

# Carbohydrates in food

Carbohydrates should cover 58-60% of the energy intake. These are sugars:

- **Simple** - (monosaccharides, disaccharides).
- **Compound** - (polysaccharides - starch and fiber).

**Fiber** is a plant material resistant to the digestive enzymes of the GIT. It moderates the rise of glycemia after a meal, favorably affects the action of insulin, has a satiating effect, and lowers the cholesterol level.

## Recommended daily dose

The recommended daily intake of carbohydrates is approximately **4-6 g/kg/day**.

## Function

Carbohydrates are the source of muscle energy. They are an important structural component and an equally important factor in taste. fiber function - see above.

## Excess

Excessive intake of simple sugars is associated with:

1. Unnecessarily increased energy supply and subsequently with **obesity**.
2. With '*glucose intolerance*'.
3. **Hyperlipidemia**.
4. Increased risk of **tooth decay**'.

One-sided excessive supply of coarse fiber **reduces the absorption of important elements (*Fe, Cu, Zn, Ca*) and other protective substances**.

## Lack

Lack of fiber increases the risk of:

- colon tumors;
- CHD;
- ICHDK.

## Optimal ratio of main nutrients in total energy value

- Protein: 12-14%.
- Carbohydrates: 58-60%.
- Fats: 28-30%.

## Links

### Related Articles

- Carbohydrates (biochemistry, clinically relevant carbohydrates) • Carbohydrates (1. LF UK, NT)
- Lipids • Lipids (1. LF UK, NT) • Fats in food • Lipids as an energy source • Degradation of lipids and metabolism of ketone bodies • Fatty acids
- Proteins in food • Proteins (1. LF UK, NT) • Amino acids
- Types of food • Mineral substances in food • Trace elements in food • Microorganisms in food • Foreign substances in food
- Nutritional recommendations
- Diabetes mellitus

## References



Bakery



Potatoes



Pasta

- BENCKO, Vladimír, et al. *Hygiene – teaching texts for seminars and practical exercises*. 2. edition. Prague : Charles University, 2002. 204 pp. ISBN 80-7184-551-5.

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