



# Nutritional advice after bariatric surgery



**azdelta**

Uw ziekenhuis.

## 1

## Change your food habits

Your well-being and the optimum successful result of the procedure long-term, is dependant from not only a good follow-up, but your motivation and cooperation are important here.

As the physical anatomy is made smaller, the point at which you will feel satiety or a feeling of fullness will happen quicker. At the beginning, you would like to eat more, but that is not the intention at all. It is very important that you will learn to recognize this feeling of fullness and immediately stop eating. By adapting your eating habits and learning this new eating behavior, you will be able to prevent discomforts like nausea and vomiting.

Tips:

- Chew very well.
- Take small bites.  
(Use a dessert fork/spoon and put down your knife and fork after each bite)
- Use a dessert size plate. (The smaller quantity of food will look more appealing on a smaller plate, and you will not notice the portion is of a smaller size)
- Stop eating and drinking, when you are feeling 'full'.  
Extra eating or drinking can cause nausea.
- Whilst eating the meal, it's better not being pre-occupied doing other things such as reading the paper or watching TV.
- Make sure you are in a comfortable position at the table. By eating slowly and being in a calm relaxed atmosphere, free of distractions, you will enjoy and savour your mealtimes.
- Stop drinking half an hour before the meal, do not drink during your meal, and wait 30 minutes after the meal to drink something.

This way food is not pushed along your digestive tract by the fluid and prevents you becoming hungrier sooner.



## Use healthy and varied food

Although the volumes that you can eat are very limited, we strive for a healthy and well-balanced nutrition.

It is advisable taking 3 meals a day: breakfast, lunch and dinner. At 10 o'clock and in the afternoon, you can take a healthy snack, without any sugars and a low fat content.

Some patients have an aversion to particular foods, where other patients are able to eat anything. This is quite normal. You can test your palate, by trying tiny amounts of a particular food.

If you aren't able to tolerate a particular food type-don't worry, you can try it again at a later date.

### Tips to maintain optimum comfort whilst eating

#### Drinks

If you take big gulps and drink too quickly, you may feel uncomfortable.

Take tiny sips, as if you were drinking from a bottle with a filter-top.

- Between meals, drink sugar free drinks, such as non-fizzy water, coffee or tea without sugar, vegetable soup, or low-sugar drinks.
- Zero sugar soft drinks are an alternative for high sugar content drinks. If you do choose a carbonated drink, allow the drink to settle and for the fizz of the gas to escape. Try to avoid drinking Cola, Cola Light or Cola Zero. All contain a lot of chemicals.
- Avoid sweet drinks as juices (even when they're sugar free), soft drinks and sugared milk drinks.
- Limit the use of alcoholic drinks to a minimum. Keep in mind that the effects of alcohol is more noticeable after you have had a weightloss procedure.

## **Bread**

- Fresh bread is difficult for the body to digest, and may get stuck at the beginning of the gastric outlet. It's preferable to use older brown bread. Avoid sandwiches and pastries, and if you have to eat bread, only choose to eat the crust of a roll, avoiding the inner crumb. The middle of the bread goes like a putty consistency and lies heavy on the stomach causing a feeling of heaviness and discomfort.
- Roasted bread, crackers, etc... are better tolerated.

## **Potatoes, pasta and rice**

- Cook potatoes, pasta and rice until they are fully cooked.
- Take a high-fiber product, like brown rice or brown pasta in preference to the white starchy pasta.
- Take thicker pasta, that you can better chew.
- Mashed potatoes are not a problem.
- Croquettes, or lightly toasted potatoes can be eaten after 3 weeks, in a limited way.

## **Vegetables**

- Cook your vegetables well done and not al dente in the beginning, to make them easier to digest.
- Vegetables which are more difficult to digest tend to be sprouts, paprika, mushrooms, and they can cause abdominal bloating and wind. If you encounter any problems after eating any of these vegetables, it is better to avoid them in the future, and eat carrots or swedes, or cauliflower.
- Soft, uncooked vegetables can be gradually introduced from the 3rd week.

## **Fruit**

- Take a piece of fruit every day, start with soft and ripe fruit.
- Shelled and fruit without the pith is easier to digest.
- Citrus fruits can be juiced. (max. the juice from 1 piece a day)
- It is better to avoid nuts.

**Meat**

- Meat like roast beef, cutlet, steak,... are fibrous, dense and contain a lot of connective tissue.  
They are difficult to chew, as they tend to form into a ball, which is difficult to swallow.  
So it's preferable to avoid these sorts of meat.
- Soft meat like chicken and turkey are a good choice
- Avoid eating a lot of minced meat, hamburgers or sausages
- Eat meats (ham, chicken slices) are mostly easy to tolerate.
- Avoid meat which is fibrous such as the cheaper cuts of meat and processed ham

**Fish**

- Fish is better to tolerate than meat, also oily fish.
- Use fish 2 times a week.
- Breaded sorts and readymade fish cuts are discouraged, as they tend to be processed, and do not have the same health benefits.

**Eggs**

- Eggs, mainly under the form of scrambled eggs, omelettes, fried egg or soft-boiled eggs, are well tolerated by the stomach.

**Milk-products**

- Milk-products can cause dumping syndrome if taken in large quantities.
- Choose low-fat, semi-skimmed, unsweetened milk-products.
- If you are intolerant to the lactose in dairy milk, then you can substitute by a lactose -free milk or soya milk, almond milk is also fine.
- Low-fat cheese spread, low-fat flat cheese and low-fat hard cheeses, can be taken.

## Fats

- Because fat (both unsaturated and polysaturated) are commonly present in many sorts of food, the use of spreads such as butter etc and cooking with fats, needs to be limited. It is recommended to use fats spreads sparingly and to try to limit any amount when eating.
- Too much fat slows the emptying of the stomach and can lead to heartburn.
- Choose healthy type fats such as olive oil, rapeseed oil, liquid low fat margarine.

## Dressings

- Limit the use of mayonnaise and always try to use low-fat varieties when having sauces with food. Try to use low-fat salad cream and low-fat vinaigrette.
- Avoid high fat sauces based on butter, eggs or cream.
- Milk sauce based on low-fat or semi or skimmed milk, and broths such as chicken or vegetables are nutritionally good as well.

## Sugars

- Avoid sweets, chocolate and ice cream. They slide easily through the small stomach, but they mostly cause dumping syndrome as well as having no nutritional value at all.
- Sugary food contains a lot of calories and fat, with none of the benefits of vitamins and minerals.
- Replace sugar by low-calorie, artificial sweeteners.
- If you like jams and marmalade, try to have the reduced sugar products.

## Some tips when you go to a restaurant

- Take 1 small glass of wine or beer and don't eat appetizers such as olives or garlic bread.
- Do not drink too much while you are eating, limit the use of alcohol.
- Forgo a starter, or take the starter as main meal, the quantity is ideal.
- Ask for separated sauces.
- Order coffee instead of a dessert.

## Building scheme

### > **First week**

- The first week after the procedure, we recommend liquid, mashed food. The following sorts of food can be used:
- Still water
- Weak coffee, weak tea
- Low-fat, unsweetened yogurt
- Thin vanilla pudding or vanilla pudding without sugar
- Mixed fruit yogurt or drinkable yogurt without sugar
- Low-fat mixed vegetable soup, low-fat vegetable- and meat bouillon
- Vegetable juices
- Not sweetened fruit compote
- Mashed potatoes (without any fats such as butter added)
- Pureed vegetables (without any fats such as butter added )
- Low-fat milk, pure buttermilk
- Low-fat chocolate milk without sugar (with cocoa and sweetener)

### > **Second and third week**

#### • **Ploughman's lunch:**

- If you think normal bread is too heavy, you can eat toasted brown bread, or crackers.
- 1 slice of brown bread , thinly spread with margarine. thinly spread with low-fat cheese spread or low-fat confiture (chutneys)
- Try to avoid out with chocolate spreads, pate, fatty meat and fat cheeses.

#### • **Warm meal:**

- Mashed potatoes
- Fish or egg (poached, cooked, scrambled egg)
- Soft-boiled or stewed vegetables like cauliflower, broccoli, chicory, spinach, carrots.
- Quantity: semi dessert plate

- **Snack (when there is a need for):**

- Coffee cup size of soup
- Low- fat unsweetened yogurt
- A piece of soft, ripened or mashed fruit

- **Drinks**

- Unsweetened drinks without the fizz

> **Fourth week onwards**

- There should gradually be extended: normal bread, cooked potatoes, pasta, meat, soft raw vegetables
- Fizzy drinks: allow time for the fluid to settle and the bubbles to decrease
- Gradually increase portion size to fit on dessert plate only
- Try fruit and vegetables to suit your taste. The aim is to have a varied, healthy , balanced diet.



## Daily schedule as from week 4

<b>BREAKFAST</b>	<ul style="list-style-type: none"><li>• 1 to 2 slices brown or wholemeal bread, thinly smeared with butter or low fat spread.</li><li>• filling: low-fat cheese/low-fat meat/ low sugar jam or marmalade</li></ul>
<b>AFTER HALF AN HOUR</b>	unsweetened drinks
<b>SNACKS BETWEEN MEALS</b>	a piece of fruit or low-fat, unsweetened yogurt or a coffee cup size of soup
<b>AFTERNOON</b>	1 dessert plate (1/3 potatoes/rice/pasta + 1/3 vegetables + 1/3 meat/fish/egg)
<b>AFTER HALF AN HOUR</b>	unsweetened drinks
<b>INBETWEEN</b>	piece of fruit or low-fat unsweetened yogurt
<b>EVENING</b>	<ul style="list-style-type: none"><li>• 1 to 2 slices brown or wholemeal bread, thinly smeared with butter/ low fat spread</li><li>• filling: low-fat cheese/low-fat meat/</li></ul>
<b>AFTER HALF AN HOUR</b>	unsweetened drinks
<b>LATE AT NIGHT</b>	if you feel the need to: a piece of fruit or low fat yogurt

# 3

## Complaints after a bariatric procedure

### The Dumping Syndrome

#### Why do Dumping Symptoms start?

- The food ends up in the smaller stomach or directly in the small intestine.
- The constrictor between the stomach and the small intestine, is missing, so the food is no longer evenly dosed and goes more speedily into the intestines.
- By drinking with the meals, the passage of food is accelerated.
- The stomach can no longer grind, mix and knead, whereby overlarge food chunks go to the small intestine.

**The Dumping Syndrome occurs mainly with the Gastric Bypass procedure and less after a Gastric Sleeve.**

We distinguish two sorts of dumping complaints:

> **Early dumping symptoms:**

These occur fairly rapidly after eating (+ half an hour). Early symptoms arise when food in large quantities arrives in the small intestine. This highly concentrated food mass attracts a lot of moisture in the small intestine. This liquid is withdrawn to the surrounding blood vessels. That causes the following complaints:

- a full uncomfortable feeling
- abdominal pain and intestinal cramps
- diarrhea

In addition, there is a decrease in blood pressure, because moisture is extracted to the blood vessels. As a result of this reduction in blood pressure, there will be some complaints as:

- palpitations
- dizziness
- generalized feeling of weakness
- drowsiness
- sweating

### > **Later-onset dumping symptoms:**

They can present after about 2-3 hours after eating the meal. These symptoms are caused because of the sudden variability between concentrations of blood sugar matched against the insulin production which is produced in the pancreas. Because the food is passing quickly through the small intestine, some sugars are absorbed rapidly. A high blood sugar causes production of insulin, which is a hormone used in digestion. However, the insulin production from the pancreas is somewhat slower. So if too much insulin is produced at this later stage, and the food has already passed through, the person will experience symptoms of low blood sugar or dumping symptoms.

The following symptoms can appear:

- sweating
- restless feeling and shaking
- dizziness
- hunger
- need to eat something sweet
- palpitations
- fainting

In case of vomiting or nausea after eating, you have to ask yourself the following questions and try to find out if you have made mistakes.

- Have I eaten too quickly?
- Have I chewed my food thoroughly and slowly?
- Did I eat too much/ were the bites too big?
- Did I drink after the meal?
- Did I drink too quickly after the meal?
- Have I eaten food with too much sugar?
- Do the problems appear each time after I consume milky sugary products?

**Ask your doctor in the following cases:**

- repeated, frequent vomiting
- repeated, black, loose smelly stools
- sudden onset stomach pain, coupled with vomiting
- the feeling that you can eat large amounts of food without getting a feeling of satiety or fullness.

When you get the feeling that food is stuck, stop immediately with eating and try to drink small sips. If you feel that the fluids after a few hours still can't pass, and you are in discomfort, contact your doctor.

## Constipation

Many patients are struggling with constipation stool after a bariatric procedure.

After all, there is less stool because there is a reduced food intake. After the procedure, the fluid intake is often reduced, whereby the problem increases.

Don't worry it will often resolve as any weight loss surgery can cause an upset in regular bowel habit.

This tips can be help:

- Make sure you drink plenty
- Include fibre in you diet
- Do not use chewing gum (this can always make you feel hungry)
- A natural supplement such as Fibregel can help

## Burping and Gas

Eat quietly and chew enough

- Do not speak while eating
- Do not chew chewing gum
- Avoid carbonated drinks, cabbage, leek, onion, garlic, cucumber and bell pepper Avoid carbonated drinks, cabbage, leek, onion, garlic, cucumber and bell pepper

# 4

## Exercise

It is important that you not only adjust your food habits, but it is advisable to do more exercise. The calories you absorb and that not are consumed, are stored as fat. To lose weight, the body has to burn more calories, then the calories your body absorb through the nutrition. This is only possible by doing exercise.

Start slowly with exercise. As the weight decreases, the exercises become easier. It is recommended to move 30 minutes each day. Choose activities that you like, and you can do whenever and wherever you want.

Remember small changes- Big results!

- Take the stairs instead of the lift.
- Go, if it is possible, on foot or by bicycle to an appointment instead of by car
- Park your car a bit further away so you have to walk further
- Do not use remote control for the television, but stand up from your chair.
- Walk around while dialing with your mobile phone instead of sitting.
- Pick up your daily newspaper (by foot or bicycle) at the newsagent.
- Avoid frozen food and go to the shops to buy fresh food.
- Buy your fruit and vegetables at the market.

## 5 Weight control

In the first year after the surgery, you have to monitor your weight regularly, but not too often. Once a week is enough. You will probably come in to contact with other patients who have undergone bariatric surgery. Do not become desperate when other patients lose weight, quicker than you. The speed of the weight loss depends on various factors, like initial weight, gender, metabolism, muscle... Do not forget: the scales are your friend and not your enemy... Looser clothes that once used to be too tight are a great incentive to carry on...

## 6 Follow-up

### > **Before the procedure:**

It is intended that you have a conversation with the dietitian. It is difficult to predict how you will react to the new situation. The nutrition is adjusted and adapted personally.

It is desirable that you come on a regular base at the doctor and the dietitian for further follow-up.

Do you wish more information about this nutrition? Do not hesitate to contact us (cf. backpage).



# Notes

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