

# Pancreatic Surgery

## Whipple Procedure

### Your surgery and recovery at home

This booklet belongs to: \_\_\_\_\_

We also give you '**Preparing for Your Surgery**' booklet.

**Read both booklets carefully.**

**Bring both booklets** to every hospital visit before your surgery.

# Pancreatic Surgery Using Whipple Procedure

(Pancreaticoduodenectomy)

This surgery is usually done to remove growths (tumors) in the pancreas.

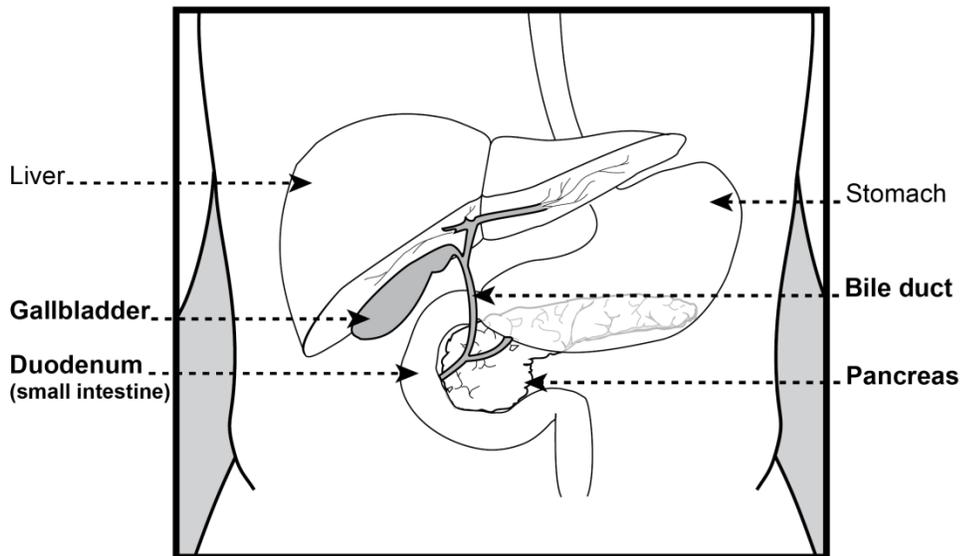
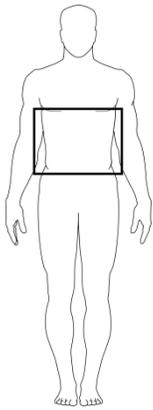
This surgery removes:	What this body part does:
- part of your <b>pancreas</b>	- makes insulin which helps the body use sugar - releases digestive juices and enzymes into the small intestine which help breakdown food
- the upper part of your small intestine (the <b>duodenum</b> )	- first part of the small intestine (or small bowel) after the stomach
- the <b>gallbladder</b>	- stores bile and adds it to the duodenum when fats are needing to be digested
- the lower <b>bile duct</b>	- carries bile from the liver and gallbladder through the pancreas and to the duodenum

## Bile

A digestive juice made by the liver

Helps the body break down the fats we eat

Helps the body absorb fat-soluble vitamins



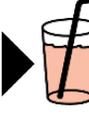
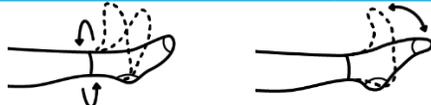
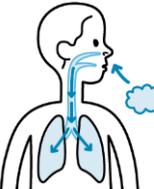
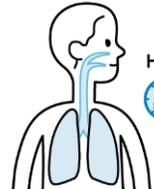
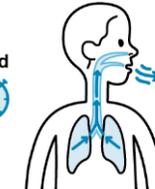
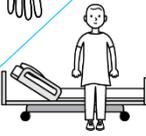
This surgery is done using an 'open incision'. The surgeon makes one long cut through the skin (an incision) and does the surgery through that opening. You will have one long incision in your abdomen.

This surgery usually takes about 5 to 7 hours.

## Path to Home Guide: Pancreatic Surgery using Whipple Procedure

This gives you an example of a person's recovery in hospital.

During your stay, we check your blood sugar regularly to see how your pancreas is working.

Category	After Surgery				
	Surgery Day	Day 1	Day 2	Day 3 to 4	Day 5 to home
<b>Nutrition</b>	Ice chips only   	  	  Ice chips only to clear fluids	  Clear fluids to full fluids	 Regular diet Small frequent meals
<b>Activity</b>	 Sit or stand at bedside	 Walk 2 or more times  Up in chair	 3 or more times 	 3 or more times 	 
	Leg exercises every day 				
<b>Deep Breathing Exercises</b>	Every day  10 times per hour			 Hold 5 sec	
<b>Pain Control</b>	 	**PCA pump or epidural		 Pills	
	Pain at a level comfortable for you				
<b>Tubes and lines</b>	 Intravenous Surgical drain tube(s) Urinary catheter	 Intravenous Surgical drain tube(s)	 Intravenous capped 	 	

\* PCA Patient Controlled Analgesia is a pump connected to your intravenous that lets you give yourself pain medicine when you need it.

\* Epidural Sometimes the epidural catheter placed in your back for surgery is left in place. An epidural gives continued pain relief by numbing the nerves of the surgery area as long as the pump is running.

# After Your Surgery

## Going home

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How long you stay in the hospital depends on:

- your health before the surgery
- the type of surgery
- how you recover from the surgery

Most people can go home 7 to 8 days after the surgery.

You are ready to go when:

- ✓ You are eating and drinking regular food and drinks.
- ✓ Your bowels are working.
- ✓ Your incision is healing.
- ✓ Your pain is well controlled with pills.
- ✓ You can move around safely.
- ✓ You know what medications (including new ones) you are taking, how to take them, and why you need them.
- ✓ You have prescription(s) for your medications, if needed.
- ✓ You have a ride home from the hospital.
- ✓ You have arranged for some help at home for the first few days.

## Caring for Yourself at Home

### Managing pain

It is normal to have some discomfort or pain when you return home. This should steadily improve but might last for a few days to a couple of weeks.

The level of pain and type of pain medication you need depends on:

- The type of surgery you had
- How the surgery was done
- If you were taking pain medicine before surgery

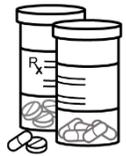
Your pain should be at a comfortable level that allows you to move, deep breathe, cough, and to do every day activities.

When you are ready to go home, your surgeon will give you instructions to take pain medicine. This might include a prescription for an opioid (narcotic).

For the first few days:

If your pain is at an uncomfortable level, take your pain medicine as directed. As your pain improves, take your pain medicine less often and/or a smaller amount until you have little or no pain, then stop.

At first, you might have to take a prescription medication. After a short time and as your pain improves, a non-prescription pain medicine should be enough to manage your pain.



#### Questions about medicines?

Call your local pharmacy and ask to speak to the pharmacist.

For after-hours help, call 8-1-1. Ask to speak to a pharmacist.

**Non-prescription pain medicines** (also called 'over-the-counter' medicines) – You buy them at the pharmacy without a prescription. You might only need to take this type of medicine if you don't have much pain after surgery.

Examples of non-prescription medicines (and brand names):

- acetaminophen (Tylenol®)
- acetylsalicylic acid or ASA (Aspirin®)
- non-steroidal anti-inflammatory drugs (NSAIDs)  
Examples:      ibuprofen (Advil®, Motrin®) ★  
                      naproxen (Naprosyn, Aleve®) ★

★ **Note:** **NSAIDs are not for everyone after surgery.** If you have (or have had) health problems such as stomach ulcers, kidney disease, or a heart condition, check with your surgeon or family practitioner before using NSAIDs.

**Family Practitioner:**  
Refers to either a family doctor or nurse practitioner

**Remember**

You can do other things to help ease your pain or distract you from the pain:

- ✓ Slow breathing
- ✓ Listen to music
- ✓ Watch T.V.

**Opioid (narcotic) pain medicines** – You might get a small number of pills for severe pain.

They are only meant to be taken for a short time. Take only as much as you need to allow you to do daily activities.

Examples of opioid pain medicines:

- Tramacet® (tramadol and acetaminophen) ★
- Tylenol #3® (codeine and acetaminophen) ★
- Oxycocet® / Percocet® (oxycodone and acetaminophen) ★
- tramadol, hydromorphone, morphine, oxycodone

★ **Note:** These medications also have 300 to 325mg acetaminophen in each tablet. All total, **do not** take more than 4000mg of acetaminophen in 24 hours (too much can harm your liver).

When taking non-prescription pain medicines as well, most people need to take a lower amount of the opioid or take the opioid less often.

Always read the label and/or information from the pharmacist for how to safely take medication.

**Drinking and eating**

With removing part of your pancreas and your duodenum, you might need to change how you eat and what you eat. It might take some time before your appetite returns to normal.

Common problems after this type of surgery:

- feeling full quickly
- weight loss
- diarrhea
- intestine cannot absorb fats and proteins (malabsorption)
- ‘dumping syndrome’

To help avoid these problems and get the nutrients you need:

- Eat 5 to 6 small meals a day rather than 3 larger ones.
- Eat slowly. Take small bites and chew your food well.
- Eat foods high in protein such as meat, poultry, fish, eggs, dairy, peanut butter, tofu, or legumes.
- Drink at least 6 to 8 glasses of liquid each day (unless you have been told differently because of a medical condition).

Need help with food choices?

Call 8-1-1.

Ask to speak to a dietitian.

If you **feel full quickly**:

- Eat smaller, more frequent meals and snacks.
- Space out your meals and snacks 2 to 3 hours apart.
- Drink liquids between meals instead of during your meals. This way you are not filling up on liquid.

If you are **losing weight**:

- Weigh yourself weekly. Tell your family practitioner if you are losing weight.
- Choose foods that are high in calories and protein.

If your appetite is poor, you might want to drink nutritional drinks (nutritional supplements) such as Ensure® or Boost®.

If you are having **loose stools or diarrhea**:

- Avoid foods and drinks with lots of sugar, fat, caffeine, or spice.
- Avoid foods that act like laxatives such as prunes, prune juice, licorice, or sugar alcohols (such as sorbitol and mannitol).
- Eat foods that can help thicken your bowel movements (poop) such as bananas, white rice, white pasta, bread, cheese, crackers, noodles, potatoes, and oatmeal.

If diarrhea continues, talk with your pharmacist or family practitioner.

If your intestine is not absorbing fats and proteins well (**malabsorption**):

- Talk to your family practitioner when you have pale, frothy or greasy bowel movements. You might need to take digestive enzymes with your meals.

**Constipation** can happen because you are taking opioid pain medication, are less active, or eating less fibre.



To prevent constipation:

- Drink at least 6 to 8 glasses of liquid each day (unless you have been told differently because of a medical condition).
- Gradually add fibre to your diet.
- Increase your activity.

If you continue to be constipated, talk with a pharmacist or family practitioner.

### **Dumping Syndrome**

After this kind of surgery, a small number of people can develop a digestion problem called 'Dumping Syndrome'.

Signs of dumping syndrome include: feeling sick (nauseated), throwing up (vomiting), stomach cramps, and diarrhea. It can also include sweating, fast heartbeat, and feeling weak (from the rapid rise then drop in blood sugar).

If you notice signs of dumping syndrome, contact your family practitioner.

To prevent dumping syndrome:

- Add high fibre foods back into your meal plan a little at a time (such as whole grain bread, whole grain pasta, fresh fruits, and fresh vegetables).
- Limit sugar or sweet foods (such as table sugar, brown sugar, jelly, jam, preserves, syrup, candy, cake, cookies, sweetened cereals, donuts, icing, pastries).
- Include a protein every time you eat a meal or snack (such as meat, fish, chicken, turkey, egg, nuts, milk, yogurt, cheese).
- Avoid foods that act like laxatives such as prunes, prune juice, licorice, or sugar alcohols (such as sorbitol).
- Drink liquids 30 minutes before or after meals, rather than with meals.

## Caring for your incision

**Always** wash your hands before and after touching around your incision site.

Before you leave the hospital, your nurse will teach you how to care for your incision.

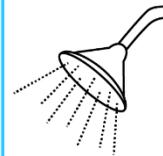
Showering:

- You can shower once most of your tubes and lines have been taken out, usually within 4 days after surgery.
- Continue to take only showers for at least 2 weeks after your surgery.
- Try not to let the shower spray directly on your incision(s) or bandage if still covered. Gently pat the area dry.

For at least the next 2 weeks or until the incision is healed:

- ✗ No soaking in a bath tub or hot tub.
- ✗ No swimming.
- ✗ No creams, lotions, or ointments on your incision, unless directed by your surgeon.

Doing any of these things could delay healing.



## Managing moods and emotions

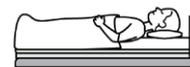
After major surgery, it is quite common to have a low mood or changeable mood at times. If you find your mood is staying low or is getting worse, contact your family practitioner.

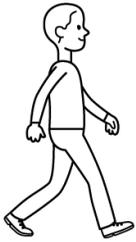
## Getting rest

It is very common in the first few weeks to feel tired and have low energy. Rest and sleep help you heal.

Try to get at least 8 hours of sleep each night. Take rest breaks and naps during the day, as needed.

If you have trouble sleeping, talk to your family practitioner.





## Being active

Activity and exercise help build and maintain your muscle strength, give you more energy, and help with recovery. You need to find a balance between rest and activity. Pace yourself for the first few weeks.

Slowly increase how much you do each day (your activity level). Increase the distance and time you walk. Only increase your activity level as much as you comfortably can.

If you are still having pain, exercise 30 minutes after you have taken your pain medication.

Your surgeon will tell you when you can increase your activities at your follow-up appointment.

For the next 4 to 6 weeks, limit heavy activities to protect your incision and abdominal muscles:

- ✘ **Do not** lift, push, or pull anything over 4 to 5 kilograms (10 pounds). This includes carrying children and groceries.
- ✘ **Do not** vacuum, rake leaves, paint walls, reach for things in high places, or any other reaching activity.
- ✘ **Do not** play any sports, do high intensity exercise, or weight training.

You can return to **sexual activity** when you feel ready and your pain is well controlled.

Usually, you can return to **driving** when you can shoulder check and comfortably wear your seatbelt. If you are not sure about it, ask your surgeon.

**Remember: Do not drive** when you are taking opioid pain medication.

## Questions you might have:

Examples: 'How will my bowel habits change?' 'When will I be able to return to my regular activities?' 'When can I return to work?'

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A 4 litre milk jug weighs 4 kg (9 pounds)





## When to get help

### Call your surgeon or family practitioner if:

- You have a fever over 38°C (101°F).
- Your incision is warm, red, swollen, or has blood or pus (yellow/green fluid) draining from it.
- You have a cough that continues to get worse.
- You notice stinging, burning, or pain when you urinate (go pee) or your urine smells bad.
- You have redness, tenderness, or pain in your calf or lower leg.
- Your pain does not ease with pain medicine, or stops you from moving and recovering.
- You are throwing up or not able to keep fluids down.
- You have diarrhea that is severe or continues for more than 2 days.
- You feel increasingly tired or dizzy.

Cannot contact the surgeon or family practitioner?

Have any questions about your recovery?

- ▶ Call Fraser Health Virtual Care, 10:00 a.m. to 10:00 p.m., daily **1-800-314-0999**  
[fraserhealth.ca/virtualcare](https://fraserhealth.ca/virtualcare)
- ▶ Call **8-1-1** (HealthLinkBC) to speak to a registered nurse any time - day or night.

▶ **Call 9-1-1** if you have any of the following:

- trouble breathing or shortness of breath
- chest pain
- sudden, severe pain

**9-1-1**



HealthLinkBC is available in 130 languages.

For an interpreter, say your language in English. Wait until an interpreter comes on the phone.

## Safe use of opioid pain medicines

If you are using any medicines with opioids (narcotics) in them, we want you to do so safely. However, serious problems can happen. Take note of the following safety information.

### Before taking opioids:

- Tell your surgeon if you have sleep apnea. Opioids can make your sleep apnea worse.

### Safely storing opioids:

- Store opioid medicines in a secure place.
- Keep out of sight and out of reach of children, teens, and pets.
- Never share your opioid medicine with anyone else.

### Safely disposing of unused opioids:

- Take any unused opioid medicines back to your pharmacy to be safely disposed. **Do not** keep unused medicines at home.

### Safely taking opioids:

- Your pain should lessen over the first week. You should not need to take opioid pain medicine for more than 1 week.
- Always use the least amount possible for the shortest amount of time.
- Common side effects include constipation, feeling sick to your stomach (nausea), a dry mouth, sweating, dizziness, and feeling drowsy.
- **Do not** crush, cut, break, chew, or dissolve opioids before taking. Doing this could cause serious harm, even death.
- While taking opioid pain medicines: **Do not** drive or drink alcohol. **Do not** take any sleeping pills unless your doctor has said you can.

## Appointments after surgery

Arrange to have your staples or sutures (stitches) removed 10 to 14 days after the surgery.

**I have an appointment with:** \_\_\_\_\_  
(surgeon or family practitioner)

**My appointment is on:** \_\_\_\_\_

See your family practitioner 7 to 10 days after going home from the hospital.

**My appointment is on:** \_\_\_\_\_

See your surgeon 3 to 4 weeks after going home from the hospital.

**My appointment is on:** \_\_\_\_\_

[www.fraserhealth.ca](http://www.fraserhealth.ca)

This information does not replace the advice given to you by your healthcare provider.

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