The friendly guide to fertility

Written by fertility doctors, translated for everyone.

Visit FERTILITY.CA for more info

Get busy.

Just starting?

Many women get pregnant the first month they try. We hope you will be pregnant naturally within six months if you're under 35 years old, or one year if you're over 35. Check out the Overall Health section inside for tips on boosting your fertility.

Having trouble?

If it has been 6-12 months it may be time to learn more. Find out about common fertility conditions inside, and check out our cheat sheets on tests and treatments that may help you get pregnant.

Got diagnosed?

If you've been diagnosed with a condition, you're probably filled with big, frightening questions. How does it affect your fertility? What happens now? Can you still get pregnant? Read up inside on common conditions, and visit Fertility.ca for more detailed insight.

This guide will get you rolling. But for the full scoop, visit FERTILITY.CA

Eggs.

You're born with hundreds of thousands of immature eggs in your ovaries. Each egg carries half a potential baby's genetic information. (The other half, of course, comes from sperm.) Every month, your body chooses one promising egg to mature. Once the chosen egg is ready, it's released into your fallopian tubes (ovulation). It'll stay there for a day or two, waiting for sperm. If it's fertilized, it'll travel into your uterus, implant on the wall, and become a baby.

In this department, timing is everything. Ovulation happens about 14 days after your period starts. You can track it yourself with a home urinary LH detection kit. Try to have sex more often during your 'fertility window', the four or five days leading up to ovulation, and a day following it.

Egg quantity & quantity.

Lower egg quality, or fewer eggs, are fertility issues that usually affect older women. Their ovarian reserve has naturally diminished, and the healthiest eggs may have already been used. Sometimes, hormone therapy and/or IVF can help. Check out our cheat sheet for more info about how your fertility doctor can measure your egg quantity and quality.

PCOS.

If you have lots of eggs but long and irregular periods, you may be suffering from polycystic ovary syndrome (PCOS). Basically, immature eggs release hormones. If you have too many immature eggs, the increased hormones confuse your body as it tries to grow and release these eggs. The good news is that hormone therapy for PCOS is an option, and the outcome is usually excellent.

Tubes.

Fallopian tubes are where the real action happens: the sperm fertilizing the egg. Your ovaries create eggs, but it's too difficult for sperm to travel all the way to your ovaries. So when an egg is ready to be fertilized, one of your ovaries will release it. A fallopian tube catches that egg, and provides a friendly environment for the egg and sperm to meet. Then the fallopian tube will use its hairs and muscles to move the fertilized egg into your uterus.

Endometriosis.

Endometriosis is a disease where the lining of your uterus grows in places it shouldn't. Often that's around your fallopian tubes, on your ovaries, and behind your uterus. These chunks of unexpected tissue can reduce the quality and quantity of your eggs, cause blockages in your fallopian tubes, and make it harder for a fertilized egg to implant in your uterus. Endometriosis is treated with hormone therapy. In more severe cases, in vitro fertilization (IVF) is an option.

Blocked tubes.

Any tubal obstruction can cause major challenges to fertility. Sometimes blockages can be cleared with a catheter. If not, IVF bypasses your tubes completely.

Hydrosalpinx.

Hydrosalpinx is when a tube gets large and swollen with fluid. This fluid can block the egg from being fertilized or from implanting in the uterus. To control the fluid, it's usually treated by either removing the tube or blocking it with a clip. If natural conception is difficult after your tube is blocked or removed, IVF is an option.

Sperm.

Sperm are some of the tiniest cells in a man's body. They're responsible for delivering genetic information to the egg, so it has enough information to become a baby.

Sperm travel from the "sperm factory" in a man's testicles to his sperm duct and into your vagina. Then they swim through your cervix and uterus, and eventually reach the end of your fallopian tube by "sniffing" out the egg.

Here, the sperm will fertilize your egg (if an egg is ready and waiting). Sperm are released by the hundred million, so their odds are good!

Six ways to help your sperm:

- avoid excessive heat, like hot tubs or saunas
- limit coffee to one or two cups per day
- · don't smoke or do drugs, even marijuana
- don't drink more than two ounces of alcohol twice per week
- maintain good eating habits—fresh fruits, leafy vegetables, and red meat can help
- don't go on any intense diets
- exercise regularly and moderately

Low sperm count.

Sometimes a low sperm count can be reversed with lifestyle changes. If not, IVF/ISCI can help. This treatment can also help if your sperm have low motility (swimming skills) or abnormal morphology (a less healthy shape).

No sperm.

If a blocked tube causes you to have no sperm, it's often repairable with surgery. If you have a broader sperm production issue, your fertility doctor can advise you on next steps.

Uterus.

Throughout the first two weeks of your cycle, the release of estrogen causes the uterus to prepare a "nursery" for a potential embryo: thickening and enriching its lining with extra blood vessels and tissue.

Then the hormone progesterone maintains that lining, keeping it nice and thick for two weeks while your uterus waits for the arrival of the fertilized egg.

About five days after the egg has been released from your ovary and fertilized in your fallopian tube, it reaches the uterus. The "nursery" lining lets it burrow into the wall, and connect to your blood system to keep growing.

Polyps and fibroids.

These are fairly common benign growths inside your uterus. They can make it harder for the fertilized egg to implant or develop. If they're small enough, they may never cause problems. They can usually be removed surgically.

Uterus shape problems.

This condition is diagnosed with an ultrasound. It may mean your uterus dips down at the top. This doesn't usually cause difficulties, but in some cases it can create challenges carrying the pregnancy. It's treated with surgery.

Lining problems.

Menses that are unusually heavy (or light) may suggest uterine lining issues, which can affect implantation. If you are worried, talk to your doctor. Sometimes a uterine biopsy can help.

Cheat sheet: Fertility tests.

Semen analysis.

Depending on your case, your fertility doctor may check your semen volume, sperm count, sperm motility (their swimming skills), sperm morphology (their shape), DNA fragmentation (their genetic integrity), and more.

Egg count.

There are three tests that help your fertility doctor judge your egg quantity: AMH (a hormone your remaining eggs release), AFC (a count of follicles that hold eggs) and FSH (a hormone your body uses to produce eggs).

Egg quality.

Your menstrual cycle and pregnancy history (if you've had losses, for example) will provide insight into your egg quality. But the best test is Preimplantation Genetic Screening (PGS): your doctor retrieves eggs (usually during IVF) and inspects the chromosomes directly.

Sonohysterogram.

This ultrasound test involves having sterile saline injected into your uterine cavity to ensure your uterus has a normal shape and open fallopian tubes.

General health.

For men, your fertility doctor may check for abnormal testosterone levels and testicular issues. For women, your doctor may look for any reproductive hormone or alloimmune issues. Age and lifestyle is also assessed.

Cheat sheet: Treatments.

Hormone therapy.

A man's sperm production and a woman's reproductive cycle both run on hormones. If your levels are a little off, medication can help increase (or decrease) them. Key hormones are testosterone, estrogen, hCG, FSH, LH and GnRH.

Intrauterine insemination (IUI).

IUI may help if you have a low sperm count, sperm with low motility, or difficulty having intercourse. In IUI, your fertility doctor selects healthy sperm and inserts them into the woman's uterus right when she's ovulating.

In vitro fertilization (IVF).

IVF may help if fertility issues make egg fertilization or implantation difficult. In IVF, your fertility doctor retrieves an egg from the woman. The egg is fertilized with sperm in a lab, and then implanted back into her uterus to grow.

Intracytoplasmic sperm injection (ICSI).

If the sperm have difficulties swimming into the egg, ICSI may be added to your IVF treatment. In ICSI, instead of waiting for the sperm to fertilize the retrieved egg, your fertility doctor will inject a single sperm directly into the egg.

Preimplantatation Genetic Screening (PGS)

lf, during IVF, you want to be confident that the embryos are genetically balanced before they are transferred, PGS will provide added reassurance

Overall health.

Quit (or reduce) your smoking.

Of all lifestyle changes, quitting smoking is by far the most effective! Smoking has the potential to harm an embryo or baby, and harms your ability to get pregnant. You should quit smoking at least two months before you begin trying.

Sleep well.

Improving your sleep hygiene is the surest and quickest way to improve your general health. If you're a troubled sleeper, try setting a regular bedtime, limiting late night TV or computer screen time, and cutting down on caffeine.

But becoming a good sleeper isn't always easy. You can try getting resources from the Canadian Sleep Society, downloading meditation apps, and taking natural supplements like magnesium or melatonin. If you have no luck, see your doctor and schedule an appointment in a sleep clinic.

Drink responsibly.

The relationship between alcohol and egg quality isn't entirely understood, but it's safe to say that 3-4 drinks a day is too much. If you find yourself tempted to drink to relieve stress or emotional pain, reach out to a therapist or a trusted friend for support.

Eat reasonably.

Under-eating and being underweight are associated with lower fertility. If you're overweight, it may help to lose some weight, but that's still being debated. No intense diets!

This guide will get you rolling. But for the full scoop, visit **FERTILITY.CA**, talk to your doctor or get in touch with us. We're here to help.

♥ Follow us: @fertilityca

f Like us: tiny.cc/fertilityca