

## Nutrition after a Whipple's procedure

In a Whipple's procedure parts of the stomach, small intestine and pancreas are removed (see picture). These organs have important roles in digesting and absorbing food. Some people may experience symptoms after the surgery and need to make changes to their diet.

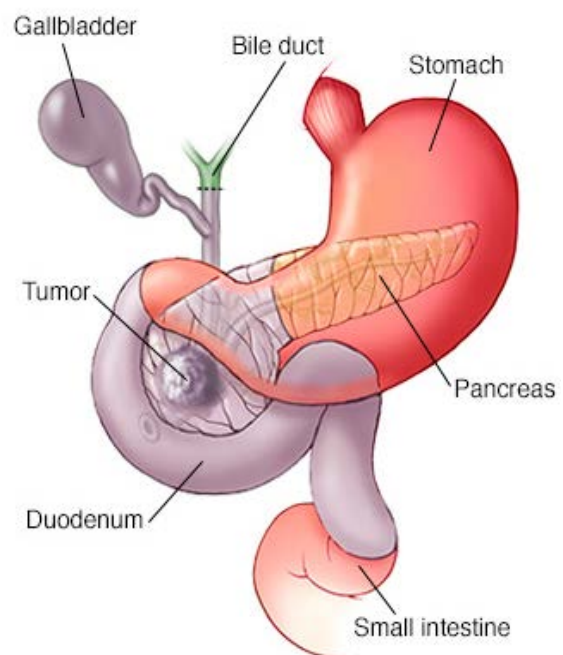
### What are the possible symptoms?

- Weight loss
- Poor appetite
- Feeling full quickly
- Nausea and/or vomiting
- Abdominal discomfort
- Sweating, flushing or light-headedness
- Diarrhoea
- Loose, fatty, pale bowel motions\*

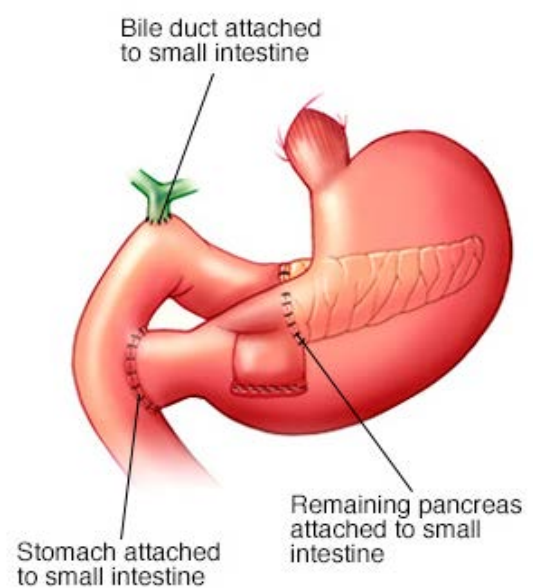
### Why do these symptoms occur?

- With part of the stomach removed you can fill up on solid foods quickly.
- Food can also pass through your small intestine quickly and cause diarrhoea and poor digestion of food.
- With parts of the pancreas removed, fewer enzymes are available for digestion and this can cause food to be poorly absorbed.

### Before Surgery



### After Surgery



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## How can I manage these symptoms?

- Eat 6-8 small meals per day
- Avoid large meals
- Eat slowly and chew food well
- Have drinks 30 minutes before or after meals, instead of with meals
- Avoid foods and drinks containing lots of sugar e.g. cordial, soft drink, sports drinks, energy drinks, lollies

## What kinds of foods should I eat?

- Foods high in protein and energy will assist you to recover and prevent weight loss (see table).
- Include a source of protein at each meal, e.g. meat, chicken, fish, eggs, milk, cheese or yoghurt.
- Your doctor may suggest having softer meats instead of tough varieties for a few weeks after surgery.
- Eat nutritious snacks between meals e.g. cheese and crackers, nuts, dried fruit, yoghurt, dairy desserts.
- Choose nourishing drinks, e.g. milk, Sustagen or Ensure rather than tea and coffee. You can find nutritional supplement drinks at chemists and some supermarkets. Your dietitian will advise you on how much you need each day.

High protein	High energy
Meat, chicken, fish	Avocado
Milk (plain or flavoured), cheese, eggs	Oil (olive, sunflower, canola, rice-bran)
Yoghurt, custard, dairy desserts	Dried fruit
Nuts and seeds	Muesli/nut bar
Legumes (e.g. baked beans, chickpeas, kidney beans, lentils)	Margarine spread, salad dressings, cream
Nutritional supplement drinks / powders (e.g. Sustagen, Ensure, Resource Plus, AdVital, Beneprotein)	

## \*What are pancreatic enzymes?

If you experience loose, fatty, pale bowel motions this can indicate you are having difficulty absorbing fat from food. Your doctor may prescribe pancreatic enzymes. These capsules need to be swallowed whole with water immediately before, during or after the meal or snack.

## Final tips

Monitor your weight weekly. If you continue to lose weight or symptoms such as diarrhoea persist, you should seek medical advice or ask your GP for a referral to a dietitian.

## Suggested meal plan

<b>On waking</b> Glass of milk or yoghurt
<b>Breakfast</b> Cereal with full cream milk OR Eggs on toast
<b>Early morning tea</b> Sustagen / Ensure made on full cream milk
<b>Late morning tea</b> Cheese and crackers / yoghurt
<b>Lunch</b> Sandwich with meat / cheese / egg and salad
<b>Afternoon tea</b> Fruit smoothie made on milk / yoghurt
<b>Dinner</b> Meat / fish Potato / rice / pasta Vegetables
<b>Supper</b> Fruit and ice-cream

## Things I can do to improve my diet

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2.

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**For further information contact your dietitian:** \_\_\_\_\_