



# **Study / Facilitation notes For Positive Weight Management**

This section forms part of  
The NCEF in Association with the IHF

## **Fit For Life Lifestyle Management Specialist Module**

This Module is accredited by the University of Limerick and carries 15 ECTS Credits



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### Learning Outcomes for this section:

- Outline the causes of obesity
- Outline the principles of positive weight management
- List the health implications of being overweight
- Explain how Body composition is measured
- Explain key points in relation to successful weight loss
- Help clients compare their diets to the Food Pyramid
- Help clients to devise a Positive Weight Management Mini-Plan
- Plan and prepare an informative and interesting 1 hour presentation on Positive Weight Management for the general public using
  - Appropriate learning outcomes
  - A selection of suitable presentation methods
  - A suitable selection of supporting resources and materials

## Positive Weight Management

### Obesity in Ireland

- Obesity figures have almost doubled in Ireland over the last ten years.
- 39% of the Irish Population is overweight, with 25% obese.
- This means two out of every five adults are overweight and one in four is obese
- Children aged 5-12 years – 1 in 10 is overweight and a further 1 in 10 is obese – 22% in total either overweight or obese
- 1 in 5 teenagers aged 13-17 years is overweight or obese

(irishheart.ie)

### What is obesity?

- An excess of body fat posing risks to health status.
- 'The most common nutritional disorder in the world' (WHO, 1998)

## Causes of obesity.....Energy In ≠ Energy Out

The overwhelming influence for 99% of the population is environmental (IOTF, 2002)

'...no longer acceptable to blame the individual for obesity, the causes are clearly societal...' (IOTF, 2002)

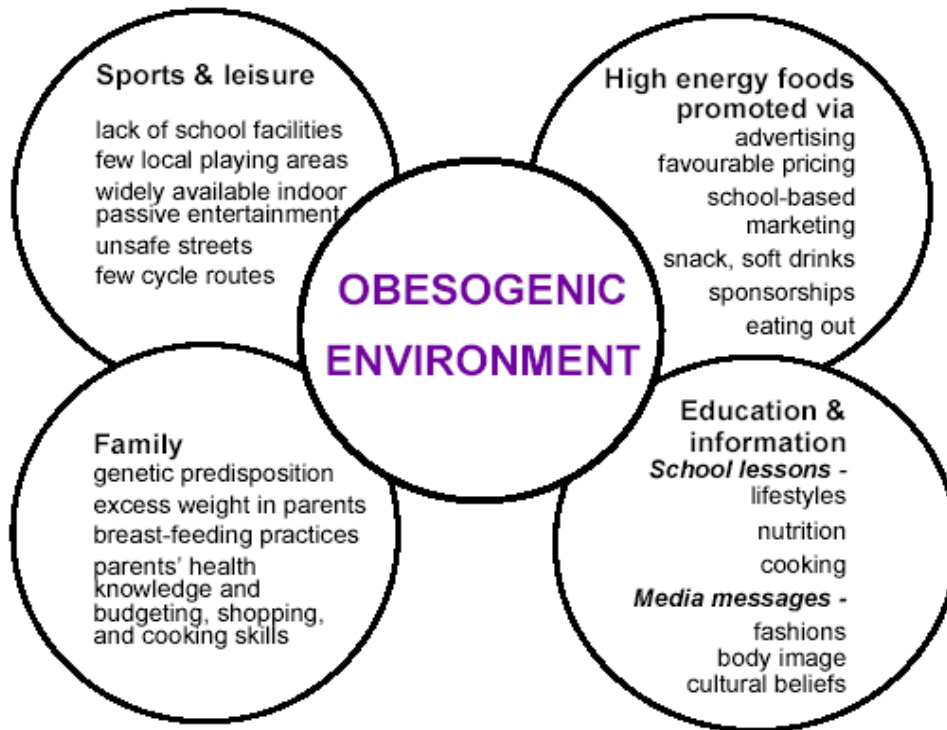
### 'Toxic environment'

#### **Energy In:**

- Increasing abundance of energy dense foods/drinks
- Advertising – school based marketing, sports sponsorship
- Increasing portion sizes
- Low satiating properties of soft drinks
- Snacking culture/grazing
- Passive over-consumption

### **Energy Out:**

–Restricted opportunities for physical activity, leading to an almost universal sedentary state.



### **Health implications**

- Premature death
- Type 2 diabetes
- High blood pressure
- Altered blood fats
- Coronary heart disease and stroke
- Osteoarthritis
- Certain types of cancer
- Breathing difficulties
- Psychosocial disorders (NTOF, 2005)

## Types of obesity

### 'Apples' and 'pears' (1)

- Distribution of body fat is a recognised risk factor for CVD, independent of BMI



Central/abdominal obesity confers greater risk than peripheral obesity. The pattern of fat deposition is mainly governed by genetic factors. Being overweight with central obesity is associated with many metabolic abnormalities including:

- Low HDL cholesterol
- Raised triglycerides
- Raised LDL cholesterol  $\geq$
- Raised blood pressure
- Glucose intolerance

### Waist circumference levels

	Increased risk	Substantial risk
Men	$\geq 94\text{cm}$ (37 inches)	$\geq 102\text{cm}$ (40 inches)
Women	$\geq 80\text{cm}$ (32 inches)	$\geq 88\text{cm}$ (35 inches)

Risk relates to the possibility of developing CHD

## What is “Body Composition”?

Body Composition is the ratio of muscle and bone weight vs. fat weight  
Muscle tissue is **denser** than fatty tissue – 1lb of Muscle still weighs the same as 1lb of fat – but 1lb of muscle takes up less space than 1lb of fat.

Result: 2 individuals of the same weight and height: one that has a higher % of body fat than muscle & will appear **larger** than the individual with more lean muscle tissue.

### Body Mass Index

BMI =  $\frac{\text{Weight in kilos}}{(\text{Height in metres})^2}$

Calculate your own and see how you rate below:

BMI kg/m <sup>2</sup>	Interpretation
18.5 – 24.9	Desirable body weight
25 – 29.9	Overweight (pre-obese)
30 – 34.9	Moderately obese (Obese class I)
35 – 39.9	Severely obese (Obese class II)
>40	Morbidly obese (Obese class III)

## Reaching a healthy weight

Key elements:

1. Healthy eating
2. Physical activity
3. Behaviour modification

• *Gradual* weight loss of 1-2lbs a week

## 1) Healthy Eating

### Key nutrition points

- Follow Food Pyramid guidelines
- Reduce portion sizes
- Have regular meals
- Learn to recognise hunger
- Shopping & reading food labels
- Food preparation & cooking
- Maintaining adequate water intake
- Limiting alcohol consumption

### Why Dieting Alone Does Not Work!

If you reduce your calorie intake – your body adapts to conserve energy and lowers basal metabolic rate (BMR). Lean muscle is then broken down to supply energy. Every time lean muscle mass is reduced through excessive dieting, BMR decreases and energy requirements drop even further.

**Result: increased body fat levels**

## 2) Physical Activity

### Combine Diet with Exercise

- Physical activity ensures BMR is maintained.
- Muscles burning fuel are less likely to be used as fuel themselves.
- BMR remains elevated for 2-4 hours after exercise
- More Calories are burned at rest

## 3) Behaviour Modification

Behaviour modification involves identifying unhealthy practices and putting strategies in place to help change that behavior.

### People eat to...

Live	Relax/distract
Relieve hunger	Relieve boredom
Enjoyment	Experience new tastes/cultures
Be social	Feed Habits
Provide comfort	

### Common Reasons For Emotional Eating are:

- (1) To obtain a good feeling
- (2) For comfort
- (3) Out of sheer boredom
- (4) Out of habit (for example, every time you watch TV)
- (5) For social reasons

- (6) To cope with stressful events
- (7) To fill a void or missing need
- (8) To recapture a feeling or memory associated with a food
- (9) To cope with depression
- (10) To cope with (or in response to) other feelings such as anger, loneliness, frustration, disappointment, grief, lack of control or anxiety.

( The A.W.A.R.E. Formula- 5 STEPS TO END EMOTIONAL EATING, Tom Venuto, (NSCA-CPT, CSCS, NLP-Master Practitioner)

### **The A.W.A.R.E Formula**

- (1) Become AWARE of your emotional eating behaviour patterns
- (2) WATCH out for the thoughts, emotions, events and situations that trigger those behaviour patterns
- (3) ARREST the patterns when they happen
- (4) REPLACE the old emotional eating behaviour with more constructive alternatives, outlets or coping mechanisms to satisfy the emotional need.
- (5) ESTABLISH new beliefs about food and the right reasons for eating, and then repeat them as affirmations until they're hard-wired in as the new pattern.

### **Strategies for Weight Loss**

- Use a food diary: record places and situations when foods are eaten
- Rewards (non-food)
- Set goals: long- and short-term
- Keep records
- Don't do it alone – include a friend/partner
- Get help from a qualified health & fitness professional and dietician

### **Alternatives to eating - Readiness for change**

- ↓resistance 'yes, but...'
- ↓questioning about the problem
- ↑questions about the change
- ↑resolve optimism, concern
- Self motivational statements
- Envisioning how would it be if you changed? (decisional balance)

### **Barriers to change: decisional balance**

- What might get in the way for you?
- Identify high-risk situations
- Devise coping strategies

### **What is successful weight loss?**

- Weight loss of 10% of initial body weight and maintenance for 1 year (*Wing and Hill 2001*).
- 5% sustained weight loss (Stern et al 1995)
- NB: Moderate weight reduction associated with significant health benefits.

### **Weight loss illustration**

♥To lose 1lb you need to use up approx. 3,500 calories per week

♥Cut out biscuits after meals = 300 kcal

♥30 minutes brisk walk daily = 200kcal  
= 500kcal

500 x 7 = 3,500 calories

### **What strategies are people using to lose weight?**

Successful weight management requires a complete lifestyle change. Adherence to exercise programmes has been shown to be much lower for those with high body fat levels (Dishman 1980)

### **Studies on the Psychological Aspects of Fat Loss**

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#### ***McGuire et al, 1999***

1. Examined behavioural strategies of those who have maintained weight loss found that those who maintained weight loss had used more behavioural strategies to control fat intake and levels of physical activity than the re-gainers.

#### ***Klem et al, 1999***

- Studied whether weight loss maintenance became easier over time (2yrs or more)
- They found that less effort was needed to diet & maintain weight.
- That the balance between effort & pleasure shifts towards pleasure
- This shift may increase the likelihood of continued maintenance

#### ***Dohm, 2001***

- Studied factors which differentiate between those who maintain weight loss and those who do not
- Found that the key may be in how the individual responds to dietary lapse



- Maintainers had a direct coping mechanism planned and prepared for a lapse, whereas the re-gainers had to seek outside help
- Only half of those trying to lose weight using dietary restriction combined with regular physical activity. (Serdula 1994)
- Supplements, fasting and diet pills
- College students taking supplements for weight loss (Newberry et al 2001)

## The Weight Loss Industry

- The search for faster weight loss is fuelling the growth of a multimillion dollar weight loss industry.
- Unrealistic claims about “fast” and “effortless” weight loss
- Vary greatly in their divergence from recommended weight management practices (Stern et al 1995)
- 33 Billion per year in America
- 93 Billion per year in Europe

### Commercial Options Available

- Commercial Weight Loss Programmes
- Non-prescription Weight Loss Supplements
- Self Help Programmes
  - > 20 different types available
  - Meal replacement products.
  - Pills, capsules, liquid drops, slimmer’s coffee.
  - Herbal ingredients
- No proven efficacy of ingredients
- Some ingredients associated with adverse effects (Egger et al 1999)

### Fad diets

- >50 titles available
- Focus on macronutrients e.g. low carbohydrate or on eating or avoiding certain foods.
- May be nutritionally inadequate
- Weight loss primarily results from energy deficit
- Lack of long term efficacy studies (Saltzman et al 2001)

### High protein, low carbohydrate diets

Nutritionally unbalanced diet

### Low carbohydrate:

- Cutting out a food group can lead to weight loss
- ↓ energy, fibre, vitamins and minerals
- ↓ fruit and veg so less fibre and antioxidants

-Recommended to eat high fibre wholegrain carbohydrate foods more often than refined sugary sources

#### **High protein, low carbohydrate diets may cause:**

- Constipation
- Bad Breath
- Possible impaired liver and/or kidney function
- Osteoporosis
- Unlimited meat intake (incl. fat) encouraged
- High in saturated fat: ↑risk CVD

This diet causes rapid weight loss, mostly due to muscle breakdown and body water loss. There is **no evidence** that it supports sustained healthy weight loss

#### **Weight Loss Programmes**

- Weight Watchers, Best of Health, Unislim
- Vary in quality and design
- Classes usually run by non-health professionals with varied training.
- Lack of transparency about long term success rates.(Cleland et al 1998)
- No validation by professional bodies
- Commonly recommended to patients by health professionals

#### **Information Sources**

- Magazines and newspapers are not a good source of unbiased information in relation to health (Bartlett et al 2002)
- Journal reviews of popular diets and weight loss supplements (Gardzina et al 2002, Saltzman et al 2001)
- Self Regulatory Codes within the Media.(ASAI 2003)

#### **Unrealistic expectations**

- Individuals set goals of weight loss of 32% of initial body weight. (Foster et al 1997)
- After 5 years weight loss is 3%. (Anderson et al 2001)
- Individual is disheartened, demoralised and returns to poor habits – often resulting in higher overall body fat levels.
- Recommended: *gradual* weight loss of 1-2 lb per week

## Resources

BMI Calculator. Available on <http://weigh2live.safefood.eu/>

Loose weight and reduce your risk of heart disease and stroke. Available on:  
[http://www.irishheart.ie/media/pub/informationleaflets/lose\\_weight\\_2011\\_final.pdf](http://www.irishheart.ie/media/pub/informationleaflets/lose_weight_2011_final.pdf)