



#### YMCA Awards

## Level 3 Nutrition to support physical activity 2018



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Risks of specific diets



#### Popular weight loss methods/diets

- Very low-fat diets
- High protein, low-carbohydrate diets
- Food combining diets
- Meal replacement diets
- 'Fat burning' and 'weight loss' supplements
- Elimination or limited food diets
- 'Rapid' weight loss methods



#### **Evaluating popular weight loss diets**

- Does it take into consideration individual lifestyles?
- Does it set long-term plans for both diet and activity?
- Does it include exercise?
- Does it provide enough energy to meet minimum requirements (BMR)?
- Does it include all the food groups necessary for health?



#### Ways to spot a bad diet

- Provides fewer than 1000kcals per day
- Promotes rapid weight loss
- Has an unbalanced eating plan
- Promotes unrestricted amounts of certain foods
- Fails to make long term changes to eating habits and lifestyle



#### Very low calorie diets

Clients who want to lose weight will frequently opt for a very low calorie diet:

- Fewer calories than BMR
- 'Crash' diet or 'Starvation' diet



#### Very low calorie diets

Physiological consequences of very low calorie include:

- Decreased metabolic rate
- Decreased efficiency of fat mobilising and fat burning mechanisms
- Loss of lean muscle tissue
- Ketoacidosis
- Risk of nutritional deficiencies
- Rapid weight gain when normal eating is resumed
- 'Yo-yo' dieting



## Health and performance implications of diets that encourage severe energy restriction

- Impact on hormonal regulation
- Impact on energy levels and productivity
- Short-term health effects
- Long-term health implications
- The purported benefits of such a diet



## Health and performance implications of diets that encourage severe energy restriction

A diet too low in fat will also cause:

- Poor hair and skin condition
- Deficiency in fat soluble vitamins
- Deficiency in essential fatty acids
- Hormone imbalance



### Nutritional intake can influence the actions of certain metabolic hormones

#### e.g. Calorie restricted diets

- Increased mitochondrial efficiency less calories burned for the same energy output
- Decrease in circulating thyroid hormones
- reduction in testosterone, leptin, insulin and IGF-1 levels in the blood
- Increase in catecholamines, glucagon and ghrelin



#### Clients at risk of nutritional deficiencies

- Iron deficiency vegetarians, vegans, menstruating women, preschool children
- Iodine deficiency Can lead to thyroid hormone production problems
- Vitamin D deficiency people with dark skin colour, people with little sunlight exposure
- Calcium deficiency young females and the elderly



## Communicating the health risks associated with current weight-loss fads and popular diets

- Short- and long-term health risks of calorie restricted or macronutrient restricted diets
- Impact of yo-yo dieting
- Impact of advertising and the few success stories that are highlighted
- Long-term impact on hormonal and metabolic regulation
- Psychological impact of weight loss and weight gain and its impact on day-to-day life (lethargy, mood swings, emotional distress)
- Provide basic information on thermodynamics and the essence of every diet i.e. fewer calories consumed than expended will result in weight loss



#### Islam

- Muslims only consume Halal meat (meat that has been slaughtered in a prescribed way according to Islamic practices)
- They do not consume pork
- During the religious festival of Ramadan, they fast between sunrise and sunset



#### Hindu

- Hindus generally follow a vegetarian or vegan diet
- A vegetarian is an individual who (for ethical, moral or other personal reasons) chooses not to eat meat, fish, poultry or animal products
- Vegetarians do eat eggs and dairy products
- A vegan follows a vegetarian diet and in addition does not eat dairy products and eggs

Buddhists generally follow a vegetarian or vegan diet



#### **Jewish**

- Kosher meat is prepared by using a single knife to cut open the throat to kill the animal, with all the blood drained
- The meat should be soaked in water and salted to remove the last traces of blood
- Meat and dairy foods must not be prepared or eaten together



#### Sikhism

 Sikhs do not eat halal or kosher meat, beef or pork because they are not meant to take part in religious rituals apart from those within the Sikh religion

#### **Eastern Orthodox Christianity**

 Weekly fasts include abstention from meat, fish, eggs, dairy, and sometimes other foods such as olive oil and alcohol as well



#### Other influences on dietary practices

- Family influences
- Food availability
- Financial status
- Belief system e.g. veganism
- Allergies e.g. Coeliac disease



#### **Supplements**

- A personal trainer is <u>not</u> qualified to recommend vitamin or protein supplementation
- Base any advice just on healthy eating guidelines
- If you suspect a protein or vitamin deficiency, or feel a client needs to increase intake, refer them to a dietician for proper evaluation



## When recommended by a qualified nutritional expert, supplementation can be used if:

- Intake at required levels is regularly failing to be achieved
- Higher levels of physical stress are being applied to the body resulting in increased needs
- The body is failing to utilise the nutritional intake effectively



#### Supplementation is not necessary if:

- Sufficient intake is being readily used by the body to satisfy all of its needs
- Dietary adaptations could be implemented to ensure all requirements are being met

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