

Effect of smoking on a person's nutritional status

Tobacco smoke contains over 100 carcinogens, KCN, As, benzene, polonium, ammonia, cadmium, formaldehyde and free radicals. However, the most significant component is **nicotine**, which is more addictive than heroin. **One cigarette contains 15 mg of nicotine**; a smoker absorbs approximately 1-3 mg. However, the amount is individual, depending on the method of smoking. For example, smoking **menthol cigarettes** causes **irritation of the cold receptors**. The smoker then does not perceive the irritants and absorbs the smoke and therefore the nicotine even more.

⚠ The lethal dose is **60 mg** of nicotine.

Hookah smoking

Nicotine needs the **alkaline pH** of water pipes to be absorbed, so it is more easily absorbed. In addition, cooler smoke is easier to inhale than normal smoke, which is why we inhale more nicotine when smoking a hookah. If you take a big drag, you inhale *10 times more* than smoking a regular cigarette.

⚠ Second-hand smoke - same risk to blood vessels

🔍 For more information see *Smoking*.

Effect of smoking on weight

In general, smokers have **higher energy intake** and a less balanced diet - less fiber, vitamins, unsaturated fatty acids, fruits, vegetables. In addition, nicotine modifies taste in the smoker. In addition, lipophilic nutrients in the digestive tract degenerate with exposure to smoke (lutein, lycopene, antioxidants). Supplementation with vitamins does not improve endothelial function, in combination vit. C and vit. A further increases the risk.

Nicotine **decreases appetite** by affecting serotonin and dopamine efflux. In addition, nicotine **increases basal metabolic rate** by about 800 kJ, which is why smokers lose weight more easily. Furthermore, nicotine slows down gastric peristalsis and speeds up intestinal peristalsis. This is why smokers may suffer from constipation during cessation. Smokers have higher LDL cholesterol, lower HDL, which are risk factors for developing dyslipidemia, diabetes mellitus, obesity, metabolic syndrome. They also have impaired glucose tolerance, which is impaired by active and passive smoking.

Risks of smoking in pregnancy

Smoking during pregnancy causes:

- lower fetal birth weight;
- hypoxia, higher risk of asphyxia;
- hypovitaminosis, lower levels of vitamin C;
- reduces the likelihood of breastfeeding.

Withdrawal therapy

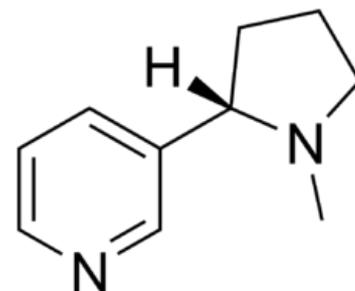
During withdrawal, there is often a **weight gain** of about 6 kg. Therefore, drinking, limiting sugary and fatty foods, and physical activity are important. In addition, **constipation** is a risk, as nicotine no longer accelerates bowel motility. **Strict diets are inappropriate**, they can lead the smoker to the cigarette again. Support with pharmacotherapy for 3-6 months is important. Most importantly, the smoker must change his stereotypes and want to quit smoking.

🔍 For more information see *Tobacco dependence treatment*.

Links

References

1. KUDLOVÁ, Eva, et al. *Hygiena výživy a nutriční epidemiologie*. 1. edition. Praha : Karolinum, 2009. 287 pp. ISBN 978-80-246-1735-0.
2. BENCKO, Vladimír, et al. *Hygiena a epidemiologie : Učební texty k seminářům a praktickým cvičením pro studijní obor zubní lékařství*. 1. edition. Praha : Karolinum, 2006. 178 pp. ISBN 80-246-1129-5.



Chemical structure of nicotine

3. PODSTATOVÁ, Hana. *Základy epidemiologie a hygieny*. 1. edition. Praha : Galén, 2009. 158 pp. ISBN 978-80-7262-597-0.