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ESSENTIAL

COUPLE'S FERTILITY & PRECONCEPTION GUIDE

*The His & Hers Guide
to Getting Pregnant*



Trying to conceive is a journey that you don't have to take alone! UpSpring has created a guide that both you, and your partner, can use to help increase your chances of getting pregnant naturally.

HEY THERE, FUTURE PARENTS!

If you've been looking for a guide that takes the guesswork out of getting pregnant naturally, you've found it! UpSpring has done some hard-hitting research to bring you the most important information you need to know about trying to conceive. From preconception and what nutrients help support egg and sperm health to optimizing your 'fun time' and so much more!

*A baby fills
a place in
your heart
that you
never knew
was empty.*

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PLEASE NOTE: This guide is only meant to give you a general overview of the common needs, symptoms and options for your conception journey. In no way should this be taken as medical advice. If you have any questions or concerns, please consult your physician.

FERTILITY AND INFERTILITY: STATS, FACTS AND MYTHS

*ANNUALLY,
11 MILLION
COUPLES
TRY FOR
PREGNANCY...*

*...BUT
7 MILLION
HAVE
FERTILITY
ISSUES.*



Simply stated, fertility is the ability to produce offspring. However, we as humans have one HUGE advantage over the rest of the animal kingdom: the ability to analyze, support and modify the reproductive factors that may impact our ability to conceive and carry a baby to full term.

Whether you're starting to think about getting pregnant, actively trying to conceive or you have been trying for a while, there are things you can do today that can help improve your odds of conceiving and having a healthy baby. And the best part is that none of these involve needles, pharmaceuticals or multiple doctor visits.

In the emerging field of science known as Epigenetics, scientists are discovering the genetic expression of your DNA isn't set in stone and can be modified by specific diet and lifestyle choices! More about this later in the guide. (See section "Epigenetics")

Before we get started with our couple's guide, it's important we go over some stats and information about fertility and infertility. Let's get some facts straight so you can move forward with an informed and effective plan for conception!

- On average, you have a 15-20% chance of conceiving each month.
- 12-15% of couples are unable to conceive after 1 year of unprotected sex, and 10% of couples after 2 years.
- Infertility affects both men and women. In fact, about 50% of all infertility problems are directly attributed to the male, and mainly due to low sperm count.
- According to the Center for Disease Control and Prevention, 7.4 million U.S. women ages 15-44 years old will have difficulty getting or staying pregnant.
- The most common cause of infertility in women is known as polycystic ovarian syndrome (PCOS) which affects 6.1 million women.
- The most common (and correctable) cause of male infertility cases is associated with varicoceles, also known as abnormal veins surrounding the testicles, which affects an estimated 38% of men.
- The average cost of a single cycle of IVF in the U.S. is \$12,400.
- On average, there is a 30% chance that an IVF treatment will result in a live birth.

FERTILITY MYTHS

Frequency: It's not about quantity, it's about quality! Getting pregnant is ultimately based on timing. More sex does NOT equal getting pregnant faster. In fact, if a man has sex too often, it can lead to a decrease in sperm count.

Sex positions: No need to get crazy (unless that's your thing), missionary works best.

Her orgasm: If the woman doesn't climax, it won't stop his sperm from reaching their destination.

Legs up the wall: You'll look silly and it won't help increase your odds of getting pregnant.

PARTNER ASSESSMENT QUESTIONS AND DIALOGUE

In years past, reproduction was a relatively simple concept. Sperm and egg coming together, with male and female chromosomes mixing to form the embryo. Now with emerging science, we know diet, lifestyle and environment for mother and father during preconception can impact fertility and future health of the unborn child. Because of this science we know preconception health for both partners before pregnancy is more important than ever.

Do you remember those “Couple’s Quizzes” in Cosmopolitan and other magazines that you used to sit down with your boyfriend and fill out? Well, this is sort of like that, but a little more from the ‘intimate’ variety. Use these questions to create an open dialogue around each of your personal medical histories, mindset, lifestyle and more. When it comes to having children, there’s a lot to talk about!

SIDE NOTE: If you’ve been trying to get pregnant for over a year or have had other reproductive issues such as PCOS (polycystic ovarian syndrome), your chances of becoming pregnant might be lower and you’ll need to talk to your doctor about infertility testing. Infertility affects both men and women equally, which is why it is important to address factors for both the man and the woman, including hormones, diet and other health issues.

HIS QUESTIONS

MEDICAL

- Have you been diagnosed with low sperm count or low sperm quality? (Y) (N)
- Have you ever experienced impotence or other ejaculative problems? (Y) (N)
- Have you or your partner ever had an STD diagnosis? (Y) (N)
- Are you a smoker? (Y) (N)
- Have you or your partner ever undergone cancer treatment? (Y) (N)
- Do you currently take any vitamins or supplements? (Y) (N)
- Are you on any medications or being treated for anything? (Y) (N)

HIS QUESTIONS

MINDSET

- What's one word you would use to describe how it would feel to become a father?
- What did you appreciate about how your parents raised you?
- What do you wish your parents had done differently?
- Who took care of you when you were sick as a kid?

HER QUESTIONS

MEDICAL

- Are you over 35 years old? Y N
- Have you ever been diagnosed with PCOS, endometriosis or other reproductive diagnosis? Y N
- Have you ever experienced irregular periods? Y N
- Have you or your partner ever had an STD diagnosis? Y N
- Are you a smoker? Y N
- Have you or your partner ever undergone cancer treatment? Y N
- Do you currently take any vitamins or supplements? Y N
- Are you on any medications or being treated for anything? Y N

MINDSET

- What's one word you would use to describe how it would feel to become a mother?
- What did you appreciate about how your parents raised you?
- What do you wish your parents had done differently?
- Who took care of you when you were sick as a kid?

ANSWERS

MOSTLY "NO": If you or your partner had mostly "No" for your answers and you've only been trying to get pregnant a short period of time (less than 6 months), then that does not suggest you need to see a fertility specialist at this time.

MOSTLY "YES": If you or your partner had mostly "Yes" for your answers and you've been trying for over 12 months, it would be a good idea to visit your doctor and fertility specialist for testing.

FEMALE FERTILITY WORKUP— OVARIES, EGGS AND HER HEALTH

When you're trying to conceive, it is important to make sure your body is ready for conception and if there are any issues, to address them right away.

HER ANATOMY & PROCESSES

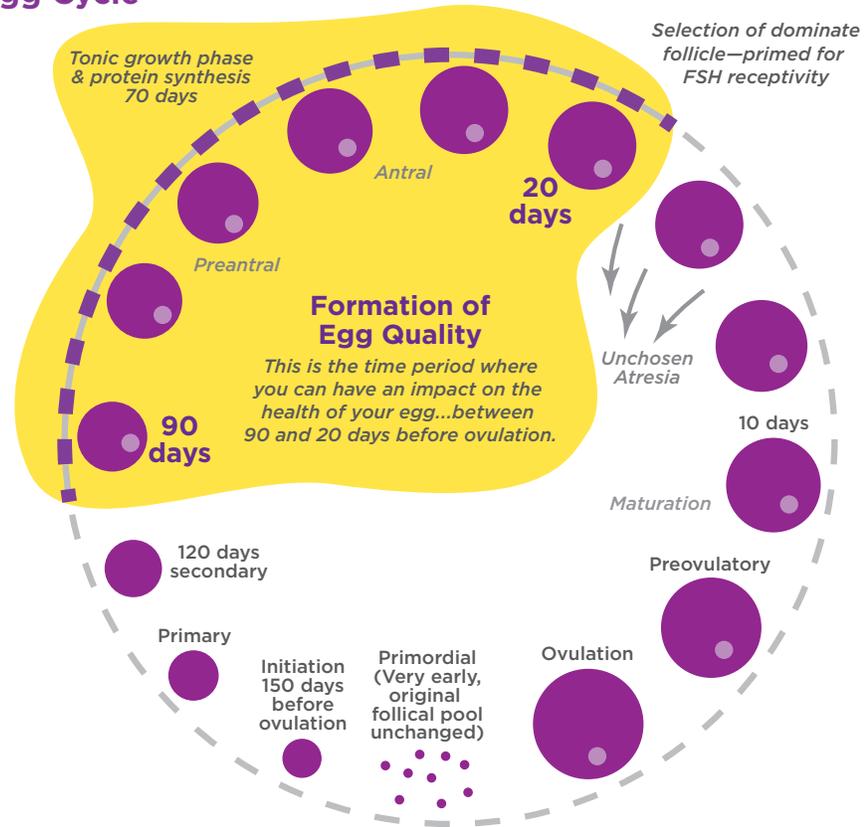
Ovulation

- This is the process of the woman's body releasing an egg.
- Factors that can impact the regular release of an egg include uterine follicle health, hormonal irregularities, inflammation and disease.
- A woman usually ovulates (or releases an egg) about 12 to 16 days before her next period is due. This is the best time for you and your partner to be having sex!
- Indicators include: Increase in cervical mucus including volume and thickness due to increased estrogen; slight increase in body temperature due to the hormone progesterone, which is secreted when an egg is released. Women are usually most fertile 2-3 days before their temperature reaches its maximum.
- You can use a basal thermometer or buy an over-the-counter ovulation predictor kit, which detects an increase in luteinizing hormone (LH) in your urine before ovulation.
- Ovulation Calendars are also very helpful! (Visit your app store and type in "Ovulation Calendar" to find some amazing options to track your cycle)

Egg Health

If you're trying to get pregnant and your doctor has told you that your eggs are not healthy or that they're 'old,' do not panic! Most women don't know this, but there are options that can help improve and protect the eggs you have. Due to the fact that it takes 90 days for an egg to fully form, your diet and lifestyle changes as well as supplementation needs to start at least 90 days before conception to have a positive impact on its formation.

Egg Cycle



Previous Miscarriage(s)

On average, the time it takes for your womb lining to heal and regenerate is about 4-6 weeks, and this is generally about the same amount of time to start menstruating again.

Basic Fertility Exam

This is typically performed by your OB/GYN and is used to look for any obvious physical indications that could indicate potential fertility issues.

Thyroid: Checking for abnormal size of the gland.

Hair patterns on face and body: These can indicate an increase of male hormones that will need to be addressed.

Breast exam: This includes looking at the size and shape of your breasts, as well as checking to see if any liquid comes out, which would indicate the presence of prolactin, a hormone that prevents or decreases ovulation.

Pelvic exam: This includes inspecting the cervix for signs of unusual growths, sores, discharge or infection.

Pap smear: This common exam checks for cervical cancer and looks at the cervical mucus for infections.

WAYS TO PROMOTE AND IMPROVE FERTILITY

- **Maintain a healthy weight:** Being overweight or underweight can impact multiple parts of your body including blood pressure, glucose levels and most importantly can impact ovulation and your potential to get pregnant.
- **Prevent STIs:** Any infection is not good for the body, but this is especially important when it comes to your uterus. Infections like chlamydia and gonorrhea are two of the leading causes of infertility in women.
- **Get plenty of rest:** For the average adult, getting enough rest means an average of 7-8 hours per night. When your body clock becomes irregular, so can your hormones! This can lead to irregular periods and other endocrine issues which directly impact your chances of getting pregnant.
- **Don't smoke:** Smoking damages your DNA and is associated with lower fertility by prematurely aging your ovaries and depleting your eggs. If you struggle to quit, ask your health care provider for ways to help.
- **Limit alcohol:** Heavy drinking is shown to increase the risk of ovulation disorders and there is no 'safe level' of fetal alcoholic exposure. Since most women don't know they're pregnant until 4-8 weeks, it's possible to be drinking while pregnant without knowing you're pregnant!
- **Limit caffeine:** Keeping caffeine intake below 200 milligrams/day (An 8 oz cup of coffee) does not appear to impact fertility.
- **Get your vitamins:** At least 90 days prior to conception begin taking a quality prenatal vitamin.
- **Promote blood flow and oxygenation:** An essential way to promote egg health is to get the blood flowing! Staying hydrated by drinking at least 64 oz of water per day can help keep your blood flowing. Another great way to get your blood pumping is through light to moderate exercise.

- **Balance Hormones:** When your body is releasing hormones properly, it keeps everything running smoothly, including your ovulation and egg release. Stress and other environmental factors can have a big impact. The best ways to balance your hormones include:
 - Stop taking any hormonal birth control.
 - Limit exposure to pesticides, parabens, phthalates and other endocrine receptor disruptors. On average about 60-70% of what is put on the skin is absorbed in 2 minutes or less. Take time to check that the ingredients in your makeup, lotions, soaps, hair products and more don't include these common hormonal disruptor ingredients. Common ingredients to look out for include: methylparaben, propylparaben, butylparaben, ethylparaben, diethyl phthalate.
 - Add a [*maca supplement*](#) to your diet. Maca does not contain hormones itself, but aides in fertility by adding over 30+ different minerals and 60+ phytonutrients into your body that help regulate the pituitary, adrenal and thyroid glands (the hormonal balancing trifecta). Maca is considered an adaptogen, which means it's non-toxic or harmless to any organ of the body and can be ingested for long periods of time safely.

MALE FERTILITY WORKUP: TESTICLES, SPERM AND HIS HEALTH

While there are many considerations on the female part about how to optimize her body for conception, there are equal considerations that a man can take to improve fertility and having a healthy baby.

HIS ANATOMY & PROCESSES

- **Sperm Analysis:** The doctor will do a semen analysis that will look at the following characteristics of the sperm to determine its viability.

Count: Normal sperm count is considered between 40-300 million. Counts under 10 million are considered poor and counts of 20 million or more are adequate if motility and morphology are normal.

Motility & Velocity: This is quantifying both the number of active cells as a percentage of the total and the quality of movement.

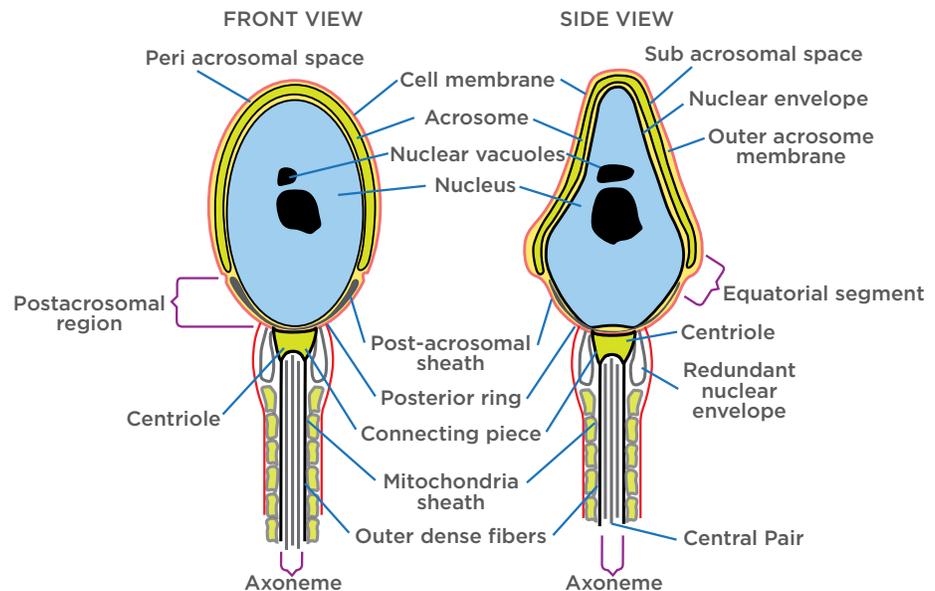
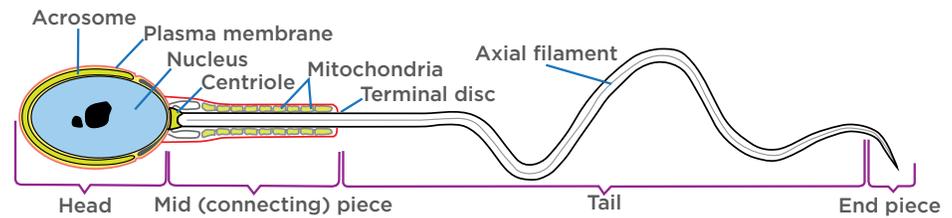
Volume: The average ranges from 2-5 milliliters. If there is low volume, it can indicate seminal vesicle damage or other blockages. This may also be an indication of a problem with the prostate gland.

Liquefaction: At the point of ejaculation, normal semen will instantly coagulate into a pearl gel and within about 20 minutes will liquify.

Morphology: The Kruger morphology test is common for examining the shape and size of the sperm head. According to the World Health Organization (WHO) at least 30% of cells are normal shaped. Men with less than 4% of normal shaped sperm typically experience infertility issues.

Seminal Fructose: If analysis shows no presence of sperm, they will run a seminal fructose test. Fructose is normally produced by seminal vesicles and the absence of fructose can indicate congenital absence or obstruction of the seminal vesicles or ejaculatory duct.

Sperm Anatomy



• Basic Fertility Exam

General Exam: This will include the standard care routine as well as examining the penis for abnormalities and the scrotum, making note of size and firmness of the testes.

Hormone testing for FSH levels: This is a test that looks for a mutation on the FSH receptor gene. While this mutation is rare, for those who have high FSH levels, this results in low sperm count.

Prostate Exam: This is not unlike any other prostate exam and involves the doctor checking the size of the prostate and feeling for abnormalities.

Androgen Levels: This looks at testosterone and prolactin levels. The normal range for testosterone falls between 300-1,111ng/dL and the normal range for prolactin should be less than 20ng/mL

**Read more about
Male Fertility Health:**

[Natural Ways To Make
Healthy Sperm](#)

[Male Fertility Workup](#)

• **Ways to Promote and Improve Fertility**

Maintain a healthy weight

Eat a healthy diet, but also bridge the nutrient gap with a few key supplements:

Zinc: Studies show that adding zinc supplementation significantly increased semen volume, sperm motility and the percentage of normal sperm morphology.¹

Folate: Helps in DNA methylation and studies indicate being low on folate can impair semen quality including sperm DNA damage.²

Selenium: This essential element helps with normal testicular development, spermatogenesis, and spermatozoa motility and function.³

Get plenty of rest: For the average adult, getting enough rest means an average of 7-8 hours per night.

Don't smoke: Smoking is associated with lower seminal vesicles and ejaculate volume, despite higher testosterone levels, in male subjects of infertile couples.⁴

Limit alcohol: Excessive alcohol lowers male-fertility markers that matter including: lowering testosterone levels, decreased sperm quality and quantity. It can also be associated with reduced libido and in some cases, impotence.

Promote blood flow and work out: Studies show that men who have higher physical activity such as weightlifting and outdoor activities, also have higher sperm concentrations and higher sperm count.^{5,6}

OTHER FERTILITY & PRECONCEPTION HEALTH CONSIDERATIONS

We're sure you don't need our help 'getting started' trying to conceive in a traditional sense, but we can help by giving you have a game plan. Assuming you've already made the diet and lifestyle modifications, started taking the proper supplements and have been having sex regularly, you may also want to consider undergoing specific testing to rule out genetic issues or other possible complications. Here are a few helpful things to consider:

- **Genetic Testing:** Couples who each carry a recessive trait, can use these tests to identify and possibly prevent passing those mutations down to their offspring. The most common genetic testing screens for cystic fibrosis, hemoglobinopathies and spinal muscular atrophy. If both the male and female are carriers of a genetic disorder, they may opt for IVF treatments before ever trying naturally because embryos created through IVF can be biopsied and tested before being implanted allowing them to identify and select only the ones that are disease-free.
- **Fertility Foods:** Foods high in phytonutrients, minerals and vitamins are super important!

Turmeric

Ginger

Pumpkin seeds

Broccoli (contains sulforaphane and antioxidants)

Berries (high in antioxidants)

Dark leafy greens (spinach, kale)

Salmon or Halibut (contains omega-3s for overall health)

Royal jelly (high in vitamins, amino acids, folate and more!)

Eggs (contains choline for brain health)

Beets (helps blood flow and circulation; very high in vitamins)

Read more about:

[Genetic Screening and Testing](#)

- **Additional Supplements:** For most of us, getting all the nutrients we need from our food is very difficult. That's why adding a quality prenatal vitamin and other supplements to your diet can help boost your preconception health and optimize the male and female body for conception.

Prenatal vitamin (Men & Women): This helps cover any gaps in your diet and optimize your DNA methylation by ensuring your body has the right components to build new cells!

Maca root: Studies have shown men who took 1.75 grams of maca root powder every day for 3 months had increased sperm counts and motility compared to the placebo group.⁷

Coenzyme Q10: Has been shown to improve mitochondrial health through its potent antioxidant properties.

Vitamin E: This has been shown to improve sperm motility in men who had low sperm count or poor sperm motility. It is also shown to prevent ovulation decline in women and reduce oxidative stress.

L-carnitine: Helps sperm maintain quality and vitality throughout their lifecycle. Has been shown to regulate oxidative and metabolic status of the female reproductive system by preventing free radical-induced DNA damage and stabilizing the storage of energy for reproductive cells.

EPIGENETICS: AGE IS NOT THE BIGGEST FACTOR IN FERTILITY

Read more about Epigenetics:

[Fathers Diet Health
On Offspring](#)

[Sperm Epigenetics
And Influence Of
Environmental Factors](#)

Epigenetics is an exciting and emerging scientific field of study surrounding genetic expression. Epigenetics is a layer of information that sits “above” the genes and refers to changes in gene expression that are caused by environmental influences. Lifestyle, diet, nutrition, stress, toxins, and life experiences all act upon gene expression; causing chemical modifications that literally turn the expression of specific genes on or off. Those gene expressions then have the potential to be passed on to offspring.

One way to understand epigenetics is with the metaphor of a musical composition played by an orchestra. The musical score is like an individual’s DNA sequencing; the notes (genes) are fixed, but may be expressed (played) differently, depending on the circumstances. The conductor of the orchestra is the epigenetic influence: how the orchestra is conducted brings the music to life in a unique way (gene expression).

Fathers and grandfathers, when compared with mothers and grandmothers, have an equal or greater impact on the epigenetic legacy that is passed down. Epigenetic expression impacts a father-to-be in two ways. First, it affects the overall health and quality of the sperm. Second, it affects specific traits in the genome—the “epigenetic blueprint”—that get passed along in the sperm. These traits, in turn, affect the development of the fetus and characteristics of the individual throughout life.

The 90-day period prior to conception is an opportunity for potential parents to counteract some of the less desirable epigenetic influences and replace them with more beneficial epigenetic influences.

The science of epigenetics demonstrates the vital importance of both maternal and paternal health during preconception. Through advanced science and focused nutritional support (for both partners) you can create positive genetic changes to help increase your chance of pregnancy and having a healthy baby.

FAQs

1) How long should a couple try to conceive before being considered infertile?

- a. If a woman is under the age of 35 and has been trying for over 12 months, she may be considered to have an infertility issue.
- b. If a woman is over the age of 35 and has been trying for 6 months, she may be considered to have an infertility issue.

2) What percentage of couples are infertile?

- a. It's estimated that between 10-12% of females are infertile and 7% of males are infertile.

3) What are common things that can make you infertile?

- a. Chronic illness
- b. Pelvic inflammatory disease
- c. STIs
- d. Ectopic pregnancy
- e. Endometriosis, polycystic ovarian syndrome or fibroids
- f. Birth defect

4) How do you check to see if you're infertile?

- a. Semen analysis
- b. Genetic testing
- c. Testicular biopsy
- d. Imaging such as sonograms
- e. Other diagnostic testing

5) What are signs of fertility in women?

- a. Cervical mucus changes (this is common during ovulation)
- b. Female's heightened sense of smell
- c. Breast soreness or tenderness
- d. Light spotting or discharge
- e. Libido changes

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