



[engelsk]

Diabetes and tobacco (Diabetes og tobakk)

The use of tobacco is harmful to health.
If you have diabetes, the consequences are even greater.

Why is smoking so harmful?

Smoking causes insulin resistance. This means that your body requires more insulin to normalise your blood sugar. If you have type 1 diabetes and smoke, you will tend to have poorer HbA1c (long-term blood sugar). But if you stop smoking, your insulin sensitivity returns to normal after eight weeks.

In non-diabetic smokers, the insulin-producing cells in the pancreas also have to produce more insulin to normalise their blood sugar. This may cause more people to develop type 2 diabetes. Insulin resistance is probably caused mainly by nicotine, but other factors in tobacco smoke may also be involved. Nicotine aside, it is all the other substances in tobacco smoke that appear to pose the greatest risk, especially of cancer and atherosclerosis (hardening of the arteries). Tobacco is a complex compound of more than 4,000 different chemical substances. Between 50 and 60 of these are carcinogenic.

Complications and diseases

For people with diabetes who smoke, there is a higher risk that they will get diabetic kidney disease, and that the disease will progress faster. If you have early signs of this – microalbuminuria – it is even more important to stop smoking. As for atherosclerosis, the cause of angina, stroke and smoker's leg (peripheral arterial disease), there is no doubt that smoking greatly increases the risk of developing this condition. Smoking doubles the risk of heart attack and increases the risk of early death by more than 50%. Other

diseases are cancers and diseases of the airways. The risk is there for everyone. By stopping smoking, you reduce the risk, but it takes many years before the risk is reduced to that of someone who has never smoked.

Medication to aid smoking cessation

Nicotine is what causes the addiction and makes it difficult to stop smoking. In some people, their addiction is so strong that they need medication to help them quit. There are three types of medication available in Norway to aid smoking cessation: nicotine replacement therapies, Champix and Zyban.

- Nicotine replacement reduces the physical withdrawal symptoms, and makes it easier to break the habit. Nicotine replacement therapy is available as patches to wear on the skin, as an inhaler, as lozenges, as tablets to place under the tongue, and as chewing gum. All of these products are available over the counter from pharmacies, without a doctor's prescription, and the commonest brands are Nicorette and Nikotinell.
- Champix (varenicline) is a medication that binds to the nicotine receptor in the brain. The product is taken for three months, but sometimes for longer, and has helped many people.
- Zyban (bupropion) is a drug that was originally developed for treating depression. It has also been found to reduce withdrawal symptoms when stopping smoking.

Both Champix and Zyban tablets are only available on prescription. Both of these drugs work best when combined with a systematic smoking cessation programme.

Smoking is harmful for everyone!

- Around half of those who smoke daily for many years die of diseases caused by tobacco.
- Studies show that those who smoke daily, die, on average, 10 years earlier than non-smokers.
- An estimated 7,500 people die each year in Norway from diseases caused by smoking.
- In addition, an estimated 300-500 people die of diseases caused by passive smoking.
- The total of these two figures represents 18 per cent of all deaths in Norway each year.

What about snus?

Snus contains more than 2,500 chemical agents, including nicotine and several potential carcinogens. The nicotine in snus and chewing tobacco enters the blood via the mucous membranes in the mouth and is

then transported around the body. A ball or portion of snus causes a high concentration of nicotine in the blood for longer than a cigarette. This means that people who take snus absorb more nicotine than smokers.

Snus also irritates the mucous membranes of the mouth, and with prolonged use, users tend to develop a depression in the gum where they place the snus, called a "snus pocket". Lesions to the mucous membranes have a chance to heal if you stop using snus. Changes in the mucous membrane may be pre-stages of oral cancer, although there is still uncertainty as to whether snus is the cause of this. Long-term use of snus may also cause the gums to recede in the area where the snus ball or portion is placed.

Other addictive substances – narcotics (street drugs)

Little research has been done on the effect of narcotics on blood sugar. However, the few studies that have been done confirm that the use of narcotics is associated with poor blood sugar control and severe diabetes complications.

This factsheet from the Norwegian Diabetes Association (Diabetesforbundet) was last updated in 2013.