



**Information on
insemination**

**Vitanova**

vitanova.dk | +45 33 33 71 01

Welcome to Vitanova and thank you for your enquiry.

You have taken the first step to becoming a mother by means of insemination. With this material we hope to be able to give you answers to some of the questions and speculations that are probably occupying you at the moment. We try to give every single woman optimal treatment and care in the process and therefore you can phone or mail in full confidence if you need to share your thoughts and queries with us.

Before insemination you must have an informal talk with one of the midwives at Vitanova. We prefer that you come to Vitanova for the conversation, but we can do it over Skype as well. The talk can take place even though you have not yet had the various examinations mentioned in the text.

According to Danish law we cannot offer help to women that are over 46 years old.

Contact

Our telephone +45 33 33 71 01 is open every day from 8.00 – 15.30. Fdays, weekends and holidays from 8 – 12.00.

If you have ovulation and want to book an appointment for insemination you should call between 8 – 9.30. You cannot book an appointment for insemination over the e-mail. We need to talk to you to make sure that you come on the right day for insemination.

The initial conversation – what do we want?

The discussion will be centred on you and your wish to become a mother. Our aim is to give you some useful advice to improve your chance of fulfilling your wishes. In this connection it is also important to talk about life style, and some of the things you can do yourself to improve your chances for pregnancy.

Some women are completely at home with the idea of becoming mother to a donor child; others are not so sure. For this reason, we will also touch on the ethical aspects of insemination, the donor and the child.

You are welcome to invite a friend of either sex to the talk. It can also be a good idea to write down questions or thoughts before you come for the talk so that you can be surer of asking about everything. Many women spend a long time alone pondering over the decision to choose insemination and we know how difficult it can be, so you are always welcome to get in touch with us if you feel the need to enlarge on some questions, or if new questions show up.

Menstrual cycle

Cycle means ring and of course refers to the woman's pattern in the activity of sexual hormones. The cycle starts on the same day that menstruation starts and is called the 1st day in the cycle. Following this a change takes place in the hormones which among other things causes the ripening process of the ovum, the womb lining swells up and prepares to receive the fertilized ovum. If the ovum is not fertilized then the lining is rejected, causing the bleeding we call menstruation. The cycle starts then on the first day of bleeding. The last day of the cycle is the day before the next bleeding starts. About 14 days before the start of the cycle and the start of the next bleeding, ovulation takes place.

Ovulation tests

Some women can feel when they have ovulation, either because they feel puffed up or notice a tightening in the abdomen, or even have some pain on the side of the body where ovulation takes place. Other women notice that their vaginal secretion changes character in the days leading up to ovulation.

In the insemination process it can be of great help if the woman can feel the symptoms of ovulation. For this reason, we need the help of chemical ovulation tests. These tests only react to the ovulation hormone LH, which is only active during the few days leading up to ovulation. The hormone is released into the woman's urine and it is this we use in the tests.

The procedure is quite simply that the woman urinates on a plastic stick containing a filter treated with chemicals that only react when there is LH in the urine. The LH hormone describes a steep curve which also

falls off sharply. For some women the peak can come in the course of 24 hours, for others it might take 5 – 6 days. It can be misleading if you keep testing after the first positive test. Therefore, it is important to start testing before there is any LH in the urine, so that a couple of tests are completely negative, and you stop testing after one clearly positive result.

The first positive test indicates ovulation within 24 – 36 hours which is the time window for insemination. We recommend testing morning and evening. The sperm used in insemination is active for 24 hours after being placed in the neck of the uterus. From this we can say that if you have a negative test in the morning and a positive one the same evening, then you should be inseminated next day. If you have a negative test in the evening and a positive test next morning, then you should be inseminated the same day the test is positive or the day after.

During our talk the midwife will instruct you in how to gain the best result with the ovulation tests and how to work out your own cycle.

Call Vitanova when the test gets positive

As soon as the test is positive you ring us at Vitanova on +45 33 33 7101 and we will help you find the best time for insemination. The telephone time in the morning is from 8.00 to 9.30 CET and is reserved for women with ovulation.

Hormones

Women with a perfectly regular menstrual cycle can normally not benefit from hormone stimulation. On the contrary, it could cause several ova to be ripened. In some cases, the woman could become pregnant with more than 2 – 3 fetuses which always involves a certain risk for both mother and children during pregnancy and while giving birth.

There can be cases where hormone stimulation is necessary, for example with PCO or other hormonal imbalances. If hormonal stimulation is necessary, then arrange with the doctor who prescribed the hormone treatment for scanning before insemination. If there are more than 3 ripened ova then insemination is ruled out and you must wait until the next cycle since we feel that the risk to you and the fetuses is too great. Scanning is normally carried out on days 10 or 12 in the cycle. When you have been scanned please phone us so that together we can plan when insemination should take place. Your doctor will normally be able to give you the optimal time for insemination based on the state of ripening of the ovum as shown on the scanning picture.

You can also get the scan at Vitanova and be followed by our gynaecologist.

Examinations before insemination

Before you start the insemination process you need to get tested for HIV and Hepatitis. Once you get the results for your tests you need to send, e-mail or fax a copy of them to us. According to the Danish law your name and ID shall be seen on the copy.

Summary of the tests that must be taken prior to treatment

Women	Men
To be taken before starting treatment	To be taken before starting treatment
HIV (HIV1 and HIV2)	HIV (HIV1 and HIV2)
Hepatitis (HbsAg, anti-HBc and anti- HCV)	Hepatitis (HbsAg, anti-HBc and anti- HCV)
FSH, LH, Oestradiol (hormones)	Sperm analysis
Chlamydia	Chlamydia
SMEAR	

We also recommend that you do the following tests:

HSU – examination of the uterus and the fallopian tubes

Hormones

AMH – anti-mullerian-hormone

TSH

Anti-TPO

AFC – ultrasound scan, that tells the number of follicles in the ovaria

Take care

Some women can have abdominal infections which do not show any symptoms. These could be Chlamydeous, Gonorrhoea or other bacterial infections. If a woman is infected and is inseminated this can spread the bacteria through the fallopian tubes and into the abdominal cavity. Here are such vital organs as the liver and the intestines and an infection here can result in serious illness if the worst comes to the worst. During the whole process you must be very careful with your sexual behaviour in terms of risk of infection. With unsafe sex – even with a partner you can trust – there is always the risk of transmission of bacteria. If during the preliminaries in the process of insemination you become unsure as to whether you have been infected with any sexually transmitted disease, then it is important to have new tests carried out before the actual insemination. We are confident that you take care of yourself and accept the responsibility for being free of infection during the process of insemination.

Examinations for infections harmful to the foetus

These examinations are not necessary concerning the insemination process it is only for your information.

German measles

German measles or Rubella is a very dangerous infection if you are pregnant as it can cause severe damage to the foetus, but with the introduction of vaccination programmes it has almost been wiped out. The Danish State Serum Institute states that only 2 cases have been reported in pregnant women since 1996 and neither case caused foetal damage. If you are in doubt as to your status of immunity, then seek advice from your own doctor.

Parvovirus

Most people have suffered from this illness as children. It is most widespread among children up to the age of 12. If you work with children or have children of your own in kindergarten it would be a good idea to ask your doctor whether it is necessary to have to be tested for immunity. If you are not immune then during your pregnancy you must avoid close contact with children who have contracted the illness.

Toxoplasmosis

During our grandmother's time pregnant women were warned against eating raw hare meat, which was believed to cause foetal damage. It was mistakenly believed that handling raw hare meat resulted in "hare-lip", i.e. a cleft upper lip and palate for the child. Today we know that Toxoplasmosis is caused by a tiny parasite that has the cat as its chief host and which can be transmitted to humans via the cat's excrement. This is normally unnoticeable to us, but pregnant women are advised not to clean out the cat's tray because we know that this is one way of transmitting the disease to the foetus. This doesn't mean that you must get rid of your cat, but be more careful with contact with your pet. A blood test can show whether you are immune to Toxoplasmosis and if so you are also unable to transmit the disease to your foetus.

Hormone status

If you are 40 years old or older or you have symptoms of menopause (irregular cycles, no ovulation, hot flush etc.) we recommend that you take test for FSH, LH, Oestradiol and AMH (anti-Müllerian-Hormone, which, shortly said, shows how many follicles there are left in the ovaria).

Water scanning, HSU

With some gynaecologists you can take water scanning, which in principle is just the same as an HSG (hysterosalpingografi) but where water is used instead of contrast fluid.

If you have preciously suffered from abdominal illness, for example been infected with Chlamydeous, we would advise you to have an HSU before starting the insemination process even if you have been treated

for the condition. It is unfortunately the case that most infections create scar tissue or result in a stitching together of the walls of the fallopian tubes which hinders the passage of the fertile ovum and its meeting with the sperm. In some cases, a lesser operation can improve the passage. If it is not possible to reopen the fallopian tubes, you can consider IVF.

You can book an appointment for HSU at Vitanova.

Insemination

The midwives at Vitanova are specially trained in insemination which is carried out by passing the sperm through the neck of the uterus on a sterile catheter. The sperm cells can find their own way up to the ovum from here. This is carried out unhurriedly and with your cooperation. During your first talk with the midwife she will ask you about special donor wishes, and these are noted on the form that you can find at the end of this pamphlet.

Insemination can be carried out with donor sperm or your own husband's sperm. You can choose between sperm from non-contact donor and open donor (with Identity Release).

Anonymous or open donor?

We buy donor sperm from recognized Danish sperm banks. In Denmark we have clear legal guidelines for storage of sperm and for which diseases it must be screened. A donor can only be approved by the sperm bank if he is healthy both in body and mind. All donors are Danes and therefore of Scandinavian appearance and are as rule university students. At Vitanova you have the possibility of wishing a donor from three parameters: colour of eyes, colour of hair and height. If you require sperm from a donor with a different ethnic background, this can normally be supplied by special order to the sperm bank. You can arrange the order with the midwife during your pre-conversation.

During our initial consultation we will talk about your wishes concerning the donor. You have the possibility of sharing your concerns and the midwife will guide you and help you make the decision that is right for you. If during the process you have second thoughts regarding whether you want an anonymous or open donor, it is quite alright, and you just let us know in good time before your next insemination. It is not unusual that some women change their minds either because they think more about their decision or talk to other women in a similar situation.

General information about donors

We buy donor sperm from Danish sperm banks which means that the donors we use are Danes. Approximately 90% of the donors are university students. The donors go through extensive physical and psychological examinations before they are approved. We also take great care in examining whether there are any hereditary illnesses in the family. A man with a hereditary predisposition to an illness can't become a donor. Statistically only 1 in 10 are approved as donors.

You can choose the colour of eyes, colour of hair and height for both types of donor. If you need to go to more than one insemination, we can choose to switch between donors that meet with your wishes. In our experience it is best to switch between the donors until we find the donor that harmonizes best with the woman.

If you require sperm from a donor with a different ethnic background than Danish, this can normally be supplied but naturally depends on whether the sperm bank has a donor with the ethnical background you prefer.

Open donor

It requires a lot of consideration for the man to decide whether he wants to be an open donor. It may appear to be a good thing to do when you're young, but of course he also needs to consider where he is in life when the child looks him up 18 years later. At that point in time he probably has a family of his own. For this reason only a few men choose to be open donors. Also, he's not donor of just one child. Depending on a country's population he may have more or fewer children. In Denmark each donor can father up to 12 children.

An open donor will never be part of the child's life. Still we understand the women who make this choice on behalf of their children. Based on research from e.g. the Netherlands we know that most children are not interested in meeting their donor. The research also shows that if you are open towards the child about

his/hers origin, the need to meet the donor is lessened. The most important thing to a mother who chooses to have a child with a donor is that throughout her life she is open towards the child about his/hers origin. Quite early in life children start to wonder who their father is and when they do it is important to tell the truth. Most children understand that they are planned and wanted children and that mother had help to make her greatest wish come true.

When you become pregnant

When you become pregnant, you can obtain the information we have about the donor: colour of eyes, colour of hair, blood group, education or occupation (not stated with all donors), weight and year of birth. This is all the information we have about him.

Contact between child and donor

The open donors Vitanova uses have an agreement with the sperm bank stating that the donor will not meet with the child until he/she is at least 18 years old. This means that if your child is interested in meeting with the donor all contact must go through the sperm bank, as only the sperm bank knows the identity of the donor. If for any reason the sperm bank or Vitanova cease to exist, this has been taken into account through legislation. All sperm banks and fertility clinics in Denmark have a legal obligation to surrender all data to cooperative partners.

If the donor dies before the child turns 18, the sperm bank is not obligated to establish contact between the donor's family and the child. From a legal point of view the agreement is only valid between the donor and the sperm bank and not the donor's family. When your child is born you will receive a document from us which states who your child should turn to in case he/she wishes to obtain information about the donor.

When the child turns 18, he/she has the possibility of contacting the sperm bank to obtain the donor's civil registration number and a description of the donor's health and family relations. Furthermore the child can obtain a more personal description of the donor.

Known donor

If you know a man who wants to donate your child, this is a possible option. However, it requires planning and you need to take your time to find out if this possibility is best for you.

Your donor shall have an initial conversation with us before he can be accepted as a donor. He shall have taken bloodtests and a sample of sperm, to see if the quality is such that it can be used for treatment. It is therefore necessary that your donor comes to the clinic for the conversation.

After the conversation we make a report which you shall read and sign if you accept the donor. Once you have accepted the donor he can deliver sperm for freezing at Vitanova. We store the frozen sperm and thaw it when you come for treatment.

Your partner's semen

For some couples pregnancy is possible even though the partner's semen is of low quality. In some cases the treatment carried out by us before insemination can improve the quality to such an extent that fertilisation of the ovum is possible. The procedure during insemination is the same as with donor semen. Should your partner's semen not be good enough, or if he is unable to produce it, we can help you find a donor who resembles your partner as closely as possible.

Insemination itself

When you come for insemination the midwife will discuss with you how it is carried out. There is plenty of time to talk about what will happen and you have the opportunity of asking all the questions you like.

After you have talked to the midwife and are ready for insemination, the sperm is placed beyond the neck of the uterus with a thin, sterile catheter. The insemination itself takes no more than 5 – 10 minutes and is normally quite painless. You may now remain resting for about 30 minutes – not so much for physical as for emotional reasons – so you have your soul with you, so to speak! You can spend this resting time as you think fit. You can listen to music, read a good book, or perhaps you would like a short nap. Our insemination couch is specially designed so that two people can lie close together if that is what you wish.

Acupuncture

You can choose to have acupuncture together with insemination. Acupuncture is gaining footing in the western world and it has now been scientifically proven that acupuncture has a positive effect on the process. Research in Germany, Denmark and Sweden has shown that acupuncture increases the success rate in relation to the treatment of childlessness. Furthermore, research in Germany, China and Denmark has shown that acupuncture increases the incidence of pregnancy by about 20% compared to women who have not had acupuncture during insemination. Vitanova's acupuncturists have great experience with fertility treatments and try to give each woman an individual treatment. Stimulation with the needles is based on each woman's current situation and is not a standardised, scheduled treatment. Thus, you may also experience that the acupuncturists stimulate different points at each session.

Effects of acupuncture

If you choose to have acupuncture together with insemination, you will lie with needles for about 25 minutes before insemination and then another 25 minutes with other needles after insemination. In all 10 needles are given before insemination and 8 after insemination. Points on the body are chosen which experience has shown to give more gi (energy) to the uterus and to increase the flow of blood. Some needles have a relaxing effect while others stimulate the hormonal system. It can perhaps sound rather wild with so many needles, but they are so fine and thin that you probably won't notice them at all. The acupuncture makes you relax, increases the flow of blood in the uterus and thus strengthens the mucous membrane so that the fertilized egg fastens itself more easily. Furthermore, the acupuncturists try to strengthen your immune system in order to minimize the risk of abortion. The acupuncturists also give you good advice about food and about what else you can do to increase the chances of pregnancy. The acupuncture is stimulating but it is important to take care of oneself and stay in shape in order for the acupuncture to take effect.

After the insemination

Act as usual

When the sperm has been placed in the cervix the sperm cells quickly swim the last stretch through the uterus and fallopian tubes where they hopefully meet the ovum. When the sperm cells have reached that far you can move and exercise as much as you wish.

Pregnancy test

You can take a pregnancy test if you haven't had your menstruation 16 days after insemination. Good luck!

No matter what the result is we would like you to let us know. We are obliged to inform the sperm bank and National Health Service of pregnancies from the individual donors so we can avoid too many pregnancies from the same donor.