

Bariatric Surgery



Source : Pixabay

A Practical Handbook

For Patients Undergoing Bariatric Surgery

Patient's name _____
Surgeon's name _____
Time of appointment _____
Accompanied by _____
Time of surgery _____
Accompanied by _____

File number _____
Date of pre-admission appt _____
Location _____
Date of surgery _____
Location (date of surgery) _____

WARNING

This handbook is intended for general information purposes only. It cannot under any circumstance replace the advice, diagnosis, treatments or care provided by health care professionals. **Please consult your doctor and other qualified members of your health care team to discuss the topics covered in this guide. Always consult a qualified health care professional about any issue that could affect your health or the health of another person.**

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Please Note :

This document is for educational purposes only. It does not replace the advice of a physician, nor does it replace the advice and care offered by health care professionals. If you have questions or concerns about your health, please contact a qualified health practitioner.

Hello !

Welcome to the CIUSSS-MCQ's health facilities! Soon you will be undergoing surgery. Your cooperation and participation are essential for each step of the healing process to go smoothly.

This practical guide will help you prepare for your stay at the hospital, and can answer some basic questions patients often have. Most of the information applies to both types of bariatric surgery. If ever this is not the case, the differences between the two will be clearly indicated.

Take the time to read this guide carefully, and please bring it with you to your appointments prior to the surgery and on the day of surgery itself.

Introduction

What Is Bariatric Surgery ?

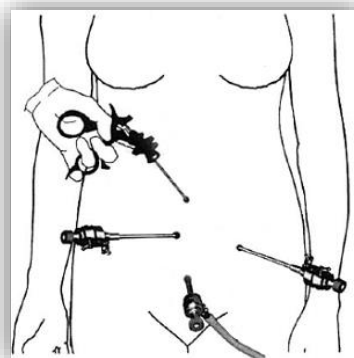
Bariatric surgery is a weight-loss surgery used to treat cases of severe obesity. Obesity is a serious health problem that can have consequences for other health issues, such as :

- High blood pressure
- Diabetes
- Increased risk of cardiovascular disease.

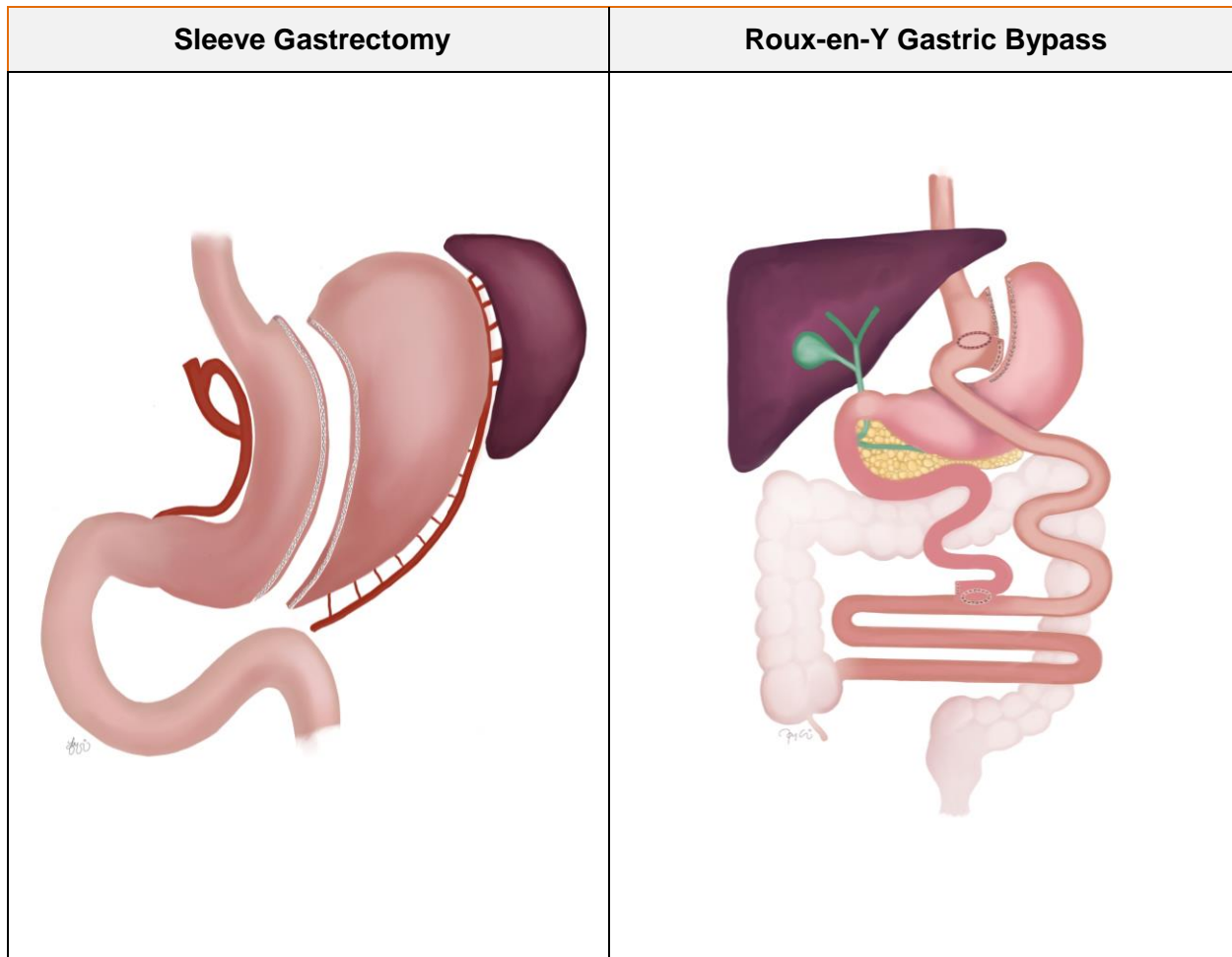
These types of surgeries are done laparoscopically. A small instrument with a camera attached to the end is inserted into the abdomen via small incisions (cuts) made by the surgeon.

Your surgeon will meet with you to choose the best kind of surgery for you. It's important that you understand both the advantages and the risks associated with bariatric surgery.

You will have been told about the different types of surgeries at the information session. However, don't hesitate to ask any questions you still have. Your health care team will be happy to answer them.



There are two types of bariatric surgery performed at the CIUSSS MCQ health centre :



Source : Images fournies par Dre Joyaube Chapdelaine

Types of Surgery

Sleeve Gastrectomy

In this surgery, about 2/3 of the stomach is removed. The remaining stomach is tube-shaped and has a smaller volume of only 100ml – 150ml (about 1/2c – 2/3 c). It is about the size of a banana.

The procedure is done laparoscopically. Small incisions of about 1 cm are made in the upper abdomen in order to insert the surgical instruments. One of the incisions is made a bit longer for the removal of the stomach.

The abdomen is slightly inflated using a gas, which allows the surgeon enough space to work properly.

Once this is done, the laparoscopic camera and the long-handled instruments are inserted. The stomach tissue is cut, and the staples put in place, using the same surgical procedures.

This surgery is recommended if :

- You have a Body Mass Index (BMI) of 40, or if you have a BMI of 35 or higher together with related health problems that require immediate weight loss, such as diabetes, high blood pressure or sleep apnea.
- An adjustable gastric band (or « lap-band ») has failed to work for whatever reason.

Roux-en-Y Gastric Bypass

Gastric bypass surgery reduces the size of the stomach and restricts the amount of food you can eat at any one time. A small gastric pouch is created that has a tiny capacity which can hold very little food. You feel full sooner. Since the stomach is much-reduced in size, food takes longer to go from the upper part of the stomach down into the intestine during digestion. Consequently, you eat less, and you lose weight.

Furthermore, this surgery bypasses a section of the intestine so that food is absorbed in only part of the intestine, reducing overall absorption of nutrients.

Surgeons use laparoscopes for this type of surgery. This means that they make a series of small incisions, instead of one big, long cut, through which they insert surgical instruments to operate on the stomach and the intestines.

The presence of the tiny laparoscopic camera inside the abdomen allows the surgeon to see the procedure on a video screen nearby. The surgeon creates a new gastric pouch by cutting the stomach tissues and using tiny staples. This will limit the amount of food you will be able to eat from this point on.

Once these changes have been made to the stomach, the surgeon makes a cut about 100 cm from the start of the small intestine and re-attaches the intestine to the gastric pouch.

The small gastric pouch fills up very quickly with food, which then travels only half the distance in the intestine than it would have done previously.

Navigating Your Hospital Stay

Throughout your hospital stay and during the period of follow-up care, you and your family will form a team together with the staff of the CIUSSS MCQ health centre. Here is what you need to know to play an active role in your own care.

Length of Hospitalization

You will be hospitalized for at least 24 hours. Your condition will determine whether you will have to stay longer.

Type of Anesthesia

You will be under general anesthetic during the surgery.

Length of Surgery

The surgery lasts from about 50 minutes to 2 hours; the length of time is different for each person.

Incisions

5 incisions will be made between your navel (belly button) and your thorax (chest).

Waking Up After Surgery

After surgery, you'll spend between 45 minutes and 2 hours in a recovery room where you will be given medication to help with pain and nausea, as needed.

- It's normal to feel heaviness or pressure in your chest when you awake from surgery. This is due to the gas that was used for the laparoscopic procedures.
- It's normal to feel pain in your abdomen.
- It's normal to feel nausea that can be difficult to control at first.

Every surgery entails a degree of pain; every patient will experience pain differently.

Returning to Your Room

- You can start sipping small amounts of water right away.
- A nurse will check your vital signs regularly (blood pressure, pulse, and temperature).
- You will be helped to get up and moving soon after returning to your room, in order to prevent vascular and respiratory problems.

Before Your Surgery

The Pre-Operative Diet

Following a pre-operative diet leading up to your surgery is very important. It is usually started about 10 days before. The pre-op diet will help to reduce the size of your liver, which helps the surgery go more smoothly, and lowers the risk of complications afterwards.

The dietitian/nutritionist will explain both the pre- and post-operative diets to you in detail.

You should eat :

- **3 portions of original *Slim Fast*[®] meal replacement, but NOT *Advanced Nutrition*[®].**
You can choose it in powder form to be mixed with either skim, 1% or 2% milk, or ready-to-drink.
PLUS + 1 cup of BOOST “*Just Protein*[®]” per portion of *Slim Fast*[®]
PLUS + your choice of 1 *Protiflife*[®] product.
- OR
- **5 *Boost*[®] Diabetic**
- OR
- **5 choices of *Protiflife*[®] product**

Add one (1) cup of plain vegetables per day (but NOT potato, sweet potato, avocado or corn). You can eat them raw or cooked (steamed or simmered in lean broth), without the addition of any fats.

Plain homemade vegetable soup is an option, but without the addition of any other foods. If you add broth, it must be fat free, with 3 grams of fat or less indicated on the label. **The soup must be included in calculating your daily portions because you must not exceed the one cup of vegetables allowed per day.** Salt, pepper, spices and herbs are allowed.

Between your meal replacements, you can eat or drink as much of the following as you want :

- Water, herbal tea, tea or coffee. You can add a few drops of milk to the coffee or tea with a sugar substitute if you wish (such as *Splenda*[®])
- Flavored, sugar-free water (such as *Mio*[®] or *Cristal Light*[®] drops)
- Bouillon or broth (containing 3 grams of fats (lipids) or less)
- Sugar-free *Jell-o*[®]
- Sugar-free chewing gum and candies are allowed.

YOU MUST NOT EAT ANY OTHER FOODS

The goal of the diet is to reduce the size of the liver and to prevent it from becoming engorged, which helps prevent possible complications after surgery. **If the liver is engorged and this diet is not carefully followed, surgery will be cancelled.**

PLEASE NOTE :

This diet is recommended as a lead-up to bariatric surgery ONLY. It is not recommended to follow this diet at any other time.

Stop Using Tobacco Products

Cigarettes irritate the stomach and increase the risk of serious complications, among other things. It is **MANDATORY** to quit smoking for this surgery. If you don't, the surgery will be cancelled. Nicotine increases the possibility of infection of your surgical wounds, delays their healing, and increases the risk of post-operative complications in general.

The CLSC offers support to help you quit smoking (find the contact info at the back of this guide). You can get a prescription to help you stop smoking if you see a nurse at one of the “Quit Smoking Centres” (in French, “Centre d’abandon du tabagisme”). Quebec also has a useful support website, “I Quit Now” (<http://tobaccofreequebec.ca/iqitnow>).

Exercise

Exercise helps you get into the best shape possible before surgery. If you are already exercising, keep it up! If not, begin to gently add some exercise to your daily routine.

Some suggestions :

- Walk or cycle for 15 minutes/day and gradually increase the time, at your own rhythm
- Go swimming once or twice a week according to your ability.

Stop Drinking Alcohol

Surgeons strongly recommend that you do not consume any alcohol from the time you decide to undergo surgery until your return home afterwards. Alcohol can alter the effect of anesthetic medications used during surgery.

Eat Healthy Foods

Eating a healthy diet leading up to your surgery can contribute to a speedier recovery afterwards. See Annex I to refer to Canada’s Food Guide.

Find an Alternative to Oral Contraceptives

If you are a woman of childbearing age, please discuss alternatives to oral contraceptives with your doctor. Since bariatric surgery will reduce your body’s capacity of absorption during digestion, there is a risk of becoming pregnant even if taking oral contraceptive pills.

Managing Your Medications Prior to Surgery

Medication to be stopped	Date Stopped	# of days before surgery
Medications to be taken the morning of surgery		Time
Preparation of the bowel at home, the night before and the day of surgery : <input type="checkbox"/> No preparation necessary <input type="checkbox"/> 2 sodium phosphate enemas (Fleet) : 1 the night before; 1 the morning of surgery <input type="checkbox"/> Bi-Peglyte® bowel prep.		

Medications to Be Stopped Before Surgery

Medications to be stopped _____ day(s) before surgery :

Medications to Be Taken the Morning of Surgery

Take your medication with only 30– 60ml (1-2 oz) of water.

Note to diabetic patients: do not take your oral hypoglycemic drugs or your insulin the morning of your surgery.

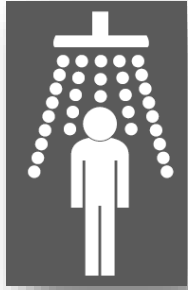
Plan to Have Help at Home Afterwards

Plan to have a friend or relative stay with you the first few days after you're back at home and try to prepare a few meals in advance. Make sure there is some acetaminophen (Tylenol®) in your home medicine cabinet to relieve pain. Before your surgery, you can ask the CLSC about any community services available in your region that might be able to support you.

Names of People Who Can Help	Phone Number(s)

The Day of Surgery

Bathing and Showering



To reduce the risk of infection after surgery, it's important to take a shower or bath beforehand, ideally the morning of the surgery itself.

What to Remove :

- All makeup
- Nail polish
- Vaginal tampons : use sanitary napkins instead
- Contact lenses
- All jewelry, including body piercings (micro-dermal piercing as well)

What to Bring With You :

- Medicare card
- Hospital card
- All your medications in their original containers, and a list from the pharmacy of all the medications you take
- Any inhalers, drops, ointments or creams you might need
- Your CPAP machine (if you use one)
- Dressing gown and non-slip slippers
- A full range of necessary personal toiletries (toothbrush and paste, deodorant, etc.)
- Comfortable underwear
- Containers for storing dentures, glasses, contact lenses, as needed
- Tissues (Kleenex)
- Sanitary napkins (not tampons)
- A 50 ml container of urine for women 15-50 years of age capable of bearing a child
- A padlock or combination lock
- This handbook
- A bottle of protein water, such as *Protein 20*[®] or *biPro*[®]

Please leave all money and valuables at home.

The CIUSSS MCQ health authority is not responsible for the loss of any money or valuables you might have in your possession.

Medications: Whether to Stop or Keep Taking Them

It is important to keep taking your regular medications. Ask your pharmacist if the pills you take can be ground into powder. Capsules can often be opened and sprinkled on your food. In the first few months following surgery it will be difficult for some pills to be swallowed whole.

If you're taking medications prescribed by the doctor, please carefully follow the instructions given to you by the nurse at your pre-admission appointment. Take notes in the section provided for that purpose at the end of this booklet. Heart and blood pressure medications must be taken with a bit of water on the day of the surgery, unless otherwise indicated.

If you are unsure or have any questions, please check with a nurse from the Bariatric Clinic (in Drummondville at the Ste-Croix Hospital: 819-478-646, ext. 24489; in Trois-Rivières, at the "Centre Hospitalier Affilié Universitaire Régional": 819-697-3333, ext. 64578).

Inhalers **must be taken** on the morning of your surgery even if you only take them as needed. **You must bring your inhaler and spacer (aerochamber) with you the day of your surgery.**

Going to the Hospital

Where to go for admission

Go to the room number that has been written on the first page of your personal copy of this handbook. Arrive at the time assigned to you the night before by the secretary of the surgical care unit. A hospital employee will finalize your admission upon arrival. You will be given an identification bracelet to wear and be directed to the appropriate surgical care unit.

In the surgical care unit

You will be greeted by the nursing staff, who will help you to prepare for surgery. You'll put on a hospital gown and will have to remove **all** your clothing, including your underwear.

An orderly will come to take you to the operating room when it's time to go.

In the operating room

Different pieces of equipment will be set up to monitor you through the surgery. Every patient is given an IV when they arrive in the operating room.

Anesthesia

An anesthesiologist will meet with you and prescribe the proper anesthetic medication.

In the recovery room

Every person who undergoes surgery spends time in a recovery room immediately afterwards. The length of time varies from person to person, from 45 minutes to 2 hours. You'll receive medications to control pain and nausea, as needed.

Return to the surgical care unit

Your vital signs will be monitored closely (blood pressure, pulse, and respiration rate). This is standard practice to ensure that everything progresses normally.

- You can start to sip water in small amounts right away.
- You will be helped to get up and moving soon after returning to your room, in order to prevent vascular and respiratory problems.

It's normal

- To feel a weight or pressure in your chest upon awakening.

After Your Surgery

Getting Up and Moving

You will be encouraged to get up and moving frequently after the surgery.

You'll need to get up and moving because :

- This prevents circulatory problems (phlebitis) and respiratory complications (pneumonia).
- This helps release intestinal gas and reduces abdominal discomfort and bloating.



Eating : Post-operative Diets (1 month after surgery and after)

Post-operative Diet for Sleeve Gastrectomy Patients

While you are hospitalized, you will be fed a clear liquid diet in small portions. You will gradually begin to eat again on the first day after your operation as you progress from one phase of the diet to the next. The stages are as follows :

Phase 1 : Begins on the same day as your surgery /Day 1

A strict liquid diet, for about 4 days.

Phase 2 :

A semi-liquid diet for about 4 days.

Phase 3 :

A diet of soft pureed food for about 1 week.

Phase 4 :

A soft food diet for about 2 weeks.

Phase 5 :

A normal diet according to the 2019 Canada Food Guide.

Please note that the proportions of the different food groups as presented in the Guide will differ slightly for you due to your increased need for protein after this surgery.

PHASE 1 : STRICT LIQUID DIET

For about 4 Days

Once you have woken up from surgery, you can begin drinking a bit of water, or proceed otherwise according to your doctor's instructions.

For the first 4 days, choose **clear liquids**, i.e. liquids that are transparent and which you can drink with a straw.

Drink slowly, taking **only small sips at a time** to avoid nausea and/or vomiting. **Avoid** liquids that are either **too cold (icy drinks) or too hot (boiling)**.

Get plenty of fluids to avoid dehydration by **drinking frequently throughout the day**. Take only small sips about the size of a tablespoon and up to four (4) Tbsp at a time, once again to avoid nausea and vomiting. The goal at this stage is to be able to drink at least 4 cups, but ideally up to 6 cups, of liquid per day.

Liquids Allowed in Phase 1 :

- Water, clear broth, warm tisane (herbal tea), tea or coffee, according to what you can tolerate
- Pulp-free protein-rich fruit juice (see suggested recipe section in Annex III)
- Protein-enriched fruit gelatin (Jell-o®) (see suggested recipe)
- *Boost*® fruit juice supplements (**not** the dairy-based supplements)
- Regular *Gatorade*®, *Pedialyte*®, or a homemade recipe for a hydrating drink
- Protein water (*PROTEIN 2o*®) is available at *Bulk Barn*; *biPro*® protein water is available at *Couche-Tard* stores
- Protein powder *Revolution Nutrition Isolate Splash*® (available at *Popeye*), diluted in water.

N.B.: If you have difficulty drinking water, you can add some flavour drops, or try flavoured water, such as lemon, lime, cucumber, etc.

Try to drink hydrating and protein drinks instead of just water. Remember that at this stage you get nourishment only from liquids.

For breakfast :

- ¼ - ½ cup (60-125 ml) dry cereal soaked in about ¼ cup (60ml) milk. (e.g.: Corn Flakes[®], Special K[®], Rice Krispies[®]).

OR

- ¼ - ½ cup (60-125 ml) warm cereal (e.g.: cooked oatmeal, cream of wheat, baby cereal), thinned.
- You can drink ½ cup (125 ml) of diluted juice (a hydration formula or protein-enriched juice), about 15 minutes before or 30 minutes after breakfast, according to your own capacity to tolerate it. **Add milk powder or Boost Just Protein[®] powder to your meals and snacks.**

Snacks :

- ¼ - ½ cup (60-125 ml) milk (skim, 1%, or 2%) with milk powder or Boost Just Protein[®] powder added.

OR

- ¼ - ½ cup (60-125ml) of recommended juice (see Annex III for recipes of hydrating juice or protein-enriched juice).

OR

- ¼ - ½ cup (60-125 ml) of fruit puree OR Greek-style yoghurt OR protein-enriched milk shake (see recipe section).

Lunch and supper :

- ½ cup (125 ml) of pureed soup (see recipes in Annex III) with the addition of silken tofu, milk powder, or Boost Just Protein[®].

OR

- Protein meal replacements, soup, or protein-enriched oatmeal (eg: Protilife[®], available in pharmacies).

Introducing Solid Foods

You should eat **3 small meals per day**. There should be items from at least 3 food groups with a **source of protein**, and **2-3 snacks high in protein every day**.

It is recommended to wait at least an hour after waking to eat your first meal of the day. This will allow any morning swelling of the stomach to subside and make it easier for you to eat.

Take at least 20-30 minutes to eat a meal, eating only small mouthfuls about the size of a teaspoon (tsp). Eat slowly and chew your food very well, chewing every mouthful about 15 to 20 times each. Be very aware of signs of becoming full and stop as soon as you don't feel hungry anymore.

Drink well and keep hydrated by drinking from 1.5 to 2 litres per day (about 6-8 cups). **Do not drink while eating** in order to leave enough room in your stomach for the nutrition your body needs from solid food. Wait about 30 minutes (according to your own level of tolerance) after eating before drinking anything.

If you have trouble eating or drinking, this may be due to the presence of secretions. Try drinking a warm beverage before meals to help improve this situation.

Do not lie down after eating a meal, because this can cause gastric reflux. Resume walking and exercising as soon as possible.

During the first month, drink hydrating liquids (*Gatorade*[®] or a homemade recipe) and protein beverages (e.g.: *Boost*[®], *Slim Fast*[®], *Ensure*[®], *Oasis Nutrisolution*[®], or *Premier Protein*[®] available at *Costco*) in order **to fill your both your needs for hydration and for protein.**

Women should get 60 grams/day of protein, and men should get 70 g/day. Everyone needs about 1.5 litres of fluids per day.

At first, you might only be able to consume smaller portions than those suggested above. Don't worry! It can take a few weeks before you will be able to eat portions of this size. Proceed slowly : it's very important to respect the reduced capacity of your stomach.

PHASE 3 : SOFT PUREED FOOD

For about 1 week

Breakfast :

- ¼ - ½ cup (60-125 ml) dry cereal, soaked in ¼ - ½ cup (60-125 ml) milk with milk powder or *Boost Just Protein*[®] powder added (e.g.: *Corn Flakes*[®], *Special K*[®], *Rice Krispies*[®]).

OR

- ¼ - ½ cup (60-125 ml) warm cereal (cooked oatmeal, cream of wheat, or baby cereal), thinned.

OR

- A piece of white toast, crusts removed, with non-hydrogenated margarine, and an egg (omelette, or crushed hard-boiled).

Lunch and supper :

- Approximately 1.5 oz (45 g) of: cooked meat, pureed chicken or poached fish, in a light sauce (tomato or white sauce); tofu or an omelette; legumes (pea soup, beans, lentils, etc.).
- Approximately ¼ cup (60 ml) of pureed vegetables.
- Approximately ¼ cup (60 ml) of mashed potatoes.

Wait about 30 minutes after eating before drinking any liquids (time will vary from person to person). Select from the following list of healthy choices :

- ¼ - ½ **cup (60-125 ml)** rehydrating drink; protein-enriched juice; skim milk; protein-enriched milkshake; protein-enriched soup; a commercial, high-protein beverage (*Boost High Protein*[®]); yoghurt drink; a milk-based dessert; Greek-style yoghurt; fruit puree; high-protein gelatin.

At this stage you'll eat foods that are easy to digest, and soft enough to be broken with a fork.

Foods such as bread (plain, not toasted), pasta, rice and red meats can be more difficult to digest. Introduce them in small quantities according to your ability to tolerate them. Fat or greasy foods such as fried or breaded foods and rich sauces can cause discomfort and should be avoided.

If eating soft foods causes nausea or vomiting, return to Phase 2 of the diet, the semi-liquid stage.

What You Can Eat :

- An omelet or boiled egg.
- Cottage cheese, ricotta, or other soft cheese with less than 20% M.F.
- An egg salad mix with yoghurt and light mayonnaise.
- Lentils and other pulses; firm or semi-firm tofu.
- Canned fruit or fruit compote.
- Grilled or poached fish.
- Chicken or lean ground meat with a light sauce.

If you are hungry between meals, choose snacks that are high in protein, such as yoghurt, a hard-boiled egg, skim milk or cheese, or pudding made with milk. At this stage of the diet, it is good to eat dairy products made from skimmed or partially skimmed milk daily. Limit your intake of fats to 3-6 tsp/day (15-30 ml), and choose good quality, cold-pressed vegetable oils.

Breakfast :

- ½ cup (125 ml) of dry cereal softened in milk, or warm cereal such as oatmeal or cream of wheat

OR

- A toasted piece of white bread, crusts removed, with non-hydrogenated margarine, with 1 oz/30 g of light cheese or light "cretons" spread, or 1 Tbsp (15 ml) of peanut or other nut butter, or 1 egg.

Lunch and supper :

- Approximately 2 oz. (45 g) of meat, ground chicken or poached fish in a light sauce (white or tomato), or silken tofu, or an omelette made with 2 eggs.
- ¼ to ½ cup (60-125 ml) of ground or finely chopped vegetables.
- ¼ to ½ cup (60-125 ml) of boiled potatoes (mashed with a fork), or mashed.

Wait 30 minutes after eating before drinking any liquids, according to your own tolerance level.

- Then, have a ½ cup (125 ml) of a protein drink.

Snacks :

- Choose one of the following: ½ cup (125 ml) fruit puree; milk-based desserts; yoghurt; protein-enriched gelatin; or two (2) soda crackers or two (2) melba toast with 1 Tbsp of nut butter. See “suggestions of healthy snacks” in the table found later in this handbook.

If a snack is difficult to eat and digest, try having a liquid one instead.

At first, you might only be able to consume smaller portions than those suggested above. Don't worry! It can take a few weeks before you are able to eat portions of this size. Proceed slowly: it's very important to respect the reduced capacity of your stomach.

PHASE 5 : NORMAL DIET

About 30 days after surgery

Food will only be able to pass through the opening of your new stomach if it is ground very finely. For this reason, you **must chew your food as thoroughly as possible**, and **pay attention to when you begin to feel full**. Eat at a leisurely pace, taking at least 30 minutes to eat small meals.

When you're ready, begin to introduce small amounts of fresh bread, pasta, rice, red meats, salad, raw vegetables, and nuts. Proceed with moderation and be aware that these foods can be harder to swallow than other foods.

Bread and whole-grain cereals can be reintroduced according to your body's ability to tolerate them.

Eating 3 small meals and 2-3 protein snacks each day is the best way to manage feelings of hunger and fullness, and to maintain an optimal weight.

Focus mostly on proteins at first, and then gradually make room for the other food groups until you achieve a balanced diet according to the *2019 Canada Food Guide*.

Please note that the proportions of the different food groups as presented in the Guide will differ slightly for you due to your increased need for protein after this surgery.

Post-operative Diet for Gastric Bypass Patients (Roux-en-Y)

You will be given clear liquids during your hospital stay. You will then start a progressive diet for the first month after surgery. There are 5 stages :

Phase 1 : The day of the surgery/Day 1

A strict liquid diet for 1-2 days.

Phase 2 :

A semi-liquid diet for about one (1) week.

Phase 3 :

A diet of soft pureed foods for about one (1) week.

Phase 4 :

A diet of soft foods for about two (2) weeks.

Phase 5 :

A normal diet according to the *2019 Canada Food Guide*.

Please note that the proportions of the different food groups as presented in the Guide will differ slightly for you due to your increased need for protein after this surgery.

PHASE 1 : STRICT LIQUID DIET

For 1-2 days

Immediately following your operation, you can slowly begin to drink water. If this is otherwise indicated, follow your doctor's instructions.

On the first day, and the second day if necessary, drink **only clear liquids** (liquids that are transparent and that can be drunk with a straw).

Drink slowly, sipping only small amounts at a time to avoid nausea and/or vomiting.

Dilute juice and sweet drinks by half with water to avoid "Dumping Syndrome". **Avoid drinking liquids that are too cold (icy drinks) or too hot (boiling).**

Get plenty of fluids to avoid dehydration by **drinking frequently throughout the day**. Take only small sips about the size of a tablespoon and up to four (4) Tbsp at a time, once again to avoid nausea and vomiting. The goal at this stage is to be able to drink at least 4 cups and ideally up to 6 cups of liquid per day.

Liquids Allowed in Phase 1 :

- Water, clear broth, warm tisane (herbal tea), tea or coffee, according to what you can tolerate.
- Pulp-free protein-rich fruit juice (see suggested recipe section in Annex III).
- Protein-enriched fruit gelatin (Jell-o®) (see suggested recipe).
- *Boost*® fruit juice supplements (**not** the dairy-based supplements).
- Regular *Gatorade*®, *Pedialyte*®, or a homemade recipe for a hydration drink.
- Protein water (*PROTEIN 20*®) is available at *Bulk Barn*; *biPro*® protein water is available at *Couche-Tard* stores.
- Protein powder *Isolate Splash*® *Revolution Nutrition*® (available at *Popeye*), diluted in water.

N.B.: If you have difficulty drinking water, try adding some flavour drops, or drink flavoured water, such as lemon, lime, cucumber, etc.

Try to drink hydrating and protein drinks instead of plain water. Remember that at this stage you get nourishment from liquids only.

PHASE 2 : SEMI-LIQUID DIET

For about 1 week

Breakfast :

- ¼ - ½ cup (60-125 ml) dry cereal soaked in about ¼ cup (60 ml) milk. (e.g.: Corn Flakes®, Special K®, Rice Krispies®).

OR

- ¼ - ½ cup (60-125 ml) warm cereal (e.g.: cooked oatmeal, cream of wheat, baby cereal), thinned.
- You can drink ½ cup (125 ml) of diluted juice (a hydration formula or protein-enriched juice), about 15 minutes before or 30 minutes after breakfast, according to your own tolerance level. **Add milk powder or *Boost Just Protein*® powder to your meals and snacks.**

Lunch and supper :

- ½ cup (125 ml) of pureed soup (see recipes in Annex III) with the addition of silken tofu, milk powder, or *Boost Just Protein*®.

OR

- Protein meal replacements, soup, or protein-enriched oatmeal (e.g.: *Protillife*®, available in pharmacies).

Snacks :

- ¼ to ½ cup (60-125 ml) milk (skim, 1%, or 2%) with milk powder or *Boost Just Protein*[®] powder added.

OR

- ¼ to ½ cup (60-125 ml) of diluted juice or recommended juice (see Annex III for recipes of hydration formula juice or protein-enriched juice).

OR

- ¼ to ½ cup (60-125 ml) of fruit puree.

OR

- ¼ to ½ cup (60-125 ml) protein-enriched milkshake smoothie (see recipes).

OR

- ¼ to ½ cup (60-125 ml) Greek-style yoghurt or milk-based dessert enriched with protein.

Introducing Solid Foods

You should eat **3 small meals per day**. There should be items from at least 3 food groups along with **a source of protein**, and **2-3 snacks high in protein every day**.

It is recommended to wait at least an hour after waking to eat your first meal of the day. This will allow for any morning swelling of the stomach to subside and make it easier for you to eat.

Take at least 20-30 minutes to eat a meal, eating only small mouthfuls about the size of a teaspoon (tsp). Eat slowly and chew your food very well, chewing every mouthful about 15 to 20 times each. Be very aware of signs of becoming full and stop as soon as you don't feel hungry anymore.

Drink well and keep hydrated by drinking from 1.5 to 2 litres per day (about 6-8 cups). **Do not drink while eating** in order to leave enough room in your stomach for the nutrition your body needs from solid food. Wait about 30 minutes (according to your own level of tolerance) after eating before drinking anything.

If you have trouble eating or drinking, this may be due to the presence of secretions. To deal with this, it can help to drink a warm beverage before meals.

Do not lie down after eating a meal, because this can cause gastric reflux. Resume walking and exercising as soon as possible.

During the first month, drink hydrating liquids (*Gatorade*[®] or a homemade recipe) and protein beverages (e.g.: *Boost*[®], *Slim Fast*[®], *Ensure*[®], *Oasis Nutrisolution*[®], or *Premier Protein*[®] available at *Costco*) in order **to fill both your needs for hydration and for protein**.

Women should get 60 grams/day of protein, and men should get 70 g/day. Everyone needs about 1.5 litres of fluids per day.

PHASE 3 : SOFT PUREED FOOD

For about 1 week

Breakfast :

- ¼ to ½ cup (60-125 ml) dry cereal, soaked in ¼ - ½ cup (60-125 ml) milk, with the addition of milk powder or *Boost Just Protein*[®] powder (e.g.: *Corn Flakes*[®], *Special K*[®], *Rice Krispies*[®]).

OR

- ¼ to ½ cup (60-125 ml) warm cereal (cooked oatmeal, cream of wheat, or baby cereal), thinned.

OR

- A piece of white toast, crusts removed, with non-hydrogenated margarine, and an egg (omelette, or hard-boiled, crushed).

Lunch and supper :

- Approximately 1.5 oz (45 g) of: cooked meat, pureed chicken, or poached fish, in a light sauce (tomato or white sauce); or tofu, an omelette, or legumes (pea soup, beans, lentils, etc.).
- Approximately ¼ cup (60 ml) of pureed vegetables.
- Approximately ¼ cup (60 ml) of mashed potatoes.

Wait about 30 minutes after eating before drinking any liquids (time will vary from person to person). Select one from the following list of healthy beverage choices :

- **¼ to ½ cup (60-125 ml)** rehydrating drink; protein-enriched juice; skim milk; protein-enriched milkshake; protein-enriched soup; a commercial, high-protein beverage (*Boost High Protein*[®]); yoghurt drink; a milk-based dessert; Greek-style yoghurt; fruit puree; high-protein gelatin.

At first, you might only be able to consume smaller portions than those suggested above. Don't worry! It can take a few weeks before you will be able to eat portions of this size. Proceed slowly : it's very important to respect the reduced capacity of your stomach.

PHASE 4 : SOFT FOODS DIET

For about 2 weeks

At this stage you'll eat foods that are easy to digest, and soft enough to be broken up with a fork.

Foods such as bread (plain, not toasted), pasta, rice and red meats can be more difficult to digest. Introduce them in small quantities, according to your ability to tolerate them. Fat or greasy foods such as fried or breaded foods and rich sauces can cause discomfort and should be avoided.

If eating soft foods causes nausea or vomiting, return to Phase 2 of the diet, the semi-liquid stage.

What You Can Eat :

- An omelette or boiled egg.
- Cottage cheese, ricotta, or other soft cheese with less than 20% M.F.
- An egg salad mix with yoghurt and light mayonnaise.
- Lentils and other pulses; firm or semi-firm tofu.
- Canned fruit or fruit compote.
- Grilled or poached fish.
- Chicken or lean ground meat in a light sauce.

If you are hungry between meals, choose snacks that are high in protein, such as yoghurt, a hard-boiled egg, skim milk or cheese, or pudding made with milk. At this stage of the diet, it's best to eat dairy products made from skimmed or partially skimmed milk daily. Limit your intake of fats to 3-6 tsp/day (15-30 ml), and choose good quality, cold-pressed vegetable oils.

Breakfast :

- ½ cup (125 ml) of dry cereal softened in milk, or warm cereal such as oatmeal porridge or cream of wheat.

OR

- A toasted piece of white bread, crusts removed, with non-hydrogenated margarine, with 1 oz/30 g of light cheese or light “cretons” spread, or 1 Tbsp (15 ml) of peanut or other nut butter, or 1 egg.

Lunch and supper :

- Approximately 2 oz. (45 g) of meat, ground chicken or poached fish in a light sauce (white or tomato), or silken tofu, or an omelette made with 2 eggs.
- ¼ - ½ cup (60-125 ml) of ground or finely chopped vegetables.
- ¼ - ½ cup (60-125 ml) of boiled potatoes (crushed with a fork), or mashed potatoes.

Wait 30 minutes after eating before drinking any liquids, according to your own tolerance level.

- After the 30 minutes have passed, have a ½ cup (125 ml) of a protein drink.

Snacks :

- Select a snack from the following list : ½ cup (125 ml) fruit puree; milk-based desserts; yoghurt; protein-enriched gelatin; or two (2) soda crackers or two (2) melba toast with 1 Tbsp of nut butter. See “suggestions of healthy snacks” in the table found later in this handbook.

If a snack is difficult to eat and digest, try a liquid one instead. At first, you might only be able to consume smaller portions than those suggested above. Don't worry! It can take a few weeks before you will be able to eat portions of this size. Proceed slowly : it's very important to respect the reduced capacity of your stomach.

Food will only be able to pass through the opening of your new stomach if it is ground very finely. For this reason, you **must chew your food as thoroughly as possible**, and **pay attention to sense when you begin to feel full**. Eat at a leisurely pace, taking at least 30 minutes to eat small meals.

When you're ready, begin to introduce small amounts of fresh bread, pasta, rice, red meats, salad, raw vegetables, and nuts. Proceed with moderation and be aware that these foods can be harder to swallow than other foods.

Bread and whole-grain cereals can be reintroduced according to your body's ability to tolerate them.

Eating 3 small meals and 2-3 protein snacks each day is the best way to manage feelings of hunger and fullness, and to maintain an optimal weight.

Focus mostly on proteins at first, and then gradually make room for the other food groups until you achieve a balanced diet according to the *2019 Canada Food Guide*.

Please note that the proportions of the different food groups as presented in the Guide will differ slightly for you, due your increased need for protein after this surgery.

General Long-term Dietary and Healthy Lifestyle Recommendations after Sleeve and Gastric Bypass Surgery

A healthy diet adapted to your needs will help speed your recovery after surgery.

Your stomach will be very small and much reduced in size. The goal of the surgery is to help you to feel full sooner by eating only small portions of food.

Gastric Sleeve is known as a restrictive bariatric surgery, reducing your stomach to the size of a banana. You'll feel full much more easily, because your stomach will have a much smaller volume.

Gastric Bypass (Roux-en-Y) is both a restrictive and a malabsorptive surgery. This procedure does more than just reduce the size of the stomach by creating a gastric pouch. It also bypasses part of the small intestine, thereby limiting the area where nutrients can be absorbed by the body and reducing overall absorption of food. Care must be taken to avoid "Dumping Syndrome" (see topic in this booklet).

In both types of surgeries, due to inflammation on the first few days after your operation, you will take liquids only. You'll have to drink frequently to get enough fluids.

Liquids :

Sip liquids often throughout the day to get enough fluids and to prevent dehydration. Liquids at room temperature are generally best. However, drinking a warm beverage is advisable as it can help liquify gastric secretions and help expand the stomach. Doing this makes it easier to eat and drink and reduces the risk that a blockage will occur. The recommended amount of liquid is 6 cups per day (1.5 litres). To avoid dehydration, the minimum acceptable amount is 4 cups (1 litre) per day.

Frozen or icy drinks can cause vasoconstriction of the stomach lining (reduced blood flow to the stomach) and should be avoided. Refrigerated (cool) drinks can be taken if tolerated.

If you find it hard to drink plain water, try adding some flavour drops (*Mio*[®], *Crystal Light*[®]), or flavour the water yourself by infusing it with pieces of fruit or vegetables (lemon, lime, cucumber infusions, etc.). This might make drinking water easier to do.

Don't drink liquids while you eat. Drink something 15 minutes before a meal and wait from 20 to 30 minutes (according to your individual tolerance level) after a meal before resuming your hydration drinks.

In general, once you've had bariatric surgery you should stay away from all carbonated (fizzy) beverages, including both regular and diet sodas and sparkling water. The bubbles produced by carbonation can cause the stomach to expand over the long term.

Drink alcohol in moderation. One (1) alcoholic beverage per day is the maximum recommended amount.

Once you're eating enough solid foods to fill your dietary requirements, stop drinking beverages that are high in calories.

Meals and Snacks :

Once you've had bariatric surgery, it's important to eat 3 small meals and plan 2-3 healthy snacks per day, because this will help you lose weight properly and eventually maintain an optimal weight over the long term. Your overall dietary goal is to fill your body's nutritional needs and avoid slowed or sluggish metabolism.

Include a source of protein at each meal and snack. This is important because it prevents loss of muscle. Remember to include carbohydrates in your diet, such as fruit and starches, because they contribute to overall good health and are good sources of energy.

Consult the reference guide on healthy snacks and balanced meals included in this handbook. You will be eating reduced portion sizes and you'll have to choose healthy foods. Try dividing your grocery list into the 3 categories suggested in the *2019 Canada Food Guide*.

Healthy snacks are planned, not haphazard. It's important not to nibble and munch continuously throughout the day between meals. These bad snacking habits are one of the main reasons people fail to lose weight after bariatric surgery.

Discover a new range of flavours by trying healthy foods of good quality. Limit foods that are high in sugar, fat and salt: these are often responsible for extra weight gain.

Chew your food very thoroughly, eating only small mouthfuls at a time (especially with meat). Take at least 20 to 30 minutes to eat, or longer, up to 40 minutes. Take your time: try putting your fork down after every mouthful.

Make sure to cut up tough and stringy foods into small pieces (e.g.: asparagus, celery, rhubarb, etc.).

To prevent gastric reflux, don't eat anything 2 hours before going to bed.

Wait about an hour after getting up before having breakfast in the morning.

Know when to stop eating. Learn to recognize the signs of being full and stop eating before you feel too full or uncomfortable (with a sensation of blockage). Eating too much can lead to nausea and vomiting. Furthermore, it can cause the stomach to expand over time, making the surgery less effective and resulting in reduced weight loss.

While you must eat slowly, don't take longer than 40 minutes to eat a meal, because this might lead to you eating a larger portion size.

If eating meat becomes a problem, try eating softer proteins like fish, poultry, ground meat, eggs, pulses (such as beans, lentils, chickpeas, etc.), tofu, or cottage cheese. To soften meat, try marinating it first, or cooking it by braising in a slow cooker.

A Few Reminders :

Keep active! Every little step that you add to your daily routine can help!

Keep taking your vitamin supplements every day, as prescribed.

The post-operative diets outlined in this handbook describe the phases everyone must go through to get back to a normal diet. Everyone has their own personal rhythm and their own tolerance levels. It's important that each person take the time needed to lose weight and to keep potential discomfort to a minimum, such as nausea, vomiting, reflux, blockages, or other problems.

Be patient with yourself! Weight loss varies from person to person and is affected by a great many factors, so be realistic as well. Bariatric surgery is not a miracle cure for obesity, and pounds will not just fall away automatically. It's very helpful, at first, to set concrete and achievable weight-loss goals. Talk it over with your dietitian or qualified nutritionist.

Don't forget that losing too much weight too fast can cause problems and create important risks for your health.

Ultimately, the goal of weight loss is either to prevent health problems, or to improve or resolve existing health problems associated with severe obesity.

After your operation, keep in touch with the bariatric surgical health care team to help you manage your new healthy dietary and lifestyle habits. Doing this will help you set the best conditions for losing the most weight in the healthiest way and minimizing the risk of complications, which guarantees a successful outcome over time.

Make an appointment to see your registered dietitian/qualified nutritionist after the surgery to follow up on your nutritional and weight loss program.

Eating Well : Principles for Long-term Dietary Health after Bariatric Surgery

Food groups; recommended and non-recommended foods

Food Groups	What to eat :	What to avoid :
Protein	<p>Skim or 1%-2% milk</p> <p>Enriched soymilk</p> <p>Low-fat yoghurt, plain or flavoured</p> <p>Low-fat Greek-style yoghurt</p> <p>Low-fat cottage cheese or ricotta</p> <p>Low-fat cheese (<20% M.F.) Lean pork or red meat</p> <p>Very lean ground beef, turkey or chicken</p> <p>Skinless turkey or chicken</p> <p>Grilled or baked chicken</p> <p>Canned tuna, salmon or chicken</p> <p>Only occasionally: low-fat deli meats (turkey, chicken, ham, roast beef)</p> <p>Eggs</p> <p>Tofu</p> <p>Beans and pulses</p> <p>Edamame</p> <p>Hummus</p> <p>Peanut/nut butters</p> <p>Nuts and seeds</p>	<p>3,25% or homogenized milk</p> <p>Cream</p> <p>Ice Cream</p> <p>High-fat cheese</p> <p>Meats high in fat (ribs, bacon, smoked sausages, regular ground beef)</p> <p>Chicken skin</p> <p>Fried or deep-fried meats or poultry</p> <p>Breaded or deep-fried fish</p> <p>Deli meats high in fat (mortadella, bologna, kielbasa, salami)</p>
Fruit and Vegetable	<p>Any plain vegetable, without added fat</p> <p>Salads (low-fat dressing)</p> <p>Any fruit without added sugar</p> <p>Canned fruit (in water or juice)</p> <p>Dried fruit</p>	<p>Vegetables in cream or butter sauce</p> <p>Salads with high-fat dressing (Caesar, Greek, etc.)</p> <p>Canned fruit in syrup</p>

Food Group	What to eat :	What to avoid :
Cereal and Starch	Bread (whole grain) Cereals (high in fibre) Oatmeal, Cream of Wheat Pasta, rice, potatoes, corn Crackers (whole grain or wheat) Grains (quinoa, couscous, millet, amaranth, spelt, etc.)	Doughy breads Croissants Sugary cereals
Beverages	Water Sugar-free drinks (Nestea's Singles®, Lipton's Iced Tea To Go®, Crystal Light®) Artificially flavoured water Diluted fruit or vegetable juice (pure juice, tomato juice or vegetable cocktail) – 1-part juice to 1-part water Tea, decaffeinated coffee Low-fat broth (beef, chicken, vegetable)	Non-diluted juice Soda, pop Limit beverages with caffeine Alcohol
Desserts and Sweets	Sugar-free Jello® Light jam, without added sugar Milk- or soy-based puddings (e.g. tapioca, rice pudding, Belsoy® pudding)	Rich, sugary desserts and pastries high in fat Sweet granola bars Honey Jam Jellies Candy
Oils and Fats	Non-hydrogenated margarine; healthy oils (canola, olive) Cream cheese low-fat mayonnaise avocadoes	Everything else

Adapting a recipe

Fats and sugars have a role to play in the texture and the keeping qualities of prepared foods. Be careful not to remove them completely when adjusting and adapting a recipe.

Reducing sugar in a recipe

You can usually safely reduce the amount of sugar in a recipe by half. Try adding a few pieces of dried fruit to add sweetness if you want.

Reducing fats or oils in a recipe

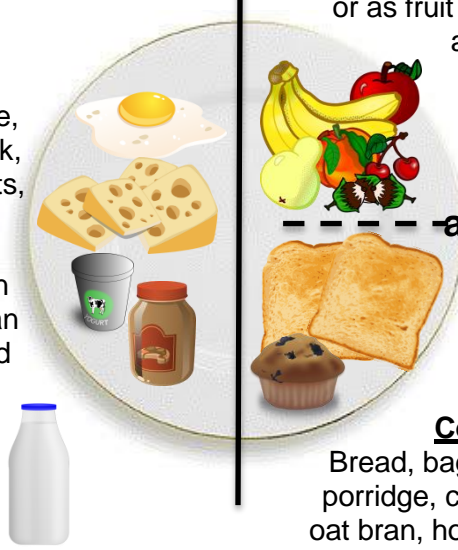
It's also possible to reduce the amount of fat required in a recipe by half. Simply replace the half you take out with the same amount of fruit compote or yoghurt, so that the texture will not be affected.

Adding a source of fibre :

- Ground flax seed.
- Wheat bran.
- Oat bran, or oatmeal ground in a blender.
- Use whole wheat flour; alternately, if you don't like using whole wheat flour on its own, use a blend of half unbleached flour, half whole wheat flour.

Find meal planning tips and recipe suggestions at the 2019 Canada Food Guide website : food-guide.canada.ca

Breakfast




Protein
Egg, cheese, milk, soymilk, yoghurt, nuts, peanut or other nut butters, lean meat, or lean meat spread (cretons)

Fruit
Whole or in pieces; pureed or as fruit juice; no sugar added

Cereals
Bread, bagel, dry cereal, porridge, cream of wheat, oat bran, homemade muffin

--- and/or ---

Lunch and Supper



Protein
Meat, poultry, seafood, fish, eggs, cheese, pulses, nuts

Vegetables
Cooked or raw; in soups or salads

Starches
Potatoes, rice, barley, pasta, whole-wheat bread

Be Careful...

Your stomach will be very small after the surgery, so you'll feel full very quickly. Do not eat large portion sizes, because this could make you feel very uncomfortable. In this guide you'll find recommended portion sizes, but it's important to respect the capacity of your own stomach. **During the first weeks after surgery, focus on remaining hydrated and getting enough protein to eat.**

FRUITS AND VEGETABLES

1/3 of the plate

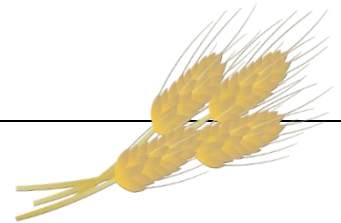


Important : Choose fresh fruits and vegetables, without any added syrup or other concentrated sugars.

CEREALS AND GRAINS (STARCHES)

1/3 of the plate

Bread, potatoes, rice, pasta, couscous, quinoa, other grains, etc.



Important : Choose whole grain products (2 g of fibre per portion, or higher). Avoid high-fat foods with higher than 3 g of fat/portion, such as donuts, croissants, high-fat crackers, etc.

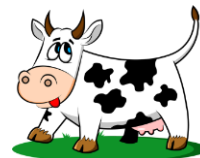
PROTEINS

1/3 of the plate

Meats, poultry, fish, seafood, eggs, nuts and seeds, tofu, pulses (such as lentils, chickpeas, and so on), cheese, peanut butter, milk, Greek-style yoghurt, soymilk, etc.

Important : Trim all visible fat from the meat and remove poultry skin. Use cooking methods that require little or no fat, such as baking, grilling, poaching, steaming, or cooking in a wok.

Milk and dairy products



Important : Choose milk or yoghurt that is partly skimmed with 2% M.F. or less, and cheese that has 20% M.F. or less.

OILS AND FATS

Limit of 1 Tbsp (15 ml) per meal

Butter, margarine, oil, mayonnaise, salad dressing.



BEVERAGES

Beverages : 1.5 to 2 litres/day

Water, tea, herbal tea, coffee, or broth.

Important : Drink low-calorie beverages only.

Drink as often as you want, except never during meals. Always wait 30 minutes after eating before drinking something.



Reading labels

It's recommended to read a label either in grams (on the left side of label) or in % Daily Value (D.V., on right side).

Cereals and grains : Bread (1 slice); grains (30 g); cookies (30 g); granola bar (30-40 g); crackers (20-30 g); pasta (85-90 g).

Saturated and trans fats : 10% or less of D.V.

Note that a D.V. of 5% and less is considered LOW; a D.V. of 15% and more is HIGH.

Fibre : 2 g or more per portion.

Sodium (salt) : 10% or less of D.V.

Sugar : 10 g or less.

For frozen/prepared meals :

Sodium : less than 600 mg/portion.

Protein : more than 18 g/portion.

Total fat (lipids) : 10 g and less per portion.

Dairy Products :

Cheese : 20% M.F. and less (partly skimmed).

Milk and yoghurt : 2% M.F. and less.

Nutrition Facts	
Valeur nutritive	
Serving Size 1 cup (140 g) / Portion 1 tasse (140 g)	
Amount	% Daily Value
Teneur	% valeur quotidienne
Calories / Calories 70	
Fat / Lipides 0.3 g	1 %
Saturated / saturés 0.1 g + Trans / trans 0 g	1 %
Cholesterol / Cholestérol 0 mg	
Sodium / Sodium 5 mg	1 %
Carbohydrate / Glucides 18 g	6 %
Fibre / Fibres 2 g	8 %
Sugars / Sucres 15 g	
Protein / Protéines 1 g	
Vitamin A / Vitamine A	15 %
Vitamin C / Vitamine C	110 %
Calcium / Calcium	2 %
Iron / Fer	2 %

Proteins

Tips for Getting Enough Protein

It might be difficult to get enough protein after your operation, since you can only eat small portions of food. Start reading labels to find out how much protein a product contains or visit Health Canada's website to consult or download the helpful document, "Nutrient Value of Some Common Foods".

Protein Requirements (in the first month after surgery)

In order to fill your body's requirements for protein after the surgery, you'll have to add some concentrated protein powder to your food, such as *Boost Just Protein*[®]. Add about 6 scoops per day in all but spread them out over your meals and snacks.

For maximum benefits, add each scoop of *Boost Just Protein*[®] to ½ cup (125 ml) of liquid (such as diluted juice, milk, yoghurt, yoghurt drink, broth, etc.). Use the blender to obtain a smooth consistency.

Skim milk powder is less expensive and can be used to replace protein concentrate. **However, you must double the quantity of skim milk powder to get the same level of protein as there is in the concentrated protein powder.

Alternately, you can try ready-to-drink protein water (*PROTEIN 2o*[®] or *BiPro*[®]), or protein powder to be diluted in water (*Isolate Splash*[®] from *Revolution Nutrition*[®]), or meal replacements that are high in protein (e.g. *Premier Protein*[®], *Boost High Protein*[®], *Protillife*[®] oatmeal or protein soup, etc.)

Here's a table to help you calculate the amount of protein :

Food	Portion size	Amount of protein
Skim milk or soymilk	½ cup	4 g
Greek-style yoghurt	½ cup	10 g
Cottage cheese	½ cup	13 g
Low-fat cheese	30 g ou 1 oz	7 g
Meat, poultry, fish	90 g ou 3 oz (size of a deck of playing cards)	27 g
	75 g ou 2 ½ oz	23 g
	60 g ou 2 oz	18 g
	45 g ou 1 ½ oz	13,5 g
	30 g ou 1 oz	9 g
Lean cold cuts	50 g	8 g
Cooked shrimp	6 mediums	6 g
Egg	1 large	6 g
Tofu	75 g or 2½ oz	11 g
Pulses	1/3 cup	6 g
Edamame	1/3 cup	10 g
Hummus	30 ml (2 Tbsp)	2 g
Peanut or other nut butter	15 ml (1 Tbsp)	4 g
Nuts and seeds	¼ cup	6 g
Boost [®] protein supplement	1 scoop	6 g
Skim milk powder	30 ml	6 g

A few examples of protein-enriched supplements :

Product	Portion size	Amount of protein
Protein water Protein2O®	500 ml	15 g
ProtiLife®, available at pharmacy	1 bar	10-16 g
Milk 2 Go Sport®	325 ml	26 g
Milk 2 Go Sport Pro®	473 ml	38 g
Premier Protein® Shake	325 ml	30 g
Premier Protein®	1 bar	30 g
Protein water - Bipro®	500 ml	20 g
Isolate Splash® Revolution Nutrition®	250 ml	24 g

Did you know?

Women should consume a minimum of 60 grams of protein per day, while men should consume 70 grams daily.

Snacking Habits : What's Healthy, and What's Not!

Healthy snacking is NOT :

- Nibbling or munching on something all through the day without really feeling hungry.
- Ingesting too many calories for the body's needs.
- Grabbing whatever is handy.
- Opening the fridge or the pantry out of habit.
- Eating because you're bored, stressed, anxious or for any other reason than plain hunger.
- Eating without mindfulness or awareness.

Healthy snacking IS :

- Breaking up a meal.
- Spreading out your different nutrient requirements.
- Eating something to prevent hunger or food cravings.
- Choosing something healthy in the right amount.
- Eating because you feel real hunger.
- Eating with awareness and mindfulness.

The consequences of unhealthy snacking habits :

- Contributes to weight gain.
- Weighs down the digestive system.
- Can be compensation for a need other than hunger.
- Can reduce the number of hours slept at night.

A good snack :

- Is healthy and filling.
- Contains a source of carbohydrates (fruit or grains) and a source of protein (meat or meat substitute or dairy product). See the table of healthy snack suggestions below.
- Low in fat and concentrated sugars.

You might find that you are eating to compensate for another need or problem, such as stress, boredom, fatigue, or anxiety, for example. If this is the case, you must try to identify the need and find a way to address it so that you only eat when you are truly hungry.

Surgery is a way to control feelings of fullness after meals and snacks, but it can't stop you from nibbling and unhealthy snacking. Surgery influences true hunger but cannot change "false" hunger resulting from forms of psychological or emotional compensation.

Healthy Snack Suggestions

Source of carbohydrates	+	Source of protein
<i>(fruit or starch)</i>		<i>(dairy, meat, or meat substitute)</i>
1 apple	+	1 oz cheese 20% M.F. or less
1 rice cake	+	1 Tbsp peanut butter
1 Tbsp dried fruit	+	6-7 nuts or soy nuts
1 mini pita or 2 sesame breadsticks	+	1 Tbsp soy spread
2 low-fat crackers	+	1 Tbsp hummus
1-2 Tbsp of light granola cereal	+	1/2 cup Greek-style yogurt
2 crackers	+	1 hard-boiled egg
1 small homemade muffin	+	1/2 cup milk
1/2 cup fruit compote	+	6-7 nuts
1/2 slice of bread	+	1 Tbsp chicken spread / light meat spread - "cretons"
2 crackers	+	1/2 mini-tin of tuna
1 kasha cereal bar	+	1/2 cup milk
1 choice of fruit	+	1/2 to 1 bottle of Protein20® or Bipro® or Premier Protein® or Revolution Nutrition Isolate Splash™
1/3 cup of yogurt dip or hummus	+	Raw veggies
1 cup of milk, soymilk or Milk 2 Go®		
2 Tbsp of roasted chickpeas		
175 ml greek yogurt		

What About Vitamin and Mineral Supplements?

It is likely that you will be unable to get enough vitamins and minerals from your regular diet. This is especially true for people with a higher need for increased nutrients. In this case, the doctor or dietitian/nutritionist will prescribe vitamin and mineral supplements. It's important to start taking them as soon as you get the prescription.

A list of your nutrient requirements will be made for you after your surgery to ensure that you fill all your dietary needs. You can discuss it with your dietitian/qualified nutritionist.

From now on, you'll always have to take :

- A chewable multivitamin such as *Centrum*[®] or the equivalent.
- Vitamin B-12.
- Calcium and Vitamin D.

You should avoid taking anti-inflammatory medication from now on (check with your pharmacist).

For the first 3 months after surgery, you'll also have to take a prescription (*Pantaloc*[®]) that works against gastric reflux and stomach pain.

For Patients Who Have Undergone **Gastric Bypass (Roux-en-Y)** :

Important : Iron supplements are best absorbed on an empty stomach. Taking both calcium and iron at the same time will limit the absorption of both minerals, so avoid taking them at the same time whenever possible.

Possible Complications and Problems

Dehydration

Dehydration occurs when the body does not have enough water to function properly.

Symptoms of dehydration

- Dark urine.
- Less frequent urination.
- Nausea.
- Dizziness.
- Dry mouth and tongue.
- Fatigue.
- Irritability.
- Lower back pain.

What to do :

- Get lots of fluids by sipping small amounts frequently throughout the day; drink a minimum of 1 litre, and up to 1.5 litres per day.
- Choose drinks that contain electrolytes.

e.g. Pedialyte[®], regular Gatorade[®] or an equivalent (Pedialyte[®] is also available in frozen popsicle form.).

- Drink 1 cup (8 oz) of a hot or warm beverage 15 minutes before a meal.
- Avoid consuming alcohol.

When to consult a health care professional :

- If your surgical wounds develop signs of redness or burning, or if you notice any greenish-yellow discharge.
- There is a strong and unpleasant odour coming from the incision site(s).
- You develop a fever higher than 38.5 C (101.3 F)—when taken orally.
- You have persistent nausea and vomiting.
- You cannot eat or drink.
- The pain worsens (the area around the wound becomes sensitive to the touch).
- You experience increased abdominal pain.
- Any other worsening of your condition.

Complications can occur up to 1 to 2 months after surgery. They are most likely to occur from 7-14 days after surgery.

Nausea and Vomiting

If you feel nausea or a sensation of heaviness after eating a meal, it's generally a sign that you have eaten too much. You might not have chewed your food thoroughly enough before swallowing.

Nausea and vomiting can also have other causes during the post-op period :

- Dehydration (Drink at least 1 litre of water per day).
- The surgery itself (the anesthesia).
- Pain-relief medication (narcotics).
- Eating more than the stomach can accommodate in its newly reduced capacity.
- Eating too fast, or not taking care to chew the food properly.
- Moving too quickly from one stage of the post-op diet to the next (i.e. eating certain foods before you are ready to do so).
- Food that gets blocked in the stomach; possibly linked to the presence of secretions.
- A period of more than 4 hours without eating or drinking something healthy.

What to do :

- Take something to control the nausea so that you can become rehydrated (such as Gravol[®], either in tablet or suppository form).
- Continually sip small amounts of liquid throughout the day, even if you don't feel thirsty. Drink up to 1.5 litres of fluids per day, and choose drinks that help keep you hydrated, such as Pedialyte[®], Gatorade[®], or a homemade recipe for hydration found in the food guide in Annex III.
- If you can't tolerate narcotic drugs, try to control pain with Tylenol[®].
- Eat slowly and chew your food well.
- Eat only small portions to respect your stomach's reduced capacity (your stomach is much smaller now).
- Drink ½ cup to 1 cup of a warm or hot beverage, 15-30 minutes before a meal (it will vary slightly from person to person), in order to reduce the stomach's secretions, if this is a problem.
- Avoid drinking while you eat.
- Go back to the previous phase of your post-op diet if needed. Advance at your own pace.

If you cannot tolerate any solid food, go back to a clear liquid diet for 24 hours to ensure that you don't become dehydrated. If symptoms persist, consult your doctor or the bariatric surgical team (Ste-Croix Hospital in Drummondville: 819-478-6464, ext. 22306; or the Hospital in Trois-Rivières (Centre Hospitalier Affilié Universitaire Régional: 819-697-3333, ext. 64578).

Dumping Syndrome, or Rapid Gastric Emptying

Dumping Syndrome is a condition that can develop after gastric bypass surgery.

Dumping syndrome occurs when the stomach fills up with too much food to be absorbed at once, so the food is “dumped” too quickly into the small intestine. The small intestine then contains pieces of food that are too large, which causes too much water to be sent to nearby blood vessels.

Dumping syndrome can occur when foods are eaten which are too concentrated, too cold or too hot, too sugary or high in fat, or too spicy. The problem is aggravated if these foods are taken in liquid form.

Dilute the sweet liquids you drink after your operation, and then progress as quickly as possible to the second stage of the diet.

Symptoms are usually the same as those associated with hypoglycemia or diarrhea.

Symptoms can include :

- Cramps.
- Bloating.
- Nausea.
- Diarrhea.
- Weakness.
- Increased heart rate.

These symptoms appear from 10 minutes to an hour and a half after a meal and can last up to 3 hours. They are most often caused by eating foods that are too sweet or too high in fat, or by eating too much food that is a mix of solids and liquids together.

What to do :

- Avoid eating sugar and sweets.
- Choose foods that are low in fat :
 - Lean meats.
 - Partly skimmed dairy products (milk and yoghurt at 2% M.F.; cheese at 20% M.F. or less).
 - Cereals and grains with less than 3 g of fat (lipids) are best, up to a maximum of 5 g of fat.
- Choose prepared or frozen meals that have less than 10 g of fat.
- Avoid fried and greasy foods.
- Eat protein at each meal.
- Eat only small portions at a time and eat them slowly.
- Limit your caffeine intake.
- Do not eat foods that are too hot or too cold.

If You Are on Diabetes Medication

What to do :

Monitor your blood glucose level. If it drops **below 4 mmol/L**, this means you have low blood sugar (hypoglycemia). If this happens, you must take the following steps :

1. If your blood glucose level is **lower than 2.8 mmol/L**, take **20 g** of fast carbohydrates. If your glucose level is **between 2.8 and 4.0 mmol/L**, take **15 g** of fast carbohydrates.
2. **Wait 15 minutes** and check your blood glucose level again.
3. Depending on the result, repeat steps 1 and 2 as necessary until your blood sugar levels are at **4.0 mmol/L or higher**.
4. Within the next hour, if the hypoglycemia occurs during the pre-op period (before a surgery), have a liquid meal (such as BOOST Diabetic[®] or Slim Fast[®]). If it happens after an operation, have a liquid or solid meal (depending on what stage of the post-op diet you are at) that has 15 grams of carbohydrates and a source of protein, such as :
 - ½ container of a meal replacement drink (Slim Fast[®], BOOST Diabetic[®], Ensure[®]).
 - 1 fruit or ½ cup canned or pureed fruit, and 1 oz of cheese.
 - 6 soda crackers with 1 oz of cheese or peanut butter (slightly less than 2 Tbsp).
 - 1 slice of bread with 1 Tbsp of peanut butter.
 - 2 plain biscuits (social tea) with ½ cup milk.
5. Contact your doctor to adjust your diabetes medication to avoid having low blood sugar in the future.

For 20 grams of fast carbohydrates, choose one (1) of the following :

- 4 tablets of BD Glucose[®]
- 7 tablets of Dextrosol[®]
- 9 tablets of Glucosol[®]
- 4 teaspoons (20 ml) of either honey, molasses, maple syrup, corn syrup, or regular jam.
- 4 individual sachets or 20 ml (4 tsp) of sugar (**not** sugar substitute) dissolved in 60 ml (¼ cup) water.
- 200 ml (1 cup minus 2 Tbsp) of regular carbonated pop or fruit drink (**not** diet drinks).
- ¾ cup (175 ml) fruit juice.

For 15 grams of fast carbohydrates, choose one (1) of the following :

- 3 tablets of BD Glucose[®]
- 4 tablets of Dex4[®]
- 5 tablets of Dextrosol[®]
- 7 tablets of Glucosol[®]
- 1 Tbsp of either honey, molasses, maple syrup, corn syrup or regular jam.
- 3 individual sachets or 1 Tbsp of regular sugar (**not** sugar substitute) dissolved in 60 ml (1/4 cup) water.
- 1/2 cup (125 ml) of a regular carbonated drink (soda pop) or fruit drink (regular, NOT diet).
- 5 pieces of Life Savers[®] candy.
- 1/2 cup (125 ml) of fruit juice.

Difficulties Eating and Drinking

You must make sure you get enough fluids.

You must sip liquids continuously throughout the day (at 15-minute intervals, for example) in order to drink a minimum of 1 litre and ideally 1.5 litres per day, in order to remain properly hydrated. Secretions might interfere with your ability to drink enough. If this is the case, a warm drink, such as coffee, tea, broth, or warm water, can help to liquify these secretions and aid with dilation, making room in the stomach to allow for food and/or liquid to be ingested more easily.

Constipation

If you suffer from constipation after surgery (at the liquid and semi-liquid diet stage) :

- Drink 1.5 litres of water per day (unless contra-indicated by your health professional).
- Eat foods that are rich in fibre once you have started a normal diet.
- Avoid using dietary fibre supplements after the surgery (such as Metamucil[®], Benefiber[®], etc.) until such time as your body can digest solid food. It's recommended to try prune juice instead.
- If you have not had a bowel movement in 3 days, try Lax-a-Day[®] or another laxative prescribed by your surgeon, or speak to your pharmacist.

If you suffer from constipation at the normal diet stage (a month or more after surgery) :

What to do :

- Drink at least 2 litres of water per day.
- Eat 3 small, balanced meals and 2-3 snacks, on a regular schedule.
- Eat foods that are rich in both soluble and insoluble fibre at each meal (see Annex II for examples).
- Increase your intake of fibre gradually to avoid having gas (flatulence).
- Exercise : being active can help maintain good bowel health.
- Chew your food well because this facilitates digestion and reduces gas.

Gastro-esophageal Reflux (GERD)

When gastro-esophageal reflux occurs, part of the contents of the stomach and/or gastric juices back up into the esophagus. Symptoms can include stomach pain, coughing, hoarseness, bad breath, etc.

What to do :

- Take a prescription of Pantoloc® for the first 3 months.
- Avoid foods that irritate your digestive system (talk to your dietitian or nutritionist).
- Don't lie down after eating and wait 2 hours after eating before going to bed.
- Consult your health care team if the reflux persists.

Bloating

After your surgery, it is normal to experience bloating. Gases in the intestines become active as the intestines start working again.

What to do :

- Carbonated (fizzy) drinks, carbonated water, tonic water and beer can cause bloating and are not recommended.
- Certain foods can also cause bloating, such as :
 - Pulses (peas, lentils, chickpeas, etc.).
 - Vegetables from the cabbage or melon families. Avoid watermelon, honeydew melon and cantaloupe, and Brussel sprouts, broccoli, cauliflower, etc.
 - Eggs
 - Sugar alcohols (sweeteners such as sorbitol, mannitol, or xylitol). Some people can tolerate them in small amounts.
- Eat slowly and chew your food thoroughly.
- Don't skip meals.
- Don't drink through a straw or chew gum, if these things affect you negatively.
- You can try using over-the-counter medicines like Gas-X®.

Lactose intolerance can also cause bloating and diarrhea. Consult your dietitian or nutritionist if you feel this is an issue.

Diarrhea

Some people have soft or liquid bowel movements for several months after surgery, as their body adapts to changes. Dumping Syndrome can also cause diarrhea.

What to do :

To prevent diarrhea :

- Limit your consumption of alcohol and caffeinated beverages or stop drinking them altogether.
- Take care to properly hydrate yourself with Pedialyte® or a homemade hydrating drink (see Annex III).
- Avoid greasy or spicy foods and avoid eating prunes or drinking prune juice.
- Avoid products designed for dieting which contain Sorbitol, Mannitol, or Xylitol.
- **Eat foods rich in soluble fibre**, because they are easier on the intestines and contribute to the healthy formation of stools by reabsorbing water from the colon. Soluble fibre improves bowel function (can be found in bananas, applesauce, oatmeal, white rice, psyllium (Metamucil®), etc.).
- **Reduce your intake of insoluble fiber**, because it can irritate the bowel and make diarrhea worse (see the section on dietary fibre in Annex II.).
- Yoghurt with probiotics can help regulate bowel function by helping to balance gut flora (brands such as Activia®, Yoptimal®, Danactive®, etc.).
- If you have very frequent bowel movements that are liquid for more than 3 days, consult your doctor.

Hair Loss

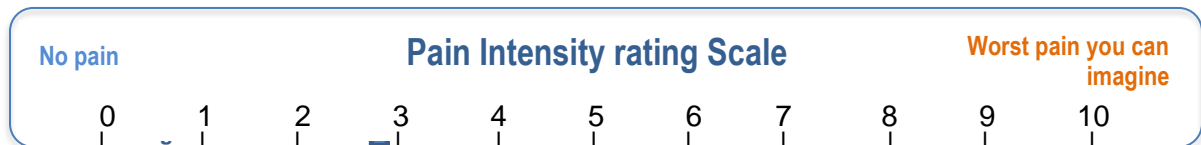
Hair loss can occur after bariatric surgery, or after important weight loss. It is a temporary phenomenon. Make sure to eat well and to take vitamin supplements as prescribed.

Pain

It is normal to feel pain after surgery. You might experience it as a burning sensation or a feeling of tightness. The pain will be strongest during the first 24 to 48 hours, after which it will gradually diminish.

If you have had laparoscopic surgery, you might experience muscle aches or discomfort in your shoulders or ribs. This is entirely normal and is due to the carbon dioxide that was introduced into your abdomen during the surgery.

Pain Intensity Rating Scale



You can use this scale to evaluate the intensity of your pain. The nurse will ask you to rate your pain on a scale of 0-10. The goal is to keep your pain level below a 4, which is in the low-moderate range.

Try to be as accurate as possible when describing the location of your pain. Even if you have already been given an epidural, you might be prescribed supplemental pain medication, orally or by injection, to increase its efficiency. Alternately, you might receive medication to help with pain that can't be relieved by the epidural.

It's better to take medication to control the pain so that you can get up and move around more easily, than it is to suffer the pain but remain bedridden or incapable of being active.

Going Home

Pain Management

You can take acetaminophen (such as Tylenol®) or another medication prescribed by your doctor to control pain.

Removing Surgical Sutures or Staples

Your surgical staples will be removed 7-10 days after your surgery by the nurse from the CLSC, either at home or at the CLSC clinic, depending on your condition. Alternately, your surgeon will remove them at your follow-up appointment at the outpatient clinic.

Your Incision

It's quite common for the site of your incision to show a bit of redness and to be tender to the touch for the first week or two after surgery.

Care and Monitoring of Surgical Wounds

- Take showers instead of baths for the first few days.
- Wait at least a week until your incision is well healed before taking a bath. It's normal for surgical wounds to be tender to the touch or to feel itchy during healing.
- Gently dab your scar dry after a shower; do not rub it.
- Wait at least 2 weeks before bathing in a pool or hot tub; avoid public pools and hot tubs.
- Do not apply cream, aloe vera gel or anything else on your surgical wounds nor on the staples.
- Any pieces of surgical tape on your incision will fall off by themselves within about 5 to 7 days.

It's important to examine your incision site every day and check for oozing or discharge, redness, signs of an itchy rash, or a strong, unpleasant odour, etc. If you see any of these symptoms, speak with a nurse from the bariatric clinic (Ste-Croix Hospital, Drummondville: 819-478-6464, ext. 22306; the Hospital in Trois-Rivières, "Centre Hospitalier Affilié Universitaire Régional" : 819 697-3333, ext. 64578.).

Convalescence

Your recovery will take at least one (1) month.

Psychological Support

If you feel you need some psycho-social support to help you cope emotionally after your surgery, you can call Quebec's free health and information line 811 (Info-Santé). They can direct you to the proper resources.

Pregnancy

Once you have decided to undergo bariatric surgery, it's important to talk to your doctor about using a good contraceptive method, because you can't have the surgery if you're pregnant.

Even if you lose a lot of weight in the first few months after your surgery, you are nevertheless strongly advised to wait at least 18 months before becoming pregnant, because your body will be undergoing a lot of changes in that time.

In order to have a happy and healthy pregnancy, it is best if your weight has stabilized first. While your weight is stabilizing, you can sort out any nutritional deficiencies that could potentially have an impact on the development of your baby. Once the 18-month period is over, if you become pregnant, please make an appointment at the bariatric surgery follow-up clinic. A nurse will do blood tests to check for any vitamin or mineral deficiencies that could affect your health, which will help you plan a healthy maternity diet to make the most of your pregnancy.

Plastic Surgery

Your body image will undergo many changes as you lose a large amount of weight. You might find that you have excess or loose skin and wish to do something about it. Once your weight has stabilized at about 18 months post-surgery, you can ask your surgeon for a referral to a plastic surgeon to explore this option.

The cost of plastic surgery is generally not covered by Medicare.

References

Please note : Many of the references were consulted in French for the original version of this handbook, unless written in English below. For your convenience, a note is added at the end if the reference is available in part or whole in English.

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Annex I

2019 Canada Food Guide

Canada's
food guide

Eat well. Live well.

Eat a variety of healthy foods each day

Have plenty
of vegetables
and fruits

Eat protein
foods

Make water
your drink
of choice



Choose
whole grain
foods

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Discover your food guide at
Canada.ca/FoodGuide

Annex I (cont'd)

Canada's
food guide

Eat well. Live well.

Healthy eating is more than the foods you eat



Be mindful of your eating habits



Cook more often



Enjoy your food



Eat meals with others



Use food labels



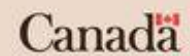
Limit foods high in sodium,
sugars or saturated fat



Be aware of food marketing



Discover your food guide at
Canada.ca/FoodGuide



Annex II

Dietary Fibre

The best sources of dietary fibre are fruits and vegetables, whole grains, and pulses, nuts and seeds.

Eating enough fibre improves digestive regularity and helps us to feel full sooner. Not enough fibre in the diet can lead to sluggish function of the intestines.

Dietary fibre is divided into two groups :

Soluble Fibre

Soluble fibre can be dissolved in water and forms a sort of gel, which slows down the digestion of carbohydrates. It is beneficial for blood sugar levels, helping to keep them under control. The gel also traps part of the cholesterol consumed and is eventually eliminated by the bowels. Soluble fibre also facilitates intestinal transit through the colon.

Insoluble Fibre

Insoluble fibre cannot be dissolved in water. It acts like a sponge, expanding as it absorbs water, softening stools and both regularizing and facilitating their elimination. Insoluble fibre plays an important role in controlling weight and managing constipation.

As you gradually increase your fibre intake, be sure to increase the amount of liquid you drink at the same time. Take your time and go slowly.

Tips for Increasing Dietary Fibre

A Simple Recipe :

- 20 ml Metamucil®
- 40 ml ground flax seed
- 60 ml oat bran

This recipe contains 21 grams of fibre. It can be spread out over one or two days and added to cereal, yoghurt, fruit compote, muffin recipes or even to salad dressing.

You can find some more recipes and ideas at this site : www.allbran.ca/recettes.

How much fibre should be consumed each day by bariatric surgery patients?

Men : 13 à 35 grams

Women : 14 à 25 grams

A Few Sources of Dietary Fibre

Sources of Soluble Fibre

Sources of soluble fibre	Portion	Total amount of fibre
Psyllium cereal	½ cup	8 g
Cooked oatmeal (porridge)	½ cup	2 g
Flaxseed	1 Tbsp	3 g
Chia seeds	1 Tbsp	3,7 g
Quinoa	1 cup	2,6 g
Pear	1	5 g
Apple	1	2,6 g
Banana	1	2,1 g
Spinach	½ cup	2,3 g
Sweet Potato	½	2 g
Carrot	½ cup	2 g
Rye bread	1 slice	2 g
Soybean/ edamame	½ cup	4 g
Metamucil®	1 tsp.	3 g

Sources of Insoluble Fibre

Sources of insoluble fibre	Portion	Total amount of fibre
Bran cereal	½ cup	3,7 g
Almonds	¼ cup	4 g
Baked beans	½ cup	7 g
Lentils	½ cup	4,5 g
Red kidney beans	½ cup	8,6 g
Chickpeas	½ cup	5,6 g
Brussel sprouts	4	3,2 g
Oranges	1	2,3g
Dates	3	2 g
Raspberries	½ cup	4,2 g
Plums	3	2 g
Blueberries/ blackberries	½ cup	2 g
Green peas	½ cup	4 g
Multi-grain bread	1 slice	2 g
Cooked whole-wheat spaghetti	½ cup	2,4 g

Amount of Fibre Found in Certain Brand-name Cereals and Snack Bars:

Brand-name cereals and snack bars	Portion	Total amount of fibre
All-Bran® cereal	½ cup	12 g
Kashi GoLEAN Crunch® cereal	½ cup	5,3 g
Raisin Bran® cereal	½ cup	3 g
Shredded Wheat® cereal	1 piece	3 g
Fibre 1® cereal	½ cup	13,4 g
All-Bran® snack bar	1	4 g
Kashi® snack bar	1	4 g
Fibre 1® snack bar	1	6 g

Annex III

Post-operative Recipes for both Sleeve and Gastric-bypass Bariatric Surgeries

PROTEIN-ENRICHED HYDRATION DRINK

Protein-enriched Orange Juice

Ingredients :

- 2 cups (500 ml) pure unsweetened orange juice
- 1 cup (250 ml) cold water
- 6 scoops (180 ml) *Boost Just Protein*[®] protein powder

Directions :

Whisk all ingredients together until well mixed.

HOMEMADE HYDRATION DRINKS

Hydrating Apple Juice

Ingredients :

- 4 cups (1 litre) pure unsweetened apple juice
- ½ tsp (3 ml) salt
- 4 cups (1 litre) cold water

Hydrating Grape Juice

Ingredients :

- 3 cups (750 ml) grape juice
- ½ tsp (3 ml) salt
- 5 cups (1,25 litre) cold water

N.B. :

Choose real fruit juice without added sugar. For one month after surgery, it's recommended to drink juice without pulp. Avoid drinking prune juice.

PROTEIN-ENRICHED MILKSHAKE SMOOTHIE

Ingredients :

- 100 g (about ½ cup) soft or silken tofu, plain or flavoured
- ½ cup (125 ml) skim or 1% milk OR soy beverage
- ½ cup (125 ml) pieces of fruit, fresh or frozen
- 2 scoops (60 ml or ¼ cup) *Boost Just Protein*[®] protein powder
- 1 Tbsp. (15 ml) maple syrup

Directions :

Place the ingredients in the blender and blend until smooth.

Variation :

Replace protein powder with ground almonds or milk powder, or even with pasteurized liquid eggs (such as *Natur'oeuf*[®]).

If you want, you can add some yoghurt to the milkshake, which will increase the amount of protein.

For the first month after surgery, avoid choosing berries with small seeds, such as strawberries, raspberries or blackberries.

Yield :

3 portions of 1/2 cup (3 X 125 ml).

PROTEIN-ENRICHED STRAWBERRY GELATIN

Ingredients :

- 1 box (85 g or 125 ml or ½ cup) strawberry-flavoured gelatin
- 1 cup (250 ml) boiling water
- 1 cup (250 ml) cold water
- 4 scoops (120 ml) *Boost Just Protein*[®] protein powder

Directions :

Dissolve gelatin in boiling water. Add the cold water, followed by the protein powder. Whisk them together; avoid making too many bubbles. Continue to mix until everything is dissolved.

Wait a few minutes for the bubbles to disappear as much as possible and then divide into ½ cup (125 ml) portion sizes. Refrigerate at least 2 hours until set.

Yield :

4 portions of ½ cup (4 X 125 ml).

PROTEIN AND VEGETABLE SOUP

Ingredients :

- 3 cups (750 ml) broth (your choice)
- 3 cups (750 ml) cooked vegetables (your choice)
- 1 package silken tofu

Directions :

Put all ingredients in the blender and blend until smooth. Season to taste.

HAVE QUESTIONS?

Get in touch with the health centre where you had your surgery.

Call or go in person to one of our service centres, from Monday to Friday :

- Hôpital Sainte-Croix
570, rue Heriot
Drummondville (Québec), J2B 1C1
Telephone : 819 478-6464, ext. **24489**
- Centre hospitalier affilié universitaire régional (CHAUR)
1991, boulevard du Carmel
Trois-Rivières (Québec), G8Z 3R9
Telephone : 819 697-3333, ext. **64578**

Follow the instructions on the voicemail (French only) and leave a message. Someone will return your call as soon as possible.

www.ciussmcq.ca