

## Nutrition Before and After Bariatric Surgery





### Table of Contents

NUTRITION AND BARIATRIC SURGERY	4
Follow up appointments	4
LIQUID DIET BEFORE SURGERY	5
OPTIFAST® 900	5
What is the Optifast <sup>®</sup> 900 diet?	5
How do I get Optifast <sup>®</sup> 900?	5
How do I prepare Optifast <sup>®</sup> 900?	6
How many Optifast <sup>®</sup> 900 packets do I drink per day?	6
What else can I drink while on Optifast <sup>®</sup> 900?	6
Can I change the flavor of my Optifast <sup>®</sup> 900 meal replacement drink?	7
Recipe ideas to change the flavor of Optifast <sup>®</sup> 900	7
Diabetes Management while on Optifast <sup>®</sup> 900	8
Vitamin and mineral supplements while on Optifast® 900	. 9
Other considerations when taking Optifast <sup>®</sup> 900	. 9
BEFORE SURGERY CHECKLIST	10
FOOD STAGES AFTER SURGERY	11
STAGE 3: HIGH PROTEIN FULL FLUIDS	12
Goals	12
Fluids and Hydration	12
HGH PROTEIN FULL FLUID CHOICES	13
PROTEIN SUPPLEMENTS	14
Sample high protein full fluid menus	15
HIGH PROTEIN FULL FLUID RECIPES	16
VITAMINS AND MINERALS AFTER SURGERY	
Sample vitamin timetable	19
Bariatric surgery supplements available in Canada (optional)	. 19

20
21, 22
22
23
24
25
26
26
27

### Nutrition and Bariatric Surgery

The information in this booklet is intended for discussion and guidance together with your dietitian. If you have questions, call the Bariatric Clinic at 306-766-0398.

Both Roux-en-Y Gastric Bypass and Sleeve Gastrectomy surgeries are procedures that reduce the size of your stomach. These surgeries can help promote weight loss by restricting the amount of food that can be eaten at one time and by causing a feeling of fullness after very small meals.

However, the way you eat after surgery must be permanently altered. Initially, both the consistency and volume of food is restricted to allow for healing, while providing essential nutrients.

The long term goal is to consistently control portion sizes while prioritizing a nutritionally balanced intake. These guidelines provide you with information to help you modify your intake and maximize the benefits of surgery.

### **Follow Up Appointments**

It is important to keep all follow up appointments so that your progress can be monitored and to address any concerns you may have sooner rather than later.



Photo by AllGo on Unsplash.

Follow up appointments are outlined on page 23 of your Guide to Bariatric Surgery Booklet

### Liquid Diet Before Surgery

The pre-surgery liquid diet helps shrink the liver. This makes it easier for the surgeon to perform the surgery. After surgery, you transition through a liquid to a pureed/soft and then a regular diet. This transition is designed to help you heal and to meet your fluid and nutritional needs.

You **may** have been asked to follow a liquid diet longer than 14 days if deemed necessary by your surgeon. This could be 21 or 28 days. Your surgeon would have advised you of this when you signed consent for surgery.

### Optifast<sup>®</sup> 900

### What is the Optifast<sup>®</sup> 900 diet?

Before surgery, you will start on a liquid diet, using a meal replacement product called Optifast<sup>®</sup> 900. Optifast<sup>®</sup> 900 is a complete meal replacement drink that is high in protein and low in carbohydrate and fat. It provides all of the vitamins and minerals you need to stay healthy before surgery.

Optifast<sup>®</sup> 900 is available in two (2) flavours; chocolate and vanilla. It comes as powder in individual packets. Each packet must be mixed with **water** and cannot be mixed with other beverages or foods.

Optifast<sup>®</sup> 900 is very low lactose and gluten free.

### How do I get Optifast<sup>®</sup> 900?

Optifast<sup>®</sup> 900 is not available in retail pharmacies. It is a medically supervised meal replacement drink and is available only through your healthcare provider.

The clinic will provide you with a code to order Optifast<sup>®</sup> 900 <u>online at</u> <u>www.shopoptifast.ca</u>. This will be delivered to your home address. This code is intended for your **personal use only** and is not to be shared with others. <u>Allow one (1) to two (2) weeks for delivery</u>.

### How do I prepare Optifast<sup>®</sup> 900?

1. Add 1 to 2 cups (250 to 500 mL) of water to a shaker bottle or a blender. You may add more water or less water to achieve a thinner or thicker consistency if desired.

- 2. Add the contents of one (1) Optifast<sup>®</sup> 900 packet on top.
- 3. Shake or blend. Add ice cubes if you prefer it colder.

Drink Optifast<sup>®</sup> 900 as soon as it is mixed in order to avoid clumping.

Do not heat Optifast<sup>®</sup> 900 or add hot liquid to the powder.

### How many Optifast<sup>®</sup> 900 packets do I drink per day?

Drink **four (4) packets per day.** Drink your first packet within one (1) hour of waking. Try to drink a packet about every four (4) hours throughout the day for a total of four (4) packets per day.

### What else can I drink while on Optifast<sup>®</sup> 900?

Drink an additional 1.5 to 2L (6 to 8 cups) of fluids daily. This amount does not include your four (4) servings of Optifast<sup>®</sup> 900. Choose sugar-free, calorie-free fluids which are non-carbonated and caffeine-free.

For example:

- Water (you can add some fresh lemon or lime).
- Decaffeinated coffee or tea. You can add up to ¼ cup (60 ml) skim milk per day. No added sugar.
- Sugar-free water flavourings such as MIO<sup>™</sup>, Crystal Light<sup>™</sup>.
- Chicken, beef, or vegetable bouillon or broth. Limit to 1 cup (250 ml) per day.
- Sugar-free Jell-O<sup>®</sup>.
- Popsicles made from Crystal Light<sup>™</sup> or MIO<sup>™</sup>.
- Gatorade<sup>®</sup> Zero; Powerade Zero<sup>™</sup>

# Important:You can drink your Optifast® 900 drink up until midnight the<br/>night before surgery. No protein drink after midnight.<br/>Clear fluids are allowed up to two (2) hours before surgery.

### Can I change the flavour of my Optifast<sup>®</sup> 900 meal replacement drink?

You may add any of the following to your Optifast<sup>®</sup> 900 to change the flavour:

- Brewed decaffeinated coffee.
- Sugar-free syrups or flavour extracts such as mint, berry, maple, banana or orange.
- Zero-calorie flavourings such as Crystal Light<sup>™</sup> or MIO<sup>™</sup>.

### Recipe ideas to change the flavor of Optifast<sup>®</sup> 900

#### **Chocolate Orange**

1 1/4 cups (300 mls) water Crushed ice 1 chocolate Optifast<sup>®</sup> 900 package 1 to 2 drops orange extract

#### Mint Chocolate

1 1/4 cups (300 mls) water Crushed ice 1 chocolate Optifast® 900 package 1/4 tsp (1 ml) mint extract Artificial sweetener as needed

Blend ingredients. Drink chilled.

#### **Berry Dream**

1 1/4 cups (300 mls) water Crushed ice 1 vanilla Optifast® 900 package Sugar free flavored water enhancer such as raspberry Crystal Light™

Blend ingredients. Drink chilled.

Blend ingredients. Drink chilled.

#### Spiced Optifast<sup>®</sup> 900

1 1/4 cups (300 mls) water
1 vanilla Optifast<sup>®</sup> 900 package
A pinch of any of the following spices as desired:
Allspice, cinnamon, cloves, ginger or nutmeg

Blend ingredients. Drink chilled.



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<u>Photo</u> by <u>Yaroslav Shuraev</u> from <u>Pexels</u>.

### **Diabetes Management when on Optifast® 900**

The pre-surgical diet is a low carbohydrate diet. You need to closely manage your diabetes while on the pre-surgical diet.

It is important to talk with your diabetes health care team **before** starting your liquid diet as your diabetes medications may need to be adjusted.

If you have a low blood sugar while on the liquid pre-surgical diet, it is important to **treat it right away**. This is the one time you can "break away" from your liquid diet.

If your blood sugar is less than 4.0 mmol/L, take 15 grams of fast acting sugar right away.

Choose one (1) of the following:

- 1 Tbsp (15 mL) sugar or 3 sugar cubes, dissolved in water.
- ¾ cup (175 mL) juice (not sugar free).
- 6 Life Savers<sup>®</sup> (must be chewed).
- 1 Tbsp (15 mL) honey.

Wait 15 minutes. Check your blood sugar. Repeat treatment if still less than 4.0 mmol/L or if symptoms persist.



Photo by Peter Stanic from Pixabay.

### Vitamin and mineral supplements while taking Optifast<sup>®</sup> 900

Stop taking your multivitamin supplement. Optifast® 900 supplies all of your vitamin and minerals.

If you have been instructed by the clinic to take additional vitamin B12 or vitamin D, continue to take this while on your Optifast<sup>®</sup> 900 liquid diet.

### Other considerations when taking Optifast<sup>®</sup> 900

### Hunger

You may feel hungry especially during the first 4 or 5 days while on the liquid diet. This is not uncommon, and will typically improve. Some people do not feel hungry at all on the liquid diet.

If you are feeling hungry:

- Make sure you finish all 4 of your protein shakes each day.
- Drink your shakes 4 to 5 hours apart and at meal times.
- Make sure you are drinking water or sugar-free fluids in between your protein shakes.
- Often people will crave the mouth-feel of food or the desire to chew. Sugar-free popsicles that you have made yourself with Crystal Lite<sup>™</sup> or MIO<sup>™</sup> can be helpful.
- Remember the distraction techniques that you learned in class. Go for a walk, call a friend, read a good book or focus on an activity or hobby you enjoy.

### Headache

Ensure you are drinking a total of 1.5 to 2L (6 to 8 cups) sugar-free fluid each day. This amount does not include your four (4) servings of Optifast<sup>®</sup> 900.

### **Constipation or Diarrhea**

Drink all of your fluids. Ensure you are drinking a total of 6 to 8 cups (1.5 to 2L) sugar-free fluid each day. This amount does not include your four (4) servings of Optifast<sup>®</sup> 900.

A fibre supplement such as Clearly Fiber<sup>™</sup>, The Right Fibre4<sup>®</sup> or Metamucil<sup>®</sup> can be added to your water. Choose the <u>sugar-free</u> versions of these products. Follow the directions on the package. Start with the lowest dose on the label and increase gradually to the maximum dose.

### Before Surgery Checklist

Remember to check the length of time that you are required to follow your Optifast<sup>®</sup> 900 diet. This could be anywhere from 14 to 28 days as discussed with your surgeon. Order the correct amount of Optifast <sup>®</sup> 900 based on the length of your Optifast<sup>®</sup> 900 diet, as indicated below.

- Order Optifast online at www.shopoptifast.ca.
   Allow a minimum of one (1) to two (2) weeks for delivery.
  - 14 day pre-surgical diet = 56 sachets 21 day pre-surgical diet = 84 sachets 28 day pre-surgical diet = 112 sachets
- □ Blender or shaker bottle.
- □ Water bottle.
- □ Measuring cups and spoons.
- □ Sugar-free fluids. See page 6.
- □ Sugar-free flavorings to add to Optifast<sup>®</sup> 900. See page 7 (optional).
- □ Fibre supplement. See page 9 (optional).
- □ Protein supplement for your stage 3 high protein full fluid diet after surgery. See page 15.
- After surgery vitamin and mineral supplements. See page 18.
   You start these two (2) weeks after surgery. It is recommended to purchase these ahead of time.

#### Supplies for Stage 4 Soft Foods Diet which you start two (2) weeks after surgery:

- □ Small plates, cups and bowls.
- Strainer.
- Food scale.
- $\Box$  Small containers for 1/2 cup (125 ml) and 1 cup (250ml) food portions.

When planning ahead, see pages 21 and 22 for a more detailed list of food and supplies on the Stage 4 diet.

### Food Stages After Surgery

After surgery, there are five (5) food stages. This book will discuss Stage 1 to 4. At your 6 week after surgery appointment, you will be given a booklet that discusses stage 5. This will be a regular diet that is to be followed lifelong.

Stage	Diet	Start Date	End Date
<b>Stage 1</b> - In hospital	Water 30 mls (1 ounce) per hour	Day Zero: Day of Surgery	
<b>Stage 2</b> - In hospital	Low Sugar Clear Fluids 30 to 90 mls (1 to 3 ounces) per hour	Day 1: 24 hours after surgery	
Stage 3 - In hospital and continued at home	High Protein Full Fluids	Day 2: 48 hours after surgery	Continue for 14 days after surgery (weeks 1 and 2 at home)
Stage 4 - At home	Pureed and soft foods diet	Day 14 : (2 weeks after surgery) You are contacted by the Registered Dietitian and Registered Nurse 14 days (2 weeks) after surgery to start Stage 4.	Continue for 28 days until 6 weeks after surgery
Stage 5 - At home	Regular diet	6 weeks after surgery	Lifelong

### Stage 3: High Protein Full Fluids

You continue with high protein full fluids for 2 weeks (14 days) after surgery. This helps your new stomach heal and allows for the swelling to go down, while focusing on meeting your protein goals.

#### What is a full fluid diet?

Full fluids are liquid, easy to swallow, can be poured or are smooth in texture, like yogurt. Your full fluid diet is high in protein, low in sugar and low in fat.

A general goal is **60 to 80g** of protein per day.

At this stage, you <u>must</u> supplement with a protein drink to meet your protein goals. Most of your protein will come from supplements. **Track** your fluid and protein grams each day.

### Goals

- 6 to 8 cups (1.5 to 2L) total fluid per day. This is a combination of protein shakes **and** sugar-free fluids.
- 3 small meals and 3 small snacks spaced throughout the day. A snack will most often be your protein supplement.
- Approximately 1/2 to 1 cup (125 to 250 ml) serving of food or fluid at each meal and snack.
- Pay attention to your body for signs of fullness. Remember to eat and drink slowly. Stop eating or drinking when you begin to feel full. Often one extra bite or sip is too much.

#### **Fluids and Hydration**

Dehydration is a concern after surgery but can be prevented. Try to drink 1/2 cup (125 ml) approximately every hour during the day.

- Sip slowly in between meals.
- Keep water nearby at all times. Carry a water bottle with you if you are going out.
- Track all fluids.
- Flavor water with lemons, limes, mint leaves or cucumber slices.
- Sometimes, very cold water is less tolerated after surgery. If this is the case, try room temperature water or herbal tea.

### Full Fluid Choices

Category	Foods Allowed
Milk and Alternatives	Greek or Icelandic style yogurt (smooth, no pieces of fruit with 2% milk fat or less)
	Milk (skim, 1% or 2%)
	High protein milks such as Fairlife <sup>®</sup> Ultrafiltered milk; Natrel Plus or Lactantia <sup>®</sup> Ultrafiltered milk
	Soy milk, plain or unsweetened
Protein Supplements	You <u>must</u> supplement with a protein drink to meet your protein goals
See page 15 for additional information on choosing a	Pre-mixed, ready-to-drink protein drinks or meal supplements
protein supplement	Protein powders
Meat, Fish, Poultry and Alternatives	None
Fruits and Vegetables	Unsweetened applesauce
	Tomato juice
Grains and Starches	Plain cooked cereals such as oatmeal or cream of wheat. Adding unflavored protein powder will help to increase the protein content.
	You may need to add milk to thin the consistency of the cereal.
Soups	Blended or strained cream soups made with milk. Adding unflavoured protein powder will help to increase the protein content.
Other fluids	Sugar free fluids. Same as those listed on your pre-surgical diet. See page 5.

### Protein Supplements

You need to start a protein supplement while on your Stage 3 full fluid diet and up to 6 weeks after surgery. You may need to continue this longer than six (6) weeks after surgery until you can consume enough protein from your foods.

Protein supplements are available as high protein meal nutrition drinks, ready-to-drink protein supplement drinks, or you can make your own supplement using a protein powder.

What to look for in a protein supplement after bariatric surgery; general guidelines:

- At least 20 to 30 g of protein per serving
- Low in sugar (less than 10 g per serving, or ideally less than 5 g)

Protein Supplement	Suggestions
This is not a complete list. T	he SHA does not endorse or promote any specific product or brand.
Pre-mixed, ready-to-drink	Boost Carb Smart™ Boost Protein® + Shake™ 27 Ensure Protein Max® 30 Fairlife Nutrition Plan® Premier Protein®
Protein Powders	<ul> <li>Allmax Nutrition Whey Protein Isolate Isoflex®</li> <li>Allmax IsoNatural® Whey Protein Isolate</li> <li>Leanfit™ Whey Protein</li> <li>Choose a protein powder made from whey protein isolate, soy protein isolate or whey protein concentrate.</li> <li>Flavored or unflavoured is acceptable.</li> <li>If you have lactose intolerance, a whey protein isolate is a good choice as almost all of the lactose is removed in the processing. Whey protein concentrates are not lactose free.</li> <li>If you have a dairy allergy, avoid whey isolate and whey concentrate options. Choose a soy or plant based protein powder instead.</li> </ul>
Protein powders that dissolve clear into liquids or soft foods	<ul> <li>Boost<sup>®</sup> Just Protein<sup>™</sup></li> <li>Unflavoured whey protein isolate.</li> <li>Mix into liquids such as water, decaffeinated coffee or tea.</li> <li>Can be added to soft food such as oatmeal or applesauce.</li> </ul>
High protein milks	<ul> <li>Fairlife<sup>®</sup> Ultrafiltered milk; Natrel Plus or Lactantia<sup>®</sup> Ultrafiltered milk</li> <li>High protein milks can be used as a base for making full fluid soups.</li> </ul>

### Sample High Protein Full Fluid Menus

Remember to add up your protein from all sources every day. This should equal 60-80g each day.

#### Sample 1:

Breakfast	1/4 cup (60 ml) thin oatmeal or cream of wheat 1/4 cup (60 ml) milk (skim, 1% or 2%) 1 to 2 Tbsp (15 to 30 ml) protein powder added
Morning Snack	1/2 to 1 cup (125 to 250 ml) high protein supplement
Lunch	1/2 cup (125 ml) Greek style yogurt
Afternoon Snack	1/2 to 1 cup (125 to 250 ml) high protein supplement
Supper	1/2 cup (125 ml) strained cream soup 1 to 2 Tbsp (15 to 30 ml) unflavored protein powder added
Evening Snack	1/2 to 1 cup (125 to 250 ml) high protein supplement Remember to sip

#### Sample 2:

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Remember to sip		
on sugar-free		
fluids in between		
meals. Water is		
best.		

Breakfast	1/2 cup (125 ml) Greek style yogurt
Morning Snack	1/2 to 1 cup (125 to 250 ml) high protein drink
Lunch	1/2 cup (125 ml) strained cream soup 1 to 2 Tbsp (15 to 30 ml) unflavored protein powder added 1/4 cup (60 ml) unsweetened applesauce
Afternoon Snack	1/2 to 1 cup (125 to 250 ml) high protein drink
Supper	1/2 cup (125 ml) Greek style yogurt <b>OR</b> 1/2 cup (125 ml) tomato soup made with milk and 1 Tbsp (15 ml) protein powder added
Evening Snack	1/2 to 1 cup (125 to 250 ml) high protein drink

### High Protein Full Fluid Recipes

### Chocolate Peanut Butter Smoothie (1 serving)

1/2 scoop chocolate protein powder containing 20 to 30 g protein per scoop
1 cup (250 ml) skim, 1%, 2% or soy milk
1 Tbsp (15 g) powdered peanut butter such as PB2<sup>™</sup> or PB&Me<sup>™</sup>
Mix all ingredients in a blender. Sip slowly.
Protein per serving: 24 g

#### Homemade High Protein Drink (1 serving)

1/2 scoop unflavoured protein powder containing 20 to 30 g protein per scoop
1 cup (250 ml) skim, 1%, 2% or soy milk
2 to 3 drops of flavored extract such as mint, berry, maple or banana
Mix all ingredients in a blender. Sip slowly.
Protein per serving: 21 g

### High Protein Yogurt (1 serving)

1/3 cup (80 ml) Greek or Islandic style yogurt
1 Tbsp (15 g) flavoured or unflavoured protein powder or 2 Tbsp (60 ml) skim milk powder
1 Tbsp (15 ml) milk (skim, 1%, 2% or soy). Just enough to make for a thinner consistency.
In a small bowl, mix yogurt and protein powder. Add milk if needed to thin the consistency. Stir until blended.
Protein per serving: 23 g

#### High Protein Tomato Soup (1 serving)

3/4 cup (180 ml) low sodium tomato soup (canned or homemade)1/4 cup (60 ml) plain Greek yogurt or cottage cheese (blended smooth)1 Tbsp (15 g) unflavoured protein powder (whey or soy protein isolate)

- 1. Heat the tomato soup. Warm in a saucepan over low heat. Do not boil.
- 2. Blend the protein. In a separate bowl, whisk the protein powder into the yogurt or cottage cheese until smooth.

3. Remove the tomato soup from heat and slowly combine with the protein mixture. Mix well to avoid clumps. **Protein per serving: 20 g** 

#### Tips for full fluid soups:

- Thin as needed by adding extra broth, milk or water to adjust consistency.
- Use unflavoured protein powders or skim milk powder to increase protein content without altering the taste. This works best in milk based soups. Dilute first with a small amount of milk and then add to soup.
- Puree cooked beans and lentils and add to soups to increase the protein content.
- Avoid chunks. Strain or blend soups to ensure smoothness.

### Vitamins and Minerals After Surgery

After surgery, your body will not absorb certain vitamins and minerals as well as it did before.

#### Why I need to take vitamin/mineral supplements

You need lifelong vitamin and mineral supplementation. The size of your new pouch is very small. It is difficult to eat enough food to meet all of your vitamin and mineral needs. Also, vitamins and minerals are not absorbed as well after bariatric surgery.

#### Why I need to take calcium and vitamin D

Calcium and vitamin D work together to keep your bones healthy. Multivitamins typically do not contain enough calcium or vitamin D to meet your needs after bariatric surgery. It is recommended that you choose calcium **citrate** rather than calcium carbonate as it is absorbed better after bariatric surgery.

#### Why I need to take vitamin B12

Vitamin B12 has many functions in the body including keeping our nerves and cells healthy. You may not absorb Vitamin B12 as well after bariatric surgery. General multivitamins do not contain enough vitamin B12 to meet your needs after bariatric surgery so you have to take extra in a supplement.

After surgery, there are two (2) vitamin and mineral supplement stages. You start the first stage, which is chewable, quick dissolve or liquid form two (2) weeks after surgery.

You start the second stage, which is standard supplement form when you attend your in-person follow up visit at the clinic at six (6) weeks after surgery.



### Vitamin and Mineral Supplements after Surgery (Week 2 to 6)

You are contacted by the Registered Dietitian and Registered Nurse two (2) weeks after surgery and instructed to start your vitamin and mineral supplements at that time. This is the first vitamin and mineral stage which is chewable, quick dissolve or liquid form

Supplement	Brand	Amount
Multivitamin/ Mineral	Jamieson™ Chewable Multi 100% Complete Multivitamin gummies or patches are <b>not</b> recommended as they do not meet your nutrition needs after surgery.	2 tablets per day
	You will switch to standard tablets at 6 weeks after surgery as over the counter chewable multivitamins are not nutritionally adequate long term after bariatric surgery	
Vitamin B12	Webber Naturals <sup>®</sup> Fast Acting Quick Dissolve (250mcg)	2 tablets per day
	OR Webber Naturals <sup>®</sup> Quick Dissolve Fast Acting (500mcg) OR	1 tablet per day
	Jamieson™ Fast Dissolving (1000mcg) <b>OR</b>	1 tablet every 2 days
	Webber Naturals <sup>®</sup> Fast Acting, Quick Dissolve (1000mcg) <b>OR</b>	1 tablet every 2 days
	Jamieson™ Fast Dissolving Strips (1000mcg)	1 strip every 2 days
Calcium Citrate	Equate™ liquid calcium with vitamin D sugar-free <b>OR</b>	1 Tbsp 3 times per day
	Life Brand <sup>™</sup> sugar-free liquid calcium with vitamin D sugar free <b>OR</b>	1 Tbsp 3 times per day
	Wellness™ by London Drugs liquid calcium with vitamin D sugar-free	1 Tbsp 3 times per day
Vitamin D	Jamieson™ Chewable 1000 IU	1 tablet per day
	OR Life Brand™ Chewable 1000 IU OR	1 tablet per day
	Jamieson <sup>™</sup> Vitamin D drops 1000 IU <b>OR</b>	1 drop per day
	Ddrops <sup>®</sup> 1000 IU	1 drop per day

Below is a list of suggested over the counter vitamin and mineral supplements.

Page 18 of 28 Sask

### Sample Timetable

Not all vitamins and minerals can be taken at the same time as your body does not absorb them as well.

- Take your two (2) chewable multivitamins together.
- Take your Vitamin B12 with your multivitamins.
- Separate calcium doses. Take your calcium and vitamin D two (2) hours apart from your multivitamins.

Breakfast	2 tablets Jamieson Chewable 100% Complete + 500 mcg sublingual Vitamin B12
Lunch	1 Tbsp (15 ml) liquid calcium citrate + 1000 IU chewable or drop form Vitamin D
Supper	1 Tbsp (15 ml) liquid calcium citrate
Evening	1 Tbsp (15ml) liquid calcium citrate

### **Bariatric Surgery Supplements Available in Canada (Optional)**

Vitamin and mineral supplements specifically designed for bariatric surgery are available **online** if you prefer to choose this option. There are options for chewable calcium citrate or chewable multivitamins that are suitable long term. Ask your Dietitian for more information on what product and dose best meets your needs.

#### **Bariatric Advantage® Vitamins**

https://www.bariatricadvantage.ca

Multivitamin	Chewable Advanced Multi EA
Calcium Citrate	Chewable Calcium Citrate tablets with Vitamin D Calcium Citrate Chewy Bites with Vitamin D

#### Celebrate<sup>®</sup> Vitamins

https://www.celebratevitamins.ca

Multivitamin	Celebrate Essential Multi 2 in 1 Chewable
Calcium Citrate	Calcium Citrate Soft Chews with Vitamin D

### Stage 4: Pureed and Soft Foods

You are contacted by the Registered Dietitian two (2) weeks after surgery to start this stage.

A general daily goal is **60 to 80 g** of protein per day from foods and **6 to 8 cups (1.5 to 2L)** fluid.

#### **General Guidelines:**

In this stage, the focus is on choosing foods high in protein that are easy to digest. You will gradually start adding in soft foods from other food groups.

- Eat 3 small meals per day and 2 planned healthy snacks. Avoid nibbling, grazing, or picking at food throughout the day.
- The amount of food you eat at each meal or snack should be about ½ cup (125 ml) to 1 cup (250 ml).
- Always eat or drink very slowly. Meals should be paced to last 30 minutes even when the amount of food is very small. Eating too quickly can cause nausea and vomiting. Stop eating as soon as you are full. Never force the food or beverage.
- Chew food thoroughly. All food should be chewed to a liquid consistency while in the mouth. Food that is not thoroughly chewed can cause nausea and vomiting or may cause blockages.
- Do not drink liquids with meals. Wait 30 minutes before or 30 minutes after eating meals. Sip on fluid slowly, do not gulp or guzzle. Drinking liquids with meals may cause dumping syndrome.
- Keep foods moist. This makes swallowing and digestion easier. Particularly, avoid dry, over cooked meats. Foods that are too dry may not be well tolerated. Moisten with broth, skim milk, lemon juice, tomato juice, light dressing or mayonnaise.
- In the beginning, meats such as canned tuna or canned chicken may be better tolerated. Meats that are slow cooked are generally better tolerated than dry or tough meats.
- Try one new food at a time. Introduce new foods in small amounts, 1 to 2 Tbsp (15 to 30 ml) at a time. If you find that you do not tolerate a certain food, take note of it and try it again in a week's time.
- Weigh food/meat on a digital kitchen scale after it has been cooked so that you can be sure you are meeting your protein goal.

### Soft Food Choices

Category	Foods Included					
Milk and Alternatives	Greek or Icelandic yogurt (smooth, no pieces of fruit with 2% milk fat or less)					
	Milk (skim, 1% or 2%)					
	Soy milk, plain or unsweetened					
	Soft cheeses (string cheese, Laughing Cow™, Babybel®)					
	Cream soups made with milk					
	Cottage cheese (1% or 2%)					
Protein Supplements	Ready to Drink protein drinks with at least 15 g of protein per serving.					
	Protein powders with at least 20 to 30 g protein per scoop.					
	The goal is to achieve your protein targets from food. However, you may need to continue to supplement with a protein drink.					
Meat, Fish, Poultry and Alternatives	Baked fish (sole, haddock, tuna, salmon)					
	Imitation seafood					
	Egg substitute or liquid egg whites					
	Egg - scrambled, hard boiled, poached					
	Lean ground chicken or turkey with added sauce or liquid to moisten					
	Canned tuna, salmon or chicken					
	Crab or shrimp – canned					
	Lean deli meats such as shaved ham, chicken or turkey					
	Beans and lentils					
	Hummus					
	Smooth peanut butter or nut butters					
	Soft tofu					
Fruits and Vegetables	Pureed or well cooked vegetables such as carrots, turnip, potatoes or sweet potato					
	Soft fruits such as banana or cantaloupe					
	Soft, canned fruits packed in water					
	Applesauce					

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June 2025

Category	Foods Included
Grains and Starches	Oatmeal
	Cream of wheat
	Mashed potatoes or mashed sweet potatoes
	Melba toast
	Toasted bread
	Quinoa
Soups	High protein blended soups such as bean or lentil
Other fluids	Sugar free clear fluids. Same as those listed on your pre-surgical diet (page 6 of this book).

### Soft Food Recipes

### High Protein Smoothie (1 serving)

1/2 cup (125 ml) plain Greek Yogurt
1/3 cup milk (80 ml) (skim, 1%, 2% or Soy)
1/4 cup (60 ml) frozen fruit (such as banana, mango or blueberry)
Add the Greek yogurt, milk and fruit to a blender. Blend until creamy. Sip slowly.
Protein per serving: 18 g

### Ricotta and Ground Turkey Bake (1 serving)

2 ounces (60 g) cooked ground turkey
1/4 cup (60 ml) part-skim ricotta cheese
1 Tbsp (15 ml) marinara sauce
Layer the turkey, ricotta and sauce in an oven safe dish. Bake until warm.

**Tip:** Add 1 to 2 Tbsp (15 to 30 ml) pureed carrots on top of the ground turkey for added fibre. **Protein per serving: 23 g** 

### Cottage Cheese and Egg Scramble (1 serving)

1 large egg 1/4 cup (60 ml) cottage cheese 1 Tbsp (15 ml) shredded cheese In a small bowl, whisk egg until well cor

In a small bowl, whisk egg until well combined. Heat a nonstick skillet over medium heat. Pour in the egg and gently scramble for about one (1) minute. Add the cottage cheese and stir gently until the eggs are fully cooked and creamy. Sprinkle with shredded cheese.

#### Protein per serving: 16 g

### Sample Soft Food Menu

### Sample 1:

Breakfast	1/2 cup (125 ml) cottage cheese 1/4 cup (60 ml) canned fruit packed in water OR 1/4 cup (60 ml) unsweetened applesauce stirred into cottage cheese 1 Tbsp (15 ml) sprinkle ground flax
Snack	1/2 cup (125 ml) Greek yogurt 2 Tbsp (30 ml) pureed fruit
Lunch	1/2 cup (125 ml) lentil soup, blended smooth 1 unit Laughing Cow® cheese 1 piece Melba toast
Snack	1/2 to 1 cup (125 to 250 ml) protein smoothie
Supper	2 ounces (60 g) ground turkey or chicken 1 Tbsp (15 ml) mashed potatoes made with milk and skim milk powder added 1 Tbsp (15 ml) mashed or soft cooked vegetables
Snack	1/2 cup high protein drink Aim for 20 to 30 g of protein per meal

### Sample 2:

Aim for 20 to 30 g of protein per meal. This may take some time to achieve. Track all protein.

Breakfast	1/4 cup (60 ml) cooked oatmealall protein.1/2 scoop unflavoured protein powder1 Tbsp (15 ml) powdered peanut butterDash of cinnamon
Snack	1 hard boiled egg 1 unit Babybel® cheese
Lunch	1 serving Ricotta and Ground Turkey Bake
Snack	1/2 to 1 cup (125 to 250 ml) high protein smoothie
Supper	2 ounces (60 g) baked cod or salmon 1/4 cup (60 ml) mashed cauliflower or mashed sweet potato Mash cauliflower with 1 Tbsp (15 ml) Greek yogurt
Snack	1/2 cup (125 ml) high protein drink

### Protein Content in Foods

Food	Portion	Grams of Protein
Greek or Icelandic style yogurt	1/2 cup (125 ml)	12 g
Yogurt, regular (plain or flavored) 0 or 1% MF	1/2 cup (125 ml)	4 g
Milk (skim, 1% , 2% or Soy)	1/2 cup (125 ml)	4 g
Skim milk powder	2 Tbsp (30 ml)	5 g
Laughing Cow <sup>®</sup> cheese	1 wedge (19 g)	2 g
Babybel <sup>®</sup> cheese	1 serving (20 g)	5 g
Cheese string	1 string (21 g)	6 g
Ricotta cheese	1/4 cup (60 ml)	7 g
Cottage cheese (1% or 2%)	1/2 cup	15 g
Egg	1 large	6 g
Liquid egg whites	1/4 cup (60 ml)	7 g
Meat, poultry or fish:	1 ounce (30 g) cooked	7 g
Ground chicken or turkey, baked fish (sole, haddock, salmon), canned tuna, chicken or salmon		
Lean deli meat (chicken, turkey or ham)	2 slices (60 g)	10 g
Shrimp	1 ounce (30 g) cooked, boiled or steamed	7g
Tofu	3 ounces (90 g)	9 g
Beans and lentils	1/2 cup (125 ml)	9 g
Hummus	4 Tbsp (60 ml)	4 g
Smooth peanut butter or nut butters	1 Tbsp (15 ml)	4 g

### Foods to Avoid on Stage 4

Food	Avoid					
Meat and Alternatives	Higher fat processed meats such as salami, bologna, sausages and hot dogs					
	Fried meats					
	Red meats such as steak and roasts. These are often more difficult to digest at this stage.					
	Dry or overcooked meats					
	Nuts and seeds					
Vegetables and Fruit	Very fibrous vegetables such as asparagus, corn, Brussel sprouts, pea pods					
	Raw vegetables and salad					
	Fruits with seeds (strawberries, blackberries)					
	Canned fruit packed in syrup					
Grains	Untoasted bread, rice, pasta, noodles, bagels					
	High sugar cereals, granola					
Other	High sugar desserts and sweets, honey, ice cream, baked goods, candies, popcorn					
Beverages	High sugar beverages such as regular sports drinks					
	Juices					
	Carbonated beverages					
	Caffeine. Coffee can be reintroduced at 6 weeks after surgery. This will be discussed at your 6 week after surgery appointment at the clinic.					

### Reminders

The first year after surgery is a critical time that must be dedicated to forming new, lifelong habits.

- Follow each diet stage as directed.
- Drink water rather than juice. Avoid sweetened, caffeinated, and alcoholic beverages.
- Do not consume carbonated beverages.
- Consider using a baby spoon to get the right bite size.
- Small bowls and plates are also useful tools to help with portions.
- Eat slowly. Chew food well. Cut food into tiny pieces.
- Do not drink with your meals.
- Take all nutrition supplements as recommended.
- Continue food journaling.
- Make a lifelong commitment to healthy eating, exercise, and regular follow up with health care providers.
- Choose nutrition and quality. When you can consume so little, it needs to be the best it can be.

### Resources

https://www.myfitnesspal.com

https://baritastic.com

https://www.dietitians.ca

https://www.unlockfood.ca

https://food-guide.canada.ca/en/

https://www.cookspiration.com/

https://www.obesitycanada.ca

The Easy 5 Ingredient Bariatric Cookbook by Meagan Wolf, RD

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### Healthy People, Healthy Saskatchewan

The Saskatchewan Health Authority works in the spirit of truth and reconciliation, acknowledging Saskatchewan as the traditional territory of First Nations and Métis People.

**PIER**—Patient Information and Education Resource

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