

# **PATIENT INFORMATION PACK**

I hope this information will be of use to you. Bariatric surgery involves taking on a small, calculated risk to unlock what are for the majority of patients, life changing results. My goal, in conjunction with a multidisciplinary team that includes dietitians, psychologists, anaesthetists and nurses, is to minimise that risk.

For most people, it isn't possible to sustain significant weight loss with diet and exercise alone. However, it is possible to maintain your weight. Once I have brought your weight down with the surgery, together with the dietitians and psychologists, we will give you the skills and the confidence to keep it there.

Everyone's weight loss journey is unique – I look forward to being a part of yours.

Kind regards,

Dr Benjamin Wheeler (BHB, MBChB, FRACS) Bariatric Surgeon Auckland Bariatric Surgery



# THE WEIGHT LOSS SURGERY ROAD MAP - PREOPERATIVE

2 - 4 weeks recommended time off work/education

1 <sup>ST</sup> MEDICAL CONSULT WITH DR WHEELER:
☐ Please return the Patient Registration Form at least 24 hours prior to your appointment
No referral is required for this appointment.
PREOPERATIVE EDUCATION (ARRANGED BY AUCKLAND BARIATRIC SURGERY)
☐ Dietitian review
☐ Psychologist review
2 <sup>ND</sup> MEDICAL CONSULT WITH DR BEN WHEELER OR ANNA MCPHAIL (BARIATRIC NURSE SPECIALIST)
☐ GP referral required
☐ Blood tests
PREOPERATIVE DIETITIAN-LED VLCD DIET
2 – 4 weeks prior to surgery date
DAY OF SURGERY
1 - 2 night stay



# THE WEIGHT LOSS SURGERY ROAD MAP - POSTOPERATIVE

# **POSTOPERATIVE FOLLOW-UP:**

Week 1: Surgeon/nurse review

Week 2: Dietitian review

Week 4: Surgeon review

Week 6: Dietitian review

2 months: Psychologist review

3 months: Surgeon & dietitian review

6/12/18 month: Nurse review with PT/exercise review

24 months: Surgeon/nurse, psychologist & dietitian review

Annual dietitian review to 3 years post surgery

Annual surgeon/nurse review to 5 years post-surgery

Access to Auckland Bariatric Surgery in house personal trainer and health coach



#### INTRODUCTION

Weight gain over a lifetime is a complex issue that is poorly understood by medical professionals. There are a variety of different mechanisms by which weight can increase, including your genes, gut bacteria, psychosocial environment, medication side-effects, pregnancies and previous attempts at dieting, amongst other things. These different factors combine to create your "setpoint", which is where your body will defend its weight.

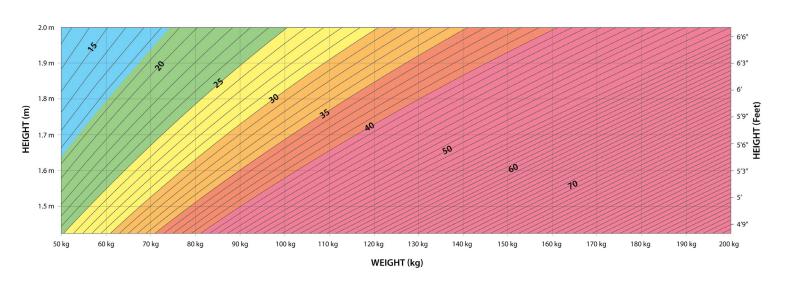
Historically, famine would occur on a regular basis; reducing your weight through diet and exercise triggers the ancient famine genes built into all of us. Your energy levels go down and your hunger goes up. This is designed to encourage you to preserve your strength for only going and finding food. Regaining weight after a diet-based weight loss attempt is very common; afterwards, your setpoint goes up and you usually end up with more weight than when you started (this is your body "helping" you survive the next "famine").

Most people blame themselves for not being able to lose and maintain weight loss. This is not helped by commercial advertisements and celebrities claiming that this is readily achievable. For the vast majority of people, fighting your physiology and genetics is no different to fighting gravity: temporary, inevitable and should not be associated with guilt. Surgery provides an alternative to the destructive cycle of weight loss and regain, by changing the setpoint at which your weight is maintained. It isn't the "easy" way out; attention still needs to be paid to weight maintenance, but it is a lot more satisfying to be doing this at a manageable size.

### **CRITERIA FOR SURGERY**

**BMI>35**: Weight alone is sufficient to qualify, due to the higher rate of having or developing metabolic consequences over time

BMI 30-35: in combination with a weight related disease





#### **BENEFITS OF SURGERY**

Bariatric surgery is unique among weight loss solutions in that it directly targets the complex underlying neurohormonal metabolic processes that cause weight gain. As a result, not only does weight drop, but addressing the root cause means a wide variety of conditions will either be improved or cured. Most notable are Type 2 diabetes and hypertension. Improvement or resolution in these is seen immediately after surgery, usually while still in hospital, *before any weight has been lost*. This is distinct from all other weight loss methods where weight must be lost in order to see any health benefits.

#### **EXPECTED COURSE AFTER SURGERY**

All operations involve a 1-2 night stay in hospital. Pain is **not** a major feature of recovery, but it is common to feel tired after surgery which can last for a few weeks. 2-4 weeks of time off from work is recommended.

Regular, life-long micronutrient supplementation is critical after the surgery, as is blood testing to monitor the adequacy of the supplements. Following the recovery period your eating will usually settle into a pattern of having three entrée sized meals a day, with reduced or absent hunger in between.

Weight loss is usually measured as "excess weight loss". This is how much weight is required to be lost to bring your BMI down to 25. The actual amount of weight lost varies depending on how much you weigh to begin with, but averages around 30-50 kg.

# **POTENTIAL COMPLICATIONS**

As with any surgical procedure there is a risk of bleeding during the operation and in the first 24 hours postoperatively. There is also a risk of the bowel joins (or the staple line of the sleeve) leaking which typically occurs between the  $4^{th}$  and  $10^{th}$  day after surgery.

The short term complications are similar for all bariatric procedures – most patients will vomit once or twice in the first few weeks after the surgery, usually due to eating too quickly or trying something they aren't ready for yet. There is also a small rate of stricturing, where the bowel join or sleeve heals too narrow. Treatment is dilation, which is done as a day procedure using a gastroscope.

All bariatric operations have a 20-30% risk of causing gallstone formation which can cause pain. A medication called Urosan, or ursodeoxycholic acid, can be given to prevent this.

Long term, most patients experience "dumping" if they have enough sugar or fat in one go. This manifests as a combination of tiredness, abdominal cramping, nausea and diarrhoea. This is more common after the gastric bypasses but can occur with the sleeve gastrectomy as well.

As for any surgical intervention there is often an increased need for medical attention in the short term after an operation. Following bariatric procedures 20-30% of patients will experience an issue that will be brought to the attention of medical staff; this encompasses everything from constipation after the surgery to developing a stricture. 1-2% of patients will have a serious complication; something that requires further surgery to fix such as a bowel blockage or bleeding. Depending on



the nature of the problem, this can result in a prolonged recovery. Death is very rare; less than 1 in 1000 people.

Insufficient weight loss is rare (although more common after revisional surgery). Weight regain over time is possible; the role of surgery is to bring your setpoint down, the role of the dietitians and psychologists is to help you keep it there.



# **CHARACTERISTICS OF THE OPERATIONS**

	ONE ANASTOMOSIS GASTRIC BYPASS	ROUX-EN-Y GASTRIC BYPASS	SLEEVE GASTRECTOMY
AVERAGE	<b>70-80%</b> OF EXCESS	<b>70-80%</b> OF EXCESS	<b>60-70%</b> OF EXCESS
WT LOSS	WEIGHT	WEIGHT	WEIGHT
NIGHTS IN HOSPITAL	1-2	2	1-2
RE- OPERATION RATE	1-2%	2-3%	1%
LONG TERM ISSUE	BILE REFLUX ~2%	ABDOMINAL PAIN ~2%	ACID REFLUX ~2%

Primary surgery (that is, an operation for a patient who has not had bariatric surgery before) can usually be any of these three choices.

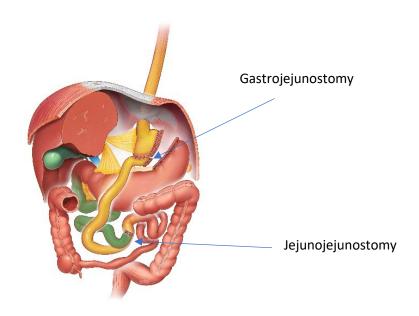
Revisional surgery, where a patient has had an operation before, is almost always best performed as a conversion to a Roux-en-Y gastric bypass.

Further specific details of the operations are provided on the following pages.



## **ROUX-EN-Y GASTRIC BYPASS**

This is the gold standard bariatric operation. It is performed as a keyhole operation and involves making a small pouch out of the stomach and then creating a Y shaped rearrangement of the small bowel; there are two joins, one of the stomach to the small bowel (the gastrojejunostomy, or GJ) and small bowel to small bowel (the jejunojejunostomy, or JJ).



The most significant downside of the Roux-en-Y bypass is abdominal pain. This can come from a variety of sources. Pain can also arise from the bowel twisting on itself (internal hernias and intussusceptions) as well as a risk of developing ulcers. This pain is often severe but short lasting and investigating it to find the source can be tricky; if the investigation (e.g. CT scan) is not performed at the time of the pain there is usually no evidence of what caused the pain. Ultimately further surgery can be required to try to resolve this.

The advantage of the Roux bypass and the reason to tolerate this risk of chronic pain, is that it is an effective anti-reflux surgery. If you either have severe pre-existing reflux or develop reflux after either the sleeve gastrectomy or one anastomosis bypass, then a Roux bypass is very capable of resolving this.



# ONE ANASTOMOSIS GASTRIC BYPASS (OAGB)

Originally called the "mini" gastric bypass, the "mini" is short for minimally invasive, which has become a redundancy as all weight loss operations are now minimally invasive. The stomach is reduced to a pouch; the small bowel is only joined onto this pouch in the one place, compared to the Roux-en-Y gastric bypass where the small bowel is divided and joined twice. Having only one join means a lower risk of the short term complications of bleeding and leaking.

The way the bowel is joined up also significantly reduces the risk of developing internal hernias - it is harder for the bowel to twist on itself. The drawback to this bowel arrangement is a small number of patients will have bile reflux not just into the stomach pouch but up into the oesophagus where it can cause heartburn. This can be controlled with medication but in a minority of patients this can be serious enough to require a second operation to convert this bypass into a Roux-en-Y bypass.

Long term, the OAGB causes similar weight loss to the Roux-en-Y gastric bypass and has a similar effect on resolving weight related health effects like Type 2 diabetes, high blood pressure and sleep apnoea.

## **SLEEVE GASTRECTOMY**

This is the most common operation performed in Australia and New Zealand. It is the most anatomically simple of the bariatric operations as it involves reduction in the size of the stomach, taking it from being an expansile bag, to a long tube or sleeve, hence the name. Although the continuity of the bowel is normal, this is actually the most invasive of the three weight loss operations I perform because most of the stomach is removed. This means the sleeve is irreversible.

Postoperative recovery is similar to the gastric bypasses with usually 2 nights in hospital. The sleeve has the lowest rate of early complications, particularly the lowest rate of leaking; there is a long staple line along the stomach but no dividing or joining of the bowel takes place. There is also a much lower rate of stricturing with a sleeve. Dumping can still occur but is less common than with a bypass.

Long term, weight loss is less than the bypasses at 60-70% of excess weight and a slightly lower rate of improvement/resolution of Type 2 diabetes. A small portion of patients (~5%) will develop severe reflux as the long gastric tube is a high pressure system which can force gastric acid back into the oesophagus. It is unpredictable who will experience this; sometimes it can be managed with medication but can require conversion to a Roux-en-Y gastric bypass to resolve it.

I would particularly recommend this operation for anyone who needs ongoing surveillance or investigation of their bowel, such as patients with a family history of bowel disorders.

# **ESTIMATE OF COSTS**



### **Preoperative Costs:**

Initial Surgeon Consultation: \$275

Preoperative Assessment: \$950

- Initial Dietitian review

Psychologist review

- 2<sup>nd</sup> Surgeon consultation

- 2<sup>nd</sup> Dietitian review

Additional Surgeon Consultation (if required): \$200

Pre surgery Very Low Calorie Diet (VLCD): \$200-\$500 dependent on time frame required.

## **Operation & Aftercare Package:**

Mini (One Anastomosis) Gastric Bypass: \$22,300

Sleeve Gastrectomy: \$22,800

Roux-en-Y Gastric Bypass: \$23,850

- Inclusive of 1 night Hospital stay (\$600-\$800 additional fee per extra night)
   /Anaesthetist fee
- Inclusive of postoperative follow-up package:
  - 5 year Surgeon/nurse follow-up (10 appointments)
  - 3 year dietitian support (7 appointments)
  - 2 year psychologist support (5 appointments)

### **Revisional Bariatric Surgery**

- Additional fees apply
- If you have previously had weight loss surgery, please email reception@bariatricsurgery.co.nz for a tailored quote

Price estimates are for uncomplicated surgery. Special circumstances and additional procedures may result in additional charges. These prices are valid for 1 month from the date of receipt and are subject to change.