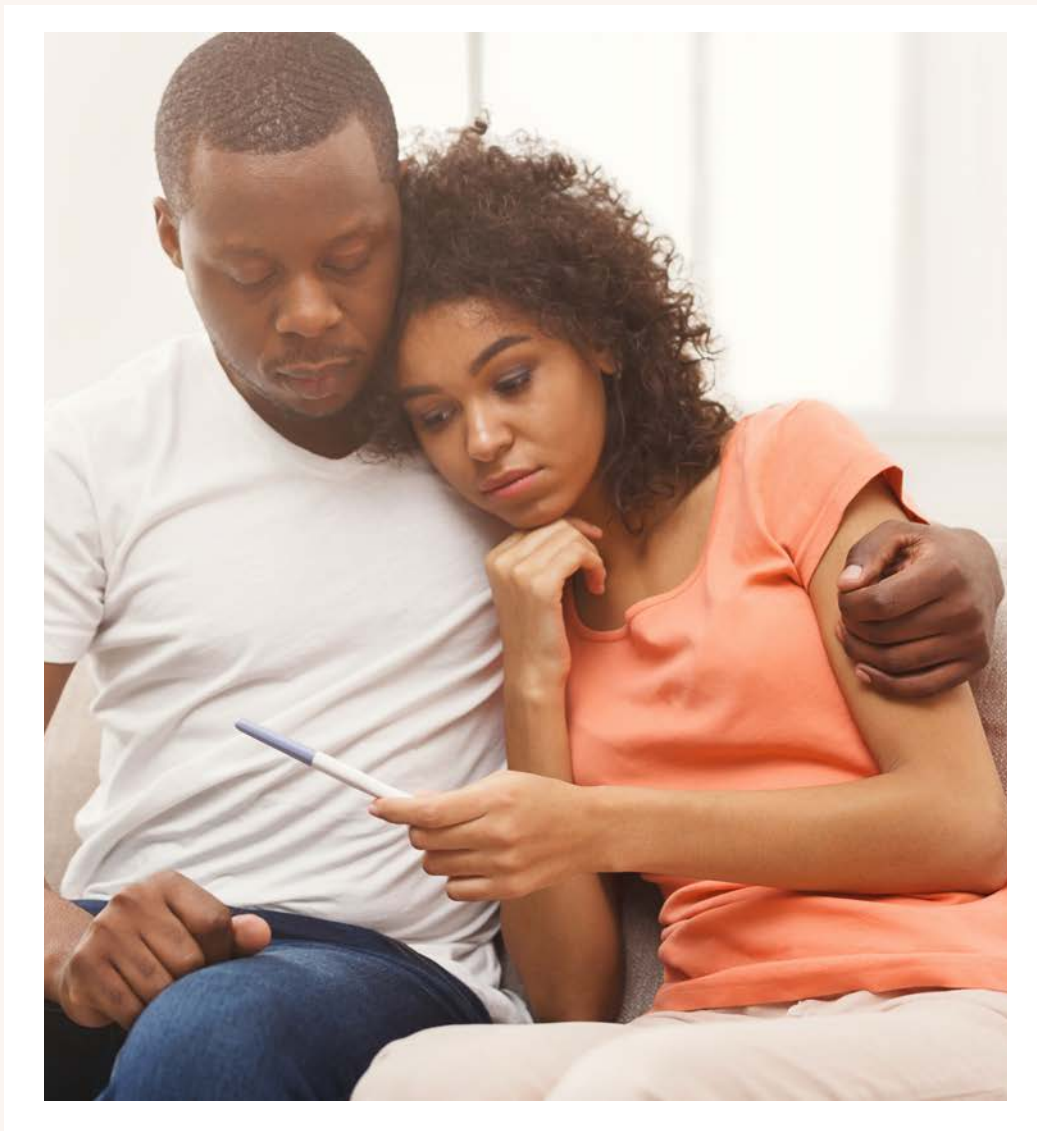


FERTILITY AND CONCEPTION

DIFFICULTY CONCEIVING? YOU'RE NOT ALONE

But there are options available!



THE BODY AGENCY



www.thebodyagency.com

Before We Begin....



Language Matters: This guide is written for heterosexual couples whose gender identity is the same as their biological sex assigned at birth.

If you're reading this, chances are you aren't quite feeling like yourself and are trying to figure out what's going on with your body and mind. Your hormones may be starting to change. If you have been trying to get pregnant for a year or more without success (6 months or more if you are 35 and up), or have not been able to stay pregnant, you may be struggling with infertility. Receiving this diagnosis from your doctor can be heart-breaking, but it does not mean you cannot successfully have a baby-- it just means there could be an issue in one or more of the 4 basic steps to getting pregnant:

1. Ovulation (release of a viable egg from one of the ovaries)
2. Movement of the egg down the fallopian tubes towards the uterus
3. Joining of an egg with a viable sperm along the way and/or
4. Implantation of the fertilized egg (now a zygote) inside the uterus.



Both men and women can have problems that cause problems with fertility. About a third of couples' infertility cases stem from the woman's body, another third from the man, and the remaining cases are a combination of the two or unknown problems. About 1 in 8 couples in America have difficulty getting pregnant or staying pregnant. But don't despair! Many women and couples who experience infertility initially can be helped – read on to learn more.

What causes infertility?

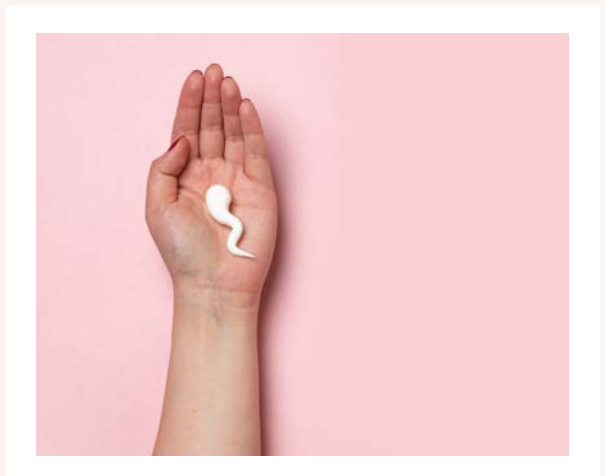
MALE INFERTILITY

Male infertility is most often the result of 1 of 3 issues:

- When veins in the testis are too large, the testis get too warm, affecting the number or shape of sperm (varicocele).
- Inefficient sperm motility often caused by the shape of sperm or injuries/damage to the reproductive system that block sperm, or
- Other factors that lead to generation of too few/no sperm at all.

These problems may be present at birth, or start later in life due to injury or illness. Male fertility can be affected by health and lifestyle.

For instance, men may experience fewer or healthier sperm if they use drugs, alcohol, or cigarettes heavily; if they are/have been exposed to environmental toxins such as pesticides or lead; if they have undergone radiation treatment or chemotherapy for cancer; or if they have had certain health problems like mumps or hormone problems. Certain medications may also affect male fertility.



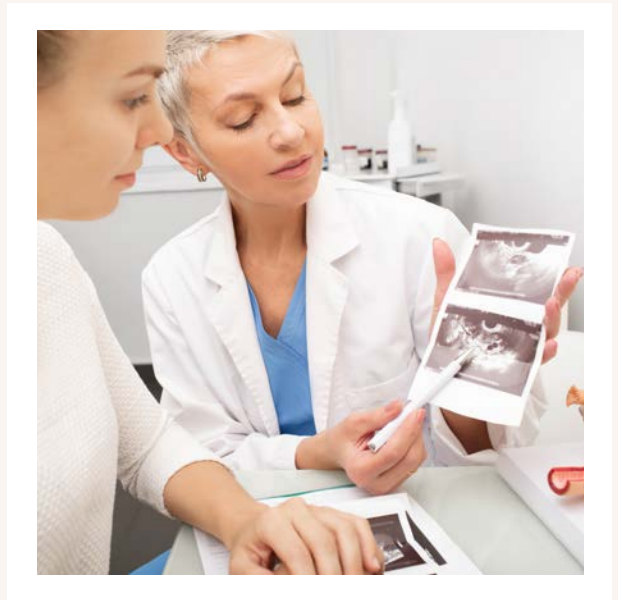
FEMALE INFERTILITY

Female infertility is most often caused by problems with ovulation, meaning no viable eggs are released that can be fertilized. Signs that a woman is not ovulating normally include irregular or absent periods. Problems with ovulation are often caused by polycystic ovarian syndrome (PCOS) or primary ovarian insufficiency (POI). PCOS causes a hormone imbalance, resulting in infrequent or prolonged menstrual periods or excess male hormone (androgen) levels. POI occurs when a woman's ovaries stop working normally before age 40 (not the same as menopause).



Other causes of female infertility often stem from physical issues with the uterus, such as fibroids or blocked fallopian tubes often due to pelvic inflammatory disease, endometriosis, or surgery for an ectopic pregnancy. Additionally, a number of factors can affect the viability of a woman's eggs.

As women age, their remaining eggs are more likely to have chromosomal errors, meaning they are less likely to result in a viable pregnancy and are more likely to end in miscarriage. Because the viability of a woman's eggs drops significantly as she ages, some women in their 20s or early 30s who know they would like to have children but are not ready may consider freezing their eggs to preserve them in prime condition.



Older women are also more likely to have underlying health conditions that can cause fertility problems. Other factors can adversely affect a woman's risk of infertility including stress, diet, weight (under or overweight), sexually transmitted infections (STIs), use of drugs, cigarettes, or alcohol. Fortunately, there are many avenues for women who are having trouble conceiving. To begin, women who are healthy have the best chance of conceiving and carrying a baby to term. A healthy lifestyle, including a balanced diet, ample sleep and exercise, and minimal stress can help.

Naturopaths may be helpful in helping you identify natural ways to improve fertility, including with acupuncture, but if you have taken all these steps but are still having trouble conceiving, you may want to talk to your trusted healthcare provider about your options.

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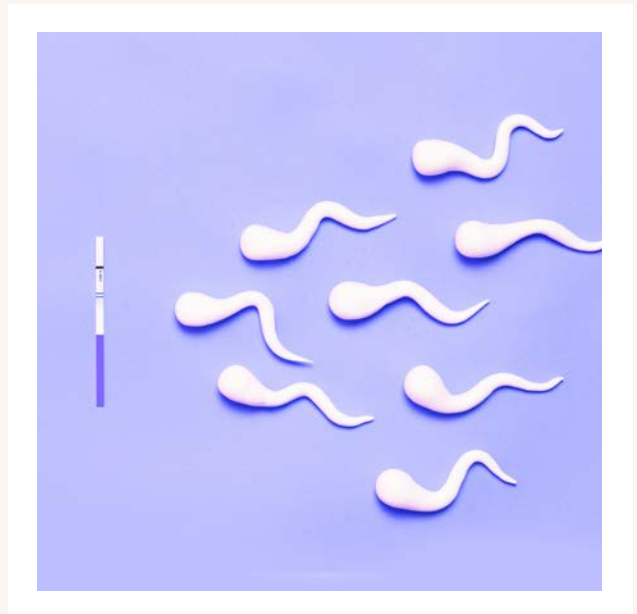
If you are 35 or older and have not yet conceived despite 6 months of unprotected sex, you should see your doctor since your chances of getting pregnant decrease each year after age 30, dropping more precipitously at 35 and again at 40. They will likely refer you to a fertility specialist. You will want to do your homework about the doctor and the facility where they practice, as success rates can vary.



When you have identified an appropriate fertility provider, they will do a fertility checkup. Sometimes they will be able to identify the problem by discussing both partners' health and sexual histories, but more often than not, they will need to do more tests.

For men, this usually starts with a semen test, looking at the number, shape, and movement of sperm, and sometimes his hormone levels.

For women, it's more complicated and it can be a long, difficult process, but it starts by assessing whether ovulation is occurring each month with ovulation tracking at home, blood tests, or an ovarian ultrasound.



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Hysterosalpingography is essentially an x-ray of the uterus and fallopian tubes using a special dye.

If ovulation is normal, the doctor will look to see if there is a block in the fallopian tubes or uterus that keep the sperm from reaching the egg. This test, called a hysterosalpingography, is essentially an x-ray of the uterus and fallopian tubes using a special dye. They may also do a minor surgery, called laparoscopy, to check the ovaries, fallopian tubes, and uterus for disease and physical problems.



TREATMENT OF INFERTILITY

The good news is that if a doctor can identify the cause for infertility, they can often treat it with medicine, artificial insemination, assisted reproductive technology, or a combination of these. Treatment may be based on age and overall health, test results, or how long a woman or couple has been trying to get pregnant, but individual circumstances and preferences around cost and acceptability of side effects may also be important considerations.

“ The good news is that if a doctor can identify the cause for infertility, they can often treat it.

Treatment for infertility can be an emotional, time consuming, and expensive experience, so it's important to talk to an expert about the benefits, side effects, costs, and possible dangers of all options before embarking.



Treatment for male infertility depends on the issue. Men who experience premature ejaculation or impotence may be treated with behavioral therapy or medicine. Men whose semen contains no sperm because of a blockage can sometimes be helped with surgery. Low sperm count can be addressed with surgery or antibiotics if the problem is caused by an infection.

Doctors can also collect sperm directly from the male reproductive tract and transfer it into a woman or mix it with an egg before inserting an embryo into a woman if needed.

Women who have difficulty conceiving also have options, depending on the issue. Some female infertility issues may also be repaired with surgery, but ovulation problems are more often treated with fertility medication. Many of these medicines increase a woman's chance of getting pregnant with more than one egg or embryo, which can lead to more problems during pregnancy and a higher risk of health/developmental problems, including prematurity.

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Some medications that are commonly used include:

- Human menopausal gonadotropin or hMG (Repronex, Pergonal): This injected medication acts on the ovaries to stimulate ovulation and is used for women who don't ovulate due to issues with their pituitary gland.
- Follicle-stimulating hormone or FSH (Gonal-F, Follistim): This injected medication causes the ovaries to begin the process of ovulation, much like hMG.
- Clomiphene citrate (Clomid): This oral medication acts on the pituitary gland to cause ovulation, often generating multiple eggs per cycle and is frequently used for women who have PCOS or other problems with ovulation.
- Gonadotropin-releasing hormone (Gn-RH) analog: This injection or nasal spray acts on the pituitary gland to change when the body ovulates and is used for women who don't ovulate regularly each month or who ovulate before the egg is ready.
- Metformin (Glucophage) (often used with clomiphene citrate or FSH): This oral medication helps the body ovulate and is used for women who have insulin resistance and/or PCOS. It can help lower the high levels of male sex hormones in women with these conditions.
- Bromocriptine (Parlodel): This oral medication is used to treat women in whom high levels of prolactin, the “milk production hormone”, are interfering with ovulation.

Couples with unexplained infertility, mild male infertility, or women with cervical mucus issues may be helped by artificial insemination— also known as intrauterine insemination (IUI). With IUI, specially prepared sperm are inserted directly into a woman’s reproductive tract. If the woman also has issues with ovulation, she may have been treated with ovulation-stimulating medication, like clomid (mentioned above), before IUI to increase chances of conception.



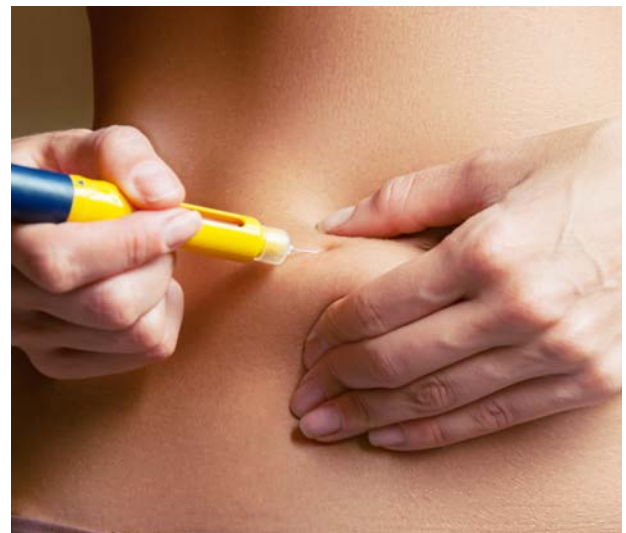
Women who are still unable to conceive may benefit from assisted reproductive technology (ART). These are methods used to help infertile couples by removing eggs from a woman’s body, mixing them with sperm to make embryos, and inserting the resulting embryos back into the woman who provided the egg or another woman’s uterus. Whether or not this results in pregnancy or live birth depends on the age of both partners and if the egg or embryo is fresh or previously frozen; the method used and facility/personnel doing the procedure; and the underlying reason for infertility. Common methods of ART include:

- In vitro fertilization (IVF): a doctor gives a woman medication to encourage the release of multiple eggs that are then removed from her body and mixed with sperm for fertilization in a dish. After a few days, any resulting healthy embryos are implanted into the uterus. IVF is often used when a woman's fallopian tubes are blocked or a man produces too few sperm.

- Zygote intrafallopian transfer (ZIFT) or Tubal Embryo Transfer: occurs in the laboratory, like IVF, but the embryo(s) is transferred to the fallopian tubes instead of the uterus.
- Intracytoplasmic sperm injection (ICSI): a single sperm is injected into a mature egg and the embryo is transferred to the uterus or fallopian tubes. ICSI is often used for couples when there are serious problems with the sperm, in older couples, or for those with multiple failed IVF attempts.

When a woman who wishes to become pregnant cannot (or does not wish to) produce and harvest viable eggs, ART procedures can also use donor eggs, previously frozen embryos, or donor sperm (this is also an option for IUI).

A person hoping to become a parent who has no eggs or only unhealthy eggs, or those who are unable to carry a pregnancy to term, could also consider surrogacy, which generally involves both medical and legal expertise. Surrogacy is when a woman becomes pregnant with her own egg or another woman's egg on behalf of another person. After birth, the surrogate surrenders the child to the intended parent. Other women find success overcoming male infertility or lack of a male partner by using donated sperm.



There are many issues to consider with any kind of ART, including whether the donors will be anonymous (this is legal in the U.S. but not in many other countries), open ID (discoverable after the child turns 18), or a “known” donor (often a family member or friend, but can also be arranged by previously unrelated parties). Adoption may be an appealing option to people for whom advanced fertility technology is not an option, not successful, or not of interest.

Grappling with fertility or infertility, as the case may be, is an emotionally fraught process. If you are living it, one small way to help is to be patient and kind to yourself. Give your body the nutrients, sleep, and exercise it needs. Take steps to reduce stresses and promote calm in your life. For some, these lifestyle changes can help improve fertility. Additional natural lifestyle changes, such as dietary changes, may further improve fertility and prepare the female body to sustain a healthy pregnancy.



Further improvements may be made by avoiding endocrine disrupting chemicals (EDCs) found in canned food, water bottles, plastics, cosmetics, fertilizers, children’s toys, and many others goods. These chemicals can impact estrogen, testosterone, and thyroid hormones that play important roles in reproduction. In women, for instance, EDCs can result in fertility abnormalities including infertility, sub-fertility, problems with hormones and the menstrual cycle.¹ Similarly, in men, EDCs can have an effect on semen quality.² The good news is that reducing exposure to some of these chemicals can subsequently improve fertility.³

1. “Exposure to endocrine disruptors during adulthood: Consequences for female fertility”. 2017. Journal of Endocrinology. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5479690/>

2. “Endocrine disrupting chemicals and impact on male reproductive health”. 2018. Translational Andrology and Urology. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6043754/>

3.Count Down by Shanna Swan. 2021. <https://www.shannaswan.com/countdown>

THE BODY AGENCY IS HERE FOR YOU

Connecting with support groups can be enormously helpful, as can researching all the complexities of the process.

We hope this guide has touched on all the topics you need to know about fertility and some of the common infertility issues— but if it hasn't, email us here so we can address your questions in future updates.

Remember, no matter what the issue, you have options! So be kind to yourself, and really tune into your body and needs – this will allow you to find solutions that will enable you to thrive at every age. The Body Agency is here for you and your family!



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Our mission is simply this -- we want them to love being who they truly are.

CONNECT WITH US

Let's Get Social

Engage with us on social as we curate information and products which will help you and your fertility journey.

Ask any question by posting comments or send a DM on your favorite social media channel and a member of our Body Board will reach out to help.

Don't miss your chance to be a part of the next big movement in women's self-care and empowerment. We look forward to staying in touch!



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