness

Please have your Primary Care Provider increase frequency of lithium monitoring after surgery. After 1-year post-surgery, resume routine lithium monitoring.

Antipsychotic Medications

Please speak with your Primary Care Provider (PCP) or Psychiatrist before making any of the suggested changes below:

Some antipsychotic medications can be difficult to take after bariatric surgery. Lurasidone (Latuda) and ziprasidone (Zeldox) should be taken with meals to help the body absorb them better. After bariatric surgery, absorption can be affected by optimal meal intake. Lurasidone doses can be increased after surgery for patients who are having issues with getting enough calories daily.

Extended Release Medications (XR/SR/ER/CR)

Switch to immediate release medications. Note that dosages may also need to change, and this should only be done in consultation with your prescribing primary care provider

Venlafaxine (Effexor) XR

Evidence to date suggests that patients can continue with Venlafaxine XR post-surgery and patients do not need to switch to other dosage form or antidepressant. Patients

should be monitored post-surgery to any signs of relapse if continuing with Venlafaxine XR.

Bupropion (Wellbutrin) SR/XL

Although there are no specific trials for Bupropion SR/XL post-bariatric surgery, we would recommend continuing this medication post-surgery and monitoring closely after surgery for any signs of relapse of mental health symptoms.

Pristiq (Desvenlafaxine)

Pristiq is not absorbed immediately after surgery and cannot be crushed. Also, because of its coating, Pristiq might not be absorbed as well post-surgery. A decision should be made pre-surgery to determine if the benefit of Pristiq warrants continuing this medication post-surgery or if switching to another anti-depressant could be beneficial. Effexor may be a good option since Pristiq is its active metabolite, unless contraindicated (e.g. due to Effexor-induced hypertension, significant liver dysfunction or any other clinical reason).

Valproic Acid/Divalproex

It is recommended that patients treated with valproic acid/divalproex are closely monitored BEFORE and AFTER bariatric surgery with serum blood levels. Please use the valproic acid monitoring protocols from the UHN Bariatric Surgery Program if continuing valproic acid treatment.

Monitoring

Prescribers of psychiatric medications after bariatric surgery should be using measurement-based care (i.e., using clinical rating scales for depression, anxiety, etc) to identify symptom re-emergence after surgery and to guide dose optimization.

Alcohol and unhealthy coping behaviours

Alcohol

People who have had bariatric surgery are at higher risk of developing problems with alcohol. Bariatric surgery changes the way that alcohol is absorbed by the body. The alcohol enters the bloodstream more quickly and stays in the body longer. It also takes much less alcohol to feel intoxicated after surgery, sometimes even just one drink!

A family or personal history of addiction can increase your risk after surgery.

Other unhealthy behaviours

Some people who used to use food to cope with stress or emotions might turn to other problem or impulsive behaviours such as shopping, gambling, using recreational drugs (cannabis, cocaine, heroin, opioids etc.) or unsafe sexual behaviours. Like alcohol, these behaviours can lead to emotional, psychological and physical health problems.

Why do some people develop these problem behaviours after bariatric surgery?

Alcohol might feel more pleasurable than before or be used as a way to cope with difficult emotions or life stressors. Drinking and other behaviours may be replacing food as a way to cope with life stressors, medical complications or physical and mental health problems.

How much alcohol can I drink after bariatric surgery?

The Bariatric Surgery Program highly recommends that you do not drink any alcohol. This is to reduce your chances of developing an alcohol use disorder and mental or physical health problems. Also, alcohol contains calories but minimal nutrition, and it may work against your weight loss goal.

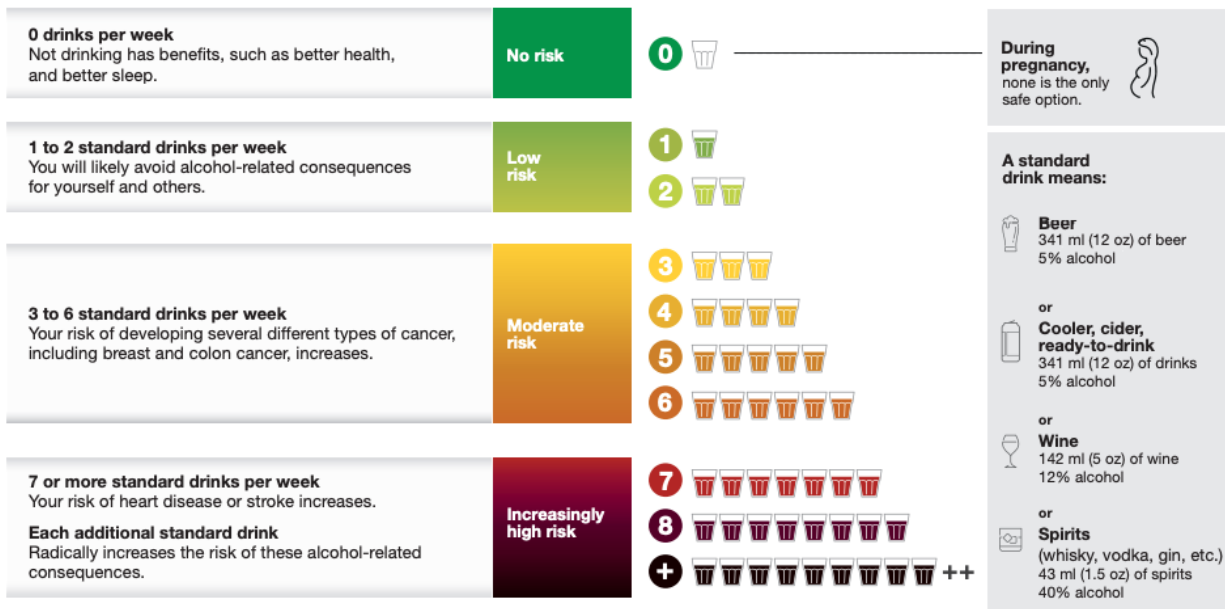
If you do choose to drink alcohol, please think about the following:

- Alcohol can irritate your stomach lining. We recommend that you do not drink any alcohol for at least 6 months after surgery to help with healing.
- After 6 months, it is important to limit how often, how much, and how quickly you drink. Your body has changed, and you will absorb the alcohol differently than before your surgery, which could lead to unexpected reactions and problems.

Canada's Guidance on Alcohol and Health

Alcohol consumption per week

Drinking alcohol has negative consequences. The more alcohol you drink per week, the more the consequences add up.



Source: Canadian Centre for Substance Use and Addiction

How do I know if I am developing an alcohol use problem or other unhealthy coping behaviours?

- I'm spending more time thinking about _____ (alcohol, recreational drugs, shopping, gambling, sex, other behaviours).
- I'm spending more time doing activities related to this unhealthy behaviour (such as going to bars or casinos, spending time with people who have substance use problems).
- I'm spending less time on my work, school or social responsibilities.
- I keep using the substance or doing the behaviour even though it has a negative effect on my physical and mental health, my relationships, work and other responsibilities.
- I haven't been able to successfully cut down or stop when I have tried to.
- I have withdrawal symptoms when I try to stop.

- My family, friends, or health care providers have told me that they are worried about me.
- I'm having legal or money problems because of the behaviour.

If you, your family members, or your health care provider thinks you might have an alcohol problem or other problem behaviour, talk with your primary care provider, the Bariatric Surgery Clinic, or refer to resources at the end of this section for more options.

Smoking

The Bariatric Program strongly recommends patients quit all types of smoking (cigarettes, cigars, cannabis) before bariatric surgery (this is a requirement for the Roux-En-Y and SADI) because smoking can increase the risk of developing marginal ulcers at the anastomosis and slow healing after surgery.

However, some people return to smoking after surgery, usually to cope with stress. It usually takes people many tries before they quit permanently. So don't give up if you have tried quitting and it didn't work the first time. There are many aids available to help people quit smoking, such as medications, nicotine patches and gum.

Where can I get help to help me quit?

Talk to your family doctor or your pharmacist about your options for quitting smoking. You can also call Smokers Helpline at 1 877 513 5333 or visit the website www.smokershelpline.ca. More resources are listed at the end of this handbook.

Weight Regain

It is common and normal for people to regain some weight after reaching their lowest weight after surgery. Weight regain refers to a regain of significant weight after an initial successful response to surgery. The Ontario Bariatric Network defines weight regain as a 15% rise in total body weight from your lowest weight after surgery.

Some weight regain can happen even if you are following our program's dietary and lifestyle guidelines.

Weight regain can happen for reasons such as:

- poor food choices or unhealthy eating patterns, such as skipping meals, grazing, overeating, increased consumption of high calorie liquids
- nutrient deficiencies related to food choices or not taking enough supplements
- emotional or mental health problems and uncontrolled stress
- medical conditions
- medications
- surgical complications (problems during the surgery)
- not getting enough activity or exercise
- Disrupted or irregular sleep patterns

It is normal to be afraid of weight regain, especially if you have reached your ideal or maintenance weight. Remind yourself of all the positive changes you have made to your lifestyle and your commitment to maintaining these changes.

If unhealthy eating or activity habits get out of control, it is common for people to regain the weight they lost. Remember that changes in your eating and exercise habits after surgery are part of a new lifestyle. You will need to follow them for the rest of your life.

What should I do if I regain a lot of weight after bariatric surgery?

- Review our program's nutrition handbook and read the nutrition section of this handbook for reminders on how to maintain a health after surgery.
- Speak to your primary care provider about taking medication to treat any physical and mental health conditions.
- Try out individual or group therapy to talk about the possible psychological causes for weight regain.
- Seek nutrition counselling from a Dietitian.
- Reach out to the Toronto Western Hospital Bariatric Surgery Program to find out what services are available.

Problem Eating Habits

The first year after bariatric surgery is often called the “honeymoon phase.” This is because, for many people, their extra weight falls off quickly, they do not feel hungry, and they feel full quickly.

Between the first and second year after surgery, weight loss usually slows down or stops. Many people find that they can return to eating larger amounts of food and

different types of food. This can lead to the return of problem eating habits, like eating to cope with emotions, manage boredom, picking or grazing throughout the day, bingeing or overeating, and loss of control.

Eating disorders

After bariatric surgery, a small number of people develop an eating disorder, such as anorexia nervosa or bulimia nervosa. People can become so afraid of regaining the weight they lost that they become too focused on controlling their weight, appearance, calories, exercise, or types of food to eat. This control can develop into an eating disorder.

How do I know if I have an eating disorder?

- I am not eating enough to meet my body's needs.
- I have a strong fear of regaining weight.
- My body weight and shape greatly influence my self-esteem and body image.
- I try to prevent weight regain by exercising many hours every day, taking laxatives, fasting, or making myself vomit.

How can I deal with problem eating habits?

- Practice healthy ways to cope with stressful life events that do not involve food.
- Talk to your primary care provider, see a Registered Dietitian, or seek psychotherapy in your community.
- Consult with your health care providers about taking medications for physical and mental health conditions and if this is right for you.
- After bariatric surgery, eat nutritious foods with healthy portions. Enjoy less healthy foods like sweets only in moderation. While bariatric surgery is not meant to be a strict diet plan where you deprive yourself of your favorite foods, it is important to pay attention to your nutritional needs.
- Weigh yourself once a week to check your weight. Weighing yourself more than once a week can make you feel distress. Remember that small changes in your weight each day do not accurately represent your overall weight loss.

Body Image, Extra Skin, and Mind-Body Lag

What is body image?

Body image is your “mind’s eye” version of your physical shape and size. It’s how you think about your body overall. Your body image can change over time depending on you the food you eat, your exercise habits, what clothes you wear and how they fit, and how you interact with others.

Although body image generally improves after bariatric surgery, for some patients even after weight loss they may still have significant body image concerns and low self-esteem. Some patients may develop a negative body image for many reasons. It may be because of extra or loose skin, “mind-body lag” (explained below), or related to unrealistic expectations about how the surgery would improve their self-esteem or confidence.

Extra skin or loose skin

After bariatric surgery, 9 out of 10 people develop extra (excess) or loose skin. Age, amount of weight lost, where the body weight is distributed, and other reasons determine how much extra skin you may have. Extra skin most commonly appears on the upper arms, breasts or chest, neck, stomach, and thighs.

The extra skin can cause pain and redness. It may also get in the way of exercise and other physical activities. Some people may feel upset about the way their body looks with extra skin, and it can negatively affect their self-esteem and body image. Negative body image can also get in the way of intimacy and sex.

How can I manage extra skin?

- Try wearing compression garments, which can help hold the skin in place. This can help your ability to engage in exercise, and to relieve discomfort/irritation/chaffing during your everyday activities and may even help to reduce thinking about the excess skin as you move around.
- Focus on the positive changes of bariatric surgery in your life, like having more energy, better mobility, and positive changes in your physical health and quality of life. Thinking about the positives can help you cope with the way extra skin looks or feels.
- Focus on the other things that make you feel good about your physical self, no matter what you weigh. For example, some people can appreciate their very nice hands, eyes, or glowing skin.

- Share your feelings with other bariatric surgery patients who can relate to your experiences, or speak with your primary care provider, a counsellor or therapist.
- The only way to permanently remove extra skin is through plastic surgery. Read more about this topic in Part 1 of this handbook.

Mind-Body Lag

The mind-body lag normally happens during the first 1 to 2 years after surgery. This means that even though you have lost a lot of weight, you still feel that you look or weigh the same as you did before surgery. This is a common feeling for many bariatric surgery patients.

How can I manage mind-body lag?

- ✓ Practice patience: give yourself time to adjust to your new body.
- ✓ Accept the physical changes your body has experienced. Appreciate the positive changes to your overall health and function of your body
- ✓ When you start to have negative or critical thoughts about your body, be kind to yourself and practice positive self-talk. Remind yourself how far you have come in your health journey.

Relationships and support systems

After bariatric surgery, you may notice changes in your relationships. You may interact differently with people day to day, such as: your spouse or partner, family members, children, friends, people you are dating, people at work, and people you do not know well, like service workers or strangers on the street.

It is normal for relationships change. You may find you are more confident and feel comfortable expressing yourself more than you did before your surgery. The people you interact with may not be used to this new version of you. They may react in different ways.

Recognize some of the ways that your relationships may change after surgery so that you can manage challenges you may have with your loved ones and others in your life.

How could my relationship with my spouse/partner change after bariatric surgery?

- Bariatric surgery can strengthen relationships that you had before surgery. Strong relationships continue to grow and adapt in a positive way, despite the changes brought about by surgery.
- Relationships that were not strong and healthy before your surgery may end up getting worse over time.
- After surgery, people may find that intimacy with their partner is better — they may have more confidence, energy and attraction from partners.
- You and your partner may be more affectionate with each other and your sexual satisfaction may increase.
- In some ways, your partner may feel that they are “losing” some version of you that they knew before.
- Your partner may resent your new interests and the time you are spending doing new activities, like exercising or participating in support groups. They may feel sad or neglected.
- Your partner may also feel that your weight loss has led to more people being interested in you. This may cause some jealousy.
- If your partner also struggles with their weight, and cannot lose weight in the same way that you can, they may impact how they feel about their body. Their negative feelings may also cause them to act in ways that sabotage or harm your lifestyle changes after surgery.

How could my relationship with my family or friends change after bariatric surgery?

Within your family, you may find that your role changes, or you may take on a new role. For example, being able to move your body more easily or having less pain may let you take on more chores around the home, like cleaning, gardening and maintenance work.

Some people who have children may find that their relationships with them improve as they now have more energy and can take part in more activities.

You may also form new friendships outside of the home, and spend less time sitting and being inactive.

It can be hard if some of your family and friends practice unhealthy behaviours that you are working to change, especially if they tempt you or pressure you to join them.

If relationships with others feel different or “threatened” after surgery, it’s normal to have negative feelings. Sometimes relationships need to, and will, end, as you move in different directions.

How can I manage relationship changes after bariatric surgery?

- Talking to your loved ones can help you adapt and grow together instead of apart. Explore these questions with each other:
 - How is our relationship being affected?
 - How does our relationship look different after surgery?
 - How has bariatric surgery affected me/you?
 - What has been different for me/you?
- Try to solve problems and issues as they come up.
- Explore new ways of interacting with each other. Discover new interests you have in common and can do together.
- Express your needs and concerns to the people supporting you. Try not to assume that others know how you feel without you telling them. You may feel frustrated because they are not supporting you how you would like them to. Often, your loved ones may just need you to tell them how they can best help you after surgery.
- Ask for support and understanding from your loved ones, colleagues and other bariatric surgery patients.
- With the improved confidence that you may feel after surgery, you may not be willing to accept relationships that are unsatisfying or abusive. You may feel that there are better options for you.

Psychosocial support options

Support groups can help you connect with people who had bariatric surgery.

Toronto Western Hospital's Bariatric Surgery Program offers a clinician-lead support groups.

Where to meet: All groups are virtual

Education Webinar: Third Wednesday of each month. This education-based session is led by a clinician who will discuss different topics about bariatric surgery. All patients and their support people are welcome to attend, both leading up to and after surgery.

Body Image Group: Facilitated by 2 Social Workers. 4 sessions on Fridays from 10am-12pm.

Patient thoughts: "The practical methods shared seem to be of enough variety for everyone to find suitable tools for themselves"

Dialectical Behavioural Therapy (DBT) Skills Group: Facilitated by two Psychologists. Consists of 3 modules that are 5 weeks each, scheduled on Tuesdays from 1-3pm.

Patient thoughts: "I really appreciate how it helped me identify certain behaviours that were not helping me on my weight-loss journey, and that I am not alone."

Mindful Eating Group: Facilitated by a Psychologist and/or Registered Dietitian. 9 weekly sessions on Fridays from 2-4pm.

Patient thoughts: "I loved the fact that we actually ate together and practiced the skills that we were learning. Also sharing the homework each week was amazing to make the connection"

Mindful Eating Graduate Group: Facilitated by a Psychologist and or Registered Dietitian, this is a drop-in group on the 2nd Wednesday of each month from 4-5pm. It is ONLY for patients who have previously completed the 9-session Mindful Eating program.

Peer Mentorship Program: Facilitated by the Social Work Team, for pre-surgery patients who wish to be matched to a post-surgery mentor who will support them on their journey. *This is a one-to-one support, not a group.*

Individual Psychotherapy: The Social Work and Psychology Teams (including students) work with a small number of patients individually, typically using our program's teleCBT protocol.

Other support groups

There are also many in-person and online support groups across Ontario. Try searching on www.obesityhelp.ca or on Facebook to see what is available in your area.

Healthy sleep

A healthy sleep pattern, sometimes called sleep hygiene, is key to managing your weight after surgery. Studies show that a lack of good quality sleep can lead to weight regain and other health issues, including type 2 diabetes, heart disease, injuries, and mood problems.

How can I improve my sleep habits?

- Try to go to bed and wake up at the same time each night and day, even on weekends.
- Create a peaceful bedroom environment that is quiet, dark, and at a comfortable, cool temperature.
- Remove electronic devices such as TVs, computers and smartphones from your bedroom.
- Avoid looking at screens or electronic devices for at least 30 minutes before going to bed.
- Avoid having large meals, caffeine, and alcohol before bedtime.
- Be physically active during the day (but not a few hours before bedtime). This can help you fall asleep more easily at night.

Managing stress

Finding healthy and effective ways to cope with stress is important for your overall wellbeing. Stress is normal. It will always be a part of life. But unmanaged stress and poor ways of coping with it can get in the way of your weight loss or maintenance.

Some ways to cope with stress may include:

- Relaxation techniques: deep breathing, meditation, progressive muscle relaxation.
- Make sleep a priority and keep a healthy sleep pattern.
- Do physical activities and exercises that you enjoy.
- Put your health and wellness first by keeping home, school and work separate.
- Build healthy relationships and ask for support when you need it.
- Seek support from a trained mental health professional if what you are doing is not working for you. This might include a psychologist, social worker, registered psychotherapist, psychiatrist, primary care provider with psychotherapy qualifications.
- Join a stress management program, like a mindfulness-based stress reduction workshop.

Summary

As you leave our program, remember these tips for good mental health:

- ✓ If you notice any major changes in your mood, energy levels or eating behaviours, speak with your primary care provider. Together you can find the

help you need.

- ✓ Read the nutrition resources you were given to make sure you are getting all of the vitamins and minerals you need in your food and supplements.
- ✓ Speak to your primary care provider about community resources for mental health issues.
- ✓ Use this guide and the resources in it to help you decide what services you might need to keep up with your everyday life changes.

Conclusion

We have enjoyed working with you throughout your journey in our Bariatric Surgery Program. Congratulations, once again, on all of your efforts and achievements. We wish you the best of luck as you move forward!

It's the journey, not the destination that matters! It is learning about yourself, enduring, understanding, accepting, forgiving, appreciating, growing and being an active participant in your own life!

Mental Health Resources

Important: This is not a full list of agencies and organizations. The University Health Network does not recommend one organization over another and is not responsible for the care and services provided. Some information may change. Please contact agencies or organizations directly to make sure the information is correct or to find out more about their services.

If you need help in an emergency or are in crisis:

- Visit your local emergency department or call 911
- Contact a distress centre in Ontario near you (listed below)

Distress Lines and Crisis Centres

When in need of someone to talk to. Operated by various agencies. Open 24 hours a day (unless otherwise noted):

Toronto Distress Centres: 416 408-4357 or 408-HELP

Gerstein Centre: 416 929-5200

Spectra Helpline: 416 920-0497 or 905 459-7777 for Brampton and Mississauga residents

TTY: 905 278-4890; Languages: English, Punjabi, Hindi, Urdu, Spanish, Portuguese

Assaulted Women's Helpline: 416 863-0511; Toll-free: 1 866 863-0511

Community Crisis Line Scarborough and Rouge Hospital: 416 495-2891 for 24/7 telephone crisis support.

Durham Crisis and Mental Health Line: 905 666-0483

Oakville Distress Centre: 905 849-4541 for residents of Halton Region (Burlington, Halton Hills, Milton and Oakville)

Lakeridge Health Crisis Intervention Team (7:30 am to 11:30 pm daily):
905-433-4384

Mental Health - Community Services

FindHelp **Website:** www.findhelp.ca

FindHelp operates 211, an online service which helps Ontarians connect to government and community-based health and social services available in their communities.

BounceBack **Website:** bouncebackontario.ca

BounceBack is an evidenced-based program that helps adults overcome symptoms of mild to moderate depression, low mood, or stress, with or without anxiety.

Canadian Mental Health Association **Website:** cmha.ca

Community-based mental health services and support for children, youth and adults.

Mood Disorders Association of Ontario **Website:** www.mooddisorders.ca

Free peer support and recovery programs for people living with depression, anxiety, and bipolar disorder.

Centre for Addiction and Mental Health (CAMH)

Website: www.camh.ca/en/your-care/access-camh

Access CAMH provides information, intake and scheduling for most CAMH services. CAMH is located in Toronto and is Canada's largest mental health and addiction hospital. It provides: clinical programs, residential programs, support and rehabilitation. Access CAMH is for patients, families and medical professionals to find services with a single phone call.

Ontario Shores Centre for Mental Health Sciences

Website: www.ontarioshores.ca

Provides a range of special assessment and treatment services to those living with complex and serious mental illness.

Togetherall

Website: <http://togetherall.com>

Togetherall is an online mental health and wellbeing service offering self-help programs, creative outlets and community support. Free in Ontario – 24/7 online support.

Alcohol and addictions

Connex Ontario Health Services

Website: www.connexontario.ca

Offers free and confidential private health services information for people having problems with alcohol and drugs, mental health or gambling. Their phone lines are open 24/7.

Centre for Addiction and Mental Health (CAMH)

Website: www.camh.ca/en/your-care/access-camh

Debtors Anonymous:

Website: www.debtorsanonymous.ca

A 12-step program offered by a non-profit organization. For people whose debts or problems with over or under spending have made their life unmanageable. During meetings, members share their experience, strength and hope and help each other to achieve financial solvency.

The Tweed Centre for Women and their Families:

Website: www.jeantweed.com

Agency offering community-based substance abuse, mental health and problem gambling support for women in Ontario. Includes a wide range of services including residential and day programming, out-patient programming including family and trauma counseling, individualized counselling and continuing care.

Eating Disorders

National Eating Disorders Information Centre

Website: www.nedic.ca

The National Eating Disorder Information Centre (NEDIC) is a Canadian non-profit providing resources on eating disorders and weight preoccupation.

Sheena's Place

Website: www.sheenasplace.org

Located in Toronto, Sheena's Place offers support to anyone 17+ affected by an eating disorder, as well as their families and friends. Provides professionally facilitated support groups and services free of charge.

Psychotherapy and Counselling Services

Ontario Psychotherapy and Counselling Program (OPC)

Website: ontario.psychotherapyandcounseling.ca

A psychotherapy training program and a Psychotherapist Referral Network, with counselors and psychotherapists in Toronto and the Greater Toronto Area, Barrie, Northumberland, Peterborough, Ottawa, St. Catharines, Niagara, London and other regions in Ontario.

Family Service Ontario Counselling Services

Website: familyserviceontario.org

Family Service Ontario represents 48 not-for-profit member agencies across the province. Family Service agencies in Ontario also deliver mental health, trauma and wellness services to individuals and families in workplaces and communities.

Medical Psychotherapy Association Canada (MDPAC)

Website: www.mdpac.ca/cgi/page.cgi/Public/find-a-psychotherapist.html

A non-profit professional association of physicians with over 300 members across Canada. Develops and protects standards of practice of psychotherapy by physicians.

Ontario Psychological Association (OPA)

Website: www.psych.on.ca/Utilities/Find-a-psychologist.aspx

A professional organization representing psychology and psychologists in Ontario. Members are clinicians, academics, researchers, and students who are dedicated to improving the mental health and wellbeing of Ontarians.

Find a Social Worker Ontario

Website: www.findasocialworker.ca/ON/en/FindASocialWorker.asp

Online directory of social workers in private practice in Ontario, Canada.

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