# OBESITY MANAGEMENT IN PRIMARY CARE

Obesity

Build motivation to improve self-esteem, self-confidence and quality of life

Educate patients and evaluate motivation and health risks

S tigma has no place in treatment

I nvestigate via history taking, clinical and lab examination

T reat co-morbidities

Yield compliance and adherence over the long term

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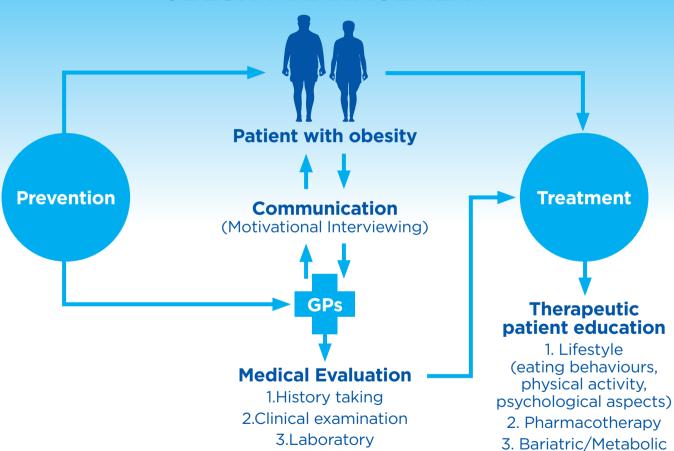
## **OBJECTIVES**

This leaflet was designed to constitute a practical tool for reviewing information on obesity management.

It is tailored to General Practitionners (GPs) and other health professionals and individuals interested in this domain.

The size provides a visual support to explain the basis of obesity management.

## **OBESITY MANAGEMENT**



4.Tools

Surgery

## OVERVIEW OBESITY MANAGEMENT IN GENERAL PRACTICE

Patient comes to treat his/her body weight issue.

Patient comes to consultation for another issue.

Avoid any stigmatisation.

Avoid any stigmatisation.

Ask the patient for permission to 'speak about his weight.'

Begin consultation with empathy and respect, develop a nonjudgmental relationship, and create a partnership with the patient, using **motivational interviewing**.

Evaluate patient expectations and motivation to change.

Use **history-taking** to determine the obesity aetiologies, including lifestyle (eating behaviour, physical activity and inactivity, psychological elements), weight loss history, motivation to change and barriers to weight loss.

**Clinical examination:** measure height, weight and calculate BMI (kg/m²), determine degree of obesity, measure waist circumference.

Assess using both general and laboratory examination to determine comorbidities.

Assess at regular intervals changes in waist circumference, the improvement in comorbidities, lifestyle modifications and improvements in quality of life.

## TREATMENT PRIORITY: TREAT COMORBIDITIES

Determine with your patient realistic goals and specific elements of lifestyle and behavioural change.

#### Patient education

Eating behaviour /eating with full consciousness (hunger, satiety, snacking, speed of eating, emotional eating, pleasure in eating).

Physical activity (PA) at least 150 min/week moderate aerobic PA, combined with 2-3 sessions of resistance exercise, recover pleasure in movement, decrease physical INactivity.

#### **Psychological aspects**

Cognitive behaviour therapy, work on self esteem, body image, self affirmation, psychotherapy, increase well-being and quality of life.

#### **Pharmacotherapy**

If necessary in lifestyle modification and BMI>30 or >27 kg/m² with comorbidities.

If there are severe eating disorders or psychological disturbances (binge eating, night eating syndrom, depression, psychosis,...), if the obesity etiology is too complex, if there is a failure of conventional treatment, refer the patient to an obesity specialist with multidisciplinary team or Collaboration Centres for Obesity Management (COMs).

Bariatric surgery is considered if conventional treatment has failed and if BMI > 40 kg/m² or >35 kg/m² with comorbidities; BMI > 30 kg/m² if diabetes type 2.

This requires additional lifelong medical treatment.

Assess at regular intervals the evolution of waist circumference, improvement of comorbidities, lifestyle modification and improvement of quality of life. As obesity is a chronic disease, follow up must be life long.

### **CLINICAL EVALUATION**

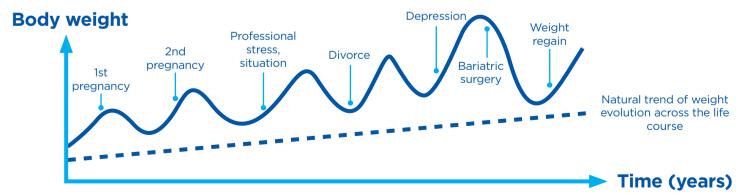
Assess history-taking to determine the obesity aetiologies: lifestyle (eating behaviour, physical activity and inactivity, psychological aspects), weight loss history, motivation to change and barriers to weight loss.

- The history-taking is a crucial phase to establish the aetiologies and the consequences of obesity. This will also enable the clinician to determine the strategies of the obesity management and treatment.
  - One important element is to identify whether the patient is in a dynamic phase or a static phase. If he is in a dynamic phase of weight gain, weight stabilization is the first goal before losing weight.

#### **CASE STUDY**

Theoretical evolution of weight change in a patient suffering from obesity compared to the 'natural' trend in patient with normal weight. Effect of different stimuli, events or emotional status on acute or chronic changes in body weight. Note that the baseline body weight in the latter situation largely overpass the 'natural' baseline.

Anamnesis tracks the body weight evolution of the patient. It can be useful for the GP to put the body weight on a graphic in order to illustrate and understand the evolution and the aetiological factors and detect the presence of the yo yo effect.



## MAJOR AETIOLOGICAL FACTORS WHICH CAN BE TRACKED BY HISTORY TAKING

### **Endogenous factors**

- Genetic predisposition
  - Epigenetic
  - Family profile
- Physiological (e.g.pregnancy)
  - Endocrine abnormalities
    - Others



### **Exogenous factors**

- Environment
- Occupation
  - Lifestyle
- Energy intake (food/drink)
- Eating behaviour (e.g. speed of eating, pleasure,..)
- Decrease in physical activity
  - Increase in inactivity
  - Smoking cessation
  - Short sleep duration
    - Insomnia
    - Hypersomnia
    - Chronic stress
    - Eating disorders

(binge eating, night eating syndrome, bulimia, severe restriction)

- Psycho-social factors
- Depression, anxiety, psychosis
- Negative body image, low self-esteem/self-confidence
  - Drugs
  - Others

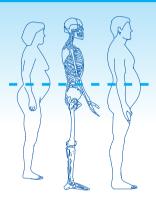
## CLINICAL EVALUATION I: ANTHROPOMETRIC ASSESSMENT FOR CATEGORIZING OBESITY

MEASURE: height, weight and calculate BMI (kg/m²). Determine degree of obesity (see below), measure waist circumference (cm).

#### BODY MASS INDEX (BMI kg/m²) CATEGORIES



#### **WAIST MEASUREMENT REFERENCE**



Measuring-Tape position for waist (abdominal) circumference in Adults

- Assess weight in underwear and height without shoes, from which you calculate BMI (kg/m²)
  - Obesity is defined as BMI > 30 kg/m² in Caucasians
- Measure waist circumference. It is a good indicator of visceral fat and a proxy for cardio-metabolic disease
  - Waist circumference reference: woman < 80 cm; man < 94 cm
  - Cut offs for cardio-metabolic risks: woman > 88 cm and man > 102 cm
  - Evaluate the cardio-metabolic risks related to the body fat distribution
- Waist circumference is considered a good proxy of abdominal body fat as well as the quantity of abdominal fat
- Note that a gynoïd ('pear') morphotype (low waist to hip ratio) shows a protective profile against cardio-metabolic risks

### **OBESITY TREATMENTS**

## I. LIFESTYLE AND BEHAVIOURAL THERAPIES

- Non-invasive
- Non-coercive

#### **II. PHARMACOTHERAPY**

- Semi-invasive
- Side effects

## III. BARIATRIC/ METABOLIC SURGERY Invasive and coercive



#### **CHANGES in:**

- Lifestyle and behaviour
  - Eating behaviour
- Energy intake (E density)
  - Physical activity
  - Physical inactivity
  - Psychological aspects
    - Eating disorders
      - Stress
      - Depression
      - Body image
      - Self-esteem
    - Self-affirmation
    - Self-confidence
    - Quality of life
      - Others



- Limited choice of drugs for Obesity (in 2017)
- Small weight loss expected (5-10%) but clinically significant
- Lacking long term experimental studies
  - Tolerance effect of drugs
  - Mixed to poor compliance of patients



- 3-4 types of operation
- Major, rapid weight loss
- Complications (10-30%)
- Re-operation (revision)
  - Excess skin surgery (after slimming)
- Patients with severe obesity often still have obesity post-surgery
- 10 x more suicide than with conservative treatment
- Conservative treatment / pharmacotherapy often required in parallel after weight loss to minimize weight regain

### LIFESTYLE AND BEHAVIOURAL THERAPY

Choose realistic goals with the patient. Recall that even modest weight loss (5% -10% of initial weight) can have beneficial effect on co-morbidities (cardiometabolic risks).

Show this scheme to the patient to help him/her to select the favoured domain within which he wants to initiate behavioural modification and which kind of change he wants to implement.

#### **NUTRITION**

- Balanced meals
- Visible sugar, hidden sugar
- Sugar-sweetened beverages
  - Visible fat, hidden fat
  - Vegetables and fruits
    - Starchy products
    - Energy density
    - Food labels
    - Salt. Alcohol
- At the restaurant, on holidays, on business travel

## EATING BEHAVIOUR & PSYCHOLOGICAL ASPECTS

- Hunger
- Satiety
- Stress management
  - Snacking
  - Emotions
  - Eating disorders
    - Self-esteem
    - Well being
    - Depression

#### PHYSICAL ACTIVITY

- Sedentarity
- Daily physical activity
  - Sports and leisure
- Muscle strengthening
- To be active on holidays or on business travels
- Motivation to change should be supported over the long term

**General objectives** the aim and the principal goal of the obesity treatment is to prevent comorbidities, and to try where possible, to keep the patient with obesity metabolically healthy; to treat comorbidities if they are already present, to fight against stigmatisation and to restore well-being, to improve body image and self-esteem. Loss of body weight per se does not constitute the first priority.

**Patient education** is a very important aspect of treatment. This will enable patients to develop and maintain skills and abilities which will enable them to live with this lifelong chronic disease. It is patient-centred, involving awareness of the disease, information, learning process of self-management, psychological support and health behaviours.

Patient education goals are intended to help patients and their family better understand obesity, live healthier lives and improve quality of life, taking into account patients' beliefs and representations about their disease. One will address patients' subjective and objective needs and help them to become self-supporting. Patient education improves therapeutic efficiency and the patient's motivation to change in the long term.

## **NUTRITION & EATING BEHAVIOUR**



Your hand as a reference basis for both area and volume criteria for estimating amount of food.



Half of the plate vegetables, a quarter of protein (meat, fish, eggs, vegetables protein...).



#### Satiety appears 20 minutes after consuming a meal

Be aware of the sensorial aspects of eating: sight, hearing, smell, taste and touch.

#### **Eating with mindfulness**

- Take a moment to relax, listening to your favorite music, and try to consider the meal to come
- Sit down at a table to eat without doing anything else (TV, radio, reading,...)
- Be aware of your hunger sensation and intensity
  Eat slowly and with pleasure, with attention to the tastes, flavours, textures, temperature of food
  Observe your emotions while eating
- Stop eating when you feel satiety and decreasing pleasure in eating

### PHYSICAL ACTIVITY

The principle of the physical activity (PA) pyramid is that the more you climb the pyramid, the less time is dedicated to PA. On the first level, the activities are very heterogenous and of low intensity. On the second level, you find structured PA (mostly sports), whereas on the 3rd level, resistance exercises increase muscle volume (eg. strength training). The last level constitutes inactivity.

To mobilize visceral fat: 300 min (5h), per week of endurance activity of moderate intensity or 150 min. of more intense activity.

## PHYSICAL INACTIVITY

Watching TV, video games, I-phone and tablets, sitting still more than 30 minutes to 1 hour continuously.

#### **MUSCLE EXERCISE**

(PARTIALLY ANAEROBIC)
Lifting weights, fitness training, flexion,
strength stretching, yoga...

#### **AEROBIC EXERCISES**

Swimming, aquagym, nordic walking, cycling, dancing, judo, cross country skiing, golf, hiking, basketball, table tennis...

## ORDINARY/ USUAL PHYSICAL ACTIVITY

Walking at 5-6 km/h according to height (the taller the faster).

#### **RARELY**

TV, i-phone, video games and tablets less than 2 hours per day.

#### 2-3 X PER WEEK

To increase **muscle mass**, 2-3 sessions of resistance exercise, 2 x per week comprising 8-10 exercises involving large muscular groups.

**5** X A WEEK AT LEAST 30 MINUTES

#### **DAILY PHYSICAL ACTIVITY**

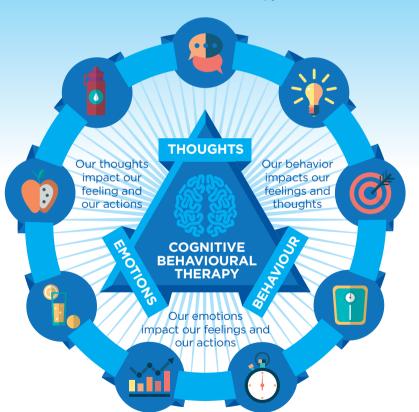
Cleaning house, stair climbing (instead of using the lift), gardening, go shopping by walking, walking the dog, walking into downtown, getting off of the bus 2-3 stops before your arrival, take all opportunities to move at home or outside.

**EVERY DAY** 

Adapted from World Health Organization (WHO)

### **PSYCHOLOGICAL ASPECTS**

In obesity management, it is particularly important to evaluate psychological aspects of the disease, such as eating disorders or depression and anxiety. This can impact significant weight gain or weight regain or can constitute a barrier to weight loss. Cognitive behavioural therapy is known to be efficient in the treatment of obesity.





Cognitive therapy (CT)
helps identifying and
modifying the distorted
thoughts, cognition,
that sustain obesity
condition.

CT helps to increase self awareness, selfunderstanding, to recognize vicious circle that can increase anxiety and eating disorders Behavioral therapy (BT) helps the patient to find strategies to change his behaviour.

Use a comprehensive diary:

- Situation
- Feelings/Emotions
  - Thoughts
  - Behavior
  - Consequences

## OBESITY SURGERY 8 PRACTICAL TIPS GPs CAN SHARE WITH PATIENTS

#### I. BEFORE SURGERY

- 1. Patients must **understand the causes of his (her) obesity** before surgery. He must be **informed objectively** about options for procedures and surgery.
  - 2. Patients should have the opportunity to **communicate** with other bariatric patients (n=3-4), who have had the same type of surgery.
- 3. Patient and clinician should discuss and together **evaluate the short and long term implications of surgery**, including possible revision (re-operation) due to post-surgery complications, and the potential need for reconstructive plastic surgery due to excess skin following massive weight loss.
  - 4. **Patients should be encouraged to anticipate** drastic changes in everyday life, including for example long term multiple nutritional deficiencies as a result of bariatric surgery (proteins, several vitamins, minerals, trace elements and iron deficiency aenemia.

#### **II. POST-SURGERY PHASE**

- 5. **Continuous feedback between patients**, physicians and health professionals over the course of the lifetime is crucial for long term protection of patient health, as is compliance with recommended postsurgical treatment.
  - 6. A plan for prevention and surveillance of mid-term complications, particularly surgical & nutritional, should be undertaken together, as should the implementation of weight maintenance strategies.

    Prevention measures to avoid the very frequent relapse in body weight regain should be taken.
- 7. **Behavioural changes are important:** for example attempting to re-discover the sensation of hunger and satiety (i.e. fullness after eating) and recovering pleasure in eating.
  - 8. **Physical activity is a key issue** both before and after surgery. Weight loss makes physical activity easier, improves mood and an active lifestyle helps prevent weight regain.

## GUIDE FOR GPs: SUMMARY OF APPROACHES TO OBESITY MANAGEMENT

What	Why
Improve communication and motivation	Motivation is essential for adherence to treatment. Readiness to change can be evaluated and supported over the long term using motivational interviewing (MI).
Avoid stigma in healthcare settings	Stigmatization is all too frequent in healthcare settings. The consequences of obesity stigma include an increase in eating disorders, which actually increases the degree of obesity, and may increase patient depression, suicidal ideation and suicide. Motivational Interviewing can help reduce stigma in health settings.
Measure waist circumference	This is a good indicator of visceral fat and is a useful predictor of cardio-metabolic disease. Measure waist circumference at regular intervals to monitor decreases in visceral fat.
Treat co-morbidities	Comorbidities should be treated with priority, particularly cardio-metabolic diseases.
Use a mutidisciplinary team	A multidisciplinary team, working in a clinical care network, would including an obesity specialist, dietician or nutritionist, specialist in physical activity, psychologist, nurse and patient's GP). This is the most efficient way to treat obesity.
Assess weight loss	A 5-10% weight loss from the initial weight has a measurable impact in reducing comorbidities.
Consider lifestyle factors, support behaviour change	Behavioural modifications may lead to 5 to 15% weight loss. It will also help to improve body image, self-esteem, self-affirmation and quality of life.
Increase physical activity	Fit patients with obesity have lower mortality risk, than normal weight sedentary patients, all aetiologies included. Additionally, regular physical activity decreases weight regain and improves weight maintenance.
Avoid weight cycling	After weight loss, it is crucial to avoid weight cycling: the patient should be clearly warned about weight regain and supported in weight maintenance. He/she should weigh himself/herself every 2 weeks. If weight gain of 3 to 4 kg occurs, he/she must take active measures to reduce weight and seek weight maintenance support from the GP.

