



INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

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Škola:	Hotelová škola, Vyšší odborná škola hotelnictví a turismu a Jazyková škola s právem státní jazykové zkoušky Poděbrady
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Anotace:	Základní informace o výživě a základních živinách potřebných k fungování lidského organismu.

Nutrition

Right and balanced nutrition helps us to keep healthy and to avoid common health problems.

The basic principles are:

- eat a variety of foods

and

- keep the balance between calorie input and output

There are six major classes of nutrients:

- carbohydrates (fiber)
- fats
- protein
- minerals
- vitamins
- water

Carbohydrates

- are a major source of energy
- **monosaccharides** → called „simple sugars“ - sugar, sweets, sweet drinks
(glucose – „blood sugar“, fructose – „fruit sugar“)
- **disaccharides**
(maltose – „starch sugar“, lactose – „milk sugar“)
- **polysaccharides** – „complex sugars“ – potatoes, bread, cereals
(starch, fiber)

Simple sugars usually get rapidly into the blood stream and as they are not utilized they are transformed into fat. It can also have a negative effect on behaviour (activation – inhibition)

Fats

fats, in the whole energetic input, should not create more than 30% of this input

- **Saturated** – animal products - milk, butter, cheese, eggs (unhealthy in bigger amounts)
- they increase the „bad“ cholesterol and a risk of cardiovascular diseases
- **Unsaturated** – sunflower oil, olive oil, fish, nuts
(it is said that they are good for heart health)
- **Trans-fats** – commercially produced (margarine...)
- they also increase the risk of cardiovascular diseases and the blood cholesterol

Proteins

- proteins build, maintain, and replace the tissues in our body.
- our muscles, our organs, and our immune system are made up mostly of protein
- the sources of proteins are all kinds of meat (lean meat esp.), soy, legumes, eggs, dairy products,

Minerals

- minerals help our body to grow, develop, and stay healthy.
- minerals have many different functions — from building strong bones to transmitting nerve impulses. Some minerals are even used to make hormones or maintain a normal heartbeat

Calcium - helps to build strong bones. It also helps to build strong, healthy teeth.

Iron - it helps to transport oxygen from our lungs to the rest of the body.

Potassium - keeps our muscles and nervous system working properly.

Zinc - helps our immune system to fight illnesses and infections. It also helps with the growth of cells and helps to heal wounds.

Vitamins

- **Fat-soluble** – A,D,E,K - are stored in the fat tissues in our body and in our liver
 - some of them can stay for months and some of them just for days
- **Water-soluble** - these vitamins cannot be stored in our body. They go through our bloodstream and whatever our body doesn't use comes out when we urinate.

That is why these kinds of vitamins must be replaced often. These vitamins are - vitamin C and the group of B vitamins — B1 (thiamin), B2 (riboflavin), niacin, B6 (pyridoxine), folic acid, B12 (cobalamine), etc.

Water

Water is an essential part of our nutrition

Daily intake of water or other drinks should be 2 l for adult female and 2,5 l for adult male

These amounts also include water from food

The diversion of the intake is approx. 80% by drinking and 20% in food