

Bariatric Surgery

- **Laparoscopic Gastric Bypass**
- **Laparoscopic Vertical Sleeve Gastrectomy**



Bariatric Surgery Program
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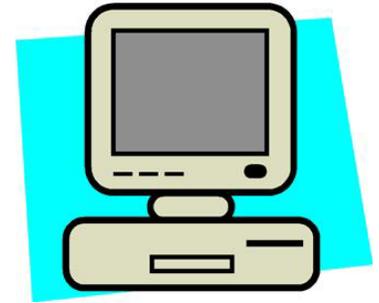
905-522-1155 ext. 33240

Remember . . .

**Please bring this book with you to your
Pre-Admission Assessment visit, hospital stay
and follow-up appointments.**

**The Ontario Bariatric Network is an
Ontario Ministry of Health and Long-Term
Care project featuring regional bariatric
programs, general information and education.
For more information go to:**

www.ontariobariatricnetwork.ca



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Products mentioned in this book are used as examples only. Alternatives to these products may be used instead of the mentioned products with the advice of a health care professional and your bariatric health care team.

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**Developed by the Department of Nursing Practice and Education,
Department of Clinical Nutrition and
Department of Surgery
St. Joseph's Healthcare Hamilton ©2007 – 2012**

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Bariatric Surgery



An Important Message

- **Your surgery may be cancelled at any time.**
- **This may happen before your surgery date or on the day of your surgery when you come to the hospital.**
- **Please do not go to the Bariatric Clinic to make a new date.**
- **If your surgery is cancelled you will be called at home and given another date for surgery.**

Bariatric Surgery

Introduction

You are going to have bariatric surgery. This book provides information that will help you prepare for this surgery and your new life after surgery.

You, your family, friends and supports can refer to this book and may need to read the information many times.

Please bring this book with you to all of your appointments before and after surgery and to the hospital when you have surgery.



Health Care Team

You will work closely with your health care team. We are here to support and guide you before, during and after surgery.

On page 93 there is a list of your health care team members. Please add their names as you meet them.

Research

You may be asked to take part in a research study. The research will be explained to you. You can decide whether you want to take part or not:

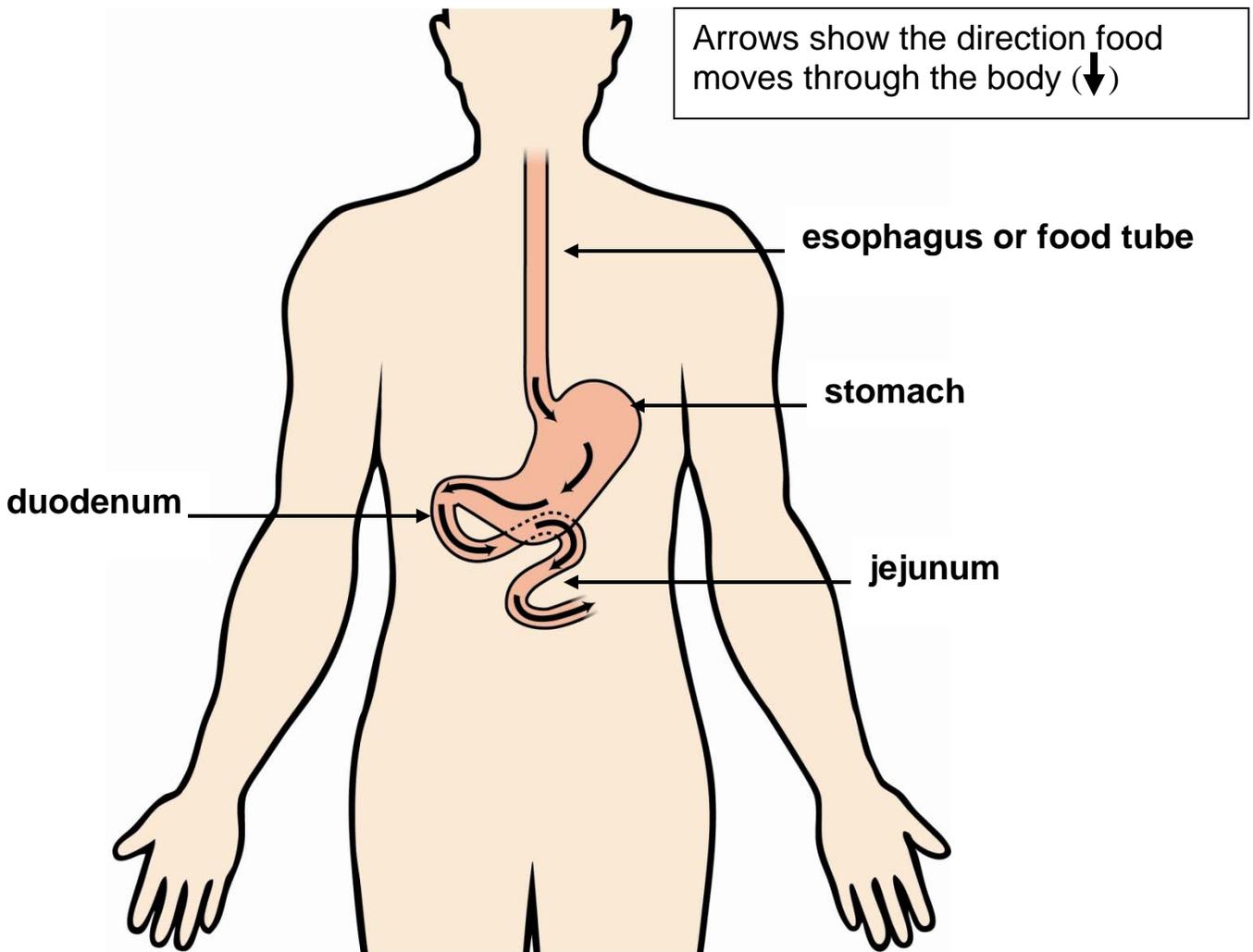
- If you decide to take part you will sign a consent form.
- If you decide not to take part, your care will not be affected.



Learning the Words and Pictures

Here are some words and pictures to help you understand this surgery:

Esophagus: (food tube)	The esophagus is the tube that carries the food you eat and drink from your mouth to your stomach.
Stomach:	The stomach breaks food into small pieces so your body can use it for energy.
Small bowel: (small intestine)	The food moves from the stomach to the small bowel first. The food is broken into very small pieces and is absorbed into the blood as the muscles push it along. The small bowel is also called the small intestine. The 2 sections of the small bowel involved in this surgery are called the duodenum and jejunum.

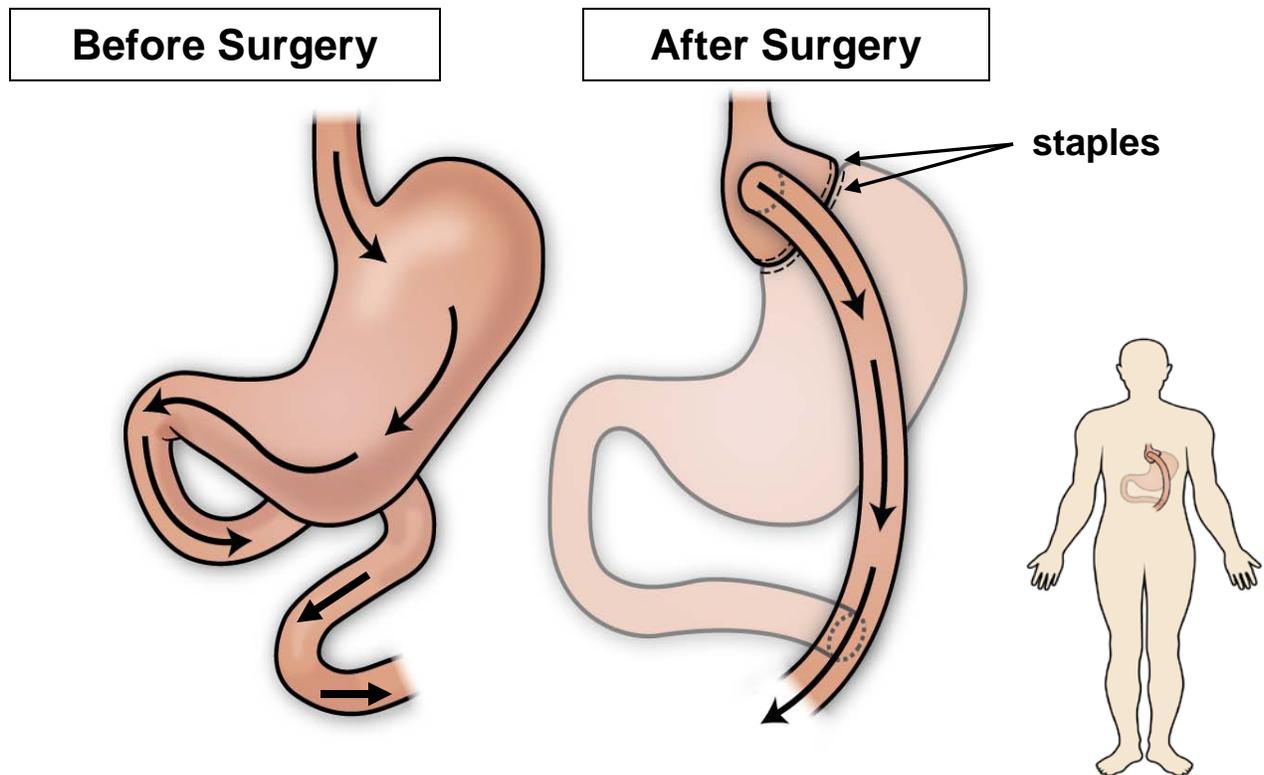


What happens with Gastric Bypass Surgery?

During this surgery, your surgeon makes a small stomach pouch at the end of the esophagus. The pouch is made by stapling the top part of the stomach. The larger part of the stomach is stapled closed. The small intestine is cut at the jejunum and attached to the stomach pouch.

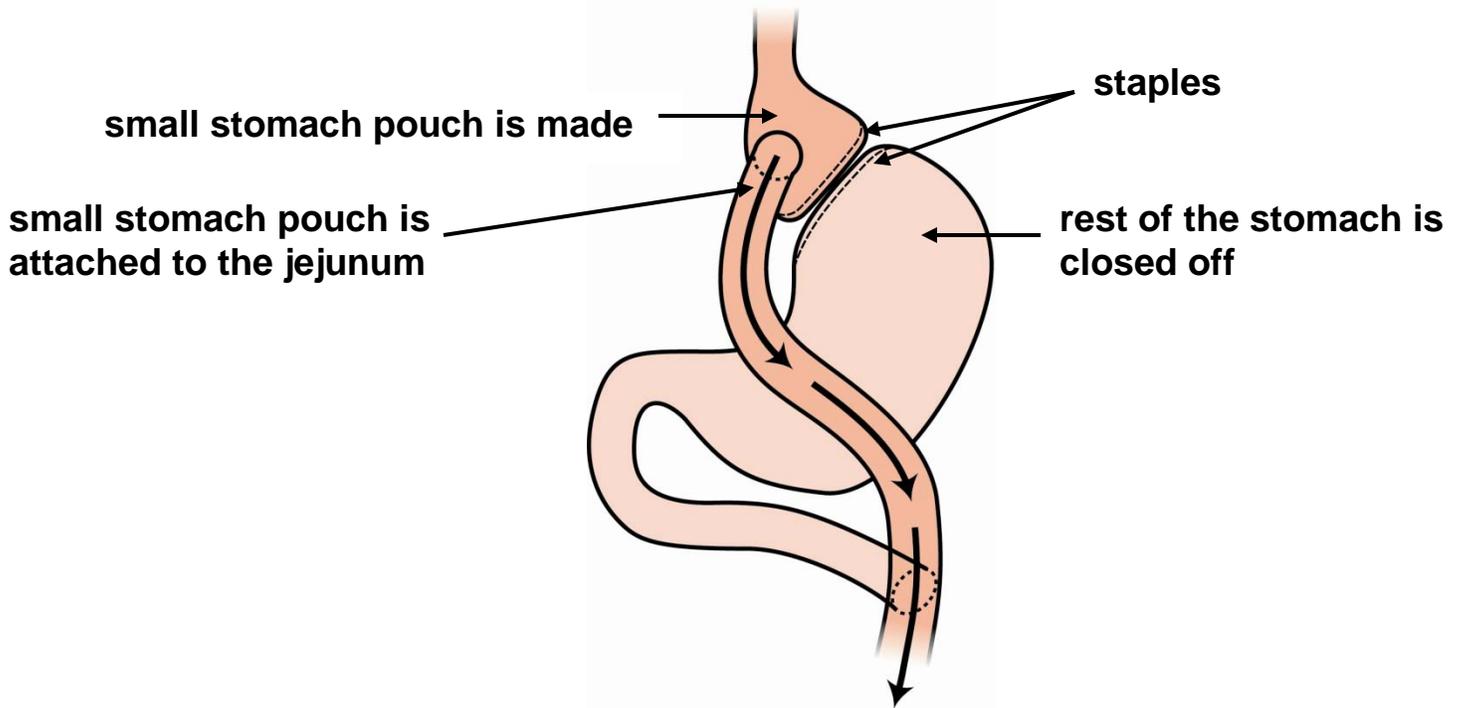
As you can see in the picture, most of the stomach is bypassed and not used any more. The duodenum is also bypassed. The larger stomach is still left in place and the normal digestive juices from the stomach and duodenum help digest food when rejoined lower down on the small bowel. The food you eat and drink will now go into the new, smaller stomach pouch and then to the jejunum.

The new, smaller stomach pouch limits the amount of food you can eat. Bypassing the duodenum also means that you absorb less calories and nutrients including vitamins and minerals.



Arrows ↓ show food moving through body before and after surgery.

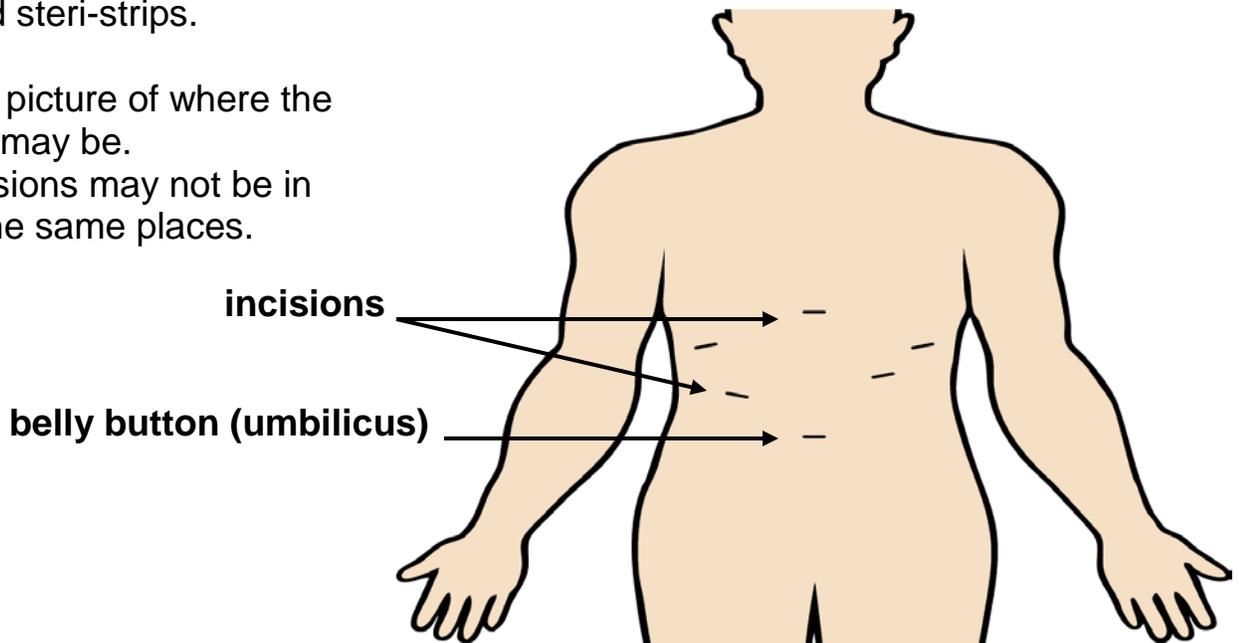
A Closer Look at Gastric Bypass Surgery



This surgery is done using 5 to 6 small incisions. Each incision is 5 to 12 millimetres (mm) long. One incision is used to insert a small camera so the doctor can see. The other incisions are used for instruments needed to do the surgery. The incisions are closed with dissolvable stitches and special tape on top called steri-strips.

Here is a picture of where the incisions may be.

Your incisions may not be in exactly the same places.

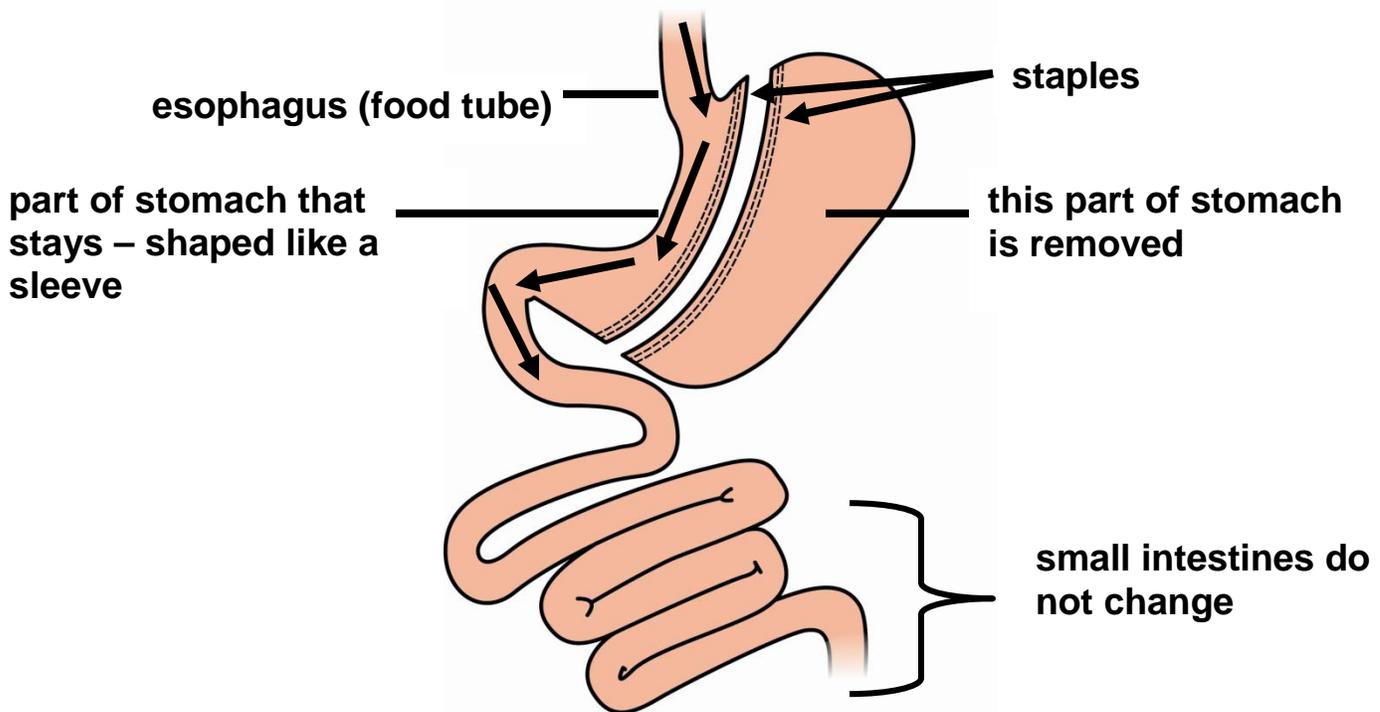


What happens with Vertical Sleeve Gastrectomy Surgery?

Vertical sleeve gastrectomy (VSG) is a restrictive, laparoscopic surgery. During this surgery most of the stomach is removed. Since the stomach is smaller, you feel full sooner.

This surgery may decrease the production of a hormone called ghrelin. A decreased amount of ghrelin is thought to reduce hunger therefore causing less food intake. This results in weight loss.

The stomach is cut creating a long pouch that connects the esophagus to the small intestine. The pouch or 'sleeve' is stapled and the rest of the stomach is removed.



Arrows ↓ show food moving through body after surgery.

The pouch holds about 100 to 120 ml (3 to 4 ounces). This depends on the surgeon doing the surgery. Normally a stomach holds up to 1000 ml (35 ounces). As shown in the picture, the way the food leaves the stomach does not change. The nerves are also left intact. Therefore the stomach is smaller but the function stays almost the same. None of the intestines are bypassed so food leaves the stomach and moves through the intestines normally.

Vertical sleeve gastrectomy cannot be reversed.

Bariatric Surgery

The smaller stomach continues to function normally. Since the amount you can eat is less, it is important to make healthy food choices for weight loss and overall health.

VSG surgery may be done for people who:

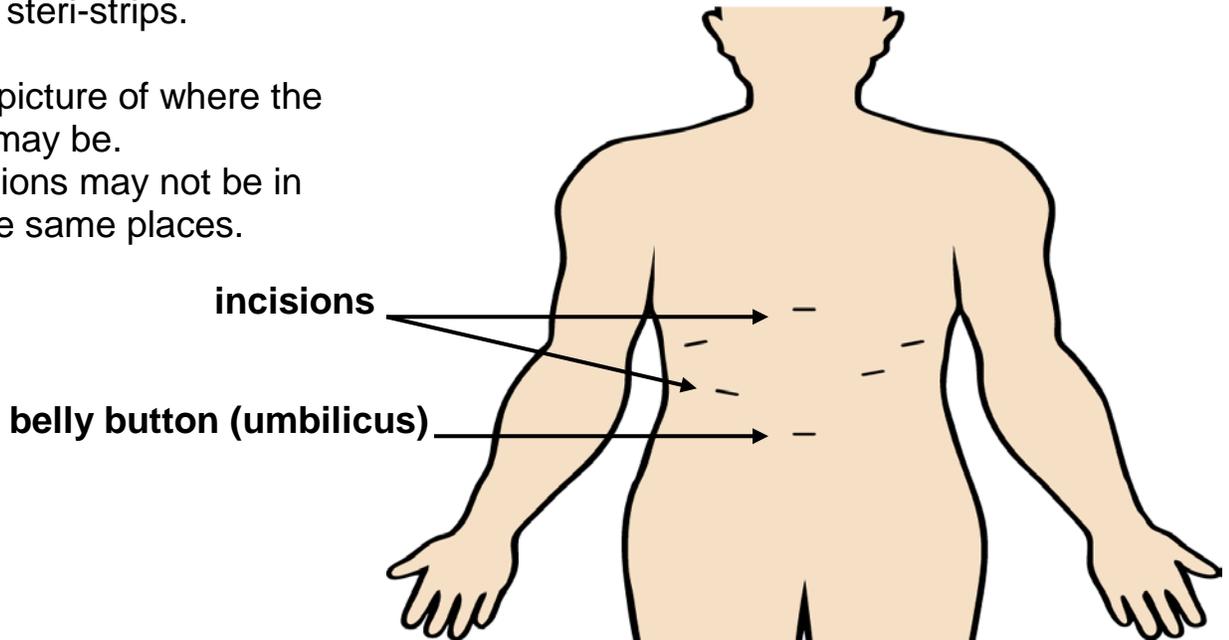
- have medical problems such as anemia, stomach ulcer and inflammatory bowel disease that would place them at high risk for surgery involving intestinal bypass
- have other conditions such as previous multiple abdominal surgery that would place them at high risk for surgery involving intestinal bypass
- are booked to have gastric bypass surgery but when doing the surgery the surgeon decides gastric sleeve is a safer option at this time

For some very obese people, vertical sleeve gastrectomy may be the first step to weight loss surgery followed by another form of weight loss surgery when it is safe to do so.

This surgery is done using 5 to 6 small incisions. Each incision is 5 to 12 millimetres (mm) long. One incision is used to insert a small camera so the doctor can see. The other incisions are used for instruments needed to do the surgery. The incisions are closed with dissolvable stitches and special tape on top called steri-strips.

Here is a picture of where the incisions may be.

Your incisions may not be in exactly the same places.



Getting Ready for Surgery

There are many things to do to get ready for surgery. This section describes the general guidelines to follow.

6 Months Before Surgery

Stop illicit and illegal drug use immediately

These are often called street drugs, illicit drugs or narcs and refer to drugs that are purchased on the street or drugs not prescribed by a health professional. Taking these types of drugs is unhealthy for many reasons. They can cause many problems with medications you need to take before, during and after surgery. Some also increase appetite and this can impair your ability to follow your diet.

You must have stopped using illicit and illegal drugs for 6 months to be considered for surgery and continue not using these after surgery.

Stop smoking immediately

Smoking is unhealthy for many reasons especially for bypass surgery patients. Smoking can delay wound healing due to poor blood flow and lead to problems such as lung infections and pneumonia. Smoking also increases the risk of bleeding, leaks and life-threatening ulcers in the stomach pouch after surgery.



You must have stopped smoking for 6 months to be considered for surgery and continue to not smoke after. It is okay to have surgery and be taking nicotine replacement therapy to help you stop smoking.

For help to quit smoking, contact your health care provider, pharmacist or the Smokers' Helpline:

- Call: 1-877-513-5333
- Website: www.smokershelpline.ca



3 to 4 Months Before Surgery

Donating your own blood – Plan 3 to 4 months before surgery

Some people want to store their own blood for surgery. This is called autologous blood donation. Not everyone is able to donate their own blood. You can talk to your doctor early about this if you are interested.

If your doctor allows you to donate your own blood, you need to contact the Canadian Blood Services in your area to make a plan. You need to do this early as you cannot give blood in the 10 days before surgery.



2 Months Before Surgery

Stop caffeine – 2 months before surgery

Caffeine irritates the lining of the stomach. Since you will have a very small, new stomach, you cannot have caffeine.

Stopping caffeine can take some time. When you first stop, you may get a headache and feel tired. This is called withdrawal. You need to withdraw from caffeine at least 2 months before surgery so you do not have this problem after surgery.

You will not be able to have caffeine for at least 3 months after surgery as well. However, you may have decaffeinated drinks. Your doctor or dietitian will tell you if or when you can have caffeine again after surgery.



Stop alcohol, beer and wine – 2 months before surgery

Alcohol irritates the lining of the stomach and can cause liver damage. When you lose weight fast, your liver takes up waste products and toxins produced in your body. This puts stress on the liver and can cause many problems.

If you drink alcohol, you will feel the effects very fast. Alcohol may also cause Dumping Syndrome described in section 'Diet Related Problems After Surgery'.



After surgery, you cannot drink alcohol for at least 3 months. After surgery, alcohol irritates the lining of your stomach pouch and/or your intestine.

Alcohol is also high in calories and some are high in sugar. After surgery, your stomach pouch is not able to break down the alcohol and your blood absorbs it very fast. This means that you feel the effects quickly and can become intoxicated after a very small amount. This is not safe for many reasons.

Your doctor or dietitian will tell you when you can have alcohol again.

Stop carbonated drinks – 2 months before surgery

This will prepare you to not drink carbonated drinks as you cannot have them after surgery. Carbonated drinks produce gas in the small stomach pouch and many people find this painful. They are also not nutritious and take up a lot of space in your small stomach.



Medications – 2 months before surgery

Before you have surgery, talk to your surgeon and family doctor about any medications, vitamins, herbal products and botanicals you take. Some of these may be stopped and others may be changed.

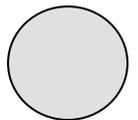
Stop taking anti-inflammatory medications such as Aspirin, Ibuprofen, Motrin, Advil, Naprosyn and Aleve.

Right after surgery, you may not be able to take some medications in pill or capsule form. Some pills may need to be split or crushed for 6 to 8 weeks or longer or for life. Some capsules may need to be opened. You may also need to take some medications in liquid form.



You will need to arrange how to take your medications and vitamins with your family doctor, surgeon and pharmacist before surgery so that you can take them safely after surgery.

A general guideline for taking pills is you may be able to swallow them whole if they are smaller than 1.5 centimetres or the size of the circle. If you have a problem taking pills this size, you should split or crush them after talking with your pharmacist.



Medical History and Physical Exam – 2 months before surgery

You will have a complete medical history and physical exam. This will involve the nurse, surgeon and medical internist.



Vitamins and Minerals – 2 months before surgery

You need to take a multivitamin and a multimineral supplement every day before and after surgery. This will help you be healthy for surgery and stay healthy after surgery. **You begin to take this supplement at least 2 months before surgery.**

The dietitian will show you which supplements to take when you come for your initial assessment. For more information on vitamins and minerals, refer to pages 56 to 61.

Nutrition and Diet – 2 months before surgery

You should begin making changes before surgery to prepare for your new lifestyle. Keeping a food journal will help you monitor your food and fluid intake. Your success will depend on your choices. **Weight loss surgery alone does not cure obesity.**

Here are some guidelines to follow:

- Buy high protein supplements recommended by the dietitian to last at least 4 weeks after surgery.
- Choose low fat foods.
- Avoid foods high in sugar.
- Eat 3 meals a day with a protein source at each meal (refer to pages 50 to 54 for more information on protein)
- Eat slowly and chew food well.
- Do not use straws.
- Sip your drinks.
- Read the Nutrition and Diet section to prepare for After Surgery (starting on page 33).
- Since your diet changes a few times after surgery, prepare a grocery list so you will be ready for these changes.
- Avoid overeating or having a last big supper of your favourite foods before surgery.
- Have smaller cups, bowls and plates ready for smaller portions after surgery.



Exercise and Activity – 2 months before surgery

It is important to be in good physical condition before surgery. Being in good shape will help you recover faster and prevent problems after surgery.

Make sure that at least 2 months before surgery you begin or continue to do regular physical exercise.

Walking

Walking is a great exercise.

Walking helps:

- your blood flow
- you breathe better
- you build muscle
- you lose weight
- you to feel good



Start walking before surgery. You will be moving and walking the day you have surgery so it is best to get into shape now.

Remember . . .

- To maintain a healthy weight and to prevent weight gain, you need to develop and keep healthy eating habits.
- Physical activity must be part of your daily routine.



1 Month Before Surgery

Nutrition and Diet before Surgery – 1 month before surgery

You need to follow a diet that is low in sugar and low in calories. This type of diet has been shown to help shrink the liver. This can help make the surgery easier to do and safer.

Some people will begin to follow this diet 1 month before surgery. Others will follow it for 2 weeks or so before surgery. Your surgeon will tell you how long you need to follow this diet before surgery. This depends on your personal treatment plan.



Liver – Shrinking (OPTIFAST) Diet:

- Make sure you have 4 OPTIFAST packets each day. You can drink 1 packet every 4 hours.
- Mix 1 packet with at least 300 ml (1¼ cups) of cold water. You can add ice cubes if you like. Shake well or blend. Be sure to only add other flavourings that do not contain added calories.
- Drink at least 2 litres (8 cups) of fluid each day including the Optifast amounts:
 - Drink sugar-free, calorie-free beverages that are non-carbonated, including water, decaf coffee or tea and products such as Crystal Light.
 - Low fat broth, sugar-free jello, and sugar-free popsicles are included as fluids.
- Make sure you continue to take your multivitamin/multimineral supplements each day.
- **Stop the Liver – Shrinking (OPTIFAST) Diet 2 days before surgery.**



If You Have Diabetes

Key Points

To help manage your blood sugar as you get ready for surgery you will need to do the following:

- Check your blood sugar regularly and record the results.
- You may need to adjust your medication because you are eating less food each day. You may need to work closely with your diabetes care provider before surgery to manage your diabetes.



Managing diabetes when on the Optifast Diet

Optifast is a low carbohydrate diet.

This means most people lose weight when taking Optifast. When you lose weight you need to closely manage diabetes as well.

As you lose weight, your diabetes medication will need to be adjusted as you will need less medication to keep your blood sugar in your target range. You can talk to your diabetes health care provider about guidelines to use as you lose weight. It is important to contact your diabetes health care provider if you need help.



At first, **if you take insulin**, the amount should be decreased by 10 to 20%. You need to keep on testing your blood sugar as advised by your diabetes health care provider. If you have episodes of low blood sugar under 4.0 mmol/L, you need to lower the amount of insulin you take by 20% until your blood sugars are within target.

At first, **if you take oral hypoglycemic medication**, the amount you take may change. For example, if you take metformin, you will continue to take the same dose and check your blood sugar regularly. If you take another kind of oral hypoglycemic, you will cut the dose in $\frac{1}{2}$. For example, if you take 10 mg twice a day, you will take 5 mg twice a day. You must check your blood sugar often when on the Optifast diet as advised by your diabetes health care provider.

Contact your diabetes health care provider when you have questions or concerns.



If you have a low blood sugar while on the Optifast diet

You need to treat the low blood sugar first. You will need to break your Optifast diet by treating the low blood sugar **but it is important to treat it right away.**

When your blood sugar is below 4.0 mmol/L:

1. Take 15 grams of a fast acting carbohydrate right away.
Examples of taking 15 grams of a fast acting carbohydrate are:

- Chewing 3 to 4 dextrose or glucose tablets – read the label **or**
- Drinking 175 ml ($\frac{3}{4}$ cup) juice



Taking 15 grams of a fast acting carbohydrate will raise your blood sugar quickly.

2. Wait 15 minutes and check your blood sugar again.
3. If your blood sugar is still below 4.0 mmol/L, treat again with one of the fast acting carbohydrates listed above.
4. Repeat these steps until your blood sugar is in your target level.
5. If your next meal or snack is more than 1 hour away, you need to have a snack that contains both carbohydrate and protein such as $\frac{1}{2}$ can of Boost Diabetic supplement. Your diabetes educator can give you more examples of carbohydrate and protein snacks to have.

Remember . . .

- **Bring your Blood Sugar Record to each visit.**
- **See the back of this book for sample Blood Sugar Records.**

1 to 2 Weeks Before Surgery

Pre-Admission Assessment Visit – 1 to 2 weeks before surgery

You will come to the Pre-Admission Assessment Unit to learn how to get ready for surgery. Here you will meet with a nurse, pharmacist and anesthesiologist.

You will have blood taken for any tests your surgeon has ordered. You will also have a heart test done called an ECG. You will meet with the anesthesiologist to talk about having general anesthesia for this surgery. This means that you are asleep during surgery.



In the Pre-Admission Assessment Unit you will get a set of instructions to follow before surgery. If you are not sure of anything, contact your surgeon's office for advice.

Stopping Some Medications and Other Products:

The anesthesiologist, nurse and pharmacist will tell you what medications and other products to stop before surgery. You will get a reminder list to take home.



If you take anticoagulant medications such as Heparin, Coumadin or Plavix, follow the guidelines from the doctor, nurse or pharmacist.

If you take vitamins, herbal products, botanicals or medications, tell the anesthesiologist, nurse and pharmacist about all of the ones you take. Some may cause your blood to be thin or cause other medical problems and need to be stopped before surgery.

Make sure you have stopped taking herbal products such as St. John's Wort, ginkgo biloba, garlic, ginseng and kava kava **2 weeks before surgery.**

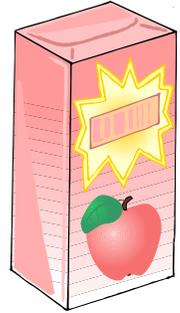


2 Days (48 hours) Before Surgery

Diet:

- **Stop the Liver – Shrinking (OPTIFAST) Diet 2 days before your surgery.**

Continue drinking only clear fluids. This includes water, decaffeinated tea and coffee with no lemon or milk, apple juice, white grape juice, cranberry juice, broth, clear popsicles, jello and products such as Crystal Light. You can have as much as you like but this is all that you can have.



Do not have any milk, cream, lemon juice, orange juice, pineapple juice or grapefruit juice.

1 Day (24 hours) Before Surgery

If you have a CPAP or BiPAP machine:

Get ready to bring your machine and mask to the hospital the day of surgery.

Write down your prescription provider and settings for the machine so your health care providers will be able to operate it.

The respiratory technician at St. Joseph's Hospital may need to talk to your provider about your settings.

What to bring to hospital:

Pack your bag and follow the list you got in the Pre-Admission Assessment Unit. You will stay in the hospital 1 to 2 nights.

Bring your CPAP or BiPAP machine and mask if you use one.



After Midnight Before Surgery

Instructions:

After midnight, follow the eating and drinking instructions you were given in the Pre-Admission Assessment Unit.

'Nothing to Eat or Drink' means no chewing gum, sucking candy or anything.



You can take any medications the anesthesiologist advised with a small sip of water.

Remember...

- **Follow the reminder paper the nurse and anesthesiologist in the Pre-Admission Unit filled out for you.**

The Day of Surgery

The Day Surgery Unit or DSU

You will check in at the Reception Desk of the Day Surgery Unit about 2 hours before surgery.

You wait in the waiting room until you are called in.



If you have a friend or family member with you, you go into the Day Surgery Unit by yourself at first. As soon as you are ready for surgery, the nurse will invite your support person to join you.



In the Day Surgery Unit, you will get ready for surgery. You will go to the bathroom and then put on a hospital gown. The nurse will ask you some questions and answer your questions.



Intravenous Therapy

You will have a small thin tube put into a vein in your arm. This is called an intravenous or IV. The IV is used to give you fluids and medications before and after surgery.

Before surgery you will get antibiotic medication in your IV to help prevent infection.



The Operation

The Operating Room

When it is time, you will be taken to the Operating Room. This room is bright and cool. You may walk or travel by wheelchair or stretcher. You will be helped onto the operating room table.

The team then goes through the steps of preparing for surgery called a “surgical time out.” They make sure they have the right patient and the right surgery before starting.

You are in the operating room about 2 hours.



The Post Anesthetic Care Unit and Nursing Unit

Recovery

You will go to the Post Anesthetic Care Unit (PACU). You will be watched closely by the nurses and given pain control medication. You will stay here until you are fully awake and then go to your bed on a nursing unit. There is a waiting room for your support person.

Pain Control

You may have some pain from your incisions. You will also have pain from the air that is put into your abdomen to help the surgeon do the surgery. This 'gas bubble' pain usually decreases within the first 2 days. Ask your nurse for pain control medication when you need it. The nurse will let you know how often you can have pain control medication.

Other ways to relieve pain are:

- walking
- any method of relaxation such as listening to music, deep breathing or imagery



Intravenous Therapy

The IV will give you fluids and medication after surgery. It is taken out when you are able to drink well.



Nausea

Some people have nausea after a general anesthetic. It is very important to tell your nurse if you feel sick to your stomach. You will be given medication to prevent nausea and vomiting.

Activity

Exercise and activity are very important to help you recover.

Getting up and moving helps keep muscles strong and prevents:

- breathing problems
- blood clots
- constipation

Do deep breathing exercises and circulation exercises every hour you are awake.

The First Time You Get Up

Ask your nurse to help you the first time you get up. You will be encouraged to move around as much as you can. Make sure you are wearing non-slip shoes, non-slip slippers or non-slip socks. As you feel stronger, you will be able to take longer walks.



The nurses will help you get up and walk the same day of your surgery. The next day you should walk at least 4 times.

Support Stockings

You may wear support stockings to help your blood move around and prevent blood clots.

Bathing and Showering

You can shower 4 days after surgery or as advised by your surgeon. Try to keep incisions dry when sponge bathing. Pat the incisions dry after bathing. Avoid using soap on your abdomen until incisions are well healed.



Incision Care

Look at your incisions each day. Each incision should be a clean, dry closed line. Your incisions may be covered with tape. Tell your nurse if you see any discharge coming from an incision or if an incision opens. You can take the tapes off 7 to 10 days after surgery depending on your surgeon's instructions.

Nutrition and Diet

Since diet is very important, there is a complete diet section in this book starting on page 33.

Medications

Your health care team will give you your medications in a form that you can take. Some may be split or crushed. Some may be put into unsweetened applesauce, water or other liquid to help you swallow.



Making Plans to Go Home: Discharge Time is 11:00 a.m.

You will need to arrange for someone to drive you home.





At Home After Surgery

Pain Control

If you have pain, take the liquid pain control medication ordered by your doctor. Pain should decrease over time. Call your doctor if your pain is not relieved by medication, does not go away over a few weeks or you have a sudden increase in pain.



Medication

You may need to split or crush some medications for 6 to 8 more weeks or longer or for the rest of your life.



Your health care team will assess how to take your medication at each clinic visit.

Take 1 pill at a time. Wait before taking another medication to make sure it goes down. Drink fluid after taking a pill to help you swallow.



You can mix the medication with a small amount of unsweetened applesauce, water or other liquid to help it go down.

Your doctor and members of the health care team will tell you when you can start taking certain medications after surgery. Each person's plan of care for medications is different.

Talk to a member of your care team when you have questions or concerns.

Remember . . .

- You must take a pre-natal multivitamin/multimineral supplement every day for the rest of your life.
- We will call this your pre-natal supplement in the rest of this book.
- This supplement needs to be split for the rest of your life.

Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)

You can never take this type of medication after surgery. There are too many types and brand names to list here but some names include ibuprofen (examples Advil, Motrin), acetylsalicylic acid (example ASA) and COX-2 inhibitors (example Celebrex), Naproxen and Aleve.



If any health care provider or specialist you see wants you to take NSAIDs after surgery, you must contact the Bariatric Clinic first.

Ulcer Prevention Medication

You will take a special medication to prevent stomach ulcers for at least 3 months. Your surgeon will prescribe this for you.

Medications for Blood Pressure

Blood pressure is written as 2 numbers.

There is a top number and a bottom number:

120 systolic = when your heart contracts and pumps blood forward
80 diastolic = when your heart relaxes

In this example the blood pressure is 120 over 80.

If you take medications to manage your blood pressure after surgery, you should monitor your blood pressure at least 2 times a week.

Call the health care provider who looks after your blood pressure such as your family doctor, nurse practitioner or cardiologist if you notice:

- the top number (systolic) is less than 100
- the top number (systolic) is more than 155

Do not stop any medication or change doses on your own.

Medications for Depression and/or Seizure Control

If you take medications to manage depression and/or seizures, you must closely monitor your symptoms after surgery.

Call your family doctor or health care provider if you notice changes in your symptoms of depression or seizure control

Do not stop any medication or change doses on your own.



Prevention of Blood Clot Medication

After surgery you have a higher risk of getting a blood clot.

A blood clot can be very dangerous.

A blood clot can block a blood vessel so blood cannot flow through your body:

- A blood clot in your brain can cause a stroke.
- A blood clot in your heart can cause a heart attack.
- A blood clot in a lung is called a pulmonary embolism. Symptoms include sharp chest pain, trouble breathing and shortness of breath.
- A blood clot in your leg is called a deep vein thrombosis. Symptoms include pain, redness, tenderness and swelling around the site of the clot.

You will be taking a medication called an anticoagulant or blood thinner. You will need to take this medication by injection for about 10 days after surgery.

This medication prevents:

- a blood clot from forming
- a blood clot that has formed from getting bigger

You may need to have the injections longer or you may be changed to a pill. This is decided by members of your health care team.



Exercise and Activity

Gradually resume your normal activities. Moving and walking helps you recover, prevents problems after surgery and promotes weight loss.

- ✘ Do not lift or carry anything over 4 kilograms or 10 pounds.
This includes things like a grocery bag, suitcase, laundry basket, vacuum cleaner, pet or child until you check with your doctor.
Most people should follow this guideline for 6 to 8 weeks
- ✘ Do not do any strenuous exercise for 6 to 8 weeks until your doctor says you can.

Start with short walks a few times a day. You will feel tired so rest and take breaks but keep on walking. As you recover you will be able to walk further each time, and more times each day. You may want to buy a pedometer to wear and measure your progress.

Keep on walking:

- 6 weeks after surgery, you should be walking a total of 30 to 45 minutes
- 3 months after surgery, you should try to be walking for a total of at least 45 to 60 minutes



Get Advice First

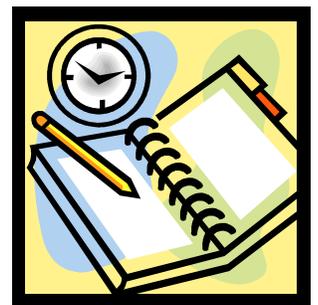
Talk to your doctor if you have problems with your joints and walking is hard. There is an exercise for you! Sometimes water exercises are better.

Talk to your doctor about starting any new exercises as you must be well healed first.



Return to Work or School

The usual time off work is 4 to 6 weeks. When you return to work depends on what you do and how you feel. Talk to your doctor about when you can go back to work or school at your follow-up visits.



Sexual Activity and Pregnancy

You can resume sexual activity when you feel able.

It is important not to get pregnant until your weight is stable and you are following a healthy lifestyle. This is usually around 15 to 18 months after surgery.



Remember: A healthy mother = A healthy baby

Rapid weight loss after bariatric surgery can greatly increase your fertility which means you can get pregnant easily. You need to talk to your family doctor and use non-oral hormonal birth control such as depo-provera.

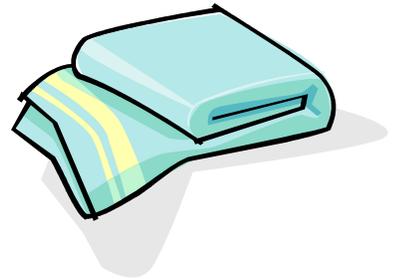
If you would like to have a baby, it is very important to plan for a pregnancy. After surgery your nutritional levels may not be optimal. Vitamin and minerals levels need to be checked and followed to ensure proper growth of the baby. Pregnancy should be followed by an obstetrician who deals with high risk pregnancies.

For the first 18 months after surgery, if you become pregnant at any time or think you may be pregnant, contact the Bariatric Clinic right away. You will need to be referred to an obstetrician for an assessment of high risk pregnancy.

Bathing and Incision Care

When you shower, cover the incisions to keep them dry. You can shower 4 days after surgery or when your doctor advises.

You cannot take a bath or swim until your incisions are well healed. You can talk to your doctor about this during a follow-up visit.



Keep the tape on your incisions clean and dry for 7 to 10 days depending on your surgeon's instructions. If any tape falls off, leave it off.

It is normal to have some swelling around the incisions. This takes a few weeks to go away. If you have severe swelling, bruising or redness that is spreading, contact your doctor as you may have bleeding or an infection.

You may have some numbness in the incision area. This is normal as some nerve endings were cut during surgery. Feeling may or may not return slowly over the next 2 to 3 months.

Incision scars

The scars may be red, dark pink or purple. These may or may not fade over the next year. This depends on your skin type.

Follow-up

You will have a follow-up appointment at the Bariatric Clinic 7 to 10 days after surgery.

You will also come to the Bariatric Clinic at:

- 4 to 6 weeks
- 3 months
- 6 months
- 12 months
- Yearly

Blood tests are done 3, 6, and 12 months after surgery.



Contact your family doctor or health care provider if you notice:

- any incision is red, swollen, painful, bleeding
- any incision has yellow, green or smelly discharge
- you have a fever – a temperature 38.3° or above
- vomiting that lasts more than 3 hours
- dizziness that does not go away



Go to St. Joseph's Hospital or the nearest Emergency if you have:

- leg pain or swelling
- shortness of breath
- chest or shoulder pain



Call 911 or your local emergency number. Do not drive yourself.

Getting Support from Family and Friends

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Good Support Helps

When you have decided to lose weight it is important to have the support of family and friends to help you achieve your goals. There has been a lot of research on the value of having positive relationships and supports when losing weight and keeping it off.



Talk to your family and friends about how they can help you.

We all know that it is hard to change behaviour and sustain change over time. Researchers agree that losing weight is a major challenge. In order to lose weight a person often needs to combine several strategies. Having weight loss surgery is only the first step. You must also make permanent positive changes to your diet and eating habits as well as exercise to lose weight and maintain weight loss.

Most people need and want support to make these changes.

After surgery, there may be an emotional adjustment to your new life. You will need to deal with changes in your relationship with food and changes in your new body image.

- Sometimes you may expect more or different changes.
- Sometimes the changes can be overwhelming even though it is what you wanted.

You may find a change in your lifestyle such as exercising more and going out less to eat interferes with your previous relationships. You may feel your role and identity with your family and friends has changed and this can sometimes lead to anxiety and depression.

It is helpful to have family and friends listen to you and encourage you as you go through these changes. Seeking individual counselling might also be of benefit. You may want to join a support group, chat-line or on-line forum. It can be helpful to hear from others who are going through some of the same experiences as you. If you use the internet remember that all sites are not safe, reliable or give accurate information.

You may need to combine several strategies of support to help you lose weight and adjust to the changes in your life.

Monthly Support Group at St. Joseph's Healthcare Hamilton

You are invited to attend a monthly support group at St. Joseph's Hospital after bariatric surgery. The Bariatric Support Group provides a chance to have peer to peer support from others who have had this type of surgery.

You will be able to talk to others about your challenges and experiences, share recipes and ideas and you may even find an exercise partner. You will be given more information about this group after surgery or feel free to ask about it.



Ways Family and Friends Can Help

Here are some helpful hints for family and friends with examples of how to help you.

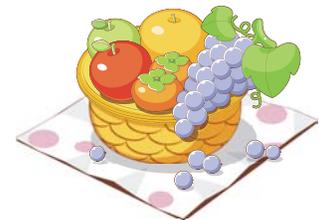
Ask your family members and friends to read this section.

- Learn about obesity, weight loss and bariatric surgery. As you learn about this subject you will discover that no one plans to become overweight. Obesity is a result of a combination of physical, chemical, psychological and emotional issues. Losing weight is a major challenge and requires support from everyone around.



- Avoid becoming a "food cop". What you may see as support, your family member or friend may see as harassment. Constant nagging, rolling your eyes or talking behind your family member's or friend's back is not healthy for the relationship. Offer support in positive ways.

- Serve your family member or friend healthy food. When you invite him/her to dinner offer healthy choices in small portions and plate the food at the counter instead of serving family style. Offer fresh fruit instead of cake or pie for dessert. Call in advance to discuss menu preferences so you can relax and enjoy each visit.



- Be patient. If you feel that your attitude is changing such as you are getting irritated or frustrated watching your family member or friend cheat...walk away, read a book or go out for a while.

- Avoid eating poor choice foods in front of your family member or friend. Some people will say, “I am not on a diet so why do I have to suffer”? You do not. However, it is hard to convince someone that you love him or her when you eat chocolate in front of him or her. Wait until you are not together. For example, treat yourself at work or school before you come home.
- Enjoy the benefits of being healthy yourself. Many people could use losing a few pounds or kilograms themselves. There are many benefits of eating healthy and being a healthy weight.
- Take part in activities and support others getting involved too. Help your family member or friend plan activities that he or she may like to do or want to try such as kite flying, golfing, dog walking and swimming. Help him or her build a routine with other friends and family. For example walk with you on Mondays, swim with another friend on Tuesdays, bike on Wednesdays with neighbours, walk on Thursdays with you etc.



- Avoid sabotaging your family member’s or friend’s plans. Do not cook or serve unhealthy, high calorie foods. Change traditions to support his or her weight loss and maintenance goals. For example, on Fridays, Jon and Ali had date night. To show his continued love for Ali, Jon brought her favourite chocolates home. When Ali expressed her desire to lose weight, Jon was upset as his tradition would be broken.

Ali asked Jon to bring a flower or fresh fruit instead but Jon resisted and continued to bring chocolates. Ali tried hard to not eat the chocolates but having them there each week was tough.

You have probably heard people say things like “It is a birthday. Everyone has to have some cake” or “I made this especially for you”. Change the way you think and respect your family member’s or friend’s plans.



- Talk about what type of support your friend or family member wants and how much you can offer. Here is an example. Sharyl asked her friend Jenna to support her during her weight loss plan. Sharyl gave Jenna a copy of the book she was following and asked her to read it. Sharyl also asked that Jenna e-mail her once a week to encourage her and ask her how her plan was going. She did not want Jenna to check up on her by asking what she ate each day or how much exercise she had done. She felt that was asking too much and not Jenna's responsibility.

Jenna agreed to Sharyl's requests and read the book and sent emails and called Sharyl regularly. Jenna also randomly sent cards of encouragement and gave Sharyl interesting healthy recipes found in magazines and articles on various types of exercises such as yoga and Tai Chi from newspapers.

Sharyl appreciated the support and said that it was up to her to stay on track. She joined a fitness program to get support from trainers and friends she met there. When Jenna and Sharyl met once in a while, they walked and talked instead of meeting in a café.

- Avoid being the only support person. This can be hard to take on and keep your relationship going. Encourage your family member or friend to find other supports as well.
- Continue to communicate. Be clear, open and honest about how you feel. Every so often, take some time to evaluate how things are going. Talk to your family member or friend and ask how you are doing supporting him or her in these weight loss and healthy lifestyle plans. Relationships change over time and yours will too. Celebrate together as good relationships are worth keeping.



Nutrition and Diet After Surgery

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What can I drink and eat after surgery?

This depends on your surgeon. Right after surgery you may or may not be able to drink.

For a short time, you will also continue to get fluids through the IV. After you are drinking well, the IV will be removed.

While you are in the hospital, you will be given a chart to record how much you are drinking.



Your diet will then follow these stages:

- You will progress slowly from clear fluids to a soft diet.
- You will begin by sipping throughout the day. At first your stomach will hold about 60 ml (1/4 cup).
- By about 8 weeks you will be able to eat about 240 ml (1 cup) of solid food for each meal.

After surgery, the diet stages are:

Diet Stage	Start Date	Details
In hospital – Clear Fluids	Day after surgery	See pages 35 to 36
Week 1 – Full Fluids	Start when you get home	See pages 37 to 40
Week 2 – Full Fluids	↓	See pages 37 to 40
Week 3 – Soft Foods	↓	See pages 41 to 45
Week 4 – Soft Foods	↓	See pages 41 to 45
Week 5 – Soft Foods	↓	See pages 41 to 45
Week 6 – Diet for Life	↓	See pages 46 to 48

Clear Fluids

Tips and Suggestions

- You will start this diet in hospital after your surgery.
- Clear fluids help decrease irritation and stress to the surgical area and allow time to heal.
- Clear fluids also help to prevent vomiting.
- You should begin by sipping throughout the day. Sip about 30 ml (2 tablespoons) each hour. You will progress slowly up to a maximum of 120 to 180 ml (½ to ¾ cup) an hour depending on your doctor's order.
- Record your fluid intake on the paper your nurse gives you to do this.
- You will also get Boost Diabetic or Carnation Breakfast Essentials (No Sugar Added) supplements 1 to 2 days after surgery.



Clear Fluids Diet Guide

Food Group	Foods Allowed	Foods Not Allowed
Milk and Alternatives	None	All
Meat, Fish, Poultry, and Alternatives	None	All
Fruit and Vegetables	No added sugar fruit juice	All others
Soups	Low fat beef, chicken, or vegetable broth	All others
Grain Products and Starches	None	All
Beverages	Water Unsweetened drinks	Carbonated drinks Caffeinated drinks Alcohol
Fats and Oils	None	All
Desserts, Sweets and Others	Sugar-free jello Sugar-free popsicles Artificial sweeteners	All other food and drinks not listed

Clear Fluids Diet Sample Menu

During the Morning

- No sugar added fruit juice 120 ml (½ cup)
- Decaffeinated coffee or tea 120 ml (½ cup)
- Water 240 ml (1 cup)

During the Afternoon

- No sugar added fruit juice 120 ml (½ cup)
- Low fat beef broth 120 ml (½ cup)
- Sugar-free jello 120 ml (½ cup)
- Crystal Light 120 ml (½ cup)
- Water 240 ml (1 cup)

During the Evening

- No sugar added fruit juice 120 ml (½ cup)
- Low fat chicken broth 120 ml (½ cup)
- Sugar-free popsicle 60 ml (¼ cup)
- Decaffeinated coffee or tea 120 ml (½ cup)
- Water 240 ml (1 cup)

Full Fluids Weeks 1 and 2

Tips and Suggestions

- You will start full fluids when you get home from the hospital.
- The full fluids diet is based mainly on milk products. You can also continue to drink clear fluids.
- Full fluids are high in protein and low in sugar and fat.
- Start by sipping about 60 ml (1/4 cup) each hour. Slowly increase the amount you drink until you can drink about 120 to 180 ml (1/2 to 3/4 cup) at each meal.
- Your goal is to drink 2 litres (8 cups) of fluid each day including your protein drinks. This may be hard at first, but it should get easier with time and practice.
- Your goal is to get a minimum of 60 grams of protein each day. You need to drink protein supplements to reach this goal.
- Track your fluid and protein intake by writing it down on the pages at the back of this book. Make more copies of these pages before you run out.
- Talk to your dietitian if you are not able to meet your goals.

60



**Full Fluids Diet Guide
Weeks 1 and 2**

Food Group	Foods Allowed	Foods Not Allowed
Milk and Alternatives	Skim, lactose-free skim or reduced sugar soy milk (less than 10 grams of sugar each serving) Nestle Carnation Breakfast Essentials (No Sugar Added) Boost Diabetic Premier Nutrition Protein Supplement Low fat, no sugar added or artificially sweetened pudding, smooth yogurt or Greek yogurt or custard	1%, 2% or homogenized milk Cream Soy milk with 10 grams or more sugar each serving Yogurt with pieces of fruit, nuts or seeds All others
Meat, Fish, Poultry, and Alternatives	None	All
Fruit and Vegetables	No added sugar fruit juice (120 ml or ½ cup a day)	All others
Soups	Strained, low fat cream soup made with skim, lactose-free skim or low sugar soy milk Low fat beef, chicken, or vegetable broth	All others
Grain Products and Starches	Cooked cereals such as oatmeal or cream of wheat	All others

Full Fluids Diet Guide
Weeks 1 and 2

Food Group	Foods Allowed	Foods Not Allowed
Beverages	Water Unsweetened drinks	Carbonated drinks Caffeinated drinks Alcohol
Fats and Oils	None	All
Desserts, Sweets and Others	Sugar-free jello Sugar-free popsicles Artificial sweeteners	All other food and drinks not listed

Full Fluids Diet

Sample Menu

Weeks 1 and 2

These are examples of possible menus. You may change the type of fluids to whatever you like from the Full Fluids list but remember you must have 3 protein drinks a day and a total of 2 litres (8 cups) of fluid.

During the Morning

- 315 ml of Nestle Carnation Breakfast Essentials (No Sugar Added), 237 ml of Boost Diabetic supplement or 325 ml of Premier Nutrition protein drink
- Cream of wheat 120 ml (½ cup)
- Sugar-free jello 120 ml (½ cup)
- Skim, lactose-free skim or soy milk 120 ml (½ cup)
- Water 120 ml (½ cup)

During the Afternoon

- 315 ml of Nestle Carnation Breakfast Essentials (No Sugar Added), 237 ml of Boost Diabetic supplement or 325 ml of Premier Nutrition protein drink
- Low fat, no sugar added/artificially sweetened pudding 120 ml (½ cup)
- Decaffeinated coffee or tea 120 ml (½ cup)
- Skim, lactose-free skim or soy milk 120 ml (½ cup)
- Water 120 ml (½ cup)

During the Evening

- 315 ml of Nestle Carnation Breakfast Essentials (No Sugar Added), 237 ml of Boost Diabetic supplement or 325 ml of Premier Nutrition protein drink
- Strained, low fat cream soup 120 ml (½ cup)
- Low fat, no sugar added/artificially sweetened yogurt 120 ml (½ cup)
- Skim, lactose-free skim or soy milk 120 ml (½ cup)
- Water 120 ml (½ cup)

Soft Foods

Weeks 3, 4 and 5

Tips and Suggestions

- This stage is designed to last about 3 weeks. For some people, this stage may take longer than 3 weeks because everybody heals differently and has different tolerances.
- The focus of this stage is on **soft protein** foods that are easy to chew and digest. This should cause you the least amount of discomfort. **You can still eat all foods from the list for the previous weeks.**
- Your goal is to get a minimum of 60 grams of protein each day. 
- Always eat your protein foods first so that you are more likely to meet your daily protein requirements. Refer to pages 50 to 54 for help with meeting your daily protein intake.
- You need to continue to eat slowly and to chew very well in order to minimize discomfort. Your meal should take 30 to 40 minutes to eat. Avoid distractions such as watching television or using the computer while you eat so that you are less likely to overeat or eat too quickly.
- You need to pay close attention to your portion sizes. Stop eating as soon as you feel full. You should be able to eat about 120 ml (½ cup) of food at one time.
- You should plan to eat 3 meals each day. You will also need to add a snack in the morning and the afternoon in order to meet your requirements.
- Add one new food at a time. Start with only a small amount at first such as 15 to 30 ml (1 to 2 tablespoons). If you have trouble tolerating a new food, try it again in a few weeks.
- Do not drink liquids with your meals, as this may cause dumping syndrome or fullness. Drink liquids 30 minutes before or after eating.
- Moist meats such as canned fish, slow-cooked stews or soups are generally better tolerated than dry or tough meats. Use low-fat gravy or sauce to moisten foods and improve tolerance. 
- Some people find spicy foods hard to tolerate at this stage. Avoid them if they cause you discomfort.

Soft Food Diet Guide
Week 3

Food Group	Foods Allowed	Foods Not Allowed
Milk and Alternatives	Skim, lactose-free skim or reduced sugar soy milk (less than 10 grams of sugar a serving) Low fat, no sugar added or artificially sweetened pudding, smooth yogurt or Greek yogurt, or custard Low fat cottage cheese Pureed or strained low fat cream soup made with skim, lactose-free skim or low sugar soy milk	1%, 2%, homogenized milk Cream Ice cream Soy milk with 10 grams or more sugar a serving Rice pudding Tapioca pudding Yogurt with pieces of fruit, seeds or nuts Hard cheese
Meat, Fish, Poultry and Alternatives	Pureed, minced or ground extra-lean meat, fish, chicken, turkey Poached or scrambled eggs, egg salad without celery and onion Canned, water-packed tuna or salmon Soft tofu Pureed legumes Hummus Baby food	Fried or barbequed meat Fried eggs Fried tofu Skin of chicken, turkey Sausages and wieners Bacon Fish with bones Peanut butter Nuts and seeds

**Soft Food Diet Guide
Week 3**

Food Group	Foods Allowed	Foods Not Allowed
Fruit and Vegetables	Pureed fruits and vegetables, except those with seeds or tough skins No added sugar fruit and vegetable juices (120 ml or ½ cup a day) Baby food	Fruits and vegetables with seeds or tough skins, such as cherries, orange, grapes, berries, lettuce, tomatoes, celery, asparagus, corn, peas, cucumber, olives, pickles Dried fruit Raw or fried vegetables
Grain Products and Starches	Cooked cereals such as oatmeal or cream of wheat Soda crackers (saltines) or melba toast Smooth mashed potatoes or sweet potatoes made with skim, lactose-free skim or reduced sugar soy milk and non-hydrogenated margarine	Bread, bagels, toast Rice Pasta, noodles All other cereals Baked goods (muffins, pastries, cookies) Potato skins French fries
Beverages	Water Crystal Light, sugar-free kool-aid and other zero-calorie drinks	Carbonated drinks Caffeinated drinks Alcohol
Fats and Oils	Non-hydrogenated margarine, healthy oils (olive, canola) Low fat cream cheese Low fat mayonnaise Avocado	Butter Hydrogenated margarine Lard, shortening Coconut, palm oil All others
Desserts, Sweets and Others	Low fat, no sugar added frozen yogurt No sugar added jam, jelly Sugar-free jello Sugar-free popsicles Artificial sweeteners	Honey Regular jam, jelly Popcorn Chips Candies All others

Soft Food Diet Guide

Week 4

60

- Remember to eat protein foods first in order to meet your 60 grams a day requirement.
- This week, you may continue to eat all of the foods from the previous weeks.
- You may also begin to **add** the following foods:

Food Group	Foods Allowed	Foods Not Allowed
Milk and Alternatives	Same as Week 3	Same as Week 3
Meat, Fish, Poultry and Alternatives	Smooth peanut butter	Same as Week 3
Fruit and Vegetables	Well-cooked, soft vegetables Soft, peeled, seedless fruits such as bananas, melons, cantaloupe, watermelon Canned fruit, packed in water	Tough or stringy vegetables, such as lettuce, tomatoes, celery, asparagus, corn, peas, cucumber, olives, pickles Raw vegetables or salads Fruits with seeds, such as strawberries, blackberries and raspberries Canned fruit packed in juice or syrup
Grain Products and Starches	Low-sugar cereals that become very soft when soaked in milk Couscous Quinoa	Bread, bagels, toast Rice Pasta, noodles Baked goods (muffins, pastries, cookies) Baked potato with skin French fries
Beverages	Same as Week 3	Same as Week 3
Fats and Oils	Same as Week 3	Same as Week 3
Desserts, Sweets and Others	Same as Week 3	Same as Week 3

Soft Food Diet Guide

Week 5

60

- Remember to eat protein foods first in order to meet your 60 grams a day requirement.
- This week, you may continue to eat all of the foods from the previous weeks.
- You may also begin to **add** the following foods:

Food Group	Foods Allowed	Foods Not Allowed
Milk and Alternatives	Same as Week 3	Same as Week 3
Meat, Fish, Poultry, and Alternatives	Lean deli meats Lean, moist chicken and turkey Soft, tender fish Eggs, omelets Low-fat cheese	Fried or barbequed meat Skin of chicken, turkey Sausages, wieners with tough skins Fish with bones Nuts and seeds
Fruit and Vegetables	Same as Week 4	Same as Week 4
Grain Products and Starches	Whole wheat toast Whole wheat pita bread Whole wheat tortillas, wraps Other whole-grain crackers Baked or oven-roasted potatoes or sweet potatoes	Bread, bagels Rice Pasta, noodles Baked goods (muffins, pastries, cookies) French fries
Beverages	Same as Week 3	Same as Week 3
Fats and Oils	Same as Week 3	Same as Week 3
Desserts, Sweets and Others	Same as Week 3	Same as Week 3

Diet for Life Guide
Week 6 and Forward

- This is your new diet plan for the rest of your life.
- Remember to eat protein foods first so you can meet your 60 grams a day requirement.
- Certain foods are not always tolerated until several months after surgery. They are listed in the ‘Proceed with Caution’ column.

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Food Group	Foods Allowed	Proceed with Caution (may not be tolerated)	Foods to Limit or Avoid (high calorie making weight loss harder)
Milk and Alternatives	Skim, lactose-free skim or reduced sugar soy milk (less than 10 grams of sugar in a serving) Low fat, no sugar added or artificially sweetened pudding, yogurt, custard		Cream, 1%, 2% or homogenized milk Chocolate milk Ice cream Full fat yogurt, or puddings, custards sweetened with sugar Soy milk with 10 grams or more sugar a serving Full-fat cream cheese
Meat, Fish, Poultry and Alternatives	Lean meat with visible fat cut off: baked, broiled or barbequed Poultry: no skin Fish: canned, frozen or fresh Low fat cheese: block, cottage Legumes, tofu, hummus, low fat peanut butter Eggs	Red meat Plain nuts without added salt or seasoning (high in fat)	Breaded or fried meats, fish or poultry Meat with visible fat Nuts with coating or seasoning Bacon, sausages, wieners

Diet for Life Guide
Week 6 and Forward

Food Group	Foods Allowed	Proceed with Caution (may not be tolerated)	Foods to Limit or Avoid (high calorie making weight loss harder)
Fruit and Vegetables	No added sugar vegetable and fruit juice (120 ml or ½ cup a day) Fresh, frozen or canned fruit and vegetables	Raw vegetables Dried fruits (high in sugar) Vegetables and fruit with tough skin such as celery, apples and corn	Fried vegetables Canned fruit with added sugar
Grain Products and Starches	Toasted bread, tortilla flat breads, toasted English muffins Cooked or refined ready to eat cereals	Bread and rolls Rice Pasta (Avoid these starches until you can tolerate at least 60 grams of protein a day)	Croissants Muffins Scones High sugar cereals
Soups	Low fat soup made with meat and vegetables Low fat creamed soups made with skim, lactose-free skim or soy milk		Full-fat cream soups
Beverages	Water Unsweetened drinks	Caffeine: • not until 3 months after surgery • limit to 240 ml (1 cup) a day	Carbonated drinks Alcohol

Diet for Life Guide
Week 6 and Forward

Food Group	Foods Allowed	Proceed with Caution (may not be tolerated)	Foods to Limit or Avoid (high calorie making weight loss harder)
Fats and Oils	Non-hydrogenated margarine Olive oil, canola oil Low fat cream cheese Light mayonnaise Avocado		All others High fat salad dressing
Desserts, Sweets and Others	Low fat, no sugar added frozen yogurt Sugar-free jello, popsicles Casseroles made with low fat sauce Artificial sweeteners	Low fat, low calorie desserts and baked goods Spicy foods	Honey, jam, jelly, syrup Pies, pastry, donuts Candy High-fat/high-calorie baked goods Donuts, pastries Fried snacks including chips, cheesies, corn chips Popcorn Chewing gum

Key Diet Guidelines



Get enough fluids:

- Drink at least 2 litres (8 cups) of fluid a day. You will need to sip on liquids throughout the day.
- Start slowly and increase the amount you drink as you tolerate fluid. Listen to your body. It is important to get enough fluids for many reasons.
- Drink all fluids 30 minutes before or 30 minutes after a meal. This prevents dehydration, bloating, low food intake and vomiting. It also helps prevent Dumping Syndrome. **Do not drink fluids with meals.**

Remember...

- **Measure the amount of fluid you have each day for 4 weeks after surgery.**
- **You can use the Fluid Records starting on page 76 to help you record and follow the amount of fluid you have each day**



Get enough protein:

- Meeting your protein needs during weight loss helps promote the loss of body fat and preserve lean body mass or muscle.
- Protein helps with healing right away.
- Have your protein at the beginning of each meal to be sure that you meet your daily requirements.
- **Your goal is to have at least 60 grams of protein each day.** Divide this amount into at least 3 to 4 meals plus snacks. For more information on how to meet your daily protein requirements refer to pages 50 to 54.

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Get enough vitamins and minerals:

- Take your pre-natal supplement every day as prescribed.
- Remember to crush or split pills larger than 1.5 centimetres.
- There are more details about vitamins and minerals starting on pages 56 to 61.



Get Enough Protein

Protein Supplements:

- During the first 4 weeks after surgery, you need to drink protein shakes in order to get enough protein. After the first 4 weeks, you may need to continue to drink protein shakes until you are able to get enough protein from food. Ready-to-drink protein shakes can be used or you can make your own using protein powder.



- If you choose to buy a liquid ready-to-drink protein shake look for one that has at least **12 grams of protein, less than 20 grams of carbohydrate and less than 5 grams fat for each 250 ml (1 cup) serving.** Some examples would be Boost Diabetic, Nestle Carnation Breakfast Essentials (No Added Sugar) and Premier Nutrition High Protein Shake.



- Do not choose any of the following supplements as they are too high in carbohydrates: Regular Carnation Breakfast Essentials, Regular Boost, Ensure, Glucerna, and Slim Fast.
- If you decide to make your own protein shakes using a protein powder supplement, choose one made of whey protein isolate or a soy protein isolate, both of which are lactose-free. You can also buy whey protein concentrate which contains lactose. When choosing a protein powder look for one that has **20 to 40 grams of protein, less than 5 grams of carbohydrate and less than 3 grams of fat for each serving.**
- When using protein powder to make your own protein shake, read and follow the directions on the label carefully. Mix the protein powder with skim milk, lactose-free skim milk, soy milk (less than 10 grams of sugar for each serving) or water. Do not mix with juice as this will provide too many calories and sugar.

How many protein drinks do I need in a day?

- Your goal is to have at least 60 grams of protein in a day. The amount of protein in the protein supplement or shake you decide to use will determine how many you need in a day.
- If your shake has 30 to 40 grams of protein for 1 serving then you need to drink 2 every day to meet your protein needs.
- If your shake has 15 to 20 grams of protein for 1 serving then you need to drink 3 to 4 every day to meet your protein needs.
- Ask your dietitian if you are not sure of how many protein shakes to drink each day.
- It is important to know how much protein is in your protein shake or the protein powder you buy so your dietitian can help you meet your protein needs.
- Take your high protein supplement drinks as directed. If you are using Nestle Carnation Breakfast Essentials (No Added Sugar) or Boost Diabetic supplements, you need to drink 3 every day for the first 4 weeks. If you are using Premier Nutrition protein supplements, you need to drink 2 a day for the first 4 weeks.
- You may also need to have a protein powder supplement. Your dietitian will talk to you about this.

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When you start eating soft foods:

- In week 3 after your surgery, you will start eating soft foods.
- The focus of this step in your diet is to get enough protein.
- You should aim to get at least 60 grams of protein each day.
- As you move through weeks 3, 4 and 5, you will get more protein from food sources.
- After week 4 of your diet, you can start cutting down on your protein supplements. However, you will need to keep track of how much protein you get from foods.
- The chart on the next page will help you figure out how much protein you are getting.

60

Dietary Sources of Protein

Each protein choice below has about 7 grams of protein. **You need to have at least 60 grams of protein each day.** If you take a protein supplement such as protein powder, Boost Diabetic, Nestle Carnation Breakfast Essentials (no Sugar Added) or Premier Nutrition, then you need to calculate the number of portions of protein you need as well as your supplement to total 60 grams a day.

60

You need 8 to 9 protein choices every day if you do not take a protein supplement.

Food	1 protein choice = 7 grams protein
Beef, pork, veal, chicken, turkey, fish, shrimp	30 grams by weight (1 ounce)
Egg	1
Low fat hard cheese: colby, swiss, cheddar, mozzarella or gouda	30 grams by weight (1 ounce)
Cottage cheese, ricotta cheese	60 ml (¼ cup)
Canned tuna or salmon	60 ml (¼ cup)
Peanut butter and nut butters	30 ml (2 tablespoons)
Plain nuts with no added salt or seasoning	60 ml (¼ cup)
Dried peas and beans (kidney beans, chickpeas, lima beans)	125 ml (½ cup) after cooking or canned
Lentils	125 ml (½ cup) after cooking or canned
Milk – skim, 1%, lactose-free skim, soy (less than 10 grams of sugar)	250 ml (1 cup)
Tofu	125 ml (½ cup) = 10 grams protein
Yogurt – Greek	60 ml (¼ cup)
Yogurt – low-fat no sugar added	175 ml (¾ cup)

More about protein:

A piece of meat the size of a normal deck of cards in thickness and surface area weighs about 90 grams (3 ounces). This amount contains around 21 grams of protein.



This example shows a deck of cards beside ground turkey loaf

Ways to get the amount of protein you need each day:

- **Breakfast:** 1 to 2 servings
- **Morning snack:** 1 serving
- **Lunch:** 2 servings
- **Afternoon snack:** 1 serving
- **Dinner:** 2 to 3 servings
- **Bedtime snack:** 1 serving (if needed)

Tips for getting more protein:

After bariatric surgery you should consume moist protein. Soup, stew, chili and meat cooked in a slow cooker will help you get moist protein.

Try to drink 250 to 500 ml (1 to 2 cups) of skim, lactose-free skim or low sugar soy milk a day. This gives you fluids and protein at the same time.



Examples of high protein snacks and food:

- Light cheese with 4 to 6 crackers
- Cottage cheese or tofu with fruit
- Tuna, egg or salmon salad made with reduced fat mayonnaise – serve on top of crackers to moisten crackers
- Peanut butter or other nut butter with banana
- Kidney beans, chick peas, lentils or other legumes added to soup
- 60 ml (¼ cup) of Greek yogurt added to a serving of lentil, bean or tomato or other low fat cream soup

When you have questions:

If you have any questions about the amount of protein you need from food, call the dietitian.



Label Reading

It is important to learn how to read labels so you can compare products and make the best choice for your health.

For example the portion size on the label gives you the nutrition information for that size only. In this example, the size is 125 mL or ½ cup. If you eat more or less than this amount you have to multiply or divide to know how much is in the amount you eat.

(g = grams)

Protein:

You need to have at least 60 g a day. This product has 3 g in 125 mL or ½ cup.

Nutrition Facts	
Per 125 mL (87 g)*	
Amount	% Daily Value**
Calories 80	
Fat 0.5 g	1 %
Saturated 0 g + Trans 0 g	0 %
Cholesterol 0 mg	
Sodium 0 mg	0 %
Carbohydrate 18 g	6 %
Fibre 2 g	8 %
Sugars 2 g	
Protein 3 g	
Vitamin A 2 %	Vitamin C 10 %
Calcium 0 %	Iron 2 %

Nutrition Facts		Valeur nutritive	
Per 1 bowl (300 g) / Pour 1 bol (300 g)			
Amount		% Daily Value	
Teneur		% valeur quotidienne	
Calories / Calories	440		
Fat / Lipides 19 g		29 %	
Saturated / Saturés 4 g + Trans / Trans 0.2 g		21 %	
Cholesterol / Cholestérol	35 mg		
Sodium / Sodium 860 mg		36 %	
Carbohydrate / Glucides 53 g		18 %	
Fibre / Fibres 4 g		16 %	
Sugars / Sucres 6 g			
Protein / Protéines	15 g		
Vitamin A / Vitamine A		45 %	
Vitamin C / Vitamine C		4 %	
Calcium / Calcium		20 %	
Iron / Fer		20 %	

This product has 15 grams of protein in 1 bowl.

Nutrition Facts	
Per 125 mL (87 g)*	
Amount	% Daily Value
Calories 80	
Fat 0.5 g	1 %
Saturated 0 g + Trans 0 g	0 %
Cholesterol 0 mg	
Sodium 0 mg	0 %
Carbohydrate 18 g	6 %
Fibre 2 g	8 %
Sugars 2 g	
Protein 3 g	
Vitamin A 2 %	Vitamin C 10 %
Calcium 0 %	Iron 2 %

Fat:

Food that has less than 5% daily value of fat is low fat.

This example is low fat because it has 1% daily value of fat.

Nutrition Facts	
Valeur nutritive	
Per 1 bowl (300 g) / Pour 1 bol (300 g)	
Amount	% Daily Value
Teneur	% valeur quotidienne
Calories / Calories 440	
Fat / Lipides 19 g	29 %
Saturated / Saturés 4 g + Trans / Trans 0.2 g	21 %
Cholesterol / Cholestérol 35 mg	
Sodium / Sodium 860 mg	36 %
Carbohydrate / Glucides 53 g	18 %
Fibre / Fibres 4 g	16 %
Sugars / Sucres 6 g	
Protein / Protéines 15 g	
Vitamin A / Vitamine A	45 %
Vitamin C / Vitamine C	4 %
Calcium / Calcium	20 %
Iron / Fer	20 %

Test Yourself

Is this a high fat or low fat food?

High fat? Low fat?

Why? _____

Get Enough Vitamins and Minerals

After surgery, you will only be eating small amounts of food. Because of this, it is hard to get enough vitamins and minerals from your food alone.

If you had Gastric Bypass, your body does not absorb all the vitamins and minerals from your food. Problems caused by a lack of these vitamins and minerals are common after surgery and can lead to serious conditions.

To help prevent problems you need to take vitamin and mineral supplements for the rest of your life.

You will need to take the following:

1. pre-natal supplement
2. calcium citrate with added vitamin D supplement

If you had Vertical Sleeve Gastrectomy, you will also need the following:

3. B₁₂ supplement

Women of child-bearing age will usually also need:

4. iron supplement

You may also need to take other vitamin or mineral supplements before or after surgery. Your doctor or dietitian will talk to you if you need more.

Please bring your vitamin and mineral supplements with you to each appointment with the dietitian.

The next few pages review:

- each vitamin or mineral supplement you need
- the amount you need to take each day
- why you need it



Pre-natal Supplement:

Check the label when buying the pre-natal supplement.

It must have the following ingredients:

- Folate or folic acid
- Iron
- Vitamin B₁₂
- Zinc
- Selenium

After surgery, your pre-natal supplement must be split into 2 before taking.

You can begin splitting your pre-natal supplement for practice before surgery to get used to doing this.

Take your pre-natal supplement with a meal or at bedtime if it upsets your stomach.

Do not take the pre-natal supplement at the same time as you take the calcium citrate and vitamin D supplement.

Calcium Citrate with Vitamin D Supplement:

- Since it is very hard to get the amount of calcium and vitamin D you need from food, you will take daily supplements.
- You need to take a type of calcium called **calcium citrate**. Take one that also has vitamin D added to it. Most pharmacies carry this type of calcium, but you may need to ask for help finding it. It is available in pill and liquid forms.
- You need to take **600 mg of calcium citrate 2 times a day**. This gives you a total dose of 1200 mg of calcium a day. You can only take 600 mg at one time because your body cannot absorb more than this at one time. Depending on the type of pill or liquid you buy, this should also give you between **400 and 800 IU of vitamin D a day**.
- You may take your calcium citrate with vitamin D supplement with or without food.
- Take your calcium citrate with vitamin D supplement at least 2 hours before or 2 hours after taking your pre-natal supplement or any other iron-containing supplement. Iron and calcium compete for absorption in the body, so if taken together you reduce the absorption of each.
- Talk to your pharmacist if you are on other medications as some cannot be taken at the same time as your calcium citrate with vitamin D supplement.

Calcium – Why you need it

Calcium is needed to develop and maintain healthy bones, nails and muscles. It helps in blood clotting and heart nerve functions as well as prevents osteoporosis (decreased bone density).

Low amounts of calcium cause bone loss, bone fractures and osteoporosis (decreased bone density).

Sources of calcium in your diet include all milk products, oysters, scallops, salmon and sardines with bones, tofu, green leafy vegetables, broccoli and dates.



Vitamin D – Why you need it

Vitamin D is needed for normal growth and healthy bones, teeth and nails. It helps the absorption of calcium and phosphorous and prevents osteoporosis (decreased bone density).

Low amounts of vitamin D may cause a problem called osteomalacia or softening of the bones. Sources of vitamin D in your diet include fortified low fat milk products, eggs, liver and fish liver oils.



B₁₂ Supplement

If you have a vertical sleeve gastrectomy, you need to take a B₁₂ supplement. There are several options for this supplement.

You can take:

- a 350 to 500 mcg (micrograms) oral pill once a day
- a 1000 mcg oral pill every other day
- a 1000 mcg sub-lingual tablet dissolved under your tongue every other day
- an 1000 mcg injection from your family doctor once a month

If you have a gastric bypass, you may also need to take B₁₂ supplements. Your doctor or dietitian will tell you if you need to take this supplement.

B₁₂ – Why you need it

B₁₂ has many functions. It is needed for energy and red blood cell production, utilization of folic acid, and nervous system function. It also helps break down carbohydrates and fats and helps build proteins.

Low amounts of vitamin B₁₂ may cause anemia and neurological disorders. Symptoms of anemia include looking pale, feeling weak, tired, dizzy and short of breath.

To prevent low Vitamin B₁₂ you may need to have intramuscular injections if the oral vitamin B₁₂ supplement is not enough.

Sources of vitamin B₁₂ in your diet include meat (organ meat), eggs, fish, legumes, cheese and yogurt.



Iron

Your pre-natal supplement contains iron. Some patients, especially women of child-bearing age who menstruate or have a period, will need to take iron supplements in addition to their other supplements. Your doctor or dietitian will tell you if you need to take an iron supplement.

If you need to take additional iron, you should take **300 mg of ferrous sulfate or ferrous gluconate**.

Taking extra iron may upset your stomach or cause constipation. Talk to your dietitian or doctor if this causes a problem for you. There are other forms of iron that can be discussed.

Iron – Why you need it

Iron helps make healthy red blood cells that carry oxygen to all of the cells in your body. It is not absorbed well after gastric bypass surgery so you need to take an iron supplement after surgery.

Low amounts of iron cause anemia, a weakened immune system and problems with your neurological system. Symptoms of anemia include looking pale, feeling weak, tired, dizzy and short of breath.



Sources of iron in your diet include meat, liver, eggs, shellfish, nuts, sardines, legumes, broccoli, peas, spinach, prunes, raisins, bran and iron enriched cereals and wheat germ.

It is important to have a source of vitamin C when eating foods containing iron to improve the absorption of iron. Sources of vitamin C include citrus juices, strawberries, tomatoes and potatoes.

Helpful hints for taking your supplements:

- Keep your supplements in a handy spot.
- Follow a regular schedule to help you remember to take them.
- Use a pill organizer to keep track of the medications you take.



Here is a sample schedule:

7:00 a.m.	Breakfast – Take calcium citrate with vitamin D and if needed B ₁₂
12:00 p.m.	Lunch
5:00 p.m.	Dinner – Take calcium citrate with vitamin D
10:00 p.m.	Bedtime – Take pre-natal supplement and if needed iron

This sample schedule is only an example. **Your schedule is based on your blood tests and overall needs after surgery.** The schedule is changed by members of your health care team based on the results of your blood tests.

Arrange to have your blood tests done about 5 weeks before you come for your 3-month, 6-month and 12-month appointments in the Bariatric Clinic. This allows time for the tests to be done and the results to be ready for the team to review with you.

Remember...

- Talk to the pharmacist on our bariatric team to help you:
 - Read the labels of your medications supplements
 - Make a schedule that is good for you
- See page 91 for ‘My Medication and Supplement Schedule’

Diet Related Problems After Surgery

Nausea and Vomiting

After surgery, it is common to have an upset stomach or nausea. This can be caused by:

- the surgery
- eating too much
- eating too fast
- odors
- pain medication

Nausea caused by the surgery can last a few days to a few weeks. This should go away over time. If you think the problem may be caused by pain medications, contact your doctor for a change in medication.

Nausea can also happen when you eat too much. Eating too much will put pressure on the surgical area.

Pressure and distention may also cause vomiting. Too much vomiting can cause dehydration and a change in the nutrients in your body. It may also cause problems with your incision healing. This is not healthy.

You can prevent vomiting by:

- eating slowly
- eating small amounts
- chewing well
- not laying down after eating
- not drinking fluids for 30 minutes before or after meals
- not drinking with meals



You can usually eat again shortly after vomiting.

If you have persistent nausea and vomiting or if you are concerned, contact the Bariatric Clinic or go to Emergency.



Dehydration

Dehydration means that you do not have enough water in your body to function well. People with severe dehydration are admitted to the hospital and given fluids through their veins.

Symptoms of dehydration are:

- dark urine
- nausea
- feeling tired all of the time
- lower back pain
- making less urine
- dry mouth and tongue
- feeling dizzy
- feeling irritable

You can prevent dehydration by:

- Drinking at least 2 litres (8 cups) of fluid a day.
- Sip fluids all day long. Buy a sports bottle and keep on filling it and drinking.
- Sucking on ice chips or sugar-free popsicles if you have nausea.



Dumping Syndrome

This happens when the new, smaller stomach pouch empties into the bowel too fast. It is caused by:

- eating large portions
- eating or drinking too much fat
- eating or drinking too much sugar
- drinking with your meal

Symptoms of Dumping Syndrome are:

- abdominal pain
- nausea
- cramping
- diarrhea
- shakes or chills
- sweating
- feeling faint
- increased heart rate
- bloating

To prevent Dumping Syndrome:

- Eat protein at each meal.
- Avoid eating large portions.
- Avoid foods and drinks that are high in sugar and fat.
- Avoid drinking with a meal and 30 minutes before and after a meal.

Constipation

Your stool may be soft at first as you are not eating solid food. Some people have stool that is hard to pass. This is called constipation.



Constipation may be caused by:

- eating less fibre because you are eating less food
- not drinking enough fluids during the day
- pain control medications such as Tylenol #3
- medications and supplements such as iron and calcium

It is normal to have from 1 bowel movement every 3 days to 3 bowel movements of soft stool daily.

To help your bowels stay soft and move, your fluid intake needs to be at least 2.0 litres (8 cups) a day and you need to have regular physical activity.

If you have not had a soft bowel movement after 2 days start adding 120 ml (1/2 cup) of prune juice to your meal plan. After having the prune juice, drink warm water, decaffeinated coffee or tea. You can do this 1 to 2 times a day to help. Remember that prune juice adds extra calories to your diet plan so be sure to count this and avoid other types of juice if drinking prune juice.

If you still have constipation or pain when you have a bowel movement your dietitian may want you to add a 100% inulin fibre supplement such as Benefibre, Metamucil Simply Clear or equivalent generic product. Start by adding a small amount in your diet such as 5 ml (1 teaspoon) daily and increase slowly 5 to 10 ml (1 to 2 teaspoons) 1 to 2 times a day until your stool is soft and your bowels move every 1 to 3 days. Increasing too fast will cause an increase in gas and can cause problems and pain.

You should not use a fibre supplement such as Benefibre if you are not drinking 2 litres (8 cups) of fluid a day. This amount of water is needed to make the fibre supplement work. If you cannot drink 2 litres of fluid a day and take a fibre supplement you may become more constipated.

If you have not had a bowel movement after 3 to 4 days you can talk to your pharmacist about adding a product such as colace, senokot or milk of magnesia. Your pharmacist can counsel you on the dose to start with and how to take this type of product.

If you do not have a soft bowel movement for 4 or more days, contact the Bariatric Clinic.



Diarrhea

Some people have soft or liquid stool called diarrhea for a few months after surgery. This can happen as your body gets used to the changes. It can also happen with Dumping Syndrome.

To help prevent diarrhea, avoid:

- food and fluids that contain caffeine
- alcohol and prune juice
- spicy foods
- high fat or high sugar foods

Drink extra fluids. You may need to take a fibre supplement to help thicken your stool. You may need to add foods that thicken stool to your diet such as bananas, applesauce and oatmeal. This depends on the stage of diet you are on when you have diarrhea. Talk to your dietitian.

If you have diarrhea that continues more than 3 days, contact the Bariatric Clinic.

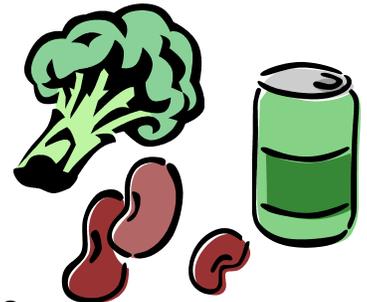


Gas

After surgery it is normal to have pain or discomfort from gas in your abdomen. As your bowel starts to move, the gas moves too.

Food is a common cause of gas. Foods that may cause gas are:

- beans, lentils, legumes
- vegetables such as broccoli, cauliflower
- melons
- apple skins
- eggs
- beer
- carbonated drinks
- dietetic products that contain sugar alcohols



To help prevent gas:

- eat slowly
- chew food well
- avoid skipping meals
- avoid straws
- avoid chewing gum

If you snore or breathe through your mouth, you may also have more gas.

Hair or Skin Changes

Hair thinning or loss and skin changes can happen after rapid weight loss. You may be the only one who can see your hair loss.

Your hair grows back as your body recovers.

To help prevent problems:

- follow your diet plan
- make sure you get enough protein and water in your diet
- take your pre-natal and calcium and vitamin D supplements each day



Vitamin and Mineral Deficiencies

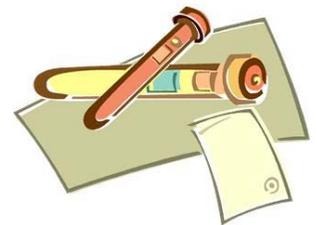
As you recover and adjust to your new lifestyle your needs may change.

It is very important to follow the diet and vitamin and mineral supplementation guidelines advised. Refer to page 56 to 61 for information on vitamins and minerals.

After bypass surgery you have an increased risk of developing serious and life-threatening problems from a nutritional deficiency.

Following your diet and taking your vitamin and mineral supplements as directed will help prevent problems and help you feel better, stronger, and healthier.

Blood tests will be done and monitored before surgery and at your follow-up appointments to assess for vitamin and mineral deficiencies. You may need to take more supplements.



Some vitamin and mineral deficiencies do not have obvious symptoms.

It is very important that you come to your follow-up appointments and that you get your blood tests done 5 weeks before your scheduled visits. This is the only way that we can know if you have a deficiency.

Diabetes and/or Low Blood Sugar After Surgery

When you go home from the hospital after surgery, you should not be taking any medications for diabetes. This includes oral medications and insulin. When you come in for your 1-week follow-up visit, your diabetes medications will be re-assessed. This is why it is very important to test your blood sugars often after surgery.

You should test your blood sugar 2 to 4 times a day, including a fasting blood sugar first thing in the morning.

What do I do with my blood sugar results?

- Write all your blood sugars on the Blood Sugar Records starting on page 81. Write the results down even though your meter has a memory. This will help your diabetes care provider see the patterns in your blood sugar levels.
- When you test your blood sugars on a regular basis, you can see if your blood sugars are in good control.

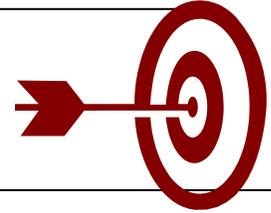


Sample Blood Sugar Record

Targets →	4 to 7	5 to 10	5 to 10	5 to 10
Date:	Before Breakfast	2 hours after Breakfast	2 hours after Lunch	2 hours after Dinner
Jan 15	6		7.8	
Jan 16	6.3	8		
Jan 17		7.5		8.3
Jan 18	7		8.5	

What should blood sugars be?

Target blood sugar levels are:



Before meals	4 to 7 mmol/L
2 hours after meals	5 to 10 mmol/L

Your blood sugar targets may be different. You and your diabetes care provider will work together to set your blood sugar targets.

Low Blood Sugar After Surgery

Since you are eating in small amounts you are at risk of having low blood sugar. Low blood sugar is also called hypoglycemia.

Some signs of low blood sugar are:



- sweating
- dizziness
- feeling tired
- feeling shaky
- blurred vision
- headache
- clammy skin
- slurred speech
- mood change
- feeling hungry

You need to check your blood sugar if you have any of the above symptoms.

If you have problems with low blood sugar, you need to test your blood sugar.

The diabetes care provider will give you a blood testing meter and show you how to use it if you do not already have one.



The diabetes care provider will tell you when to test your blood sugar.

Up to 8 Weeks After Surgery

When your blood sugar is below 4 mmol/L:

1. Take 15 grams of a fast acting carbohydrate right away by:
 - Sipping 175 ml ($\frac{3}{4}$ cup) juiceDoing this will raise your blood sugar.
2. Wait 15 minutes and check your blood sugar again.
3. Repeat these steps until your blood sugar is in your target level then sip your protein drink to keep your blood sugar in your target range.

8 Weeks and More After Surgery

When your blood sugar is below 4 mmol/L:

1. Take 15 grams of a fast acting carbohydrate right away.
Examples of having 15 grams of fast acting carbohydrate are:
 - Chewing 3 to 4 dextrose or glucose tablets – read the label **or**
 - Drinking 175 ml ($\frac{3}{4}$ cup) juiceTaking 15 grams of a fast acting carbohydrate will raise your blood sugar quickly.
2. Wait 15 minutes and check your blood sugar again.
3. If your blood sugar is still below 4 mmol/L, treat again with one of the fast acting carbohydrates listed above.
4. Repeat these steps until your blood sugar is in your target level.
5. If your next meal or snack is more than 1 hour away, you need to have $\frac{1}{2}$ can of Boost Diabetic or Nestle Carnation Breakfast Essentials (No Sugar Added) or a snack that contains carbohydrate and protein and fits into the stage of diet you are at.

If you have any concerns about having low blood sugar or what to do, talk to your diabetes educator.

What is A1C?

A1C is also called glycosolated hemoglobin. A1C shows the 3-month average blood sugar level before the test was taken. You do not have to fast before this test.

When your A1C result is less than 7%, you decrease your risk of complications.

The A1C is not the same as your blood sugar results.

The chart below will help you know what your A1C results mean.

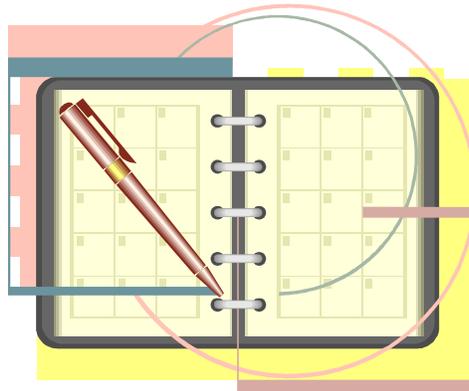
Comments	A1C Results:	Your average blood sugar during the past 3 months:
Normal Range: 4.4% to 6.4% Lowest risk of complications	5%	5 mmol/L
	----- 6%	----- 6 to 7 mmol/L
Lower risk of complications	7%	8 to 9 mmol/L
Higher risk of complications: Need to make changes to improve blood sugar control	8%	9 to 11 mmol/L
	----- 9%	----- 11 to 13 mmol/L
	----- 10%	----- 12 to 15 mmol/L
	----- 11%	----- 14 to 17 mmol/L
	----- 12%	----- 15 to 19 mmol/L

Records and Logs



If you need more pages, copy a blank form before using.

	Page
Fluid Record	73 to 76
Protein Record	77 to 80
Blood Sugar Record	81 to 86
Blood Pressure Record	87 to 88
Weight Tracking	89
Notes for Follow-up Visits	90
My Medication and Supplement Schedule	91 to 92
My Health Care Team Members	93
Notes (blank page for personal notes)	94
Tell us what you think! (Book evaluation)	95 to 96



Fluid Record

Day	Time	Type	Amount
Monday			
Total:			
Tuesday			
Total:			
Wednesday			
Total:			
Thursday			
Total:			
Total for Monday, Tuesday, Wednesday, Thursday:			

Continued on back of page →

Fluid Record

Day	Time	Type	Amount
Friday			
Total:			
Saturday			
Total:			
Sunday			
Total:			
Total from front page (Monday, Tuesday, Wednesday, Thursday)			
Total from back page (Friday, Saturday, Sunday)			
Total for whole week:			

Fluid Record

Day	Time	Type	Amount
Monday			
Total:			
Tuesday			
Total:			
Wednesday			
Total:			
Thursday			
Total;			
Total for Monday, Tuesday, Wednesday, Thursday:			

Continued on back of page →

Fluid Record

Day	Time	Type	Amount
Friday			
Total:			
Saturday			
Total:			
Sunday			
Total:			
Total from front page (Monday, Tuesday, Wednesday, Thursday)			
Total from back page (Friday, Saturday, Sunday)			
Total for whole week:			

Protein Record

Day	Time	Type	Amount
Monday			
Total:			
Tuesday			
Total:			
Wednesday			
Total:			
Thursday			
Total;			
Total for Monday, Tuesday, Wednesday, Thursday:			

Continued on back of page →

Protein Record

Day	Time	Type	Amount
Friday			
Total:			
Saturday			
Total:			
Sunday			
Total:			
Total from front page (Monday, Tuesday, Wednesday, Thursday)			
Total from back page (Friday, Saturday, Sunday)			
Total for whole week:			

Protein Record

Day	Time	Type	Amount
Monday			
Total:			
Tuesday			
Total:			
Wednesday			
Total:			
Thursday			
Total;			
Total for Monday, Tuesday, Wednesday, Thursday:			

Continued on back of page →

Protein Record

Day	Time	Type	Amount
Friday			
Total:			
Saturday			
Total:			
Sunday			
Total:			
Total from front page (Monday, Tuesday, Wednesday, Thursday)			
Total from back page (Friday, Saturday, Sunday)			
Total for whole week:			

Weight Tracking

Date	Weight (kg)	Body Mass Index (BMI)	Waist Circ (cm)	Hip Circ (cm)
Before Surgery				
4 to 6 weeks				
3 months				
6 months				
12 months (1 year)				

Notes for Follow-up Visits

Before Surgery	
1 week	
4 to 6 weeks	
3 months	
6 months	
12 months (1 year)	

My Health Care Team Members

Surgeon	
Clinic Nurse	
Clinic Nurse	
Dietitian	
Dietitian	
Pharmacist	
Social Worker	
Diabetes Nurse	
Community Care Access Centre (CCAC) Manager	
Endocrinologist	
Medical Internist	
Psychiatrist	
Psychologist	
Thromboembolism Team	
Physiotherapist	
Occupational Therapist	
Sleep Apnea Doctor	

Bariatric Surgery

I would have liked MORE information about:

I would have liked LESS information about:

Other comments or suggestions:

I am: a patient a family member other: _____

Thank you!

Please return this form. You can bring it back when you come for a check-up or mail it to:

Paula Eyles, Patient Education Specialist
Room G622
St. Joseph's Hospital
50 Charlton Avenue East
Hamilton, ON L8N 4E6

Bariatric Surgery
