

WHAT YOU NEED TO KNOW ABOUT BARIATRIC (METABOLIC) ENDOSCOPY AND SURGERY

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# 40-50% OF ALL **ADULTS CURRENTLY** LIVING IN QATAR ARE EITHER OVERWEIGHT OR



 OVERWEIGHT AND **OBESITY ARE TREATABLE** AND PREVENTABLE

### WHAT IS OBESITY?

Obesity is a disease characterised by excessive amounts of body fat. This fat usually accumulates in the abdomen, under the skin and around the internal organs.

## **HOW TO MEASURE OBESITY AND OVERWEIGHT**

Body fat is difficult to be measured directly. Therefore, obesity is primarily measured by body mass index (BMI).

Your BMI is calculated by dividing your weight in kilograms by your height in metres squared.

### BMI = Body Weight (kg) / Height (m<sup>2</sup>)

- Normal BMI is 18.5 -24.9 kg/m<sup>2</sup>.
- An Overweight BMI is 25-29.9 kg/m<sup>2</sup>.
- An Obese BMI is ≥30  $kg/m^2$ .

Obesity is caused by an imbalance between the amount of energy taken in through food and drinks, and the amount of energy used by activities in daily life.

The unused energy is stored in the body as fat and, over time, the extra weight adds up, resulting in obesity.

## HEALTH PROBLEMS ARE ASSOCIATED WITH OBESITY

Obesity is not just a cosmetic issue, it is harmful to your health and can lead to the development of several serious diseases, including:

- Diabetes.
- High blood pressure (hypertension).
- Heart attacks and heart failure.
- High cholesterol.
- Stroke.
- Certain types of cancer.
- Gallbladder diseases.
- Fatty liver disease.
- Arthritis and gout.
- Breathing problems and sleep apnoea.
- Kidney disease and kidney failure.
- Mental health problems like depression and anxiety.

### TREATMENT **OPTIONS FOR OBESITY**

There are multiple treatment options:

- Lifestyle or behavioural training.
- Dietary changes and diet.
- Increase in physical activity and exercise.
- The use of anti-obesity medications.
- Bariatric Endoscopy or surgery in some cases.

# **FNDOSCOPY?**

♠ WHAT IS BARIATRIC

Bariatric Endoscopy usually refers to the temporary placement of a fluid-filled balloon inside the stomach using a tube passed into the stomach from the mouth.

The balloon takes up space in the stomach, making the individual feel full on smaller amounts of food and feeling full for longer. As the individual consumes smaller amounts of food, gradual weight loss occurs over a few months.

After several months, the balloon is either removed using a tube passed into the stomach from the mouth (endoscope) or it empties by itself and passes out of the intestines when going to the toilet.

There are other bariatric endoscopy procedures that can be performed, but balloon procedures are most common.

Bariatric endoscopy procedures can be performed in anyone with a BMI of more than 27 kg/m<sup>2</sup> if they also have health problems like diabetes and heart disease.

Otherwise if there are no other health problems, it can only be performed in people with a BMI of more than  $30 \text{kg/m}^2$ .

## WHAT DIETARY **CHANGES CAN HELP** WITH WEIGHT LOSS

- Eat more nutritious foods that have "low energy density" like vegetables, fruits, lean meat, fish, grains, and beans.
- Eat less "energy dense foods" like fried foods, high fat/sugar fast foods, sweets, and pastries.

- Eat grilled or boiled food rather than fried.
- Control your portion size and eat regularly • Avoid soft drinks and beverages.
- Eat slowly
- Read food labels and estimate calories.

Various diet plans are available such as low-calorie, low fat, low carb, and Mediterranean diets. A dietitian will advise you on a suitable diet plan.

## ♠ WHAT IS BARIATRIC (METABOLIC) SURGERY?

Bariatric or 'metabolic' surgery is presently the most effective and long lasting treatment for obesity that is available, but it is not without risks and may not be suitable for everyone.

There are many surgical options available, but they all involve either restricting the size of the stomach or adapting the digestive system to prevent absorption of consumed nutrients.

Your surgeon can discuss with you the risks and benefits of each procedure and which is most suitable for you.

Bariatric (metabolic) surgery may be considered for people with a BMI of over 40 kg/m<sup>2</sup>. However, if the obesity is causing health problems then surgery can be considered at lower BMI levels. If an individual has a BMI of 30-34.9 kg/m<sup>2</sup> and they also have diabetes which cannot be controlled with diabetes medication, then surgery can be considered. People of South Asian descent i.e. (Indian, Pakistani, or Bangladeshi people) are also more at risk of developing health problems as a result of being obese and can therefore be considered for surgery if their BMI is over 27.5 kg/m<sup>2</sup> and they have diabetes.

Surgery can also be considered in people with a BMI of 35-39.9 kg/m<sup>2</sup> if they have controlled diabetes or other long term health problems caused by obesity, such as heart disease or respiratory problems.

Your surgeons and doctors will thoroughly assess your suitability for surgery based on your individual circumstances, other health problems and whether you have tried to lose weight using diet and lifestyle improvement. If these have not been attempted and there are no urgent health problems, then diet and lifestyle improvement may be an appropriate option before considering surgery.

### ♠ NUTRITION AFTER **SURGERY**

If you undergo Bariatric (metabolic) surgery the doctors and nurses will provide you with a strict regimen of fluids, food, and multivitamins that you can eat in the days and weeks after surgery.

It is very important that this regimen is followed to ensure you get the best results from the surgery and to prevent vitamin and mineral deficiencies that can sometimes occur after surgery.

The food regimen first starts with clear fluids, then as these are tolerated you will be allowed full fluids which are low in fat and sugar. If you are able to tolerate these fluids, you will then be allowed pureed foods and then soft foods before eventually being allowed to return to eating regular foods. You will also usually see a dietitian to discuss the types of food and fluid you should eat to help with weight loss, and which are best for your general health.

If you have diabetes and undergo Bariatric (metabolic) surgery your glucose will usually be controlled using insulin injections whilst you are in hospital. If you take tablets these may be adjusted after the surgery according to your blood sugar results.

Even after going home you will need to continue to monitor your blood sugar closely with measurements taken before each meal, 2 hours after each meal and before bedtime to make sure you don't develop a high or low blood sugar.

You will usually need to see your doctor or endocrinologist to check your diabetes control after the surgery to make sure your medication is adjusted



# **f** FOLLOW UP

You will need to see your surgeon regularly after the surgery usually starting a week after surgery.

Further follow-up will depend on the type of surgery you have had but this typically involves follow up appointments at:

- 1 month.
- 3 months.
- 6 months
- 12 months
- Either 6 monthly or annually thereafter.



### ADDITIONAL INFORMATION

Additional information on Bariatric and Metabolic Surgery in Adults can be found in the National Clinical Guideline published by The Ministry of Public Health (MOPH)

The guideline is available to the public from the MOPH website: www.moph.gov.ga