

# Surgical Options

## To Reduce Complications Of Severe Obesity

Obesity is a rapidly rising problem worldwide. In Singapore, the National Health Survey in 2004 showed that 7% of the population was obese and the trend is increasing. It is particularly more prevalent among local Malays and Indians. Obesity is a serious medical problem as it is linked directly to many common diseases such as:

- \* Type II diabetes mellitus
- \* Hypertension
- \* Coronary heart disease
- \* Hyperlipidemia
- \* Asthma
- \* Sleep apnoea
- \* Reflux esophagitis
- \* Gallstones
- \* Osteoarthritis and spine problems
- \* Certain cancers, e.g. breast cancer

There is no single effective treatment for obesity. A combination of different therapies including dietary modification, physiotherapy, drugs and obesity surgery (if required) is the key approach.

### Surgical Options for Weight Loss

Bariatric or obesity surgery is recommended for the severely obese, in cases where weight reduction through medical therapy has been unsuccessful or where patients suffer from serious complications of obesity.

Surgery for weight loss has been devised and practised over the last 40 to 50 years. The type of surgery falls into two broad categories:

- \* **Restrictive** - reduce the size of the gastrointestinal tract, e.g. laparoscopic gastric banding
- \* **Malabsorptive** - alter metabolism and reduce absorption, e.g. gastric bypass

Those who are suitable for obesity surgery are:

- \* **Patients with a Body Mass Index (BMI)\* of more than 40**
- \* **Patients with a BMI of more than 35 and obesity-related complications**

Surgery has become increasingly popular as they are usually performed via a laparoscopic approach (key-hole surgery). Both gastric banding and gastric bypass have been proven to be very effective. On average, patients can lose about 50% to 60% of their excess weight. More importantly, surgery can result in improvement or complete resolution of the various obesity-related complications.

\* BMI = weight (kg) / height (m) x height (m)

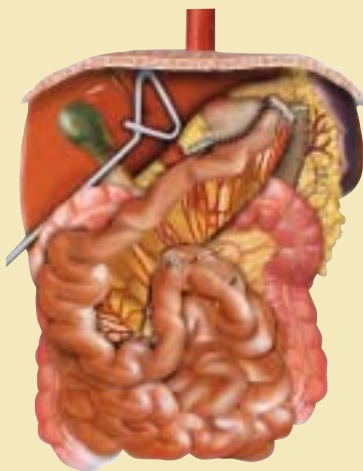
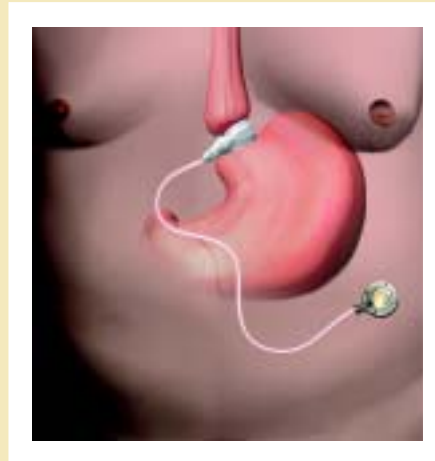
## Laparoscopic Gastric Banding (LAGB)

A silicone band is inserted into the abdomen and it encircles the upper part of stomach to create an upper gastric pouch. Food intake of patient is reduced by its restrictive and satiety effects. With LAGB, patients experience early and prolonged satiety as well as reduced appetite.

It is minimally invasive and the diameter of the band is adjustable through an access port which is implanted under the skin. Adjustments of the band are usually carried out at an outpatient clinic during follow-up visits and are critical for successful outcomes.

### Advantages of LAGB

- \* Least invasive of all obesity surgeries
- \* Performed via key-hole surgery
- \* Adjustable - balloon can inflated or deflated to control food intake
- \* Avoid irreversible damage - no cutting or stapling of stomach
- \* Reduced post-operative pain
- \* Shorter hospital stay
- \* Faster return to work
- \* Improved cosmesis (appearance following a surgery)



## Laparoscopic Gastric Bypass

A small upper gastric pouch is created by dividing the stomach at its upper pole and a gastrointestinal bypass is performed to achieve certain extent of malabsorption. This procedure is very effective but the risk of complication is higher.

*“Almost all patients recover within a few days because LAGB is a key-hole surgery. More importantly, it is very rewarding to see their medical illnesses such as diabetes and hypertension improve or even resolve with weight loss after the surgery.”*

**- Dr Jimmy So, Consultant, Department of Surgery.**

## NUH Weight Management Programme

The best treatment for obesity is a multidisciplinary approach. At NUH, our weight management programme involves a team of expertise. Patients undergo consultations with endocrinologists to assess possible causes and complications of obesity. Our dietitians will assess each patient and design a personalised diet programme for weight reduction according to the patient's need. He/she will also undergo exercise therapy with our physiotherapists.

For more information or appointment, please contact:

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