

# Factors affecting nutritional needs

The basic goal of nutrition in childhood is to achieve optimal growth and development. Proper nutrition ensures adequate immunity and response to stress. Individual nutritional needs vary according to genetic and metabolic predispositions. Nutritional needs are defined as:

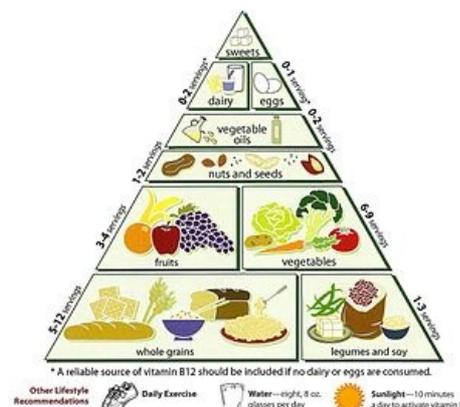
## 1. By genetic factors:

- age;
- gender;
- habitus;
- nutritional type;
- efficiency and activity of metabolism.

## 2. Environmental Effects:

- lifestyle (level of physical activity...).

During the first year of life, the organism finds itself in the so-called food dominance, when further development is completely dependent on the intake of nutrients. These are necessary to provide energy for rapid growth (during the first year of life, an infant triples its birth weight), development of immunity, maturation of the brain... During this period, nutritional demands are high and deprivation often has permanent consequences.



The food pyramid shows the recommended proportion of individual nutrients in food

## Some principles of child nutrition

- Animal proteins have a higher biological value than plant proteins;
- on the contrary, the lipid component is not covered only by animal fats;
- polysaccharides are preferable to monosaccharides and disaccharides (in addition to energy, they provide fibre, minerals and vitamins).

The share of nutrients to cover the total energy requirement depends on age – for example, fats should cover more than 50% in an infant, no more than 30% in an older child.

## Recommended nutritional allowances

Recommended nutritional doses of energy, nutrients and additives are set by the Ministry of Health. It is the amount of food that is sufficient to cover the needs of 97-98 % of individuals of the same age and sex and prevent a deficit. These standards are important mainly in the compilation of menus for groups of children. They are no longer suitable for individuals due to large individual differences.

## Links

### Related articles

- Nutritional recommendations: Nutritional recommendations (1. LF UK, NT) • Nutritional recommendation for the adult population • Nutrition of pregnant and lactating women • Nutrition in old age • Factors affecting nutritional needs
- Nutrition of children: Newborn nutrition • Breast-feeding • Artificial nutrition of the infant • Non-dairy infant diet • Toddler nutrition • Nutrition of preschool, school children and youth • Recommendation for infant feeding 2011 • Recommendation nutrient intake (Paediatrics)
- Specific nutrition
- Food composition: Carbohydrates in food • Proteins in food • Fat in food • Minerals in food • Trace elements in food • Vitamins • Microorganisms in food • Foreign substances in food
- Not thriving • Eating disorders • Disease from excess or deficiency of nutrients • Food allergies • Food intolerance • Cow's milk protein allergy

### Source

- BENEŠ, Jiří. *Studijní materiály* [online]. ©2007. [cit. 08.03.2012]. <<https://www.stefajir.cz/index.php?q=pediatrie>>.



Polysaccharides are first introduced as a side dish in the form of cereal porridge