

Bariatric Surgery at Toronto Western Hospital

Diet Guidelines

Adapted from *Eating for Health after Gastric Bypass Surgery: Information for patients having bariatric surgery*

Recovery Guidelines at a Glance



Diet Phase	Start Date	Length of Time
Clear Fluids		1-2 days (in hospital)
Liquid Diet		2 weeks
Pureed Diet		2 weeks
Soft Diet		5 weeks

Important!

Drink plenty of fluids after surgery. Dehydration is a major health concern that can be prevented.

- **Sip slowly** on clear fluids (low-calorie, non-caffeinated, non-carbonated) throughout the day
- Aim for a **total** of at least **6 to 8 cups (1500 to 2000mL) clear fluids** each day throughout your recovery: water, diluted juice, broth, herbal tea
- Be sure to include at least **3 to 4 cups (750 to 1000mL)** of your fluid as **water**
- Have **water nearby at all times**. Keep a glass of water at your bedside during sleep time. Carry a water bottle when going out
- Flavour water with lemon or lime wedges, cucumber slices, mint leaves, or low-calorie flavour crystals for a variety of tastes.

This document is intended to be used with instruction by a Registered Dietitian.

Developed by the Registered Dietitians of the Toronto Western Hospital Bariatric Surgery Program (07/13).

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Supplies You Will Need

Protein Supplements

Why do you need protein supplements?

Protein is important for building muscle and healing after surgery. After surgery, the size of your new stomach pouch will be much smaller. It will make it hard for you to eat all the protein you need. So, it is important for you to take protein supplements for at least **the first 4 weeks after surgery**.

There are 2 types of protein supplements:

1. Protein powders
2. Protein shakes

1. Protein powders

The best protein powders are made from milk (whey), soy, or egg. These come in plain or a variety of different flavours.

You can add plain powders to hot or cold foods. Try adding it to oatmeal, cream of wheat, cream soups, yogurt, mashed potatoes, pureed vegetables or fruit. You can also make your own shake by adding protein powder to milk or water. **Do not mix them with juice.**

To make your own shakes blend protein powder with 1% or skim milk, or low-fat, no-sugar-added yogurt, and 1/4 cup of fruit. Try adding flavourings, extracts, and artificial sweeteners for extra flavour. **Do not add sugar, honey, juice, or sweetened syrups.**

What should you look for in protein powder?

30 grams of protein powder should have:

- 20 to 30g of protein
- Less than 5g of carbohydrate

Make your own strawberry banana shake:

1 scoop	protein powder
1/2 cup	skim milk, frozen into ice cubes
1/2 cup	plain, low-fat yogurt
4 whole	frozen strawberries (unsweetened)
2-inch piece	banana
1/2 teaspoon	vanilla
1 package	artificial sweetener (optional)

Place all ingredients in a blender and blend until smooth.

Try this recipe with 1/4 cup chopped, frozen, unsweetened peaches in place of the strawberries and banana.

2. Protein shakes

Pre-made shakes are also available in ready-to-drink containers.

What should you look for in a pre-made protein shake?

Each serving should have:

- 15 to 40g of protein
- Less than 5g of carbohydrate

Drink 2 protein shakes every day. These can either be protein shakes you have made yourself using protein powder or protein shakes that are pre-made. **Do this for at least the first month after surgery.** Protein shakes are necessary until you are able to eat enough high-protein food. After the first month, your Registered Dietitian will tell you how many shakes you need and when to stop taking them.

Multivitamin-mineral Supplements

Why do you need to take multivitamin-minerals?

Two top reasons include:

1. Your stomach pouch is very small. It does not allow you to eat enough food to get all of the vitamins and minerals you need.
2. Vitamins and minerals are not being absorbed as well as they were before surgery.

Taking a multivitamin will help prevent common deficiencies after weight loss surgery. Vitamin deficiencies left undetected may have serious effects on your:

- Coordination
- Eyesight
- Sense of taste
- Memory
- Mood
- Metabolism
- Bone strength



All bariatric surgeries will make it harder for your body to absorb nutrients. This includes the gastric sleeve surgery. It is important for you to have your blood work done so your bariatric team can make sure you do not have a deficiency.

How much should you take?

Type of supplement	What it should contain	How often you take it
Pill	100% Daily Recommended Intake of all vitamins and minerals 18mg of iron 1mg of copper	Take 2 every day.

What should your multivitamin-mineral contain?

Look for an adult type multivitamin-mineral. It can be hard to find a multivitamin-mineral that has enough iron. Try looking in the prenatal aisle. Prenatal vitamins are safe for men and women. If you are having trouble finding the right multivitamin-mineral ask your Registered Dietitian for a list of appropriate brands.

Things to remember when taking your multivitamin-mineral:

- Both vitamins can be taken at the same time
- **Do not take multivitamin-minerals with your calcium supplement.** They can block each other from being absorbed
- For **4 weeks after surgery**, you will need to take **chewable** supplements
- Chewable multivitamin-mineral supplements will not contain enough iron, but this is alright because you are only using them short-term
- At 4 weeks, you can switch from a chewable to a pill-form multivitamin-mineral supplement that follows the guidelines listed above.



You will need to take multivitamin-mineral supplements every day for the rest of your life.

Calcium and Vitamin D

Why do you need to take calcium and vitamin D?

Calcium and vitamin D work together to keep your bones healthy and strong. If you do not get enough, you are at a high risk for bone loss, bone fractures, and osteoporosis (low bone density).

Your multivitamin-mineral supplements will not give you enough calcium or vitamin D. You will need to take calcium with vitamin D supplements 3 times a day.

Choose calcium “citrate” rather than calcium “carbonate” as it is more easily absorbed after gastric bypass surgery.

How much should you take?

Choose one of these options:

Type of supplement	Calcium dosage	How often you take it
Pill or chewable	500mg to 600mg	Take 1 pill 3 times a day
Pill	300mg	Take 2 pills 3 times a day



After surgery, you will need to take calcium with vitamin D supplements for the rest of your life. Your body can only absorb about 500mg of calcium at a time. Any extra you take would go to waste.

Vitamin B12

Why do you need to take vitamin B12?

Vitamin B12 has many functions in your body including:

- Energy metabolism
- Red blood cell production
- Nervous system function

Your multivitamin-mineral supplements do not have enough B12 so you need to take extra B12 supplements.

How much should you take?

Choose one of these options:

Type of supplement	Dosage	How often you take it
Chewable	350mcg to 500mcg	Every day
Sublingual (melts on your tongue) strip or pill	1000mcg	Every other day
Liquid	1000mcg to 1200mcg	Every other day



Your B12 vitamin can be taken with any of your other supplements.

Planning your supplement schedule

Not all vitamins can be taken together because your body will not be able to absorb them well enough.

Suggestion:

- Take your 2 multivitamin-minerals together
- Take your Calcium with Vitamin D pills 2 hours apart from the multivitamin-mineral
- Take your vitamin B12 with your other supplements



Use a pillbox to help you organize your supplements. Keep two sets of supplements, one at home and one at work.

Diet In-hospital

Day 1: Clear Fluids

Start this diet when you wake up after surgery. Begin sipping fluids to make sure your digestive system is working properly.

Slowly sip **1 Tbsp (15mL) of clear fluid** every 15 minutes. 15ml of fluid is **half a medicine cup**.

The fluids you can have include:

- water
- diluted fruit juice (To dilute juice use equal parts juice and water)
- broth
- tea

You will also be getting IV (intravenous) fluid during this time to make sure you get enough fluid.

Day 2: Clear Fluids

Start this diet 2 days after your surgery. Follow it until you go back home.

Slowly sip **2 Tbsp (30mL) of fluid** every 15 minutes. 30mL of fluid is **a full medicine cup**.

The fluids you can have include:

- water
- diluted fruit juice (To dilute juice use equal parts juice and water)
- broth
- tea

You will also be getting IV (intravenous) fluid during this time to make sure you get enough fluid.

Diet at Home

Weeks 1 and 2: Liquid diet

Start this diet when you leave the hospital. Follow it for 2 weeks after surgery.

You will need to:

1. Start taking your chewable vitamin and mineral supplements
2. Start taking your protein supplements
3. Drink 3 to 4 cups (750 to 1000mL) of water every day
4. Eat/drink only the liquid foods and drinks listed below.

How should you eat?

- **Eat slowly.** Your meals should take 30 to 40 minutes
- Eat or drink 1 tablespoon (15mL) every 5 minutes
- Stop eating if you feel any discomfort or pain
- Keep water nearby and slowly sip it throughout the day.

What foods can I eat?

Type of food	Foods you can eat
Fruit and vegetable	Tomato Juice Unsweetened apple sauce
Grain and starch	Cream of wheat , thinned with milk Oatmeal (less than 10 grams of sugar), thinned
Soup	All cream soups, strained Tomato Soup
Beverages	Sugar-free clear fluids Water
Desserts and sweets	No-sugar-added pudding No-sugar-added ice cream
Protein sources	Protein powder Protein shakes Milk or Lactose-free milk (skim or 1%) Natural/Plain soy beverage Cottage cheese Yogurt with no-sugar-added

Example liquid diet day 1

	Name of food	What is in it	
Breakfast	Oatmeal	1/4 cup (60mL) 1/4 cup (60mL) 1 tbsp (15mL)	Oatmeal Milk Protein powder
	Yogurt	1 small container	Low-fat, no-sugar-added yogurt
Morning snack	Protein shake	1 cup (250mL)	Protein shake
Lunch	Cream of mushroom soup	1/4 cup (60mL) 1 tbsp (15mL)	Strained cream of mushroom soup Protein powder
	Applesauce	1/4 cup (60mL)	Applesauce
Afternoon snack	Protein shake	1/2 cup (120mL)	Protein shake
Dinner	Cottage cheese	1/4 cup (60mL)	Low-fat cottage cheese
	Yogurt	1 small container 1 tbsp (15mL)	No-sugar-added yogurt Protein powder
Evening snack	Protein shake	1/2 cup (120mL)	Protein shake

Weeks 3 and 4: Pureed diet

Moving slowly from a liquid diet to a regular diet is an important step. Eating this way allows your stomach pouch to slowly adjust to regular food. Use a blender or food processor to puree your food, or buy baby food. You can still enjoy all the foods from the liquid diet during this time. **If you have problems with pureed food, go back to liquids for about 12 hours, then try again.**

Follow this diet for **2 weeks**.

You will need to:

1. Continue taking your chewable vitamin and mineral supplements
2. Continue taking your protein supplements
3. Drink 4 to 6 cups (1000 to 1500mL) of calorie-free fluid each day
4. Eat/drink only the pureed foods and drinks listed below.

How much protein will you need?

- Drink 2 protein shakes a day
- Add unflavoured protein powder to your food whenever possible.

How should you eat?

- **Eat slowly.** Your meals should take 30 to 45 minutes
- **Separate your liquids and solids.** Stop drinking 30 minutes before a meal. Wait 30 minutes after eating to start drinking again
- Choose food from all food groups. Make sure everything is pureed or blended
- Do not worry if you cannot finish your meals
- Stop eating if you feel any discomfort or pain.

What foods can I eat?

Type of food	Foods you can eat	Foods you need to avoid
Fruit and vegetable	Tomato Juice Unsweetened apple sauce Cooked, pureed vegetables Cooked or canned pureed fruit	Seeds and tough skins Dried fruit Raw fruits and vegetables
Grain and starch	Cream of wheat Oatmeal (less than 10 grams of sugar) Cold cereal (not sugar coated) soaked in milk until soft Soda crackers Melba toast	Bread Pasta Rice All other cereal
Soup	All soups, pureed	All other soups with chunks or pieces
Beverages	Sugar-free clear fluids Water Juice diluted in half with water Low-fat meat or vegetable broth Decaf tea or coffee	Carbonated beverages Caffeinated beverages Full-strength juice Alcohol
Desserts and sweets	No-sugar-added pudding No-sugar-added ice cream Sugar-free Jell-O®	All other sweets

Type of food	Foods you can eat	Foods you need to avoid
Protein sources	Protein powder and protein shakes Milk or Lactose free milk (skim or 1%) Natural/Plain soy beverage Cottage cheese No-sugar-added yogurt Fish (moist and mashed with a fork) Soft, poached egg Hummus Pureed chicken, beef, pork	Peanut butter Nuts and seeds Eggs (unless poached) Hard cheeses 2% or homogenized milk Cream

Example pureed diet

	Name of food	What is in it	
Breakfast	Cream of wheat	1/4 to 1/3 cup (60 –80mL) 2 to 4 tbsp (30 – 60mL)	Cream of wheat Milk
	Fruit	2 tbsp (30mL)	Pureed fruit
Morning snack	Protein shake	1 cup (250mL)	Protein shake
Lunch	Egg	1	Soft poached egg
	Melba toast®	1 to 2 pieces	Melba toast ®
Afternoon snack	Yogurt	1 small container	No-sugar-added yogurt
Dinner	Meat or fish	2 to 4 tbsp (30 – 60mL)	Pureed meat or mashed fish
	Mashed potato	2 tbsp (30mL) 1 tbsp (15mL)	Mashed potato Unflavoured pure protein powder
	Carrots	2 tbsp (30mL)	Pureed carrots
Evening snack	Protein shake	1 cup (250mL)	Protein shake

Weeks 5 to 9: Soft diet

Once you are tolerating pureed food well, you are ready to start eating soft food. You will need to use trial and error to figure out what foods will work for you, and what foods will not. **If you have problems with solid food, go back to pureed food for a few days and then try again.**

Follow this diet for **4 weeks**.

Your goals:

1. You can switch to pill form vitamin and mineral supplements. You may want to cut or break them into smaller pieces if you find they cause discomfort when swallowed whole
2. Continue taking your protein supplements
3. Drink 6 cups to 8 cups (1500 to 2000mL) of calorie-free fluid each day
4. Eat/drink only the foods and drinks listed below.

How much protein will you need?

- **60 to 80 grams** of protein every day

You may need to continue drinking protein shakes. Your Registered Dietitian will tell you when to stop drinking them.

How should you eat?

- **Eat slowly.** Your meals should take at least 20 to 40 minutes
- **Separate your liquids and solids.** Stop drinking 30 minutes before a meal. Wait 30 minutes after a meal to start drinking again
- **Eat 3 meals and 2 to 3 small snacks per day.** You will slowly be able to eat more food at each meal
- **Cut food into pieces the size of a pea**
- Eat the high-protein foods first
- Stop eating before you feel full
- Stop eating if you feel any discomfort or pain
- Choose food from all food groups.



Eat moist, tender food. Food cooked in a slow cooker or crockpot like stew, chili, and curry is very well-tolerated because of its soft texture. Remember you can still eat all of the foods from the first 4 weeks.

Type of food	Foods you can eat	Foods you need to avoid
Fruit and vegetable	Tomato Juice Unsweetened apple sauce Well-cooked fruits and vegetables	-
Grain and starch	Cream of wheat Oatmeal (less than 10 grams of sugar) Cold cereal (not sugar-coated) Soda crackers, Melba toast® Pita Bread, Tortilla Wraps Toasted Bread Potato or sweet potato	-
Soup	All soups	-
Beverages	Sugar-free clear fluids Water Low-fat meat or vegetable broth Decaf tea or coffee	Carbonated beverages Caffeinated beverages Full-strength juice Alcohol
Desserts and sweets	No-sugar-added pudding No-sugar-added ice cream Sugar-free Jell-O®	All other sweets
Protein sources	Peanut butter Milk (skim or 1%), Low-lactose milk Natural/Plain soy beverage Cottage cheese Low-fat cheese No-sugar-added yogurt Fish and minced meat Eggs (cooked with little or no fat) Legumes (beans, peas or lentils)	Whole-milk Cream



Record what you eat and drink in a food journal. Try new foods one at a time and write down how well you tolerate them. If eating a food does not go well the first time, wait a couple of weeks before trying it again.

Example soft diet day (65 g of protein)

	Name of food	What is in it	
Breakfast	Omelette	1 whole 2 tbsp (30mL) 1 tbsp (15mL) ½ slice	Egg Diced ham Shredded low-fat cheese Toasted whole wheat bread (dry)
Morning snack	--	--	--
Lunch	Chili Fruit	1/2 cup (120mL) 1/4 cup (60mL)	Chili Chopped, unsweetened canned or frozen fruit
Afternoon snack	Hummus	2 tbsp (30mL)	Hummus
	Tortilla	1/4 small	Whole wheat tortilla
Dinner	Fish	3 oz	Baked fish
	Beans	1/4 cup (60mL)	Well-cooked green beans
	Mashed potatoes	1/4 cup (60mL)	Mashed sweet or regular potato
Evening snack		1 cup (250mL)	Milk

Lifelong Healthy Eating: Week 10 and Beyond

After the recovery process, you will need to adopt a healthy new way of eating. Having bariatric surgery is not enough to guarantee you will lose weight. There is always the chance of regaining weight.

Follow a healthy diet for the rest of your life.

You will need to:

1. Continue taking your vitamin and mineral supplements
2. Drink 6 to 8 cups (1500 to 2000mL) of low-calorie fluids each day
3. Aim to eat 60 to 80 grams of protein every day.

How Should I Eat?

Eat your food in this order:

1) Protein

Eating the protein portion of your meal first helps you to get enough protein even if you are too full to finish the entire meal. Your body needs 60 to 80 grams of protein each day. Because of the small amount of food you are eating, it is important to make sure half (50%) of the food you eat is protein. Choose a good source of protein at every meal and snack.

2) Vegetables/fruit

3) Grain/starch

- **Give yourself time**

Set aside 30 to 45 minutes to eat each meal. Aim to chew your food 20 to 30 times for each bite and put your fork down in between each bite. Slow down, relax, and enjoy your food.

- **Get friends and family on board**

Explain to them why you need to eat slowly, so they do not urge you to eat faster.

- **Take small bites**

Remember to cut your food into small bites. You may also find it easier to use smaller plates and bowls to keep your portion sizes small.

- **Enjoy your food**

Eat slowly and savour the taste of your food. Practice mindful eating.

- **Stop when you are full**

Let your body, not the portion, tell you when you are full. Do not try to clean your plate. After surgery, over-eating, even a small amount, can cause vomiting and discomfort.

- **Eat 3 meals a day and 1 to 2 snacks a day.**

Do not graze. Eat only at set meal or snack times. Grazing or picking at food in between meals can slow down your weight loss and may stop you from reaching your goal.

- **Make every bite worth it**

You are not eating very much, so make every bite count. Choose the best and most nutritious foods possible.

- **Keep drinks separate**

Do not drink anything 30 minutes before a meal. Wait 30 minutes after a meal before you start drinking again. Drinking may push the food through your pouch too quickly. It will allow you to eat more at each meal.

- **Drink slowly**
Sip your drinks; do not “gulp” them. Pay attention to how you are feeling.
- **Drink often**
Sip throughout the day. Always keep a water bottle with you to avoid becoming dehydrated.

Avoid these:

- **Carbonated beverages**
When you drink carbonated beverages you risk stretching your pouch.
- **High-calorie beverages**
Beverages like fruit juice, chocolate milk, and specialty coffees are generally low in nutritional value and high in sugar. Liquids can pass quickly through your stomach pouch so they do not make you feel full, even though they are giving you a lot of calories.
- **Too many alcoholic drinks**
These are not only high in calories but because of the small amount of food you are eating you may get ‘tipsy’ from alcohol faster than you did before the surgery. Drinking alcohol in the first 6 months after surgery can increase your risk of ulcers.



*After surgery you should avoid alcohol for at least 6 months.
Drinking alcohol after surgery can increase your risk of developing an ulcer.*

Nutrition Complications after Surgery

	Why does this happen?	What can you do?
Nausea Vomiting Stomach Pain	Eating too much Eating too fast Not chewing enough Eating foods that are too dry or too tough Taking bites that are too large Eating and drinking at the same time Swallowing air Dehydration	• Measure your food. • Put your fork down between bites • Time your meals. • Chew your food 20 to 30 times for each bite. • Add a gravy or sauce to moisten your food. • Cut food into the size of a pencil eraser. • Do not drink 30 minutes before or after a meal • Do not drink during your meal. • Do not drink carbonated beverages • Do not use a straw • Do not chew gum. • Drink 6 to 8 cups of low-calorie fluid everyday • Keep track of how much you drink on your food journal .
Dehydration You may notice: • Thirst • Dry mouth, lips, eyes, skin • Headache • Dizziness • Irritable or tired • Not urinating very often • Dark-coloured urine	It is difficult to drink enough water and other clear fluids with the small size of your new stomach pouch.	• Sip water and other low-calorie fluids all day long • Try to drink 6 to 8 cups (1500 to 2000mL) of fluid every day • Drink out of the same container or bottle to help you track how much fluid you are getting • Suck on ice chips or a sugar-free popsicle; these count as fluid, too.
Food Intolerance	Your digestive tract was changed by surgery.	• Stay away from the food item for a while longer.

	Why does this happen?	What can you do?
Lactose Intolerance You may notice: • Cramping and stomach pain • Bloating and gas • Diarrhea	You are not breaking down lactose, the natural sugar in milk products due to the surgery. This may improve in time.	• Avoid milk. Try lactose-free milk or soy beverage • Yogurt and cheese may not cause any problems • Take Lactaid® pills or drops (an enzyme supplement) right before you have milk products.
Diarrhea	Your body is getting used to digesting food in a new way.	• Eat fewer products containing sugar alcohol sweeteners (words ending in “-ol”) like sorbitol, mannitol, xylitol • Reduce caffeine intake • Avoid lactose-containing products (milk and milk products); try lactose-free milk or soy beverage • Eat foods with soluble fibre (apple, banana, oatmeal) or take a fibre supplement.
	You may have dumping syndrome.	• Avoid high-fat and high-sugar foods: baked goods, candy, cookies, fruit drinks, ice cream, fries, and other fried foods • Read the ingredients on labels and avoid products listing sugar (glucose, fructose, sucrose, syrup) in the first 3 ingredients.
Constipation • Stool is dry, hard, and difficult or painful to pass • You are not truly constipated if you simply do not have a bowel movement for 1 to 2 days.	You may be: • Not drinking enough fluids • Eating less fibre • Taking pain medication.	• Drink more water • Start your day by sipping warm water • Do more physical activity – walk more • Slowly, add fibre to your diet: bran cereal, vegetables, fruit, legumes (beans, lentils), whole grain bread.

	Why does this happen?	What can you do?
Hypoglycemia After eating, you may feel: • Cold and clammy • Dizzy • Weak • Nervous	You may have eaten too much sugar or carbohydrate.	• Eat healthy meals on time – no meal skipping. Be sure each meal includes foods from 3 food groups • Have protein with each meal and snack; eat protein first • Choose carbohydrate-foods that are higher in fibre and low in sugar • Avoid high-sugar foods and drinks • Avoid alcohol. • *Always test your blood sugar first if you think you have hypoglycemia • Treat low sugar only when it is below 4 mmol/L with: ○ 3/4 cup (175mL) juice OR ○ 3 dextrose tablets • Wait 15 minutes, then test blood sugar again • Treat low sugar again only if it is still below 4 mmol/L • Eat a snack including protein and carbohydrate ○ Apple with peanut butter ○ Melba toast® and cheese ○ Greek yogurt and fruit
Gas and Bloating	You are digesting foods differently. You may be swallowing air when you eat and drink.	• Eat slowly • Do not use straws • Do not chew gum • Eat protein with carbohydrate food • Avoid the food causing the gas.
Dumping Syndrome • Fast heart beat • Stomach cramping and pain • Diarrhea • Upset stomach • Dizziness • Flushing • Sweating	You are sensitive to the fat and sugar content of certain foods and beverages.	• Avoid high-fat and high-sugar foods: baked goods, candy, cookies, fruit drinks, ice cream, fries, fried foods • Read the ingredients on labels and avoid products listing sugar (glucose, fructose, sucrose, syrup) in the first 3 ingredients. • Aim for less than 10 grams of sugar per serving • Choose foods with less than 10% Daily Value of fat • Be sure not to drink while eating; wait 30 minutes.

	Why does this happen?	What can you do?
Hair Loss	This is common between 4 to 9 months after surgery usually due to quick weight loss. Hair regrowth may start around 8 to 9 months after surgery.	• Be sure to eat at least 60 grams of protein each day • Take all of your vitamin and mineral supplements every day • Complete your blood work on time so your bariatric team can help you manage deficiencies.
Vitamin and Mineral Deficiency	You are not getting enough vitamins and minerals because you are eating much less. Your digestive system has been changed and absorbs less nutrition.	• Eat a variety of healthy foods • Take your vitamin and mineral supplements every day, for a life-time.



Remember: Your weight loss will vary depending on your commitment and ability to maintain a healthy diet and lifestyle.