PATIENT INFORMATION -

DIETARY MANAGEMENT AFTER BARIATRIC SURGERY



This brochure is for patients who have had bariatric surgery (or weight loss surgery).





BARIATRIC SURGERY

The word "bariatric" comes from the Greek word "baros", which means "weight". The operation is performed to reduce both weight and the risk of secondary disease associated with obesity.

In Sweden, the two most common operations are:

- Gastric bypass surgery, where a large portion of the stomach and part of the small intestines are bypassed.
- Sleeve gastrectomy surgery, where a large portion of the stomach is taken away but no changes are made to the intestines.

Bariatric surgery is the most effective treatment of morbid obesity. It reduces the risk of secondary disease, and many patients have also experienced an increased quality of life as a result.



Gastric bypass A large portion of the stomach and part of the small intestines are bypassed.



Sleeve gastrectomy A large portion of the stomach is taken away but no changes are made to the intestines.

Illustrations: Ethicon, Johnson & Johnson.

WHAT CAN I EAT AFTER A BARIATRIC **SURGERY?**

Food that is rich in protein

Immediately after your operation, you will probably be advised to consume liquid and/or easily digestible food. When you begin to eat normal food, it is beneficial to choose food that is rich in protein. Protein-rich foods include fish, chicken, eggs, low-fat dairy products and legumes. A high protein intake can help maintain muscle mass during weight loss. Protein can also contribute to increased satiety and therefore potentially counteract weight gain in the long run.

Vegetables and fruit

We encourage you to eat a lot of vegetables and fruit, as these are excellent sources of fibre, vitamins and minerals. Fibre contributes to satiety and good intestinal flora and can counteract constipation. You should strive to establish and maintain healthy eating habits. The population as a whole can benefit from advice on healthy eating habits, and there is strong evidence that this advice prevents lifestyle diseases and promotes health.

WHAT ARE HEALTHY EATING HABITS?

Healthy eating habits involve a high intake of vegetables, root vegetables, legumes, fruit, berries and, to some extent, nuts and seeds. You should regularly eat fish, seafood, chicken or vegetarian alternatives and limit how often you eat red meat (pork, beef, game, lamb and charcuterie products such as sausage). Choosing whole grain variants of pasta, rice and bread also has many health benefits. Oil, liquid margarine and Keyhole-labelled dairy products, such as cheese, milk and yoghurt are a better choice than high-fat variants.

It is also advisable to reduce your sugar, salt and alcohol intake as much as possible.



Find *your* way

Eat enough greens and get moving



MORE

Coarse vegetables Legumes Fruit and berries Fish and shellfish Nuts and seeds Movement throughout the day



SWAP

White flour Butter-based fats High-fat dairy products

FOR

Whole grains Plant-based fats and oils Low-fat dairy products



LESS

Red meat and charcuterie products Sugar Alcohol

Find your way illustrates what healthy food is. Published with permission from the Swedish National Food Agency.

WHAT SHOULD I EAT?

Immediately after your operation, you should eat slowly to avoid discomfort after your meal. Eating slowly also makes it possible to understand how it feels when your body sends signals that you have eaten enough. It is important that you chew your food properly to avoid discomfort after your meal.

WHAT SHOULD I DRINK?

It can be difficult to stay sufficiently hydrated just after your operation. Try to drink small amounts throughout the day. You should mainly drink water and avoid drinks that contain sugar. Avoid eating and drinking at the same time if this causes discomfort. Incidentally, there are no health benefits to not drinking water with your food. Carbonated drinks or really cold water can be difficult to drink. Instead, it may be better to flavour your water with, for example, lemon.

WHEN AND HOW OFTEN SHOULD I EAT?

The majority of people meet their nutritional needs by eating three main meals and a few snacks a day. It is advisable to spread your meals evenly throughout the day. Some people who undergo bariatric surgery eat relatively small portions of food and may therefore need to eat a little more often. You should snack as little as possible to avoid developing cavities in your teeth as well as your weight increasing too much in the long run.

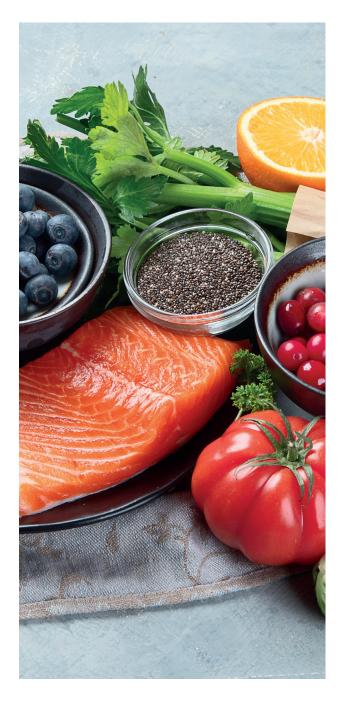
HOW MUCH SHOULD I EAT?

To begin with, the majority of people eat significantly smaller amounts than they did before the operation. After six months, most people can eat a little more, and after two years, the majority of people can eat a normal-portion low-fat meal with a lot of vegetables. The increase in portion size can be explained by the fact that the signalling of hunger and satiety changes over time rather than the size of the stomach/stomach pocket changing.

It is not possible to say what a "normal" portion is after the operation, and it is important to remember that everyone has different needs. A young and active person needs more energy than someone who is older and more sedentary.

HOW MUCH SHOULD I WEIGH AFTER BARIATRIC SURGERY?

The weight change after bariatric surgery differs from patient to patient, and patients rarely reach a "normal" weight. According to the Scandinavian Obesity



Surgery Registry (SOReg), a patient's body weight five years after the operation is typically reduced by 25% after a gastric bypass surgery and 20% after a sleeve gastrectomy surgery. This average includes people whose weight is reduced by 5% and people whose weight is reduced by 50% (half their body weight).

The results of the operation largely depend on the strength of the signals you get from your gastrointestinal hormones, which in turn seem to be partly hereditary. Moreover, these signals change over time and are out of your control. Many people blame themselves and wonder if they have "ruined" their operation in some way when they gain weight, but there is no scientific evidence for this. The vast majority of patients gain weight a few years after their operation, but this increase depends on the individual.

ARE THERE ANY SIDE EFFECTS FROM BARIATRIC SURGERY?

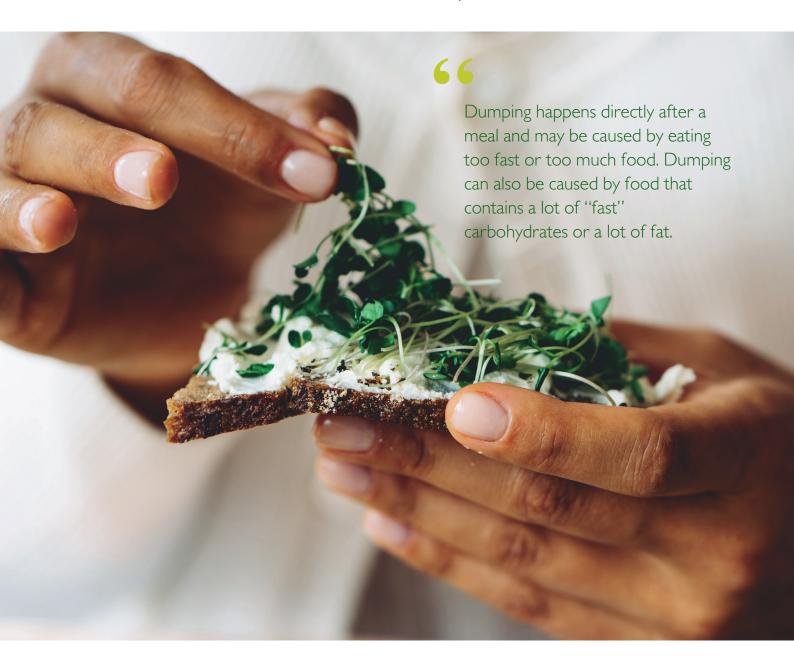
As these operations change the shape and function of the stomach and intestines, stomach cramps and "dumping" may sometimes occur in connection with a meal.

Dumping is something that many patients have experienced post operation. Dumping can manifest as nausea, fatigue, a need to lie down, heart palpitations and dizziness. Dumping happens directly after a meal and may be caused by eating too fast or too much food. Dumping can also be caused by food that contains a lot of "fast" carbohydrates or a lot of fat. Foods that typically induce dumping include fast food, pastries, ice cream, fried foods and creamy sauces. The majority of patients learn what and how much they can tolerate after a few months, which

means that dumping is most often not seen as a significant problem in the long term. Dumping is often harmless but can be uncomfortable. It often lasts between 30 and 60 minutes.

Some patients may develop a decreased level of blood sugar after a few years, which is known as hypoglycemia. The symptoms develop a couple of hours after a meal. You may feel weak, shaky, dizzy, unfocused or light-headed. If you experience these symptoms, you should drink or eat something that contains fast carbohydrates, such as milk, juice or glucose tablets, and preferably eat a meal or a sandwich within an hour. If you struggle with hypoglycemia, you should consult a dietician for more specific advice.

If you experience a lot of stomach pain that does not pass, or happens multiple times, you should consult your doctor.





EXERCISE

Exercise and movement are needed to keep your body strong and functioning. Regular exercise can also mitigate or prevent certain illnesses. It can counteract weight gain but is not particularly effective for weight loss.

Regular exercise is probably easier and more fun if your motivation is to get strong, increase your stamina or improve your body's function rather than to lose weight.

VITAMINS AND MINERALS

Patients who undergo bariatric surgery must take vitamin and mineral supplements for the rest of their lives. You need 1000 mg calcium and at least 800 IU vitamin D, 60 mg iron, 400 μ g folic acid and 1 mg B12 per day to feel good. It is important to check the levels of these nutrients via an annual blood test at your health centre.

STIGMATISATION DUE TO YOUR BODY SIZE

The term "weight stigmatisation" is used a lot these days and can quite simply be explained as a type of prejudice that affects people at a group level. Many people with obesity have experienced weight stigmatisation. This is when people that you do not know have a negative attitude or mindset towards you due to your body size. At the patient organisation HOBS (Hälsa oberoende av storlek), patients who have lost weight say that they are treated completely differently after their weight loss. They feel more seen

and respected, but they may also feel annoyed and sad that they were not treated in a non-stigmatising way before. At HOBS, they can receive support or help support others. You can contact HOBS by e-mailing them at info@hobs.se or by visiting their website: hobs.se.

FOLLOW-UP

The majority of clinics that perform bariatric surgery offer follow-up sessions for at least one year, and sometimes several years, after the operation. After that, your primary health care provider will usually take over your follow-up care and conduct checks and blood tests. Many patients have expressed a desire for longer follow-up sessions at a specialised clinic or with a dietitian.

It is vital that you as the patient ask for the help you think you need when you contact your health care provider.

HEALTH GAINS

Aside from weight and body size, patients who have undergone bariatric surgery have significantly improved their conditions for a healthier life compared with people who do not undergo the operations and still have morbid obesity. A bariatric operation reduces the risk of developing type 2 diabetes or cardiovascular disease, and patients also actually live longer.

Even if your weight increases a few years after the operation, the long-term health benefits are significant.

WWW.DRF.NU 2021