SURGICAL WEIGHT LOSS
OPTIONS

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Patient Information

Introduction

This information booklet is designed to provide you with an understanding of the different surgical weight loss options available at Better Life surgery.

We hope that after reading this booklet and talking with our team, you will have a better understanding of what is involved in weight loss surgery including the benefits and risks.

It should also help you decide which option is best for you and your lifestyle goals.

What is bariatric surgery?

Bariatric surgery is also known as obesity surgery or weight loss surgery. It refers to operations designed to help reduce your weight.

The operations may restrict the amount of food you are able to eat, reduce the amount of food you can absorb from your gut, or both.

The term does not include procedures that remove fat from the body, such as liposuction or abdominoplasty (tummy tuck)

Why should I consider surgery for weight loss?

Surgery is known to be one of the most effective methods to aid weight loss and maintenance. Many of you will have been dieting for much of your life. You may have lost a large amount of weight in the past but found it difficult to keep this weight off.

Alternatively, you may have never dieted before but have been referred by your GP or another specialist because surgery is considered the best option for you.

Carrying extra weight can also contribute to many other health problems or affect you physically and emotionally.

Why treat obesity?

The main concern about carrying extra weight is the impact it can have on your health. We know that being obese can increase the chance of having many other diseases such as diabetes and heart disease.

Being obese can also shorten your life expectancy. The heavier you are and the longer you have been overweight or obese, the greater the risk. Surgery can be a way of managing your weight and preventing further health problems. However it is only a tool to help you. Success will only be achieved by eating a healthy diet and getting regular exercise.

Weight loss surgery has been shown to prevent or improve conditions and diseases such as:

- Type 2 diabetes
- High blood pressure
- High cholesterol
- High triglycerides
- Heart disease
- Asthma
- Sleep apnoea
- Certain cancers such as breast, colon and endometrial cancer
- Polycystic ovarian syndrome
- Osteoarthritis and joint problems
- Infertility
- Stress incontinence

Studies have shown that weight loss surgery can also improve quality of life and increase life expectancy.

Criteria for Surgery

You need to fullfill the following criteria:

- Have a BMI of 40kg/m2 or more.

OR

- Have a BMI of between 35kg/m2 and 40kg/m2 with other significant disease (for example, Type 2 diabetes or high blood pressure)

AND ALL OF THE FOLLOWING

- Have tried all other appropriate, available non-surgical measures but failed to achieve or maintain adequate, clinically beneficial weight loss **AND**
- Be willing to see the various specialists that we recommend and follow our instructions **AND**
- Be generally fit for anaesthesia and surgery **AND**
- Be committed to long-term follow-up care with us or your medical practitioner.

Obesity surgery is an option if you meet the above criteria, are well informed, motivated, and have realistic expectations about what surgery can achieve for you.

Bariatric surgery requires commitment

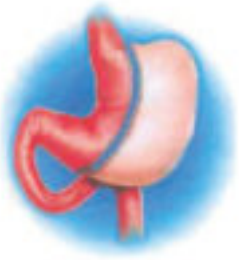
Making the decision to request bariatric surgery is a serious step and it is important that you fully understand what it will involve and what changes you will have to make to your diet and lifestyle.

From your first visit we will work with you to develop a long-term weight loss plan. We will continue to support you after surgery.

Surgery is considered a tool for weight loss. Weight loss with surgery requires commitment and motivation. It is not a quick fix.

You will gain the most success from surgery and will avoid complications if you can commit to the recommended changes to your diet, exercise and lifestyle, and maintain them for life. This is not always easy to do but we will help you to make these changes.

What do the different surgical options involve?
1. Laparoscopic Sleeve Gastrectomy



The sleeve gastrectomy is a purely restrictive operation. In this procedure, the surgeon creates a narrow tube from the stomach and removes the remainder. The surgeon uses metal staples that are similar to stitches and then cuts through the stomach.

The new stomach tube, or pouch, is about one eight of the size of the original stomach. Unlike a gastric bypass where food enters a small pouch and then passes straight into the small bowel, the route that food takes following a sleeve gastrectomy is the same as it took before surgery.

The sleeve gastrectomy can be performed as a single operation, although it was originally performed as one component of the Duodenal Switch operation. Most people will lose 50% or more of their excess weight. Weight loss is generally quite fast, however because the intestines are not bypassed, most people do not lose as much weight as with the duodenal switch or gastric bypass.

Occasionally the procedure will be used as the first stage of a 2-stage procedure, such as duodenal switch or gastric bypass. If this is the case, you will have the sleeve gastrectomy and then after some weight loss has occurred (12 - 18 months after the first surgery) the second operation can be scheduled.

Expectations of weight loss

Weight loss occurs quite quickly over the first year following a sleeve gastrectomy. Most people lose between 50 - 60% of their excess body weight, although this can vary and some may lose more. Adherence to dietary advice and exercise program will result in greater weight loss and better weight maintenance. The dietitian will discuss with you what changes you would need to make to your eating patterns to meet your essential nutritional requirements for protein, vitamins and minerals and have the best weight loss results. You must take a daily multivitamin and mineral for life to prevent nutritional deficiencies.

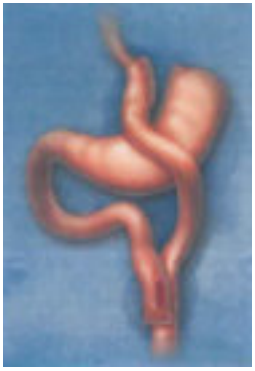
Advantages

- Can be performed laparoscopically and avoid open surgery.
- The amount of food you can eat is restricted.
- You are likely to feel fuller quicker and stay fuller for longer.
- Weight loss starts from the time of surgery.
- Weight loss tends to be faster than following the gastric band.
- You can lose on average 50-60% of your excess weight.
- As with the band, your intestines remain intact so food is digested and absorbed as normal.
- The surgery can then be followed by conversion to the duodenal switch or gastric bypass resulting in further weight loss.
- You will have better results if you follow dietary changes and follow an exercise program.

Disadvantages

- The surgery itself has more operative risks than the gastric band because it is a longer procedure and the stomach is cut.
- You may not lose as much weight as following the bypass or duodenal switch and you may be at more risk of regaining weight.
- Your hair may thin, this is temporary while losing weight at a rapid rate.
- You may develop gallstones due to rapid weight loss. It may be necessary to undergo a further operation to remove your gallbladder, although this is quite rare.
- Most of your stomach is removed. This is a permanent procedure, in other words it is irreversible.
- Nausea and vomiting may occur, particularly in the first few days after surgery. Vomiting is also common if you eat too quickly, or eat too much.

2. Laparoscopic Roux-en-Y Gastric Bypass



The gastric bypass is a combined restrictive and malabsorptive procedure. The first step creates a pouch, in the same position and of a similar size to that created with the gastric band.

The surgeon creates this pouch using metal staples that are similar to stitches. The stomach will be cut through so that the pouch is no longer attached to the rest of the stomach. The top section of the stomach (the pouch) will hold your food.

The surgeon will count down 75 - 150cm from the top of your small intestine and divide it. They will then bring up the end that is not attached to your remaining stomach and attach 1t to the pouch.

Food will now travel from the pouch straight into the small bowel. The divided end of the small bowel that is connected to the remainder of your stomach is then connected 75 - 150cm below where the other end is joined to the gastric pouch.

This allows the digestive juices (gastric and pancreatic juices) to enter the small intestine and digest the food.

As with the gastric band, the main effect is that the amount of food you are able to eat is reduced. Therefore you will fill up quickly and stay full for longer (after only a few mouthfuls of food)

Most people find that they do not get the same feeling of hunger that they did before the surgery.

The bypassed portion of stomach and intestine does not affect the absorption of most of the nutrients that you eat. However it may reduce the amount of protein, vitamins and minerals that you absorb.

The dietitian will discuss with you the diet required to meet your essential nutritional needs. To avoid developing a deficiency, we will also prescribe vitamin and mineral supplements that for you must take daily for life. We will also take regular blood tests to detect any nutritional deficiencies early and allow additional supplements to be started before you become symptomatic.

Expectations of weight loss

Most people lose weight quite quickly over the first year following bypass surgery. You will generally reach your target weight after 9 - 12 months after surgery.

On average, people lose 65 - 75% of their excess body weight. As with gastric band surgery, there is variation in the amount of weight that people lose following surgery

Adherence to dietary advice and exercise program will result in greater weight loss and better weight maintenance. The dietitian will discuss with you what changes you would need to make to your eating patterns to have the best weight loss results.

Advantages

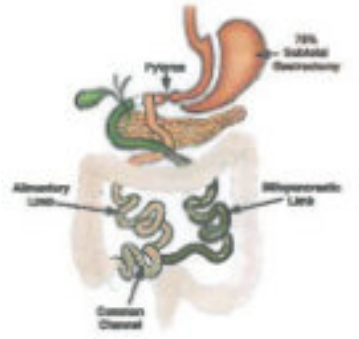
- The amount of food you can eat is restricted.
- You are likely to feel fuller quicker and stay fuller for longer.
- Weight loss starts from the time of surgery.
- Weight loss tends to be faster than following the gastric band or sleeve gastrectomy.
- You can lose on average 65 - 75% of your excess weight.
- The average weight loss after surgery tends to be higher than after a purely restrictive procedure such as the gastric band or sleeve gastrectomy.
- Weight loss is more predictable than adjustable gastric banding or sleeve gastrectomy.
- The gastric bypass procedure is particularly effective at reducing medication requirements and improving blood sugar control for patients affected by Type 2 Diabetes Mellitus*.

* A recent analysis showed resolution of diabetes in 84% of patients 2 years after surgery, and in 71% of patients less than 2 years after surgery (Buchwald et al 2007 American Journal of Medicine)

Disadvantages

- The surgery has more risks than the gastric band because it is a longer procedure and the stomach and intestines are cut.
- Obstruction can occur where the new joins are created at the pouch and further down the intestine. This may require a procedure (endoscopic or surgical) to widen the area and allow food to travel through at the correct rate.
- You will need to take daily multivitamin and mineral supplements for life.
- You will be at greater risk of suffering from nutritional deficiencies such as vitamin B12, iron and calcium and may require additional nutritional supplements if you are found to be deficient.
- Your hair may thin although this is temporary while losing weight at a rapid rate
- You may develop gallstones due to rapid weight loss. It may be necessary to undergo a further operation to remove your gallbladder.
- You may experience dumping syndrome, a condition experienced by 70-80% of people who have had a gastric bypass. In this procedure the valve which regulates the emptying of the stomach contents into the small bowel, called the “pylorus” valve, is bypassed. If you eat too much sugar, fat or alcohol, or large amounts of food, the stomach rapidly empties into the small intestine leading to symptoms which begin during or soon after eating (called ‘early’ dumping) and those that begin 1 - 3 hours afterwards (called ‘late’ dumping). Early dumping includes nausea, vomiting, bloating, diarrhea, and shortness of breath. Late dumping includes sweating, headache, weakness, dizziness, and even loss of consciousness. It is not considered a health risk, but can be very unpleasant. You can avoid dumping syndrome if you follow the recommended diet after surgery.
- Nausea and vomiting may occur, particularly in the first few days after surgery. Vomiting is also common if you eat too quickly or eat too much.
- An ulcer at the join between stomach and intestine may develop in 12 - 27% of cases.
- Some weight regain may occur over time after the first two years, but patients are as a group much better off from a weight and health standpoint even long after surgery.
- You will have better results and are less likely to experience complications if you follow the recommended dietary changes.

3. Duodenal Switch (DS)



The Duodenal Switch combines restrictive and malabsorptive elements to achieve and maintain the best reported long-term percentage of excess weight loss among modern weight-loss surgery procedures.

The restrictive component

The Duodenal Switch procedure includes a partial (sleeve) gastrectomy, which reduces the stomach, effectively restricting its capacity while maintaining its normal functionality.
With the duodenal switch, the valve situated at the outlet of stomach (called the "pylorus" valve) is kept intact. This eliminates the possibility of dumping syndrome, marginal ulcers, stomach closures and blockages, all of which can occur after the gastric bypass procedure where the pylorus valve is bypassed.

The malabsorptive component

The malabsorptive component of the duodenal switch procedure rearranges the small intestine to separate the flow of food from the flow of bile and pancreatic juices. This inhibits the absorption of calories and some nutrients. Further down the digestive tract, these divided intestinal paths are rejoined; food and digestive juices begin to mix, and limited fat absorption occurs in the common tract as the food continues on its path toward the large intestine.

Expectations of weight loss

Following this operation people tend to lose weight quickly and lose 75 - 90% of their excess body weight over 12 - 18months.

Advantages

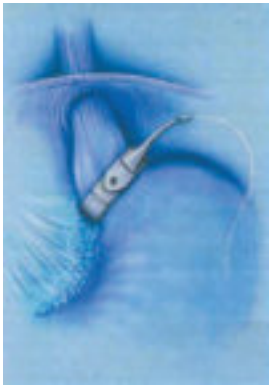
- Less food intolerance compared to other weight loss procedures. In fact you can eat normal variety of food items albeit in much smaller portions.
- Weight loss starts from the time of surgery.
- You can lose on average 75 - 90% of your excess weight.
- You may be able to maintain your weight loss better than with other surgeries.
- The operation has the highest rate of resolution of obesity related conditions e.g. diabetes is cured in 99%, sleep apnoea in 99%, hypertension (high blood pressure) in 84%, and high cholesterol in 99% of patients.
- No Dumping Syndrome. This occurs after the Gastric Bypass operation but does not occur with the Duodenal Switch operation because the pylorus valve, between the stomach and the small bowel is preserved and remains functional. For more information on dumping syndrome see information under Laparoscopic Roux-en-Y Gastric Bypass.

- No risk of marginal ulcer. This can occur after the Gastric Bypass operation in 12 - 27% patients. The ulcer occurs at the section of the small intestine joined to the stomach because the intestine is put in direct contact with the stomach acid. This risk is minimal in the Duodenal Switch operation because there is no join up between intestine and stomach and also because the pylorus valve is preserved.

Disadvantages

- The surgery itself has more risks than the gastric band, sleeve gastrectomy or gastric bypass because it is a longer and more complex procedure.
- Because there is less intestine available for absorption, you will be at a relatively greater risk of suffering from nutritional deficiencies than the bypass, particularly calcium, vitamin A and D and protein. Close monitoring for protein malnutrition, anaemia, and bone disease is required after this operation. The dietitian will support you in achieving the diet required to meet your essential nutritional needs and you must take multivitamin and mineral supplements (vitamin A, calcium, iron and folic acid, vitamin D, beta-carotene, and vitamin K) every day for the rest of your life. You are likely to have to pay the cost of these supplements yourself, as most of them are not funded.
- Your hair may thin although this is temporary while losing weight at a rapid rate.
- You may develop gallstones due to rapid weight loss. It may be necessary to undergo a further operation to remove your gallbladder, or it may be removed at the time of surgery
- Foul smelling flatulence and loose stools may be experienced especially if dietary changes have not been made to low fat choices. The dietitian will help you achieve a low fat diet to minimize these symptoms.
- Nausea and vomiting may occur, particularly in the first few days after surgery. Vomiting is also common if you eat too quickly or eat too much.

4. Laparoscopic Adjustable Gastric Banding (LAGB)



Gastric banding is a purely restrictive procedure in which a band is placed around the top part of the stomach. This creates a small pouch above the band, with the main part of the stomach below.

The band creates a narrowing between the top and bottom part of the stomach. The band is filled with fluid via a port (small chamber) placed under the skin.

This stops the food from passing quickly into the stomach, keeping food sitting in the pouch The food stimulates the nerves at the top of the stomach to give you a feeling of fullness You should fill up quickly, and stay full for longer, even after only a small amount of food (the amount eaten by a toddler).

The stomach and intestines are not cut, stapled or removed when placing the band. Therefore digestion and absorption are not affected.

If you need further operations in the future, the band can be removed and the original shape of the stomach will return to normal.

The band is not filled with fluid at the time of surgery. Your first band fill will usually be about 6 weeks after surgery. These procedures are performed in X-ray or in the outpatients department and take up to 30 minutes.

You may need your band tightened more than once, to create the correct amount of restriction from the band. Your dietitian or surgeon will discuss this with you, based on your food intake, eating skills and weight loss. It is advisable that you take multivitamins whilst your are losing weight.

Expected weight loss

You will tend to lose weight steadily over 2 years following surgery. On average, people lose about 40 - 50% of their excess body weight.

There is, however, a large variation in results and weight loss is not guaranteed. Adherence to dietary advice is necessary to achieve these results.

Advantages

- The amount of food you can eat is restricted.
- You may feel fuller quicker and stay fuller for longer.
- The band can be adjusted to increase or decrease the restriction via the access port under the skin on your stomach.
- You can lose on average 40 - 50% of your excess weight.
- The surgery itself has fewer immediate risks than the other weight loss operations, because it is a shorter procedure and the stomach and intestines are not cut, stapled or removed.
- The stomach and intestines remain intact so food is digested and absorbed as normal.
- The surgery can be reversed (although you will probably regain the weight)

Disadvantages

- Weight loss is slower than following the other weight loss operations.
- Weight loss may not start until many months after surgery, until the band is filled to the optimum level for your stomach.
- The surgery will not always create the feeling of fullness.
- The access port may twist so be inaccessible for band fills. You may require another operation to correct the problem.
- The port or band may leak and deflate, which may require another operation to correct the problem.
- The band may move or slip (2-13% of cases), you may need to have all the fluid removed from your band for a period of time, or need another operation to remove or replace it.
- The band may erode into the stomach wall and need another operation to remove or replace it (1 % of cases)
- The band or port may become infected and need to be removed.
- You may suffer from worsening gastro-oesopha geal reflux (heart burn), ulceration, gastritis, bloating, difficulty swallowing, dehydration and constipation.
- Nausea and vomiting may occur, particularly in the first few days after surgery. Vomiting is also common if you eat too quickly or eat too much.
- 34% of people fail to lose the expected amount of weight with the band.
- For successful weight loss, you will have to follow dietary changes and have self control. Should you require any other type of emergency or elective surgery in the future, the gastric band should not cause any problem. However, the surgeon performing the operation must be informed about your gastric banding prior to surgery.

This procedure is selectively offered to certain patients at Better Life Surgery as it is felt that the results are too unpredictable and inferior to gastric bypass, sleeve gastrectomy or duodenal switch.

Possible Complications of Obesity Surgery:

Obesity surgery may be associated with complications that are common to any abdominal gastrointestinal surgery including:

- **General anaesthesia:** Patients who are obese are at greater risk of surgical anaesthetic complications.

- **Pulmonary embolism:** This condition occurs when a blood clot in the leg (deep venous thrombosis) breaks off and travels to the lungs. Sometimes this can cause sudden death but most patients develop sudden shortness of breath. This occurs in about 1% of patients. To help prevent this, you may be put on blood thinning medication (heparin) and given compression stockings while in hospital. You will also be encouraged to get out of bed and walk as soon as possible after surgery.

- **Heart attack:** Obese patients are at increased risk of developing a heart attack due to the higher cardiovascular risk (such as high blood pressure, Type 2 diabetes, high cholesterol).

- **Infection:** The risk of infection is generally low. Lung infections are rare if you follow the postoperative respiratory physiotherapy guidelines. Abdominal and urinary infections are rare and can be treated with antibiotics.

- **Anastomotic/ Staple line leaks:** Leaks from the gastrointestinal tract can occur where the bowel and stomach are connected and sewed. If a complete seal does not form, bowel contents can leak into the abdomen causing a serious infection. This occurs in about 0.5 - 3% of cases of gastric bypass, sleeve gastrectomy and duodenal switch. It is extremely rare in gastric banding. If a leak is suspected, you may need X-ray testing or emergency surgery.

- **Bleeding:** Can occur in 3 - 5% of cases and is usually resolved by stopping the blood thinning medication (heparin) which prevents blood clotting and pulmonary embolism. Occasionally surgery may be needed to stop the bleeding.

- **Spleen injuries:** These are rare but have occurred during surgery. In some cases you may have to have your spleen removed.

- **Bowel obstruction:** Bowel obstructions can be caused by scar tissue in the abdomen, kinking of the bowel, or the development of an internal hernia. It can occur in up to 5% of cases and a further operation may be needed to correct it.

- **Incisional hernia:** This occurs more frequently in the open surgery technique and is rare when using the laparoscopic 'keyhole' technique. It usually requires an operation to repair the hernia.

- **Anastomotic stricture (narrowing at the new joins between stomach and Intestine):** Can occur in up to 5% of gastric bypass. This usually responds to balloon dilatations (endoscopic procedure)

- **Vitamin and mineral deficiencies**

- **Death:** There is about 0.5 to 1% risk of death associated with the surgery although this can vary in relation to the type of surgical procedure and your clinical conditions (comorbidities).

Making the right choice

Which operation is right for me?

There is no straightforward answer to this question. It is likely that you will have an idea of the procedure you would prefer when you first attend the clinic. This may be based on your own research or from talking to other people who have had surgery. It is our job to provide you with the information based on our clinical experience to help you decide. It will be a joint decision between you, the surgeon and the rest of the team.

Some important things to consider:

1. I smoke

You will be advised to quit smoking. We will not consider you for surgery if you are actively smoking because smoking is associated with higher risk of anastomotic leaks and ulceration after surgery. If you need support with this, we can refer you for smoking cessation service.

2. I drink alcohol

We recommend caution with alcohol consumption after surgery. The absorption of alcohol is unpredictable and one glass of wine may result in you becoming drunk. Alcohol should be avoided completely for the first year after surgery and as much as possible long-term as it is high in calories and may slow your weight loss. If you drink alcohol after surgery you are at higher risk of developing Wernicke-Korsakoff syndrome. This is a potentially life-threatening condition that results from severe deficiency of thiamine (vitamin 81) and can cause irreversible brain damage.

3. I comfort eat or binge eat

Surgery does not stop binge eating or emotional eating or change the triggers for these. While binge eating will not necessarily prevent you from having surgery, we need to think carefully about whether it would be better to get some additional help to address this before having surgery. We can help you access this support.

4. I am planning to become pregnant soon

We recommend that you do not fall pregnant while you are rapidly losing weight after surgery. During weight loss, your body may not be getting all the essential nutrients it needs for you and your baby to be healthy. We advise you wait 18 months to 2 years after surgery before falling pregnant. If you do fall pregnant, we advise you let us know so we can monitor you more closely. It is important to remember that you are likely to become more fertile when you lose weight and so precautions need to be taken, even if you have been told you cannot have children.

5. I've had previous abdominal surgery

Generally you will still be able to undergo surgery. If you have had many surgeries of your abdomen, you may need open rather than keyhole surgery. Mr. Atalla will discuss this with you.

6. Is the procedure reversible?

We do not consider any of the procedures reversible as reversing the procedure would result in weight regain. Reversal procedures also carry more risk than the initial procedure.

7. I am unable to attend regular appointments
You will need to attend regular hospital appointments after your surgery to ensure everything is going well and you are losing weight safely. You will need to see the dietitian pre surgery and every 3 months in the first 1 - 2 years. This is to make sure you have adequate nutrition. You may also need regular blood tests.

If you cannot attend these appointments you will not be considered for surgery at Better Life Surgery.

8. I snore
This will not stop you from having surgery, however it is important to know that snoring can be a sign of obstructive sleep apnoea. If you have sleep apnoea, we may need to delay your surgery until your sleep apnoea is managed so that surgery can be conducted safely.

9. Will my eating patterns and lifestyle have to change after surgery?
Yes. Many people believe that surgery for weight loss will force you to follow healthy eating patterns but this is not true. Surgery can help you lose weight but the amount you lose and how healthy your diet is depends on your hard work and determination.

Surgery restricts how much food you can take in at a time. This helps you to limit your food intake and therefore lose weight. Given that you cannot eat as large a quantity of food, it is extremely important that the food you do eat provides adequate amounts of essential nutrients such as protein, vitamins and minerals. It is also imperative that you take the recommended doses of vitamins and minerals every day for the rest of your life. It is possible to become protein-malnourished and deficient in nutrients such as calcium, iron, vitamin 812 as well as other vitamins and minerals if you do not follow the recommended diet and take the prescribed supplements. This can have serious and potentially irreversible effects on your health. The dietitian will educate you on the diet that is required to minimize these deficiencies. However, you may be required to take additional supplements if blood tests show that you have a deficiency. Remember you are likely to have to pay the cost of these supplements yourself as most of them are not funded.

It is important to realize that while the procedures restrict the amount you can eat, they do not physically stop you from eating your favorite foods. You are still ultimately responsible for the types of food you choose to eat. You will need to use willpower to stop eating energy dense foods such as crisps, chocolate, biscuits etc. Even small amounts of these foods can slow down your weight loss.

Most people find that once they have had surgery and are losing weight, it becomes easier to stick to a healthy diet and exercise.

It is quite common to eat to provide comfort or to help cope with stressful or distressing situations. Realistically we cannot change the fact that you are likely to experience stressful or difficult things at some point in your life but it is very important to find alternative ways of coping with these.

If you continue comfort eating, you may find you don't lose the amount of weight you want even following surgery. Food can no longer be your way of coping if you wish to lose weight and it is important to be aware that you will need to make many adjustments.

We recommend that people start making changes to their diet and exercise before surgery to maximize the safety and long term outcomes of surgery.

You need to gradually prepare yourself for the changes ahead otherwise it can be daunting to make all the changes following surgery. We will work with you to set goals and make changes prior to surgery.

It is essential that you increase your activity levels. This will help prevent you losing muscle tissue while you lose weight. It will also help you to lose more weight, and prevent weight regain. We generally recommend people begin by incorporating daily walks into their lifestyle, or use a pedometer and aim to build to 10,000 steps per day.

We recommend caution with alcohol consumption after bypass surgery. The absorption of alcohol is unpredictable and one glass of wine may result in you becoming drunk. Alcohol should be avoided completely for the fist year after surgery and as much as possible longterm as it is high in calories and may slow your weight loss.

Remember, surgery is a tool to assist weight loss: no matter what you think it is NOT the easy option.

10. Will I have loose, saggy skin after I lose weight?
Most people are left with some loose skin, especially around the abdomen, arms and thighs. You may feel you need surgery to remove some of this skin. Factors which cause saggy skin include massive weight loss in areas where there was a lot of fat (e.g. abdomen, inner thighs), smoking (destroys elastic fibers in skin) multiple pregnancies and advancing age. Going to the gym and exercising all muscle groups with resistance training may reduce saggy skin.

Mr. Atalla can offer Abdominoplasty (tummy tuck) once the weight loss is stabilised. He may also consider refering you to a plastic surgeon should you require any further reconstructive/ aesthetic surgery, such as arm or thigh reduction.

Preparing for surgery

How can I start preparing for surgery?

In order for surgery to work, there are a number of 'rules' you will need to follow in order to lose the most amount of weight and minimize complications. You can start preparing yourself for surgery by starting to practice the following:

- **Eating slowly–** to avoid overfilling your small pouch. Allow at least 30 minutes for every meal and learn to stop eating when you feel full. Overfilling can result in regurgitation (vomiting). You will need to be able to make time to have your meals without distractions or being in a rush.

- **Chewing well–** to avoid food pieces becoming lodged at the bottom of your pouch. This causes discomfort and can lead to regurgitation. Chewing well also helps you slow your meals down and if you savor every mouthful you will feel satisfied with less food.

- **Not drinking fluids with meals–** this can overfill your pouch and lead to regurgitation. Aim to stop drinking 30 minutes before you are going to eat, and then wait 1 hour after eating before you drink again.

- **Eating regularly–** this stops you getting too hungry and eating too fast. Eating regularly also results in more weight loss than if you ate irregularly, or grazed and snacked all day.

- **Eating small portions–** it takes a while for your brain to adjust to the small size of your pouch. Using a side plate, or toddler plates and cutlery helps you keep your portions under control.

- **Mentally preparing–** start to analyze your eating behavior and any triggers for comfort-eating or over-eating (for example particular situations, emotions, times etc). Start finding alternative ways of coping or other things that you can do at these times. It is better if you can address these issues before surgery.

Do I need to lose weight prior to surgery?

It is usually recomended to achieve some weight loss prior to surgery.
This makes surgery safer for you. Weight loss will be achieved using diet activity, and very low calorie diets (VLCD).

It is also important that you use the time before the operation to plan ahead. You may need help at home for the first week or two as you may feel tired as the effects of the operation take time to wear off.

You also need to give yourself time to prepare mentally for the changes that will occur in your lifestyle after surgery. It is important to think about coping strategies and you should begin to plan ways to change your behavior.

Appointments

Most of these consultations are held in the rooms either at Melbourne, Echuca or Shepparton.

First appointment

We will request fasting blood tests well before your second appointment so we have the results available.

Please fill in and return any questionnaires sent to you. Be honest about yourself.

- You will be booked to see your surgeon, Mr. Atalla who will answer any further questions you have, and if everything is in place, will put you on the waiting list for surgery. Once you have a provisional date for surgery you will be referred to the dietitian for a pre surgery appointment.
- Before your admission, you will be asked to attend a pre-operative assessment clinic. Any final checks to assess for fitness for surgery will be done here including blood tests, screening, and ECGs.

Psychology appointment

Some people in the bariatric clinic are referred to see a psychologist as part of the multidisciplinary assessment before having surgery. It is recognition of the fact that bariatric surgery is a major step and requires radical behavioral change.

Many people being seen in the bariatric service may benefit from some psychological help and support before or after surgery. Surgery has a drastic impact on the way you eat, your weight and your health and can also have an impact on your self-esteem and body image.

Many people are likely to experience psychological difficulties at some point in their lives and this should not necessarily prevent them from having surgery. As psychologists we are here to provide you with any help and support you may need to make the best decision for you at the current time.

It is therefore helpful for you to be as open as you can about any concerns you have or previous difficulties you have experienced.

Other specialist appointments to assess fitness for surgery

Some patients are at a higher risk of developing complications during or after surgery due to a pre-existing illness. You may be referred to the following:

- **Respiratory physicians–** sleep studies if you are at risk of stopping breathing when you are drowsy or respiratory function if you have breathing difficulty due to lung disease
- **ECHO, ECG or Stress Study–** if you are at risk of developing a heart failure, a heart attack or other heart disease.
- **Endoscopy–** if you have a history of acid reflux or upper gastrointestinal tract disease.
- **Anaesthetist–** you will need to come to an anaeshetic assessment clinic for review once you have been booked for surgery.
- **Stop Smoking Service–** you will be advised to stop smoking for at least 2 weeks prior to your surgery. Please see your GP if you need medication to help cease smoking.

Appointments with the dietitian

You will be working closely with the dietitians. You will be seen at least once pre-surgery to discuss your current eating habits and receive detailed information about before and after surgery diets you will be required to follow. After surgery the dietitian helps you progress to a healthy balanced diet to minimize the risk of nutritional deficiencies and promote weight loss.

Pre-operative liver shrinkage– Optifast diet

This needs to be followed strictly for 2 weeks prior to surgery. Many people needing obesity surgery have a large fatty liver, which can cause difficulty for keyhole surgery.

Therefore it is necessary to follow a diet that is low in dietary carbohydrate and fat. This encourages the body to use up glycogen stores (carbohydrate that is stored in the liver), thus helping to shrink the size of the liver.

It is essential that you follow this diet, otherwise your liver could bleed heavily during surgery or there could be injury to other organs. The surgeon may even stop your surgery.

The more weight you lose prior to surgery, the lower your risks related to having surgery.

When will I be put on the waiting list?

You will be put on the waiting list once you have completed all of your assessments listed above and you have been assessed in conjunction with Mr. Atalla, dietititan and anaesthetist to have lost enough weight and become fit enough to survive surgery.

Preparation for surgery

- You need to ensure you prepare for surgery by following the pre-operative liver shrinkage diet.
- Ensure that you have made arrangements for transport to and from hospital unless you are eligible for patient transport. You may want to make sure you have someone to help out at home for the first couple of weeks after surgery, especially if you have children.
- Look at your post-operative diet sheet and make some plans about what you need to buy prior to admission. You will need to buy or borrow a blender or liquidizer. Preparing some meals in advance and freezing them is a good way of making sure you can cope with the diet initially after surgery. Buy additional Optifast to use post operatively as it contains vitamins minerals and protein. Buy the vitamin and mineral supplement recommended for the first month after surgery.
- Start to think about your coping strategies. If you cope with stress or boredom by eating, you need to think about how you can divert your focus from food onto something else (exercise, reading, hobbies) or get help to deal with the emotions that are triggering your eating behaviors. If you have an appointment with the psychologist they will help you with this.
- You will be advised to stop taking aspirin or blood thinning medications 1 week prior to surgery.

Stop all herbal supplements including garlic, ginger and arnica at least one week prior to surgery. They can cause bleeding.

During and after surgery

Admission to hospital

- If you are diabetic, you may be admitted the day before surgery to stabilize your blood sugar levels while you are nil by mouth.
- You should bring with you toiletries, loose nightclothes/tracksuits, slippers, any medications you are currently taking, and books/magazines/money to pay for TV and telephone services
- If you use a CPAP or BiPAP machine for sleep apnoea at home it is essential that you bring this with you.
- You will be asked to be nil by mouth 6 hours prior to surgery. You may take essential medications (such as cardiac drugs) with sips of water.
- You will be seen Mr. Atalla and our anaesthetist before you go to theatre. They will answer any further questions and confirm that it is safe to proceed with your surgery.
- You will be accompanied by a nurse from the ward to theaters where you will have your anaesthetic.

What happens in hospital after surgery?

- You will be encouraged to get out of bed and start walking as soon as possible. This will aid your recovery.
- You will be provided with painkillers and medication to stop you feeling sick. Please talk to the nursing staff if you do not feel they are working.
- The average length of stay is:
- 1 - 3 days for a gastric bypass or sleeve gastrectomy
- 5 - 7 days for a duodenal switch
- You will be given a supply of medication to take home with you.
  Please wear your TED stocking for two weeks after surgery
- If you need a sick certificate for your employer please make sure you ask our practice manager prior to surgery so she can organise this beforehand.

Diet after surgery:

It is essential that you follow the dietary guidelines recommended after-surgery to make sure your staple lines heal, to avoid stretching your new smaller stomach and to get essential nutrients. You will start on a liquid diet, then move onto a puree diet before gradually introducing solid food. You will be focussing on nutrient dense meals, getting portion sizes correct, chewing food well and eating slowly - enjoy the taste! The time you spend on each stage of the diet depends on the type of surgery that you have had. After surgery you will start on Berroca multivitamin for 3 weeks. 3 weeks post-surgery you will commence on Centrum Advance 50+ x 2 tablets daily. It is important to remain on these for the rest of your life. You will be sent follow-up appointments to see our dietitian/Mr. Atalla team 1 - 3 weeks after surgery.

When can I start to be active after surgery?

You will be able to start getting up and walking the day of surgery. Most people are able to return to work a couple of weeks after surgery. We recommend no heavy lifting or strenuous activity for 6 weeks after the operation.

You will be able to start exercising at the gym or swimming about 6 weeks after the operation although gentle exercise such as walking can be done immediately.