This information is intended for all couples considering trying to get pregnant using donor eggs. It is also intended for couples proceeding with IVF using egg donation and is considered to be part of the Informed Consent process.

What is egg (oocyte donation)?

Egg donation is a way for a couple (the "recipient" couple) to get pregnant using an egg from another woman, the egg donor. The donated eggs are fertilized by the male (recipient) partner's sperm. The resulting fertilized eggs, or embryos, are then transferred into the recipient's uterus. This requires the egg donor to go through an IVF cycle in which her ovaries are stimulated with hormone medications, and eggs are retrieved from the ovaries.

What are the indications for egg donation?

Couples may consider egg donation if they are unable to use the female partner's eggs because of:

° Maternal age greater than 43 - While many women over age 43 still have regular periods, pregnancy rates with IVF are very low, in the range of 1 to 2%. Some couples may decide to use an egg donor to increase their chances of success with IVF.

° Diminished ovarian reserve - The number of eggs in a woman's ovaries decreases over time. As the number of eggs decreases, the chance of pregnancy also decreases. This usually happens in the late 30's and early 40's, however it may occur even earlier in some women. When this occurs, the ovaries respond very poorly to fertility medications. For this reason, egg donation may be advised.

° Several previous failed IVF cycles - In some cases, a couple may try several IVF cycles without achieving a pregnancy. Although a cause for not becoming pregnant may not be identified, sometimes egg donation is considered.

° Premature ovarian failure

° Maternal genetic condition which could be passed on to a child

How do I find an egg donor?

There are two types of egg donors:

° Known egg donor - In this circumstance the egg donor is known to the couple, often a family member or close friend, who is aware of the couple's struggles with infertility and has offered to donate her eggs to them. All egg donation cycles at Aurora are known egg donors. It is up to the couple to find their own donor. The "ideal egg donor" is a woman under age 35 with proven fertility (she has had a pregnancy or child before).
Anonymous egg donor - Anonymous egg donation is not available in Canada, primarily because of federal laws that prohibit monetary compensation of egg donors for providing eggs. Many couples prefer to use an anonymous egg donor, or do not know a suitable egg donor. There are many programs outside of Canada offering anonymous oocyte donation. At Aurora, we can help you to find a suitable program if this is what you choose.

What are the steps in egg donation?

1) **Physician consultation** - to determine if getting pregnant with using an egg donor a good choice for you.

2) Identifying an egg donor.

3) **Screening of the egg donor and her partner (if she has one)** - includes a physician consultation, medical, psychological and emotional screening, and a full discussion of all aspects of an egg donation cycle (see Step 5 below).

4) Screening of the recipient couple.

5) Psychological counseling.

6) Legal advice and contract.

7) Ethics review.

8) Information session for both the egg donor and recipient couple.

How is the egg donor screened?

- **Medical history** - includes current medical history, family medical history, family genetic history (for inherited medical conditions, birth defects, neonatal or infant deaths), medications and lifestyle factors including smoking, alcohol and recreational drugs.

- **Physical exam** - full physical examination including pelvic exam, pap smear if needed and breast exam.

- **Investigations** - hormonal testing, infectious disease testing (Hepatitis B and C, HIV, chlamydia, gonorrhea and syphilis), vaginal ultrasound; genetic testing may also be recommended.

- **Full discussion of an IVF cycle and potential risks of IVF.**

- **Psychological counseling.**
How is the recipient couple screened?

- Infertility history including the reason for egg donation.
- Medical history including medical issues that could potentially affect pregnancy - for women greater than 43 years of age this may include a referral to an obstetrician to discuss the potential complications of pregnancy in a woman of advanced maternal age.
- Lifestyle factors including smoking, alcohol and recreational drugs - smoking has a significant impact on the chance of pregnancy therefore both partners are advised to quit smoking.
- Physical exam - physical examination by either an Aurora physician or their family physician.
- Investigations - these include hormonal testing, infectious disease screening, transvaginal ultrasound and sonohysterogram.

Psychological and emotional screening

Psychological counseling is a mandatory part of the screening process to ensure that all individuals involved are comfortable with their decision. It is important to ensure that there are no potential concerns or risk factors for the egg donor that may make her regret her decision in the future. It is important to include the egg donor’s partner. Counseling may also include a discussion of how the egg donor may be involved in the child’s life, what and how to tell the child or children and family, etc. This is one of the most important parts of the screening process. Aurora will recommend a counselor experienced with these issues.

Legal advice and contract

In 2004 the Federal Government passed Bill C-6 which is a Bill concerning all aspects of advanced reproductive technology. This Bill clearly states that couples or clinics cannot advertise for egg donors. Egg donors cannot be compensated or paid for giving a couple her eggs. Recipient couples may reimburse expenses for which a receipt can be provided (travel, medications, childcare, etc.) but are not allowed to reimburse the egg donor for time off work or pay the egg donor for her eggs.

It is also necessary that the recipient couple and egg donor have a formalized legal contract that must be reviewed independently by each of their lawyers, and signed by all involved parties.
What are the success rates of an egg donation cycle?

The chance of success depends on the age of the egg donor. Your Aurora physician will discuss this with you in greater detail at the time of consultation.

What is the risk of miscarriage and chromosomal abnormalities?

The chance of miscarriage is also related to the age of the egg donor and not the age of the recipient. In general the risk of miscarriage is approximately 10 to 15%. The risk of having a baby with a chromosomal abnormality is also related to the age of the egg donor and not the recipient.

What are the risks of IVF to the egg donor?

- **Medication side effects** - exaggeration of symptoms that frequently occur during the menstrual cycle, such as feeling of heaviness or bloating in the pelvis, mood changes, headaches, breast tenderness and decrease in energy level may occur.

- **OHSS** - Gonadotropin medications stimulate the ovaries to mature and produce eggs. At the same time the ovaries increase in size, and this may cause abdominal or pelvic discomfort. After the treatment cycle the ovaries will return to their normal size after a few weeks. In approximately 3 to 5% of cycles an exaggerated reaction called Ovarian Hyperstimulation Syndrome (OHSS) occurs. OHSS results in ovarian enlargement. Blood vessels around the ovaries become “leaky” causing fluid to collect in the abdominal and/or chest cavities. These symptoms may require close observation and/or hospital care. OHSS symptoms tend to last longer if the cycle has resulted in a pregnancy, so OHSS in egg donors is usually less severe. Most of the cases of OHSS can be managed by rest, plenty of fluids and mild pain relievers. Ovarian twisting (torsion) is another very rare complication associated with severe OHSS. The enlarged ovary, by twisting, cuts off its own blood supply, and this may require emergency surgery for removal of the ovary.

- **Risks of egg retrieval** - this procedure has a very low rate of complications. As with any other procedure, there is a very small risk of infection. Antibiotics are usually given prior to the procedure in order to minimize this risk. There is a small risk of bleeding at the site of vaginal puncture, which is usually promptly stopped with local pressure. There is also a small risk of puncture of a pelvic blood vessel, which could necessitate surgery. The chance of a reaction to the sedatives or pain medications is small.
What is a “mock cycle”?

Before undergoing the actual egg donation cycle, the egg recipient will need to undergo a mock cycle. In this cycle estrogen and progesterone, taking by mouth and vaginally, are used to prepare the lining of the uterus in preparation for the fertilized egg. This mock cycle allows us to know how many days will be needed to prepare the recipient’s uterus during the actual cycle.

What happens during an egg donor/IVF cycle?

Once the screening is completed and the couple and their egg donor decide to go ahead with an egg donor cycle, the egg donor goes through an IVF cycle. While the egg donor is going through ovarian stimulation, the egg recipient is taking estrogen and progesterone tablets to prepare the lining of her uterus to accept a fertilized egg.

After the egg retrieval, the donor's eggs are fertilized with the recipient's male partner's sperm, and embryos are created. Embryos (usually one or two,) are then transferred into the female egg recipient's uterus 3-5 days following the egg retrieval. A pregnancy test is done two weeks later. If any additional healthy embryos are available, they are frozen for future use of the recipient couple.