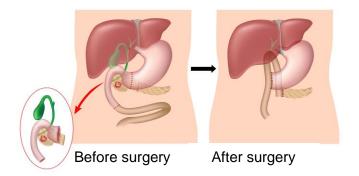
Eating Well After a Whipple Procedure

A Whipple procedure is a surgery. In the surgery, the pancreas, duodenum, gallbladder, and the lower bile duct are removed.



There are 2 types of Whipple procedures.

- One that also removes the lower part of the stomach.
- One that keeps the stomach intact.

Both types of Whipple procedures can affect what you eat and how you feel after eating. This is because the surgery removes some parts that are needed to break down or digest your food.

After your surgery

Because of the changes to your body, you may notice that after eating you feel:

- full quickly
- gassy and bloated

When you start to eat more, you may notice you experience:

- fat in your poop (looks greasy)
- food and drinks leaving stomach faster (dumping syndrome) or more slowly (gastroparesis) causing pain or discomfort
- high blood sugar
- weight loss without trying

This handout includes information to help you get enough nutrition and manage side effects after surgery.

Importance of nutrition

Getting enough nutrition daily helps to:

- heal, recover, and fight infection
- maintain and prevent muscle loss
- support your immune system

Tips to get enough nutrition

- Eat 5–6 small meals during the day instead of larger meals.
- Include protein foods at every meal and snack. Foods with protein include:
 - beef, pork, poultry, and wild game
 - eggs
 - fish, shellfish, and seafood
 - lentils, beans, and peas (may cause gas and bloating if you aren't used to eating them)
 - milk, cheese, and Greek or Icelandic yogurt
 - protein powders and nutrition supplement drinks (see details in section below)
 - soy foods, like tofu and fortified soy beverage
- Drink enough fluids daily: at least 8–10 cups (2– 2.5 L). Fluids include water, milk, fortified soy beverage, coffee, tea, broth, and soup.
- Drink fluids 30 minutes before or after you eat solid food. If you need to drink liquids with your meals, take only small sips.
- Avoid alcohol and tobacco. These can make side effects worse.
- If your appetite is poor, see the section on Nutrition supplement drinks and protein powders (page 2).

Nutrition supplement drinks and protein powders

If you have a poor appetite or are losing weight, a nutrition supplement drink may help. They can give you extra calories, protein, vitamins, and minerals.

- Choose a nutrition supplement drink that is higher in protein like Ensure[®] Advance, Resource[®] 2.0, and Boost[®] Protein+.
- There are protein powders that are unflavoured. You can blend unflavoured protein powder into smoothies, or add it to mashed potatoes, soups, oatmeal, or casseroles.
- Store-brand products usually have as much nutrition as other brands but may cost less.

Vitamin and minerals

After your surgery, your body may not be able to absorb some nutrients from food as well as you did before.

- Take a daily multivitamin/mineral pill. You may need to take chewable tablets or liquid vitamins and mineral supplements.
- Your blood levels of certain nutrients may be low. These include minerals (iron, selenium, zinc), and vitamins A, D, E, and K.

Your doctor or healthcare team can order blood tests to check if you need extra vitamins and minerals. Ask if you need to take other vitamin or mineral supplements.

Managing side effects

Everyone is different. If a food doesn't bother you, you don't need to avoid it.

Feeling full quickly

After eating, you may feel full quickly, have stomach pain, have nausea, or vomit. This may be because there is too much food in your stomach.

- Eat every 2–3 hours to allow for digestion.
- Eat 4–6 small meals each day. Smaller meals will help your stomach be less full.
- Eat foods high in protein first at meals and snacks. Protein helps you heal.
- Try to eat in a relaxed setting during meals.
- Eat slowly. Take small bites and chew your food well.
- If your feeling of fullness gets worse over the day, try eating pureed foods or balanced fluids later in the day. These foods digest quicker than solid foods.

To learn about pureed foods and balanced fluids, check out Nutrition Education (<u>ahs.ca/NutritionHandouts</u>).

Gas and bloating

Bloating is from a buildup of gas in your body usually after eating or drinking.

Some people notice that certain foods, fluids, or actions cause gas and bloating. While gas and bloating are normal, they may cause you pain and discomfort.

To manage bloating, limit or avoid:

- beans
- beer
- broccoli, cabbage, cauliflower, garlic, and onion
- · chewing gum and sucking on candy or ice cubes
- · fizzy drinks such as pop and sparkling water
- gulping fluids and drinking fast
- using straws and water bottles with spouts or small openings

Fat in your poop

When you have part of your pancreas removed, your body may not be able to absorb the fat from the food you eat.

When this happens, you may feel pain or have an upset stomach after eating. You may have looser poop, diarrhea, or bulky and greasy poop that float.

- Eat foods with fat throughout the day instead of all at one meal.
- Your healthcare team may ask you to take pancreatic enzymes. Pancreatic enzymes may help your body breakdown fat in your food.
 - Visit Nutrition Education (<u>ahs.ca/NutritionHandouts</u>) to learn more about pancreatic enzymes.

Dumping syndrome

Dumping syndrome is when food leaves ('dumps' from) the stomach too quickly. It can happen as early as 30 minutes after eating or up to 3 hours after.

Signs of dumping syndrome:

- diarrhea, stomach pain, or cramping
- drop in blood pressure
- faster heartbeat
- feeling:
 - bloated or full
 - like you can't concentrate
 - like you need to lie down right away
 - nervous or shaky
 - weak or dizzy
- flushing or sweating
- nausea or vomiting

If you have signs of dumping syndrome, let your doctor or healthcare team know.

Visit <u>ahs.ca/NutritionHandouts</u> to learn how to manage dumping syndrome.

Gastroparesis

Gastroparesis is when food moves through your stomach slower than usual and takes longer to digest (break down). It may also be called delayed gastric emptying.

You may:

- feel full after only eating a few bites
- belch or burp
- feel bloated in your stomach area (abdomen)
- feel nauseous
- vomit
- have acid reflux or heartburn

If you suspect you have gastroparesis, talk to your healthcare provider.

Meals and snacks

- Eat 6–8 small meals a day. Smaller meals keep you from feeling too full. Less food at one time means it will take less time to digest.
- Chew your food well. This helps your stomach digest food more quickly.
- Avoid foods that are hard to chew, like corn, popcorn, nuts, and seeds.
- Choose foods that are lower in fibre. Fibre stays in your stomach longer. It can also make you feel full quicker.
 - Remove the skins, peels, and seeds from fruits and vegetables before eating them
- Choose foods lower in fat. Higher fat foods take longer to move out of your stomach.
- Liquids, pureed, and minced foods digest quicker than solid foods.
- Sit upright when eating and wait 2–3 hours after eating before laying down.

For more information, visit Nutrition Education (<u>ahs.ca/NutritionHandouts</u>) and search for:

- fibre
- dysphagia (information on different food textures)

gastroparesis and diabetes (tips can be used by people without diabetes)

High blood sugar levels

You may have high blood sugar levels after your surgery.

If your blood sugar levels are high, you may need take medicine to help keep your blood sugar in a healthy range for you.

Watch for symptoms of diabetes, such as being unusually thirsty or hungry, and needing to pee more often than normal.

> High blood sugar levels can be dangerous. Talk to your healthcare team if you have these symptoms.

Losing weight

Losing some weight is common after surgery.

Keep track of your weight. Weigh yourself every week and write it down.

If you don't have a scale, you may be able to tell if you are losing weight by how your clothes fit. If they get looser, you may be losing weight.

- You may need to eat more food or eat more often.
- Try to eat foods higher in calories and protein.
- If your appetite is poor, try a smoothie or a nutrition supplement drink in between meals.
 - See the Nutrition supplement drinks and protein powders section for details.

If you are worried about your weight or are having trouble maintaining your weight:

- Contact your healthcare team.
- Call 811 and ask to speak with a dietitian.

For more information

Visit Nutrition Education (<u>ahs.ca/NutritionHandouts</u>). Search by topic:

- After surgery
- Getting more calories and protein

More support



- Talk to your healthcare team.
- Call Health Link at 811 and ask to talk to a dietitian or complete a <u>self-referral</u> form on ahs.ca/811.
- Visit <u>ahs.ca/Nutrition</u>.
- Call, text, or chat with 211 Alberta (<u>ab.211.ca/</u>) to find out about financial benefits, programs, and services.

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