



Dietary Intervention

We believe that healthy eating for weight loss can be both enjoyable and sustainable.

To achieve healthy eating and successful weight loss, the dietitian will provide diet counseling and advice in group sessions over a four-month period. During these sessions, patients will be given a nutritional assessment based on a three-day food diary. The diary gives feedback on typical calorie intake and diet adequacy. Dietary changes and goals will be made in negotiation with the patients. In addition patients will receive a personalised meal plan to suit his/her lifestyle and preferences. Reliable nutritional information will also be given to help patients distinguish fads from facts. Hands-on activities such as a 'mini supermarket tour' and reading nutrition labels will empower them to choose their food wisely.

The dietitian helps patients identify and modify their behaviour and thought pattern to improve eating habits. At the same time, learning and interacting in a small group can help foster social support which is important for long-term weight maintenance.



Here is what will be covered during the dietitian's sessions:

Session 1 (Week 1)

1. Talk to motivate and encourage patients to lose weight
2. All about nutrition (Energy balance, Healthy Eating Pyramid, sources of dietary fat, eating out wisely etc)
3. Questionnaire, setting long-term and short-term goals
4. 3 day food diary

Session 2 (Week 2)

1. Analysing the three-day food diary
2. Developing a personalised meal plan
3. List dietary changes to make
4. Discussion

Session 3 (Week 8)

1. Behaviour Modification (identify triggers to eat, distinguish between physiological and emotional hunger, attitudes towards food, non-food rewards etc.)
2. Mini-supermarket tour
3. Reading nutrition labels
4. Discussion

Session 4 (Week 16)

1. Success factors in weight loss and maintenance
2. Self-monitoring
3. Discussion

Patients will be provided resources about diet and nutrition such as:

- "Healthy Eating for Weight Loss" booklet
- Recipe Book
- Self-monitoring tool



Exercise Intervention

Besides reducing calorie-intake, it is important to expend more energy through increase in physical activity. In fact, the combination of dietary modification and exercise is the most effective approach for weight loss. This programme includes an eight-weekly exercise sessions, which aims to inculcate proper exercise habits, and make sure that the target is met. During the sessions, the patients are educated on the principles of exercises, target heart rate, and exercise intensity and the supervising physiotherapist will prescribe appropriate exercises for them. The patients will be given a log book to facilitate independent exercising during the week.

Outline of the exercise sessions:

Session 1

Orientation on principle of weight management exercise i.e. education on principle of weight management, course of aerobic, how to calculate and measure own target exercise heart rate or exercise intensity and home training programme.

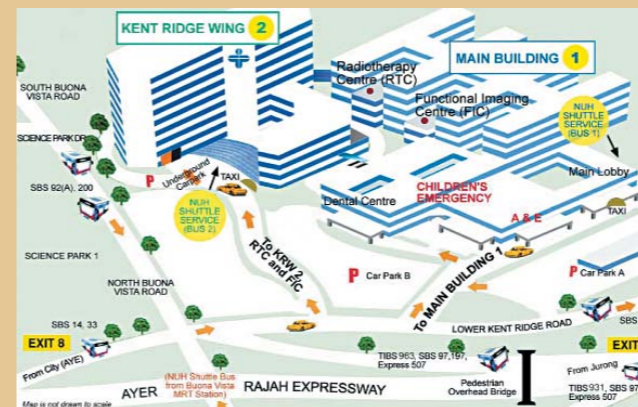
Sessions 2-7

Exercise class, mainly aerobic, supervised by specialised physiotherapist. Body toning and conditioning to be added.

Session 8

Progress review i.e. to refine the exercise programme, review of log book and reinforce home exercise programme.

LOCATION



FREE SHUTTLE BUS SERVICE

Free shuttle bus service between Buona Vista MRT Station and NUH is provided at every 12 minutes.

Operation hours : 8.00 am - 8.24 pm (Mon - Fri) and
8.00 am - 2.00 pm (Sat)
Not available on Sundays and Public Holidays

Pick-up points : Main Building 1, Lobby Entrance (Bus 1)
Kent Ridge Wing 2, Level 3, outside South Entrance (Bus 2)

CONTACT US

NUH's Weight Management Programme is located at NUH Wellness Centre
Main Building 1, Level 1

Contact: Nurse Coordinator (Weight Management Programme)
Tel : 6772 4461 or 6772 4462
Fax : 6778 3227

Opening Hours : 8.00am - 5.00pm (Mon - Fri)
8.30am - 12.30pm (Sat)

Information in this brochure is given as a guide only and does not replace medical advice from your doctor. Please seek the advice of your doctor if you have any questions related to the surgery, your health or medical condition.

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National
University
Hospital

Weight Management Programme @ NUH Wellness Centre



Weight Management Programme @ NUH Wellness Centre

In Singapore, about 35% of the adult population is overweight and about 16% are obese (i.e. about half of the adult local population is either overweight or obese). Obesity is a major public health challenge as it is associated with significant morbidity and mortality. There is an urgent need for effective strategies to prevent and manage obesity.

How Is Obesity Defined?

Obesity is defined as an excess amount of body fat (and not merely of weight). Excess body fat (based on height and weight) is measured by the Body Mass Index (BMI).

$$\text{BMI} = \frac{\text{Weight (kg)}}{\text{Height (m)} \times \text{Height (m)}}$$

BMI Values For Asians*

<18.5	Underweight
18.5 – 23	Normal weight
23.1 – 27.4	Overweight
≥27.5 – 32.4	Obese
32.5 – 37.4	Severe Obesity
≥37.5	Morbid Obesity

*BMI values are different for non-Asians

Problems Associated With Obesity

Besides aesthetic and social problems, being overweight and obese also causes significant morbidity and mortality. Obesity shortens life expectancy and predisposes to sudden death. Medical conditions that are caused by obesity (termed co-morbidities) include diabetes, coronary heart disease, hypertension, stroke, gall bladder disease, sleep apnea, respiratory problems, osteoarthritis, dyslipidemia, endometrial, breast, prostate and colon cancers.

Why should I join a Weight Management Programme?

To prevent obesity and its associated problems, weight loss is important and necessary. Even as little as 5% - 10% weight loss in obese patients has a significant effect on improving mortality and morbidity.



NUH's Weight Management Programme

NUH's Weight Management Programme is a holistic and multidisciplinary effort using medical, psychological, dietary modifications, exercise and (as a last option) surgical intervention for weight reduction. Lasting four months, we help patients prevent and reduce the health consequences of obesity through a supervised weight reduction and weight gain prevention programme. This also helps reduce their risk of chronic health conditions.

A convenient, one-stop resource housed in NUH's Wellness Centre (Main Building 1, Level 1), our Weight Management Programme is designed to help patients improve their health and the quality of their lives.

Multi-Disciplinary Team Approach

Patients will have to undergo initial assessment by clinicians before they are referred to the weight management programme. Obesity is a complex medical problem and a successful therapy requires a modern integrated team work. The multidisciplinary team (comprising endocrinologists, gastroenterologists, laparoscopic surgeons, dietitians, physiotherapists, psychologists and nurses) cares for the patient from initial screening all the way to follow-up.

The endocrinologist (physician) would screen for the possible underlying causes of obesity and assess the co-morbidities, and the suitability for medical treatment. Through behavioural modification, the psychologist manages the individual's eating habits and changes in lifestyle. The dietician advises patients on eating sensibly. The physiotherapist (exercise therapist) helps patients exercise sensibly and rationally.

How is the Programme Organised?

Regular appointments are scheduled with the team to assist patients and monitor their progress. During these sessions, patients can discuss their progress with the physician and determine the type of adjustments (if any) that need to be made in their programme. These appointments are important in keeping track of patients' health and progress in weight management.

However in some patients, these techniques have limited success in helping them lose weight. Thus, surgery is the last option to help them achieve weight loss.

Which Surgical Options are Useful Today for Weight Loss?

The Bariatric or Obesity Surgery helps morbidly obese patients to lose weight. It is recommended in morbid obesity patients or in case of unsuccessful weight reduction medical therapy. Surgery is also advised for patients who are suffering from serious complications of obesity. It must be emphasized that bariatric surgery is a medical and not cosmetic procedure.



Although there are multiple operative approaches, the most common type of bariatric surgery practiced in Asia is the Laparoscopic Adjustable Gastric Banding (lap-banding).

Who is Suitable for Obesity Surgery?

1. Morbid obesity (BMI >35) or severe obesity (BMI >30) with medical co-morbidities or complications of obesity. Commensurate BMI values for non-Asians are ≥40 and ≥35 respectively.
2. The patient must fully understand the bariatric surgical concepts, accept the risks, undergo pre-operative endocrinological, dieticians and psychological evaluation and give informed consent.
3. The patient must be motivated and capable of participating in lifelong follow-up.

What are the Benefits?

Immediately after surgery, most patients lose weight rapidly and continue to do so until 18 - 24 months after the procedure. Surgery improves most obesity-related conditions. Clinical studies showed that blood sugar levels of most obese patients with diabetes returned to normal after surgery. Other studies demonstrate a reduction in antihypertensive medications. The symptoms of gastric reflux (heartburn) are diminished, and the use of a CPAP machine for sleep apnea is eliminated.

What are the Risks of Surgery?

Complications can occur in 10 - 15% of the patients. Abdominal hernia is the most common complication that may require surgery. Less common complications include displacements of the band or the reservoir. Either during medical therapy or after surgery for weight loss there is an increased risk to develop gallstones.

