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## **MODULE 2**

ENCOURAGING SPORTS PRACTICE FOR ONE'S OWN PSYCHO-PHYSICAL WELLBEING AND TO CONTROL NATIONAL SOCIAL AND HEALTH COSTS



## **SEGMENT 8**

**The Diet** 

The term **Diet** refers to every solid and liquid substance we put into our bodies.

Diets can therefore be **normal**, **hypo** or **hyper**-caloric, depending on the caloric intake of the different substances, by maintaining, reducing or increasing body weight while consuming the same amount of food.

Diets are deemed **balanced** if they contain a healthy balance of sugars, fats and proteins as well as water, minerals and vitamins.



The Mediterranean diet, for example, is characterized by a higher proportion of sugars (60%), than fats (25%) and proteins (15%).

**Balanced diets** can <u>be followed over a long period of time without creating</u> <u>imbalances in the body</u>.

There are also other kinds of diets which may be unbalanced, because of pathologies for example, in favor of one component or another (e.g. diabetics will have a **hypoglycemic** diet while bodybuilders will follow a **high-protein** one).



One of the most complex aspect of our organism to control is the feeling of hunger/satiety.

It involves an infinite number of central and peripheral controls and messages, both mechanical (e.g. **stomach distension**) and chemical (e.g. **blood sugar**).

In addition, **social factors**, family or national habits, culture and knowledge, as well as the pressure of the mass media and the models proposed regarding body and well-being in general, are all very important factors today.



What is scientifically proven and accepted by the international community is that a correct diet combined with ideal **physical activity** are the best prerequisites for <u>preventing the most</u> <u>widespread pathologies</u>.

There have been a number of advertising campaigns in several areas to promote healthy eating, among which probably the most successful is the **food pyramid**.

According to the food pyramid, foods at its base should be used more frequently while those at the top are recommended for low consumption.



Each diet provides *general rules of food hygiene* which should be observed for a perfect digestion.

The overall intake of calories has to be divided in at least *five fractions* (breakfast, snack, lunch, dinner) taking into account the work activity.

Good quality of the food at source, method of preparation/cooking, and visual, olfactory and taste impact of the food should be checked.

Meals should always be eaten *in a quiet environment*.



Depending on the type of activity, we should distinguish among **precompetition, competition** and **post competition diets**:

- **Pre-competition diets** should be maintained before an activity and have therefore to <u>take into account the time between intake and training/race</u> and their duration.
- Competition diets concern nutrition in long-duration activities requiring calories to be taken <u>during the activity</u>.
- Post competition diets concern <u>refreshment and replenishment</u> of solid or liquid foods after activity.



A balanced diet also requires a proper intake of **water**, **mineral salts** and **vitamins** that <u>do not</u> <u>provide calories</u> but are essential for life.

Water should always be replenished depending on losses: insufficient amounts of water are very often the first reason for reduced performance during activity.

A number of mineral salts (e.g. iron/ hemoglobin) are essential for vital physiological activities.

Poor intake of vitamines (amines essential for life) can lead to a number of pathologies.



Today, in developed countries, diets generally include all essential components.

Specific deficiencies may occur in the case of particular diseases (e.g. intestinal malabsorption or an excessive menstrual bleeding) or in the case of unbalanced strict diets.

In the case of significant deficiencies, which may lead to subsequent pathologies or specific needs, supplementation with products to be combined with the diet may therefore be recommended and useful. The easiest way to calculate how many calories we consume in relation to what we eat is to **weigh ourselves**.

Weight is indeed the most elementary and easiest evaluation method to use; however, even in this simple operation you need to pay attention to the weigh station used ( which should always be the same and calibrated), the time of weighing in relation to food intake, the period of the menstrual cycle, physical activity etc.

Professional athletes, in particular climatic conditions, <u>can lose a few kilos of water</u>, which are quickly replenished in the recovery phase.



There are also several ways of assessing the percentage of **lean mass** compared to the **fat** mass of the total weight.

The body mass index (BMI) is a very simple method using a formula correlating weight and height in adults.

<u>Plicometry</u> (assessment of fat folds with an ad hoc measuring device) is very simple to use, but there are also more complex methods such as those using <u>bioimpedantiometry</u>.

However, each figure must be assessed/interpreted depending on constitution, age, sex and other factors and is not a mere number.

## **Keywords**

Diet Hypoglycaemic Hyperproteic Balanced Food Pyramid Vitamins Mineral Salts Social Factors Workout Reintegration