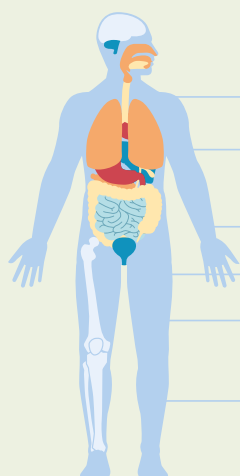


Nicotine use affects the success of surgery

All products that contain nicotine – whether they are tobacco products, e-cigarettes or nicotine pouches – have a harmful effect on the body. So far, the strongest research evidence focuses on assessing the effects of tobacco products:

- ▶ Smoking increases the experienced intensity of pain.
 - ▶ Smoking increases surgical complications.
 - ▶ Smoking increases the risk of pulmonary complications.
 - ▶ Smokers bleed more in surgery.
 - ▶ Smokers get worse results from surgery than others. Wound and bone healing are slower.
- ▶ For smokers, the risk of surgical site infection is roughly six times higher. If the patient is still smoking on the day of surgery, the risk is twelve times higher.
 - ▶ Smoking and the use of e-cigarettes impair circulation and the body's immunological defence mechanisms. The body's ability to recover from injuries and surgeries is poorer.



Negative effects of nicotine:

- Weakens the immune system
- Increases heart rate and narrows blood vessels, putting more strain on the circulatory system
- Increases the risk of arrhythmias
- Can cause erectile dysfunction
- Increases damage to the walls of blood vessels, harmfully affects blood fat levels and causes platelets to clump together more easily
- Increases oxidative stress, cell damage caused by free radicals, which can lead to various diseases and contributes to aging.

Quit smoking well before surgery

The longer the patient refrains from smoking prior to surgery, the better the results of the surgery usually are.

- ▶ If you quit smoking 8–12 weeks before your surgery, your lungs will have time to partially cleanse themselves.
- ▶ If you quit smoking at least six to eight weeks before your surgery, the risk of getting an infection is reduced.
- ▶ If you quit smoking two days before your surgery, your body will get rid of nicotine in time.
- ▶ If you quit smoking one day before your surgery, carbon monoxide will leave your bloodstream in time.



Quitting is particularly important before certain operations:

- ▶ All cancer surgeries
- ▶ Joint replacement
- ▶ Vascular surgeries
- ▶ Any surgery involving the insertion of metal or other foreign, non-absorbable matter into the body
- ▶ Surgery to fix non-union or instability of fractures, joint fusions or bone realignment
- ▶ Foot surgery
- ▶ Ankle fusion surgery



Can I have surgery if I use nicotine?

No one will be refused surgery if surgery is necessary due to a life-threatening condition or serious illness. Smoking will be taken into account as one factor when assessing the benefits and risks of surgery. The goal is to find a treatment option that will benefit the patient the most. In urgent surgeries, it is irrelevant whether or not the patient is a smoker.

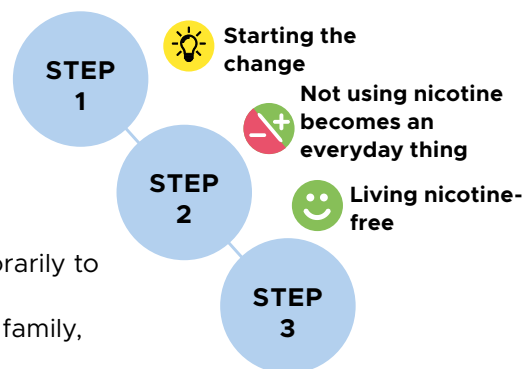
Elective surgeries to improve the quality of life usually require personal commitment to treatment. Not using nicotine is part of that.



Did you decide to quit using nicotine products?



- ▶ I'm quitting once and for all
- ▶ I'm cutting down
- ▶ I'm using nicotine replacement therapy temporarily to help with quitting
- ▶ I need support (support group, peer support, family, friend)



Effects of smoking on surgeries

Fractures and orthopaedic surgeries

- ▶ More leg fractures and upper femur fractures
- ▶ Longer bone healing time after surgery; with tibial fractures, for example, the healing time may be doubled
- ▶ Higher risk of infection
- ▶ Higher risk of reoperations and complications
- ▶ Higher risk of premature death
- ▶ Longer disability periods are more common

Joint replacement

- ▶ Higher risk of post-operative cardiac and pulmonary complications
- ▶ Higher reoperation rate and need for intensive care
- ▶ Higher risk of premature death
- ▶ A history of smoking has an impact on the retention of the prosthesis after hip replacement surgery

Back surgeries

- ▶ Higher risk of back pain
- ▶ More disc degeneration
- ▶ Higher risk of one or more operations due to a herniated disc
- ▶ More bleeding during back surgery
- ▶ Spinal canal stenosis surgery is not beneficial



Other surgeries

- ▶ More distal biceps tendon tears and rotator cuff tears, and healing is more difficult
- ▶ More complications and incisional hernias after abdominal surgeries
- ▶ More complications in brain tumour operations

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. More information: www.hengitysliitto.fi/stumppti

Stumppti

 The Organisation for
Respiratory Health in Finland