



Wishing for a baby

A guidebook on infertility for immigrants

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Preface

This guide is made for **you**. The goal of the guide is to provide important information about fertility and how to support and improve your fertility with **your** lifestyle. Also, the guide provides information about infertility, investigations of infertility as well as the treatments to enhance your fertility.

This is a guide provided by midwife-students thesis from Jyväskylä University of applied sciences accompanied by MAUSTE-project. The target of the project is to encourage and confirm the sexual health of immigrants in Finland.

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About Infertility

- Infertility can be *intentional* or *unintentional*. By intentional infertility it means that the woman or couple don't want to have a child. By unintentional infertility means that woman doesn't get fertilized after one year of regular sexual intercourse.
- In Finland, 15% of the couples suffer from infertility.
- Reasons for female infertility can be caused by:
 - High age
 - Unhealthy living habits
 - Sexually transmitted diseases
 - Alcohol, cigarettes, drugs
 - Female genital mutilation
- Reasons for male infertility can be caused by:
 - High age
 - Unhealthy living habits
 - Bad quality of sperm
 - Physical structure
 - Sexually transmitted diseases

- Between Finnish women, the biggest reason is high age.
- The sexually transmitted diseases (STD's) can damage your genitals, and making fertilization difficult. Most common STD's that harm fertility are Chlamydia and Gonorrhoea.
 - For women STD's effect of the tubes and cervix, and for men it can cause inflammation in epididymis and then decrease the quality of sperm.
 - Chlamydia is usually symptomless, but the most common symptom is urinary tract infection. Chlamydia is embraced from unprotected intercourse.
 - Gonorrhoea can also embrace from unprotected intercourse. The symptoms for it are increased amount of vaginal discharge and urinary problems.
 - In Finland its free to get treatment for chlamydia and gonorrhoea in public health care.
- Female genital mutilation (FGM) can harmfully affect the chances of getting pregnant.

- In Finland, if you perform FGM in Finland, you will be charged with penalty and can be sentenced to jail. It is violence and does not have a medical reason and it is also harmful for the woman
- By cutting the genitals, it damages the anatomy of delivering organs
- In example FGM can cause urinary tract infection, pain during intercourse as well as different inflammations can cause and lead to infertility
- Also the mental health of woman can suffer from FGM and after it. The operation can be traumatic and also happen against the women's will
- If you have experienced FGM beforehand, if needed you will get mental and physiological support and help from public health care

Female anatomy

- The female body has external and internal genitals.

- External genitals are formed by bigger and smaller labias and clitoris. These are also called as **vulva**.
- The interior genitals are formed by vagina, uterus, uterine tubes and ovaries.

Vagina is about 10 cm long tube-like canals, which connects vulva to the cervix. The mucous membrane throughout vagina protects against the pathogens. Other function for vagina is to be a gate for the menstrual blood to exit and for sperm to go towards the ovaries.

Female gonads, also called as ovaries, have the job to reproduce the eggs and sexual hormones. Ovaries are located under the abdominal wall, around the hip joint.

The uterine tubes connect the ovaries to the uterus. Through tubes the sperms go towards the ovaries (Photo 3). In uterine tubes the fertilized egg goes towards uterus, in which wall it adheres to.

The structure of reproductive system is really similar in every woman. The outer structure can vary, for example the structure of labias.

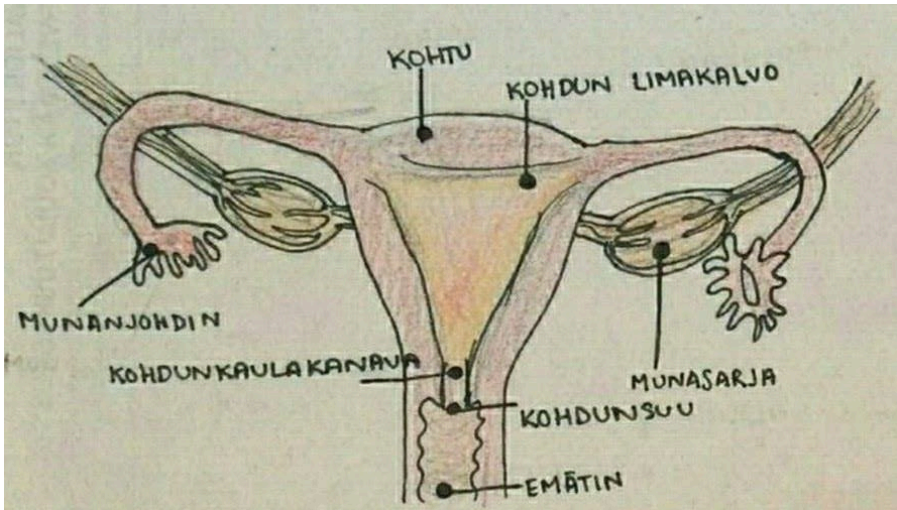


Photo 3. Female reproductive sys-

Male anatomy

- Male reproductive system can also be divided for **inner** and outer **organs** (Photo 4).
- The outer organs are penis and scrotum.
- The inner organs are testicles, epididymis and vas defenses.
 - Also seminal vesicles, prostate and Cowper's gland are included in inner organs.

The main job for testicals is to produce sperm cells.

- Testicals are situated inside scrotum, behind penis.

- Testicals produce hormones, mainly testosterone.
- Main job for testosterone is to boost sperm production, boosting muscularity and also enhancing the male sexual organs.

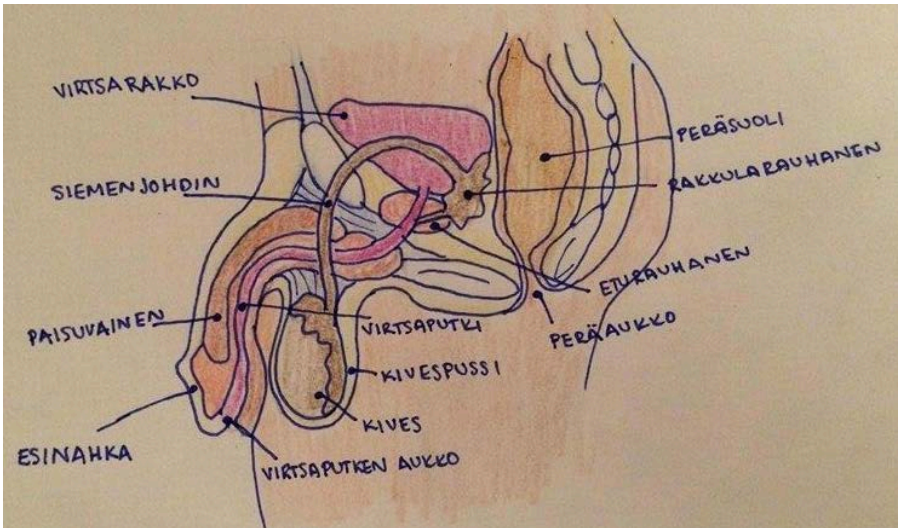


Photo 4: Male reproductive system

Menstrual cycle

Female menstrual cycle is a period of time, when the egg matures and releases itself to move on to the fallopian tube. In each cycle,

the hypothalamus in brains and pituitary gland as well as the ovaries are working together.

One of the eggs is selected, and it increases the amount of female hormone, estrogen, in blood vessels. It takes about two weeks for the follicle to grow and develop. After this the LH- content increases and the follicle breaks. This is the ovulation, which is the main process in fertilization.

The corpus luteum develops in the place of former follicle. This forms its own hormone, and it prepares the membranes of uterus for the fertilized egg. If the pregnancy doesn't occur, the corpus luteum degenerates and the menstrual cycle begins.

Fertilization

For fertilization, there needs to be male sperm and female egg. During and after intercourse, sperm moves through cervix, towards the uterine cavity. Only few hundred sperm cells reach next to the egg, and only one sperm cell passes through the egg's fence and fertilization begins. Usually fertilization happens in the fallopian tubes. Egg cell stays fertile for about one day, and the sperm cells for around two days.

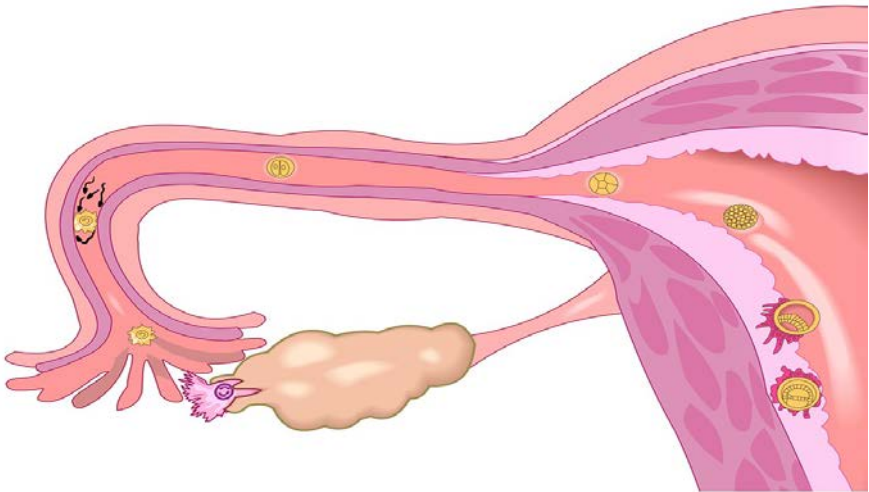


Photo 5. Fertilization

After fertilization the egg divides multiple times into round cells, which are called the embryos. They move into the uterus, and sticks

to the wall of uterus around one week after fertilization. After this the placenta starts to form and the fetus starts to develop

Lifestyle that supports fertilization

To support fertility, life style choices of female and male can support and enhance the chances of continuing pregnancy. These are nutrition, weight, intercourses, overall health and stress.

Lifestyle

Smoking, large use of alcohol and drugs are harmful to fertility for both female and male. For men, smoking harms volume of sperm cells and their activity. Also the quality of sperm cells decreases.

For female, smoking slows and harms start of the pregnancy, even with the support of in-vitro fertilizations.

By quitting smoking, the chances of getting pregnant grow to the stage as without smoking! You will get help from your nurse or doctor.



Weight

Normal weight is important for female fertility. Overweight is connected to problems with menstrual cycle, and also it can lead to problems with the egg and ovaries.

Even small weight loss can help half of the couples with pregnancy. It also enhances the prediction of pregnancy. Also under weight is dangerous for pregnancy.

Nutrition

Healthy nutrition supports the fertility of female and male. Eating disorders and under nutrition can cause infertility, and also harm female menstrual cycle. By diagnosing eating disorder and getting support for it can make pregnancy wishes possible!



Health

Illness and medication for it can be one of the reasons for infertility. These illnesses are for example diabetes, hypothyroidism, hypertension, arthritis, epilepsy, and psychological problems.

Medication used for cancer, and for example chemotherapy can lead to infertility. Anabolic steroids are harmful for testicals and sperm production.



Stress

Stress and anxiety can be harmful for menstrual cycle and make it irregular. Long going stress leads to growth of stress hormones, which are adrenaline and cortisol. These are negative hormones for fertilization during in vitro. You can get help for stress from therapy and psychologist.

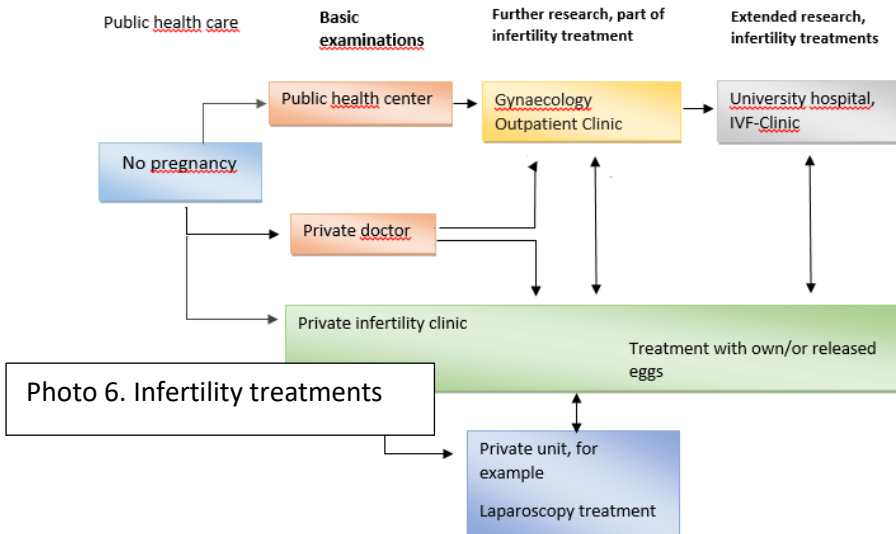
Where to find help for infertility?

Infertility is a problem for the couple and is treated for both female and male. It is good to go to infertility clinic if

- You are not getting pregnant after one year of trying
- Female is over 35- years old, and you’ve tried for over 6 months
- you have irregular menstrual cycle or there is an inflammation somewhere in your body

You can go to infertility treatments through you public health care. You can also find help from private clinics. If you have own home town in Finland, you are enabled to use the public health care.

Infertility research



Research for infertility begins at the same time for both female and men. Basics research states both health, previous operation, illnesses and medications. Also beginning time of puberty, female menstrual cycle and hormonal illnesses are stated. Alcohol and drug use is stated, and end time of hormonal contraception and possible problems in sexual life are talked about.

It is really important to talk about these problems with no rush, and it is important to be honest and truthful about the past and present life. There is space and trust to talk about feelings and fears. Also its possible to talk only with the doctor alone.

Female examination

Female fertility examination is more complicated than male examination. It is about:

- Examining ovulation
- Fallopean tube research
- Homonal blood test
- If necessary, they will do laparoscopy in stomach or hysteroscopy in uterus

Ovulation and the opening of the fallopian tubes are the basic conditions for pregnancy. As a result, they always explained the basic examinations. Ovulation can be confirmed by ultrasound examination and blood tests. Bloodtesting also examines the woman's thyroid and prolactin levels. Fallopean tube opening trial is conducted during ultrasound examination. In this case, the fallopian tubes are injected saline with a small syringe. If necessary, woman can do abdominal endoscopy surgery also. Endoscopy examines the conditions of the abdominal cavity, as well as the situation of the uterus and ovaries. Endoscopy can also find endometriosis. Endometriosis is endometrial slender sclerosis. More detailed information is obtained from the womb uterine cavity. Your doctor plans the examination specifically for you.

Male examination

Male research is based on

- Testical and scrotum observation
- Pubic hair examination
- Sperm cell diagnosis

- If necessary, blood tests, chromosome and genetic research and testicular needle examination.

Examination of testicals is necessary and important. Blood vessel problems can be found, and these are one of the decreasing illnesses to cause infertility. Sperm examination in laboratory is researching the movement, amount and structure of sperm cells. If the examination is normal, there is no need for future examination of men.

Infertility treatment

Infertility can be treated in many effective ways. Infertility treatments are always designed individually after the examinations. Primarily the first treatment is to change lifestyle and living conditions.

Quitting smoking and losing weight are important. Any thyroid disease is treated first before the actual infertility treatments. Your doctor will give you information about treatment options, but infertility treatments are always optional. You and your husband are doing a final decision on the starting any treatment.

Infertility treatments can be divided into three groups:

- follicular treatment

- surgical treatment
- assisted infertility program

Follicular maturation treatment

Maturation of ovarian follicle or ovulation induction is used if the woman when ovulation is interference. Sometimes, the thyroid-gland malfunction or over- and underweight cause the egg separation. In this case, the interference is corrected by treating the basic cause. In other cases, the egg separation is treated by oral medication of hormone therapy called clomiphene. The effects of this medicine is monitored by ultrasound. Endometrial thickening, as well as a regular menstrual cycle are signs of ovulation. Ovulation is also tested by a blood test.

If the medication does not work, the woman can try the secretion of pituitary gonadotropins, or injection therapy. These hormones regulate and stimulate gonadal function. The effect of the treatment will be monitored by ultrasound and blood testing.

The hormones used in the follicular maturity can be safely used at the same time and maturation may be recurrence a number of times.

Surgical treatment

By surgical treatment it means removal of endometriosis by arthroscopy. Endometriosis refers to endometrial slender sclerosis with endometrial tissue outside the uterus, rectal, and vagina, or between the surfaces of the ovaries. Surgery may also be used, if the uterine cavity grows into polyps and myomas, or they grow into tumors. Minor damage to the fallopian tube can be treated with surgery treatment, unless other fertility weakens factors are involved.

Infertility treatments

Infertility treatment means the beginning pregnancy starts with support medication and medical settings. They can be used almost all of the infertility. Infertility include:

- Intrauterine insemination (IUI)
- In Vitro fertilization
- Intracytoplasmic Sperm Injection (ICSI)
- Frozen embryo transfer (FET)

Insemination can be tested when infertility is not found by the obvious reasons. This treatment is also used in the case of a man of mild discrepancy of sperm or abnormal structure of the cervix. In insemination very well moving, fertile sperm are separated from seminal

fluid. After this they are injected into the uterine cavity at the same time when the egg is released.

IVF treatments are used when the infertility is caused by men and / or women due to reasons. The most common causes are the woman's fallopian tube failures. In vitro fertilization is an effective form of treatment. This treatment grows number of follicles in a woman's ovaries using hormone therapy. Ovaries are collectect in follicle punction. After this, the fertilized egg cells are fertilized with spouse's sperm in the laboratory. One or two embryos are transferred to the woman's uterus. The remaining good embryos can be frozen and these frozen embryos can be transfer to the uterus later at the appropriate time.

Psychological support

Infertility is a very emotional and personal issue for people. To all infertility is not necessarily a crisis, but it will leave its mark on each one. Infertility studies often provide critical and traumatic information about infertility to the couples. Different treatments, ap-

pointments, their design and protracted treatments can cause a variety of emotions. It's also a very difficult situation if a treatment is ended without a result.

The need for psychological support can vary from person to person. For some couples the support and conversation of spouse is enough. Still others feel that their own feelings are easier considered and talked through with a professional or a friend.

Remember that gets all the feelings and thoughts are allowed, and you have the right to get professional help if you feel it is necessary. Depending on where you live, you have access to psychosocial or psychotherapeutic support. You can get peer support from childless Association, called Simpukka - Federation. In these federation meetings and peer groups you can connect with other childless couples. With them, you can safely share your feelings and thoughts. Aid can be provided around the country and also online.

Contacts

Patient groups

Infertility association SIMPUKKA ry

Verstaankatu 5 A LH 3, 33100 Tampere

Phone: 0400 844 823

simpukka@simpukka.info

www.simpukka.info

IVF-Clinics in Finland

HELSINKI

Dextra Infertility Clinic Oy

Saukonpaadenranta 2, 4th floor, 00180 Helsinki

Phone. 09 560 16300 or 045 7733 9997

ivf@dextra.fi

www.dextralapsettomuuslinikka.fi

Fertinova Infertility Clinic

Unioninkatu 13, 00130 Helsinki

Phone. 030 633 3850

info.helsinki@fertinova.fi

www.fertinova.fi

Graviditas Infertility Clinic

Aleksanterinkatu 21 A, 5th floor, 00100 Helsinki

Phone. 010 380 2600 tai 050 381 5566

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www.lapsettomuudenhoito.fi

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www.felicitas.fi

Väestöliitto Clinic Oy, Clinic in Helsinki

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infertility.clinic@vaestoliitto.fi

www.vaestoliitto.fi

JOENSUU

Pohjois-Karjala Central Hospital, Infertility clinic

Tikkamäentie 16, 80210 Joensuu

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www.pkssk.fi

JYVÄSKYLÄ

Center Finland Central hospital, Gynecology polyclinic

Keskussairaalan tie 19, 40620 Jyväskylä

Phone. 014 269 1023

www.ksshp.fi

Fertinova / Jyväskylä

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www.vaestoliitto.fi

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