



Laparoscopic Gastric Banding

Information for Patients

INTRODUCTION

The fact that you are reading this means that either you or someone you know is considering the life-altering decision to undergo weight loss surgery. This is an important decision, and should not be made without considering all the facts.

This booklet has been designed to help you understand the following:

- The health problems associated with obesity
- Advantages and disadvantages of weight loss surgery
- Descriptions of the surgical procedures
- Risks associated with weight loss surgery
- The journey through the clinic
- The next steps to take

Please bear in mind that the information provided here is not a substitute for the opinion and advice of a qualified doctor or surgeon. Your best source of information is an **experienced surgeon**.

THE TEAM

We are dedicated to providing multidisciplinary expert management of your weight problem. The team includes a specialist surgeon, a physician, a dietician, and others, dedicated to treatment of and research into obesity related health problems, and of course our friendly office staff.

We are located at the Mater Medical Centre in Crows Nest, Sydney.

Patients can also be seen at our Newtown rooms.

The surgery is performed at the Mater Hospital in Crows Nest.

Surgeons **Michael Crawford & James Gallagher**
Physician **Philip Mathen**
Dietician **Jill Mason**

AM I A CANDIDATE FOR WEIGHT LOSS SURGERY?

Obesity is becoming an increasingly prominent health problem in our society. Approximately 15% of men and women in Australia are obese, with 4-6% classified as morbidly obese. This number is increasing. Obesity is associated with a number of health problems and importantly is associated with a reduced life expectancy.

Body Mass Index (BMI) is a method for measuring obesity and relates to a person's height and weight. A BMI score is derived by dividing a person's weight (in kilograms) by their height (in metres) squared. $BMI = wt / (ht \times ht)$
For example, a person who is 183cm tall and weighs 95kg will have a BMI of 28.4
ie. 95 divided by (1.83×1.83) .

The severity of obesity is defined using the following table of BMI scores:

	BMI
Normal	20-25
Overweight	25-30
Obese	30-35
Severely obese	35-40
Morbidly obese	40-50
Super obese	50+

Associated health risks

There are a number of medical conditions that have a direct association with obesity. These include type 2 diabetes, hypertension, fatty liver disease, respiratory problems, female infertility, and psychological problems such as depression. Patients who are obese are more likely to suffer from coronary heart disease and stroke. **There is clear evidence that obesity is associated with reduced life expectancy. Those who are morbidly, or super obese face a risk of dying that is twice that of others of the same age.**

In addition to the diseases mentioned above, obesity has a number of immeasurable side effects. Morbidly obese people often have a low sense of self-esteem and it is common for them to suffer from depression and to withdraw from social interactions at many levels.

Dieting

Those people who are able to maintain a healthy diet will be able to lose weight and maintain a normal BMI in the long term. Unfortunately for the majority of people who have become obese, dieting will only produce transient, temporary weight loss.

Randomised controlled trials have shown that surgery results in greater weight loss than diets. This weight loss is maintained over a longer period when compared with even the best of diets.

Importantly, recent studies have shown that mortality (risk of dying) is significantly reduced in patients who undergo surgery for weight loss when compared with those who don't.

WHY SURGERY?

Weight loss surgery should be considered if you are:

- Unable to achieve a healthy body weight for a sustained period of time, even through medically supervised dieting and exercise.
- Have a Body Mass Index (BMI) of over 40.
- Have a BMI of over 35 and are experiencing negative health effects.
- Weigh more than 45 kg above your ideal body weight.
- Highly motivated and committed to long term lifestyle changes and follow up.

WHERE TO BEGIN?

This information booklet has been designed to give you a better understanding of the risks and benefits of weight loss surgery. In the end though, your best source of information is an **experienced laparoscopic surgeon** who knows how to handle your special needs before, during and after weight loss surgery.

Choosing Surgery

If your goals are to live better, healthier and longer, you may want to choose weight loss surgery to help you achieve your goals. **Weight loss surgery is major surgery.** That is why you should make the decision to have obesity surgery only after careful consideration and consultation with an **experienced surgeon** or a knowledgeable family doctor. Your surgeon will be able to answer your questions and explain the exact details of the procedure and the follow-up care required. You will also meet with a **dietician** to explain the dietary expectations after the band.

The Importance of Support

The changes in your diet and lifestyle after obesity surgery can last a lifetime. And you'll have a greater chance of long-term success if you surround yourself with people who understand and support your goals.

There are things you can do, such as :

- Help your friends and family members understand why you've chosen a surgical weight loss solution.

Discuss your reasons for having surgery; you will be counting on them to help you during and after weight loss surgery.

WEIGHT LOSS SURGERY

Surgery for obesity has been carried out for over 50 years and numerous advances have been made during this time. In the past, surgery for weight loss was associated with high risks of side effects and complications. Surgery is now considered a safe and reliable means of achieving and maintaining weight loss.

Surgical treatment of obesity is a major undertaking. It necessitates undergoing major surgery and requires a life long commitment to compliance with post-operative medical care. It is **not a cosmetic procedure** for those who are

unhappy with their body image, but rather a medically proven treatment for an established health problem. Generally, gastric band surgery has proven benefits for those with a BMI >40, or those with a BMI over 35 with established obesity related health conditions. Patients should have seriously attempted to achieve and maintain weight loss before considering surgery.

Types of surgical procedures

Bariatric surgeons first began to recognise the potential for surgical weight loss while performing operations that required the removal of large segments of a patient's stomach and intestine. After the surgery, doctors noticed that in many cases patients were unable to maintain their pre-surgical weight. With further study, bariatric surgeons were able to recommend similar modifications that could be safely used to produce weight loss in morbidly obese patients. Over the last decade these procedures have been continually refined in order to improve results and minimize risks. Today's bariatric surgeons have access to a substantial body of clinical data to help them determine which weight loss surgery should be used and why. Today, there are two basic approaches that weight loss surgery takes to achieve change:

1. **Restrictive procedures** that decrease food intake. **This includes gastric banding.**
2. **Malabsorptive procedures** that alter digestion, thus causing the food to be poorly digested and incompletely absorbed so that it is eliminated in the stool. This can also incorporate an element of restriction. Gastric bypass is an example of this type of procedure.

Gastric Banding: Not only limits how much can be eaten at one time, but also decreases hunger between meals by sending signals to the brain that tell it you are satisfied.

WHAT IS GASTRIC BANDING?

The Swedish Adjustable Gastric Band (SAGB) is a soft band that is surgically fitted around the uppermost part of your stomach. This is performed using laparoscopic (keyhole) surgery, which involves several small holes in the abdomen, rather than a single large incision. The SAGB causes the section of the stomach sitting above the band to hold a small amount of food. As this section of the stomach fills and stretches, the body sends signals to the brain that the stomach is full. You feel satisfied more quickly and eat less.



The inner diameter of the band can be adjusted by injecting or removing fluid via a port placed under the skin. This allows your surgeon to regulate your weight loss according to your individual needs at any time after your operation.

With the SAGB procedure, your anatomy will not be altered. Nothing is cut, stapled or removed. Therefore there is a relatively rapid recovery period, with patients often returning home after 1-2 days in hospital. There is also a low risk of complications, and the SAGB procedure is generally reversible in the event that the band needs to be removed. Numerous studies show that 50-75% excess body weight is lost after 2 years, and patients report extremely high satisfaction scores.

The SAGB operation is a safe procedure when compared to other operations for obesity. All surgical procedures, however, carry some degree of risk. Every patient has a different 'risk profile'. The level of risk will depend of various factors including your age, other health problems, and any previous operations you may have had.

Complications may occur during the surgery. It may be necessary to convert your operation from laparoscopic to open surgery. You would not be aware of this until after you wake from surgery.

Infections can occur after the operation. These can affect the device itself, the reservoir, the wounds or the abdominal cavity. Infection may be treatable with antibiotics or may require further surgery or removal of the SAGB. Further surgery may be required if the SAGB shifts its position. This can occur even years after surgery and is one of the many reasons for regular follow up checks. Further surgery may also be required if the device erodes the stomach wall.



On the left the balloon is nearly empty and a 20cent piece can easily pass through. On the right the balloon has been partly filled, and now a 10cent coin would have trouble getting through.

WHAT CAN I EAT AFTER SURGERY?

Although surgery will help you to induce sustainable weight loss, it is not a self-acting slimming device. Your postoperative dietary and behavioural compliance is essential for successful weight loss.

Each patient will be given specific dietary advice based on their personal requirements, but the following are very brief **recommended guidelines** following surgery.

Week 1 - 4: Phasing in Diet Plan

Day of and Day 1 after surgery	Clear fluids
Day 2 to Day 6	Liquid nourishment
Day 7 to Day 13	Pureed food
Day 14 to Day 27	Soft, low-fibre food
Week 5 +	Post phasing-in diet plan

For more dietary information, please talk to your dietician, who will provide you with a more comprehensive dietary plan.

POSSIBLE COMPLICATIONS

INFECTION AND MIGRATION

An infection may develop either in the port area or in the abdomen, and in some instances this may cause the band to migrate into the stomach. In such a case, re-operation normally is necessary. Most of the complications linked to migrations have occurred as a result of too much fluid being injected into the band.

LEAKAGE

Leakage from the SAGB or from the connecting tube between the balloon and the port may require re-operation. The balloon is made of fragile material, and leakage can occur either shortly after surgery or many years later. In the event of leakage, the SAGB can normally be easily replaced with a new one. Nowadays this is a rare complication, but you must be aware that there is a possible risk that in the long term the band may need to be replaced with a new one.

SLIPPAGE OF THE BAND AND POUCH DILATATION

The band may slip, and the pouch (the part of the stomach above the band) may become too enlarged, and a re-operation may be necessary.

OTHER COMPLICATIONS

Other complications have occurred. You should ask your doctor for more detailed information.

There is no guarantee that the SAGB will work without fault for the rest of your life; however, the SAGB has been in clinical use since 1987, which has led to a method where failure is uncommon.

The risk of re-operation will always exist, even if none of the above-mentioned complications occur. You must understand that the possibility of re-operation is an integral part of the overall management of morbid obesity. Re-operations are considered a technical measure that is sometimes necessary.

The overall rate of re-operation following the placement of the SAGB is low, and the possible necessity to re-operate must not be considered as a failure of this method. Problems can usually be corrected and patients are generally rapidly back on track after such treatment.

As with any surgical procedure using general anaesthesia, there is, of course, a small risk of serious complications with even the possibility of death. However, since the SAGB operation does not involve any opening or cutting of any part of the stomach or intestines, the risk related to the surgical procedure is smaller than for most other surgical operations. Please ask your doctor for more detailed information.

General Advice and Possible Minor Side-effects

VOMITING

Patients may vomit or feel pain after food intake. This can be caused either by a poor eating behaviour, or by the narrowing of the SAGB following the injection of fluid into the balloon. By eating slowly and calmly, you will learn to listen to the signals from your stomach. Regular vomiting is definitely a warning

sign. In such cases, the amount of liquid in your SAGB may need to be readjusted.

VITAMINS

During the phase of rapid weight reduction, vitamin supplements are advisable. A liquid vitamin mixture containing multivitamins, in particular the vitamin B complex, is recommended for at least the first 6 months following surgery.

PREGNANCY

The period between surgery and weight stabilisation is considered to be a period of starvation. It is not advisable to become pregnant during starvation, despite the fact that the foetus has priority over the mother with regard to food. Should you nevertheless get pregnant, it is advisable to remove all the fluid from the balloon. You should wait until your weight has stabilised before becoming pregnant.

MEDICATION

Tablets must be broken down into small pieces or crushed before they are taken. It is common that medication for conditions such as hypertension, diabetes or asthma may need to be altered (reduced) after this operation. Patients should consult their doctors about this matter.

DOCTOR APPOINTMENTS

After surgery you must undergo regular check-ups as an outpatient. Initially, these check-ups will be carried out monthly, but soon visits will become less frequent. The SAGB will gradually be filled via the injection port during the first 18 months following surgery. During this period, your weight loss and level of well-being will be monitored. Once your weight has stabilised, check-ups will be necessary only when problems occur or on an annual basis.

PHYSICAL ACTIVITY

It will be important to alter not only your eating habits, but also your level of physical activity. Patients are generally recommended to start exercising slowly. As weight loss is achieved, physical activities will gradually become easier.

TAKE THIS INFORMATION BOOKLET WITH YOU TO TALK TO YOUR LOCAL DOCTOR ABOUT LAPAROSCOPIC GASTRIC BANDING

It can be very helpful for you to discuss the procedure with your General Physician. Take the information with you so that your GP can help explain parts to you or to jog your memory.

LONG TERM FOLLOW-UP AND LIFESTYLE

In order to get the best results from your surgery, it is important that you are committed to **long term changes**. Regular consultations may be necessary to review your progress, monitor your weight and health, advise you on diet and exercise and look for any long term problems.

Your commitment to dietary and lifestyle changes is essential to ensure the success of your surgery.

In the long term you should eat **small healthy meals** and drink only liquids containing little or no calories such as water, tea, coffee and diet soft drinks. You should take your liquids separately from solids, so that the band can work most effectively.

Regular exercise should be a part of your weight loss program and you should aim to exercise for at least 20 to 30 minutes every day.

THE NEXT STEPS

Questions for My Surgeon

Here are some of the questions you should ask your surgeon:

- Can this surgery be performed using minimally invasive techniques?
- Can I be considered a candidate for surgery?
- Which weight loss procedure is best for me? Why? What are the risks involved?
- What is the length of my anticipated hospital stay?
- How will my eating habits change?
- Do you have information about obesity surgery costs and payment options?
- What is the typical weight loss and improvement of health conditions?

REQUENTLY ASKED QUESTIONS

Won't I feel hungry all the time if I am eating less? No, the Gastric Band takes away the strong hunger urges between meals. If you are feeling hungry then it is usually a sign that the band needs tightening and you should make an appointment for an adjustment.

Will I need to be on a special calorie controlled diet? No, the band works by restricting how much you eat rather than how many calories you take. Obviously for the best results you should try to eat as healthily as possible, and your dietician will be able to advise you more on this.

How long will I need off work? This varies for different people. The in hospital recovery is quick with most people going home a day or two after surgery. An average time off work would be 2 weeks.

Will the procedure be able to be reversed if I am unhappy with it? Yes, it can be. However, this is rarely done because satisfaction levels are very high.

How will I be able to go out for a meal if I am restricted in intake? This does worry some people, but we will give you advice about ways of dealing with this. You can still enjoy a meal with friends or family even if you are eating less.

Are there any types of food I won't be able to eat? Yes, most people have difficulty with un-minced red meat, chicken breast and white bread after the surgery (they find it catches). However, the vast majority of foods will still be edible.

CONTACT US

This information booklet is intended as a guide only. Please bear in mind that the information provided here is not a substitute for the opinion and advice of your surgeon. Your best source of information is an **experienced surgeon** who specialises in the management or control of obesity.

You will need a referral from your local doctor.

Please call **(02) 9565 4854** for an appointment with **Dr Crawford**.

Patients can be seen at:

The Mater Medical Centre
200 Pacific Highway
Crows Nest 2065

Or

Suite 314, RPA Medical Centre
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