Smoking and reproduction

This document contains information about the hazards smoking causes to the pregnancy and the unborn child, and it encourages stopping smoking. When fertility treatments are planned, smoking must be stopped, because it affects the amount of hormone medications used, the amount and quality of egg cells, and the treatment failure risk.

Smoking affects fertility and achieving pregnancy

- Achieving pregnancy is delayed and the risk of miscarriage is doubled.
- In men, the amount, quality and motility of sperm cells decrease. Smoking decreases men's fertility even if the result of the sperm analysis is completely normal.
- Smoking affects the development of reproductive cells in both female and male fetuses, which can lead to decrease in the unborn child's fertility in the future.

Smoking affects fetal well-being during pregnancy

- Smoking causes oxygen deprivation in the fetus, which manifests as increase in fetal heart beat for 30 minutes after smoking. The oxygen deprivation is caused by, among other things, the carbon monoxide passing through the placenta, which replaces some of the oxygen in the fetus' red blood cells.
- After 20 weeks of pregnancy, the rapidly dividing cells in the fetus' central nervous system are particularly susceptible to the effects of tobacco smoke.
- The risk of placental insufficiency and premature placental abruption is increased.

Smoking affects the start of labor and the newborn

- The risk of premature birth is doubled.
- The birth weight is lower due to oxygen deprivation and the risk of premature birth
- Prematurely born babies who have been exposed to smoking experience an increased number of complications during the neonatal period.
- The risk of sudden infant death syndrome is increased.
- The amount of breastmilk is decreased and it is less nutritious. The milk tastes of tobacco, which may cause the child to refuse the mother's breast. On average, mother who smoke breastfeed their children for shorter periods.

Maternal smoking during pregnancy can affect the child’s development for several years

- The low body weight caused by smoking may delay the child’s normal development up until 10 years of age.
- The risk of early childhood ear infections and pneumonia is increased
- The risk of incidence of attention and behavioral disorders (for example hyperactivity, aggressiveness) is increased.
- The risk of allergies, asthma and atopy is doubled.

In addition, smokers are predisposed to numerous diseases (including cardiovascular diseases, cancers, dementia and osteoporosis). On average, people who smoke have their menopause two years earlier than non-smokers.