

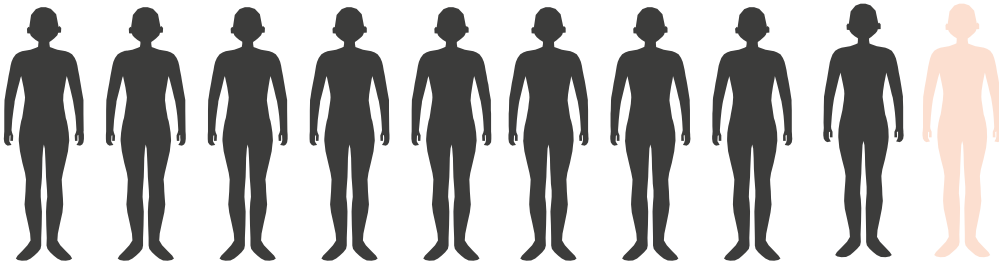
Department of  
General Surgery

# Metabolic and Bariatric Surgery



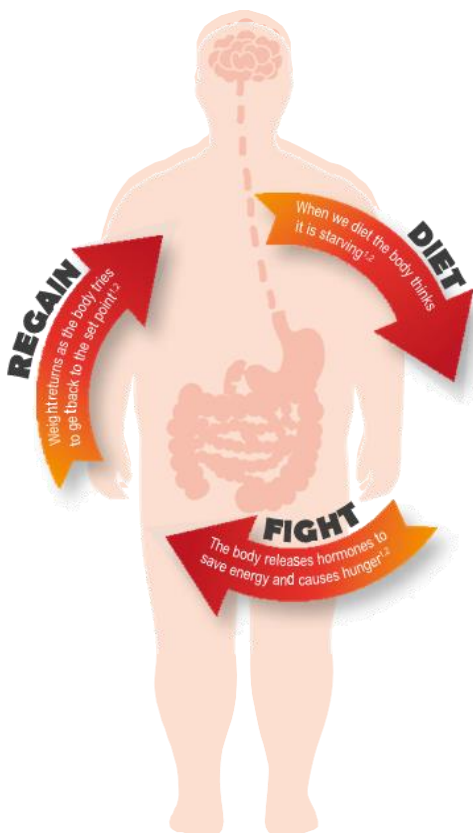
# What is Set Point Theory?

**MAJORITY** of people who try to lose weight regain it within 2 to 5 years



Researchers have discovered that persons with obesity are genetically inclined to put on weight.

The "set point" theory describes our body's strong defence system to maintain the body weight that it is genetically programmed to be at, even if this puts the person in the overweight or obesity weight range.

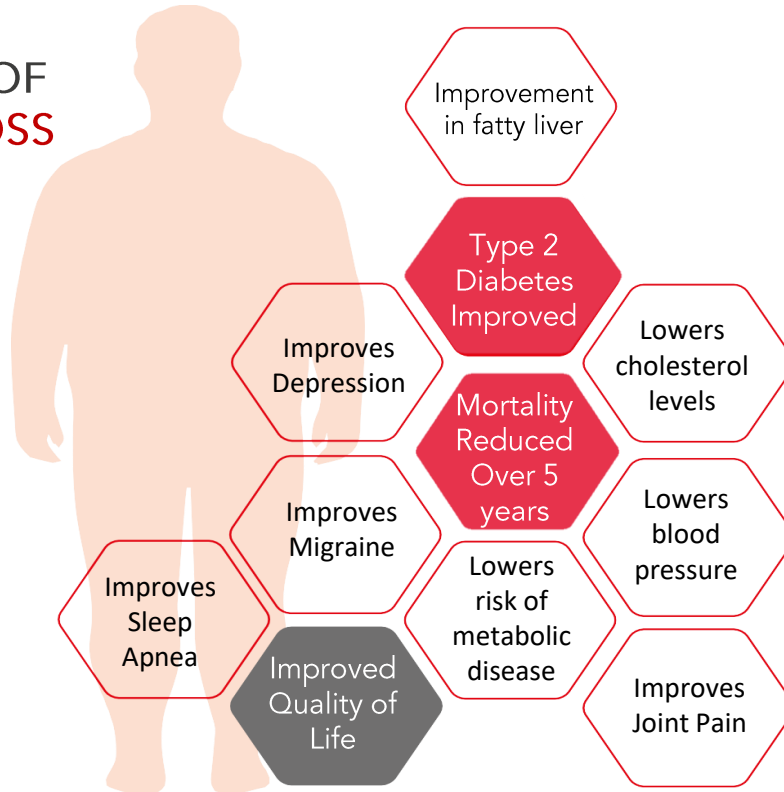


## WHY DO I REGAIN WEIGHT?

# Benefits of Losing Excess Weight

Carrying excess weight is challenging every day – physically, emotionally and financially. Losing excess weight can help you feel better, more confident and revitalized. It also helps protect you against other medical conditions.

## BENEFITS OF WEIGHT LOSS



## Metabolic & Obesity Related Health Complications



Type 2 Diabetes



Cardiovascular Disease



Arthritis



Sleep Apnea



Subfertility

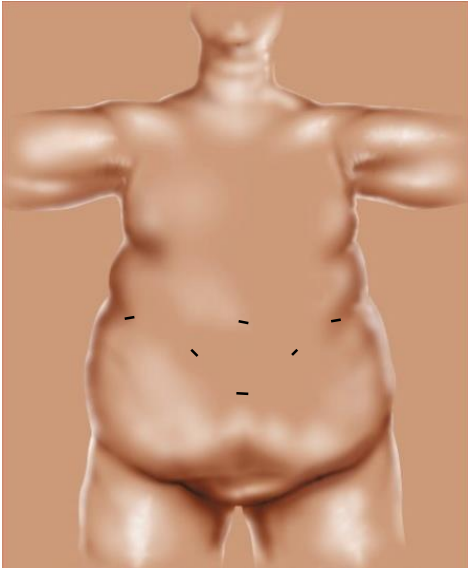


Fatty Liver



Cancer

# Common Types of Bariatric Surgery



Keyhole surgery (also known as laparoscopic surgery) is the main method used for most Bariatric surgeries. Small entry points are created at different parts of the abdomen to carry out the procedure. Keyhole surgeries are associated with faster recovery time, as compared to traditional open surgery methods.

## 1. Common Restrictive Surgeries



### Sleeve Gastrectomy (LSG)

The stomach is stapled to form a thin sleeve and the rest of the stomach is removed. This reduces the size of the stomach.

## 2. Common Combination Surgeries

### Gastric Bypass

A small pouch is created from the stomach and is connected to the small intestine, bypassing part of the system. This is also known as Roux-en-Y Gastric Bypass (RYGB).



# 10 Frequently Asked Questions for Bariatric Surgery

## 1. How much weight will I lose?

Patients will lose most of their weight within the first 2 years after bariatric surgery. On average, patients will lose about 50 to 70% of their excess weight.

## 2. I will not be able to enjoy my favourite food after surgery. Is this true?

Most of our favourite food are rich in calories and high in sugar. Generally, it is true that you will not be able to consume these foods in the same quantity and frequency after surgery.

As your stomach size will be greatly reduced after surgery, this means that you may not be able to tolerate the same volume of food as before. After RYGB procedure, your intestine may not be able to tolerate food that is high in starch or sugar content.

After bariatric surgery, you will need to make permanent changes to the amount and content of food that you normally eat. Your diet after surgery will have a larger emphasis on protein and fibre, and less on carbohydrate.

## 3. Will I feel hungry all the time since I am eating so little after the surgery?

Both sleeve gastrectomy (LSG) and Roux-en-Y Gastric Bypass (RYGB) are considered metabolic weight loss surgeries. In addition to reducing the size of your stomach, these two procedures also reduce the amount of the hunger hormone (Ghrelin) produced. As a result, patients report feeling **less** hungry and **more** full easily despite taking smaller portions of food.

# 10 Frequently Asked Questions for Bariatric Surgery

## 4. Does this mean that I will not put on weight again?

Some patients who undergo surgery can regain weight later, but seldom to the same weight as before surgery. This may occur 3 to 5 years later. Some of the risk factors for weight regain include frequent snacking, taking a calorie-rich diet and lack of exercise.

Bariatric surgery is an option to help you lose weight and maintain weight loss. To make the most out of your surgery and reduce the risk of regaining weight later on, you will need to make lifestyle adjustments such as:

- Diet changes
- Exercise
- Behavioural changes
- Psychological changes

## 5. Why do I need to take multivitamins?

After bariatric surgery, you may not be able to achieve the recommended daily intake of vitamins, minerals and proteins from diet alone. This is due to your reduced portion of food intake and the bypass of part of the small intestine in RYGB.

Your doctor will advise you to take A-to-Z multivitamin daily. In addition, most patients will require additional vitamin B12, vitamin D and iron supplements. These supplements will need to be taken life-long.

# 10 Frequently Asked Questions for Bariatric Surgery

## 6. Can I get pregnant after surgery?

Generally, one can resume family planning about 12 to 24 months after surgery. By this time, your weight loss would have stabilised and you should have gotten accustomed to your new eating habits.

Your doctor should ensure that your levels of vitamins and minerals are adequately replaced, and any other chronic medical conditions are well managed before you attempt pregnancy.

Please inform your doctor if you are planning to start a family.

## 7. When can I start doing exercises?

As almost all bariatric surgeries are performed via “key-hole” technique, you will be able to resume low-intensity exercise (brisk walk, swimming, biking) about 3 to 4 weeks after surgery.

Avoid heavy-lifting and vigorous exercise until 8 to 12 weeks after surgery.

If unsure, always seek medical advice before starting any physical activity.

## 8. Do I still need to take my diabetes and high blood pressure medications after surgery?

If you have diabetes and high blood pressure, it is very likely that these conditions will be more manageable after surgery.

Most patients will have their medications reduced, while some can stop their medications completely. However, this is ultimately dependent on the person’s medical history and management of the chronic diseases prior to surgery.

Do not stop your medications on your own.

Always speak to your doctor for medical advice.

# 10 Frequently Asked Questions for Bariatric Surgery

## 9. Why do I need to return for doctor's consultation after surgery?

After your surgery, you will be reviewed by the surgeon, endocrinologist, dietitian and psychologist. They will assess and advise you on:

- Any post-surgery complication(s)
- Progressing from liquid to solid diet
- Monitoring of your nutrition
- Other chronic diseases

The psychologist will also review and assist you in behavioural changes as you start on this journey towards a better health.

## 10. Why do I need to see other specialists before going for surgery?

Obesity is best managed in as a multi-disciplinary healthcare team. The surgeon may recommend that you consult with endocrinologists, psychologists, dietitians and physiotherapists.

This is to ensure that bariatric surgery is suitable for you and that you achieve the most desired outcomes after surgery. In addition, they will also help you prepare for long-term changes in your behaviour, diet, exercise and lifestyle.



# The Team

It is important to remember that there are possible complications related in any kind of surgery. Thus, surgical treatment of morbid obesity should not be considered until you and your doctor have evaluated all other options.

Success of surgical weight loss treatment must begin with realistic goals and progress through the best possible use of well-designed and tested operations.

The goal is to live better, healthier and longer. That is why you should make the decision to have this procedure only after careful consideration and consultation with your doctor. You may need to consult with physiotherapist, a dietician, a nurse clinician and / or a psychologist. This is to help you understand the post-surgical changes in your behaviour and ensure long-term success.



## Upper GI Surgery Team

*From left to right: Dr Kaushal Sanghvi, Dr Aung Myint Oo, Dr Danson Yeo, Dr Abdul Kareem Saleem, Dr Aaryan Koura, Dr Eshwaran Vijaya Kumara*

**Clinics B1C and 2B**  
TTSH Medical Centre, Level 2

**Contact:**  
6357 7000 (Central Hotline)



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