# **30** facts about nicotine

- ▶ A stimulating and highly addictive substance
- ▶ Temporarily increases heart rate through the autonomic nervous system
- ▶ Increases blood pressure
- ▶ Increases the secretion of adrenaline and cortisol
- ▶ Dilates the airways
- ▶ Increases saliva production



When tobacco smoke is inhaled into the lungs, the nicotine is quickly absorbed into the bloodstream, reaching the brain in about 8 seconds. With oral smokeless products, the nicotine is absorbed more slowly, but also more efficiently.



1 cigarette =



1 mg of nicotine in the bloodstream

## How nicotine affects the cardiovascular system:

- Increases heart rate and narrows blood vessels, putting the circulatory system under more strain
- ▶ Increases the risk of arrhythmias
- Increases damage to the walls of blood vessels
- ▶ Harmfully affects blood fat levels
- Causes platelets to clump together more easily



### Other effects of nicotine:

- ▶ Nicotine increases oxidative stress, which, if excessive, predisposes to conditions such as cancer and coronary artery disease and ages the body.
- ▶ Nicotine affects several key neurotransmitters in the body, which, in turn, affects immunity and increases vulnerability to infections.
- ▶ Nicotine reduces the insulin sensitivity of tissues and insulin bioavailability.
- ▶ Nicotine is considered a factor that contributes to the development of cancer. Nicotine can cause a cell to turn into a cancer cell, increase cell division and maintain the development of cancerous tissue.





## Prenatal exposure to nicotine

- Nicotine passes through the placenta and is extremely harmful to the fetus.
- ▶ A link has been found between prenatal nicotine exposure and childhood ADHD.



## Early exposure

- ► Early exposure to nicotine causes structural and functional changes in the forebrain.
- ▶ Nicotine use during childhood and adolescence causes long-term attention issues.



In sports, nicotine does not objectively improve physical performance, which is why it is not classified as a performance-enhancing drug. The reason why nicotine may be perceived as beneficial is because it stimulates the central nervous system and alleviates withdrawal symptoms in



When the body is accustomed and physically addicted to nicotine, it requires regular doses of nicotine. Quitting or taking a break from nicotine will throw the nicotine-addicted body out of balance.

## Withdrawal symptoms

- ▶ Nicotine cravings
- ▶ Feeling unwell
- ▶ Irritability
- ▶ Difficulty concentrating
- ▶ Increased appetite

Withdrawal symptoms often start a few hours after nicotine use has stopped and are at their worst after a couple of days. Withdrawal symptoms last from three to four weeks on average.



### It's possible to overcome nicotine addiction!

You can get advice, guidance and regular coaching for quitting nicotine from healthcare professionals by calling the free smoking cessation quitline at 0800 148 484.

Peer support is available in the online peer discussions of the Organisation for Respiratory Health in Finland and in the Stumppi Facebook group. More information: www.hengitysliitto.fi/stumppi



