
A MAN'S GUIDE TO FERTILITY TREATMENT

POWERED BY TRAK FERTILITY

Trak[®]
male fertility testing system

ABOUT THIS GUIDE

IT'S FOR MEN

It's no secret that fertility treatment is thought of as women's territory. But considering men contribute to half of all infertility cases, it's time we level the field by making fertility treatment a hers AND his pursuit.

This guide provides a big picture approach to understanding fertility treatment from the male perspective. It also offers straightforward advice and insight from men who have been there so you can take a more active role in what is widely considered the most challenging stretch on the road to parenthood.

IT'S FOCUSED ON FERTILITY TREATMENT

This guide is written for men who are considering or going through fertility treatments to build their families. If you want to learn more about male factor infertility or how to improve sperm count, fertility and reproductive health don't worry... our resources list on page 30 has you covered.

IT'S POWERED BY TRAK FERTILITY

Before we dive in, let us introduce ourselves. We're Trak and we provide data-driven tools, analytics and insights that help men become dads.

Because we care deeply about helping men improve their health, wellness, and fertility, this guide and all of Trak's content is backed by the latest scientific data and curated by leading urologists in male reproductive health.

To learn more about us, visit trakfertility.com



**I DIDN'T REALLY KNOW WHERE TO START BUT
ONCE I JUMPED IN, THE WHOLE THING FELT LESS
STRESSFUL.” –RUSS IN CA**

We're not going to lie, fertility treatments can be rough. They can wreak havoc on both partners' bodies, relationships, and mental health. Here are a few things to know that can help minimize the fallout.

1



Fertility treatment is a multi-stage process in which each step hinges on the last. Understanding its progressive nature ahead of time can help reduce stress as you move through the process.

2



One size does not fit all. Every patient, couple, and treatment cycle is unique. And with no shortage of options and opinions it can be hard to figure out what is best for you. Our advice? Talk openly and often with your medical providers about your options and needs.

3



There will be multiple decisions. When to begin treatment? Which treatments to try? When to try something new? How to pay for and cope with it all? Staying involved in the process and learning the basics ahead of time can help make decisions easier.

4



There will be waiting. It can take months to begin a treatment cycle and there is often downtime during and between treatments. Waiting periods are frustrating, but they are also a great opportunity to improve your sperm count, your fertility, and your overall health.

5



There will be emotions (and that's OK). For most men, fertility treatment brings new emotions, both good and bad. This can be tough to go through, so we've included options to help both you and your partner cope. However you decide to tackle the emotional side, make sure that your needs – as the guy trying to become a dad – are met.



1 THE GOOD OLD FASHIONED WAY

Not a guarantee! In fact, 1 in 7 US couples will struggle with infertility. Being one of them can make you feel like you are stuck on the starting blocks.

2 FERTILITY DIY

From lifestyle and diet changes to sperm count and ovulation tracking, many couples take positive steps to improve their fertility at home.



3 STRENGTHEN YOUR TEAM



Whether you begin with your partner's OB/GYN, a primary care provider, a urologist, or head straight to a fertility center, the decision to seek professional help is an important checkpoint.

Fertility treatment can feel like an obstacle course. Chances are you'll face physical and emotional challenges, setbacks and triumphs on your path to fatherhood. Your best bet for conquering the course? Understand the lay of the land so you won't be blindsided if challenges arise.

4 NAVIGATING THE TERRAIN

Thanks to modern science there are many treatment options available. The path does get rockier as you move on, but thankfully most couples reach the finish line without hitting all of these stops along the way.



Fertility Medications



Intrauterine Insemination



In Vitro Fertilization



Third Party Reproduction



Adoption



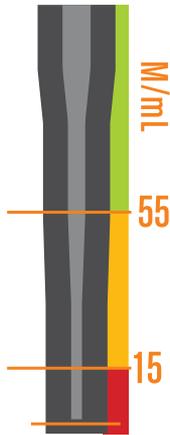
This journey creates some crazy experiences. The scheduled sex, hanging my wife upside down by her ankles and peeing on sticks... Then there are the the bizarre diets, the weird and wonderful supplements. Then there are those awkward meetings with the doctor and the strange experience of donating sperm.

—Anonymous

5 THE ULTIMATE FINISH LINE

Statistics show that when it comes to fertility treatment, persistence pays off. Stay hopeful. Your route may take you by surprise. It may take longer than you think and you might be riding in on fumes, but one thing is for sure: No matter how you become a dad, it will be worth it.

REPRODUCTION BASICS



WHAT'S NORMAL FOR MEN:

OPTIMAL Sperm concentrations above 55 M/mL are linked to faster time to pregnancy.*

MODERATE World Health Organization studies show fertile men normally have more than 15 M/mL.

LOW Sperm concentrations ≤ 15 M/mL are a leading cause of male infertility.

36.4%
OPTIMAL

37.2%
MODERATE

26.4%
LOW

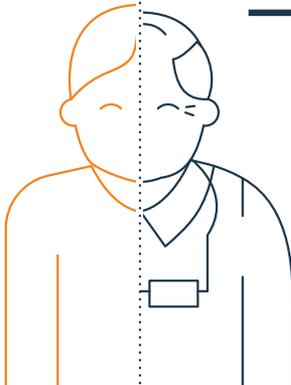


U.S. Population Data from Trak Clinical Study



AM I
TOO OLD?

While sperm quality does decrease with age, **the oldest father on record was 96 years old.**

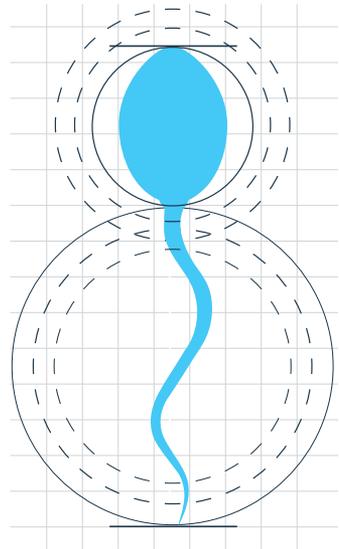


SPERM MATTERS

LOADS OF FACTORS
AFFECT MALE FERTILITY
BUT IN THE END IT ALL
COMES BACK TO THIS
LITTLE GUY.



Studies show couples get pregnant **FASTER** when men have more sperm. See page 30 for resources on how to improve your sperm count and overall reproductive health.



MORE SPERM = FASTER CONCEPTION

THE AVERAGE MAN MAKES:

1500
SPERM PER SECOND

525 BILLION
SPERM OVER A LIFETIME

SIZE:

TAIL: 0.05mm

HEAD: 0.005mm

SWIM SPEED:

5mm PER MINUTE

LIFESPAN:

2 – 4 WEEKS IN THE TESTICLE

5 – 7 DAYS IN A WOMAN

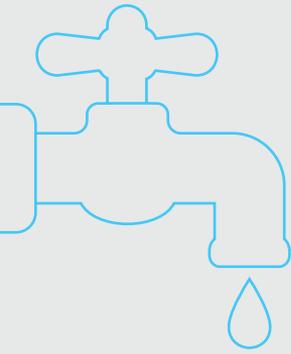
1 – 3 HOURS IN A CUP

GROWTH:

SPERM TAKE 72 DAYS TO GROW

FERTILITY ROAD BLOCKS

For him: Determining if your infertility is caused by any of these common male factor issues can help determine which fertility treatments, if any, are right for you and your partner.

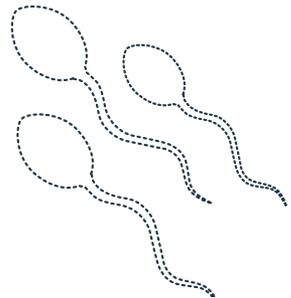


PLUMBING PROBLEMS

Many conditions can prevent sperm from getting out of the body. Some, such as retrograde ejaculation, will cause a complete absence of semen. Others leave sperm stranded in the testicle. Most plumbing problems are a result of either urological surgeries, a birth defect, or an infection (including STDs) and many can be repaired with medications or surgery.

AZOOSPERMIA & OLIGOSPERMIA

About 1% of men suffer from azoospermia which means they have no sperm in their ejaculate. Many more men suffer from oligospermia, which means their sperm concentration is found to be low – less than 15 M/mL. Sometimes these conditions are caused by treatable issues such as lifestyle factors, varicocele, use of steroids, low testosterone, or an untreated infection. Other causes can include injury, genetic disorders, undescended testicles, and other congenital defects.





HORMONE IMBALANCES

Hormones greatly affect sperm production. The headline hormone is testosterone, but men also need healthy levels of follicle stimulating hormone (FSH), luteinizing hormone (LH), estrogen, and prolactin. A simple blood test can provide a lot of insight into what could be impacting your fertility. Treating underlying issues and making health, lifestyle, and medication changes can often help balance hormones.

POOR HEALTH & HABITS

A poor diet, exposure to toxins, lack of exercise, too much stress, and even heat exposure can wreak havoc on your reproductive system's ability to produce sperm. Leading lifestyle offenders: fried and fast foods, sweets, sodas and energy drinks, steroid abuse, poor sleep quality, hot tub use, smoking and heavy drinking.



Some medications have been shown to impact sperm quality. Most of the time the effect is temporary. Ask your doctor if your medications could be impacting your sperm quality, and whether there may be alternatives.

Men with high saturated fat intake had

31%

LOWER
sperm concentration.¹

Caffeinated sodas tied to

54%

DROP
in men's fertility.²

¹ Jensen et al, *Am J Clin Nutr.* 2013 Feb;97(2):411-8

² Wesselink et al, *Reproductive Toxicology*, 2016 Jul;62: 39-45



FERTILITY ROAD BLOCKS

For her: Infertility in females can be caused by numerous factors. Some of the most common are:

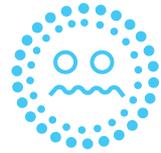


FALLOPIAN TUBE DAMAGE OR BLOCKAGE

Fallopian tube damage makes it difficult or impossible for an egg to be fertilized, or for an embryo to reach the uterus.

POLYCYSTIC OVARIAN SYNDROME (PCOS):

One of the most common causes of infertility in women. PCOS symptoms can include high levels of androgens (male hormones), missed or irregular periods, and many small cysts in the ovaries.



ENDOMETRIOSIS

Endometriosis is a condition that occurs when tissue similar to the lining of the uterus grows outside the uterus, which can impair the function of the ovaries, uterus, and fallopian tubes.



UTERINE FIBROIDS

Uterine fibroids are benign tumors in the wall of the uterus that can interfere with the implantation of a fertilized egg.

OVARIAN FUNCTION

Absent, infrequent, or irregular ovulation means no eggs are available for fertilization. Women under 40 can also suffer from premature ovarian failure (POF), a condition in which a woman loses normal ovarian function before the age of 40.



DETERMINING THE CAUSE INFERTILITY IS NOT AN EXACT SCIENCE

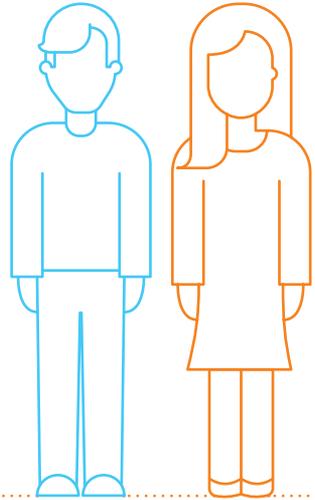
Often, undergoing treatment is necessary to reach a diagnosis. Still, one-third of couples will never learn the exact cause of their infertility.





LADIES FIRST? NOT SO FAST...

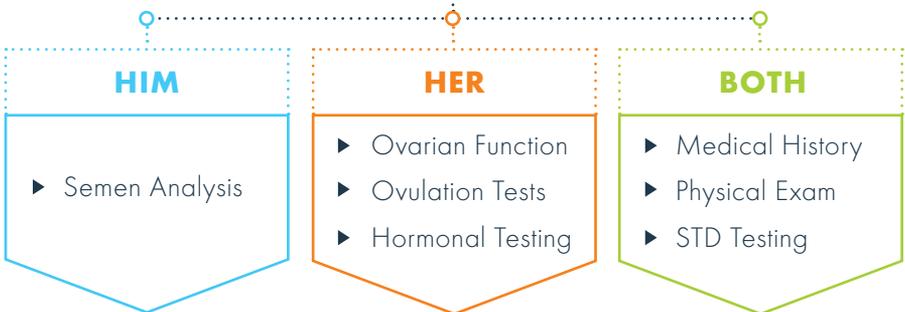
When it comes to fertility testing we want to make one thing really clear: she doesn't have to go first. Not only because **50% of infertility issues can be attributed to men**, but also because **ruling out male factor infertility can actually be a faster** and less invasive way to start the testing process.



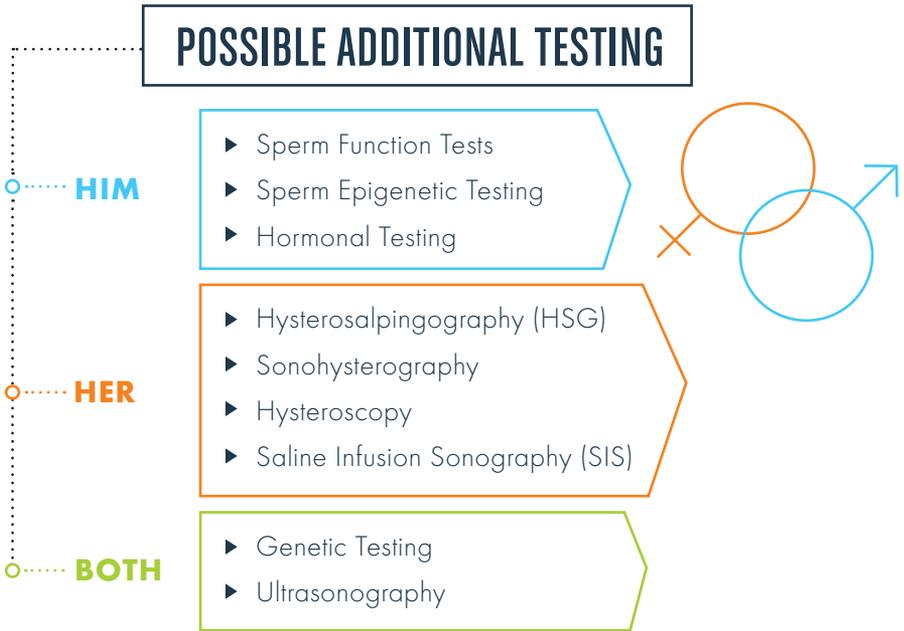
THE WORK UP

Fertility testing is a process. Generally, the least invasive methods that can detect the most common causes of infertility are done first.

BASIC FERTILITY WORK UP

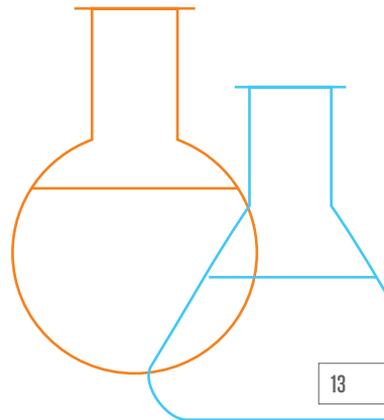


Guys (and we can't stress this enough) if you receive an abnormal semen analysis and you haven't already, please go see a reproductive urologist. Abnormal test results can reveal more severe health conditions that may underlie your infertility.



FACTORS THAT CAN AFFECT TESTING

- The woman's age
- The duration of infertility
- Medical history
- Physical examination
- Cultural and religious preferences
- Finances and insurance





MALE FERTILITY TREATMENTS

Many male fertility issues are treatable. Here are some of the most common male fertility treatments.



Lifestyle modifications

Such as reducing alcohol, avoiding heat, improving diet, exercise, and sleep can make a big difference. Supplements and testicular cooling have also been shown to have a positive impact on semen parameters for many men.



Medications

Hormonal imbalances in men are often addressed with many of the same medications that are given to women. Medications can also support erectile and ejaculatory function.



Surgeries

Male fertility surgeries address structural problems that cause infertility, primarily blockages and varicoceles. Vasectomy reversal is also possible and common.



Sperm extraction

There are several techniques to help get sperm out of the testicle including procedures that can induce ejaculation or find sperm stranded inside the testicle for use with In Vitro Fertilization with Intracytoplasmic Sperm Injection (ICSI).



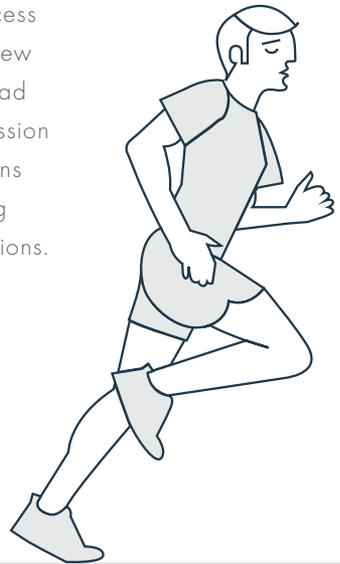
Testosterone supplementation is NOT advised while trying to conceive. Men who have testosterone deficiency (Low T) should be evaluated and treated by a urologist specializing in male reproductive health.

Every fertility provider works a bit differently, but in most cases you can expect the following treatment trajectory.



THE INITIAL CONSULT:

Your first meeting with your fertility provider, usually a reproductive endocrinologist or an OB/GYN, can be exciting and nerve wracking. It will typically include an overview of how the process and provider work, a review of any testing you have had or may still need, a discussion about the treatment options available to you including pricing, and payment options.



“My advice would be to ask questions until you are confident that you fully understand your diagnosis, treatment risks, and success rates so you can make the best decisions possible. —Andy in MA

FERTILITY TREATMENT PATH



PAPERWORK & PLAN

Once you have decided on a course of treatment you will sign releases and financial or insurance documentation. Next you will receive a treatment protocol, which is a basic blueprint for your cycle and access to any patient portals or other services your provider offers.

PREPPING & PROCEDURES

After completing any necessary pre-cycle testing you'll be off to the races. You'll receive a schedule, medications, and instructions regarding your daily doses and procedures.



KEEP IN MIND:

Most fertility treatment schedule dates are tentative and subject to change.



THE TWO-WEEK WAIT

Most fertility patients are already familiar with what is universally known as one of the most challenging stretches of the TTC process. What you may not know is that for some patients the wait for pregnancy **test results after treatment is closer to 10 than 14 days.**

RESULTS

By far the most difficult or joyous step in the process. If congratulations are in order your partner will have a series of follow up tests with your fertility provider to ensure a healthy pregnancy. If your cycle fails you will have a follow up appointment with your provider to discuss what went wrong and possible next steps. **Negative results are hard.** Our resources list on page 30 can help.



HOLISTIC TREATMENTS

Holistic treatments are often used **before, during, and after treatments** and many. Studies show that holistic treatments intended to reduce stress can improve fertility treatment outcomes. In fact, many fertility providers offer on-site service and referrals for treatments that can be used throughout your treatment cycle.



ACUPUNCTURE



LIFESTYLE CHANGES



COMMON TREATMENTS

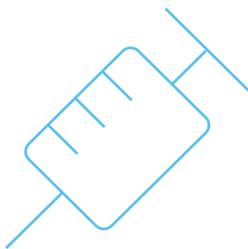
Unless your age, diagnosis, or medical history necessitates a certain type of treatment, the lowest cost, least invasive options are normally tried first.



FERTILITY MEDICATIONS

For a first-line treatment, fertility providers often prescribe medications that stimulate the ovaries to produce multiple eggs. These medications can be used with timed intercourse, at-home or in-office insemination, and often include clomiphene citrate and injectable Follicle Stimulating Hormone (FSH) drugs called gonadotropins.

\$ |  Treatment length
~ 1 month



INTRAUTERINE INSEMINATION (IUI)

One of the most common fertility treatments for moderate to low sperm counts, IUI is a technique where the man's sperm cells are placed directly into the uterus via a thin flexible catheter. IUI is often used with injectable stimulation medications, which require regular ovarian monitoring via ultrasound.

\$\$ |  Treatment length
~ 1 month



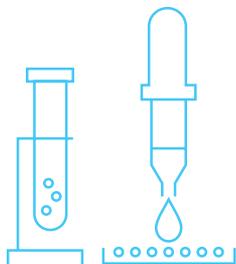
IN VITRO FERTILIZATION (IVF)

IVF is a multi-phase procedure in which her ovaries are stimulated to produce multiple eggs that are then harvested and inseminated with sperm in a laboratory. After an incubation period, usually between 2 and 5 days, the strongest resulting embryo is transferred via catheter back to the woman's uterus with the hopes it will implant. IVF cycles can include ancillary treatments.

\$\$\$



Most cycles take
2-3 months



IVF WITH INTRACYTOPLASMIC SPERM INJECTION (ICSI)

In conventional IVF, sperm are incubated with eggs in a petri dish in hopes that they will fertilize. With ICSI, a single sperm is injected directly into a single egg. ICSI is most commonly used in cases of very low sperm count, motility or morphology, and when patients have had previous IVF failures.

\$\$\$\$



Most cycles take
2-3 months



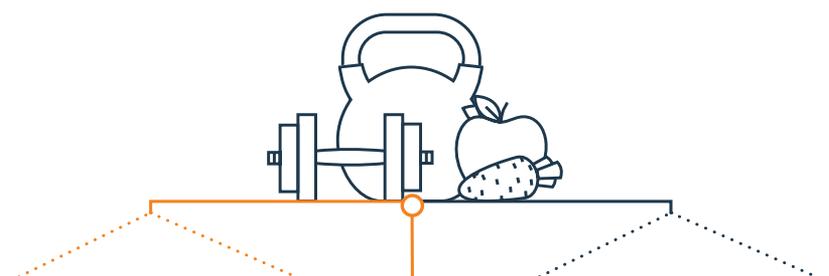
THIRD-PARTY REPRODUCTION

This is a catch-all term for treatments that require assistance from others, such as donor eggs, embryo, sperm, and surrogates. These options are most often used by the LGBT community, single parents by choice, and in cases of advanced maternal age and untreatable male and female factor infertility.

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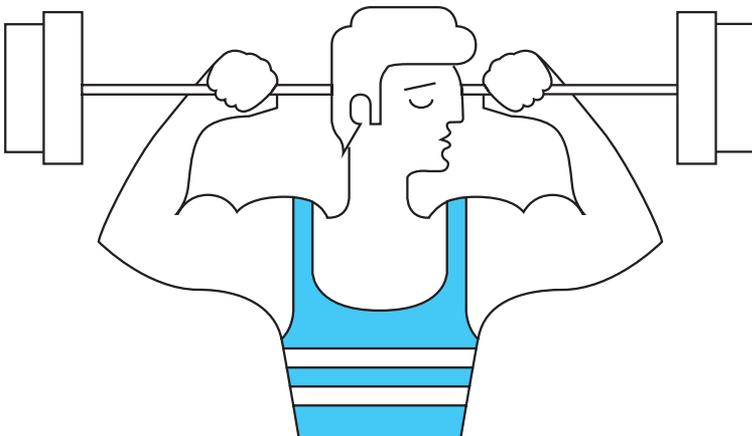
Most cycles take
2-3 months

An illustration of a house with a dotted orange outline. On the roof, there is a kettlebell, a barbell, an apple, and a carrot. A vertical orange line extends from the center of the roof down to the text below.

**GET OR STAY
HEALTHY**

**WHY? BECAUSE
HEALTHY PARENTS=
HEALTHY BABIES**

Fertility treatment involves waiting — the time from initial consult to results can take months, especially during more advanced treatments. Waiting is frustrating, but it's also the perfect time to work on improving your reproductive health and fertility. Even if you are already in great shape, paying special attention to your health and habits that most affect reproductive health can improve your sperm quality, boost your chances of treatment success, and reduce health risks for yourself and your future child.



Men have traditionally had two responsibilities during fertility treatment: Provide a sperm sample and do your best to support your partner throughout the process. Yes, these two tasks are important, but there is more you can do.

BALANCE THE WORK LOAD

Fertility treatment takes work and while there's no getting around the fact that your partner will bear the brunt of early morning appointments, daily needle sticks, and invasive procedures, there are plenty of things you can do to help out.



Handle the bills & paperwork:

Medical forms, insurance documentation, payments, and receipts are necessary parts of treatment. Taking over is a great way to engage in the process.



Attend and take notes at appointments:

For those you can't attend, check in and get an update on how things went and make sure that you and your partner both understand instructions, test results, options, and next steps.



Manage the medications:

Depending on your treatment plan, your partner may take upwards of five different medications during a cycle, many of which must be sourced from specialty pharmacies. Getting familiar with the medication schedule and learning how to order, store, prepare, and administer meds will take a huge load off her shoulders.

BE MORE THAN A SPECTATOR

GO THE EXTRA MILE



Ease the pain: When it comes to those pesky shots and medication side effects, try different methods to figure out what comfort measures work for her. Ice, heat, lots of empathy, chocolate, flowers, whatever it takes – it's really all about the effort here.



Take over on procedure days: Take on the job of reading pre and post procedural instructions and make sure you are both up to speed and ready to go. Handle any necessary travel arrangements meal, planning, and other logistics, such as pet care, so she can relax before and after procedures.



The doctor's appointments, tests, and all the decisions about how to move forward were definitely a source of stress and put a burden on our marriage... but in the end you end up seeing what an amazing spouse you have. –Anonymous



MY WIFE WAS GOING THROUGH ALL THIS STUFF
AND I WANTED TO BE INVOLVED I JUST DIDN'T
KNOW WHAT TO DO.” –ANONYMOUS



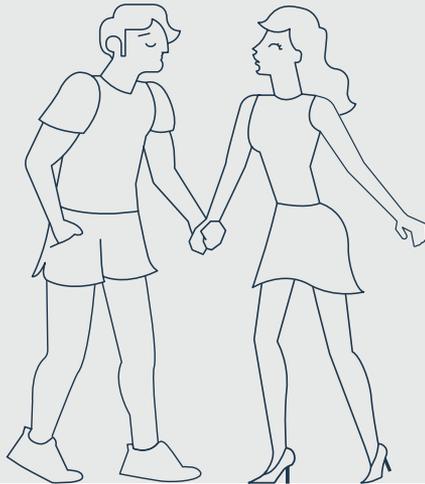
Pamper yourselves:

Massages, Netflix, and takeout, weekends away... making lots of time for the things you enjoy together can help you stay connected and reduce stress.



Get your body baby-ready too:

Preconception health is not just for women – eating right, exercising, and avoiding toxins can supercharge your sperm.

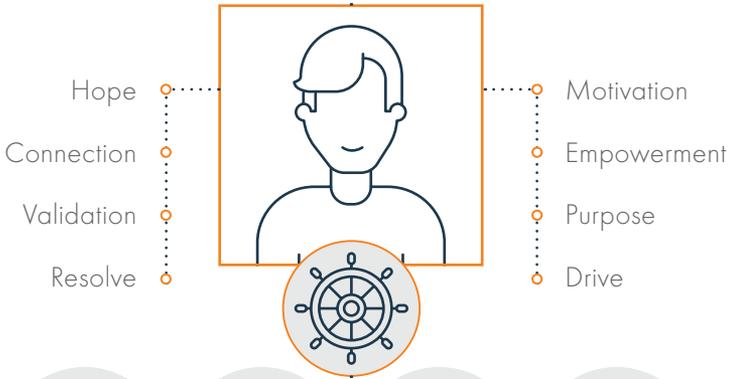


GETTING YOUR HEAD IN THE GAME



Our advice: Be ready to feel (all the) things and have some resources in your back pocket if you or your partner need outside help.

POSSIBLE POSITIVE EMOTIONS



POSSIBLE NEGATIVE EMOTIONS



All of it is part of a difficult and emotional rollercoaster, where tears are common and laughter can turn to hysteria. At times, it has been hard to cope with.

—Anonymous

Fertility treatment can be a rough road. Emotions change fast and often and can include hope, joy, frustration, despair – and everything in between!



SUPPORT RESOURCES

Guys, if you are struggling emotionally or if you are looking for a private place to discuss male fertility, ask questions and learn about your fertility, sexual and reproductive health, check out the following resources.

Don't Cook Your Balls

Trak Fertility's man-friendly educational website and male fertility forums arm men with the latest scientific research, medical information, data, and interactive tools so they can have a better understanding of male health concerns and be empowered to take control of their fertility, sexual and reproductive health through support, knowledge, participation, and access to medical care.

dontcookyourballs.com

Resolve, The National Infertility Association

Established in 1974, Resolve provides timely, compassionate support and information to all people challenged in their family building journey. Their website includes emotional, medical and financial resources as well as options for local fertility events and support groups.

resolve.org

Path2Parenthood (P2P)

P2P is an organization committed to helping people create their families by providing leading-edge outreach programs and timely educational information including outreach events and an online library with HD videos. They are a resource for infertility prevention, reproductive health and family building

path2parenthood.org

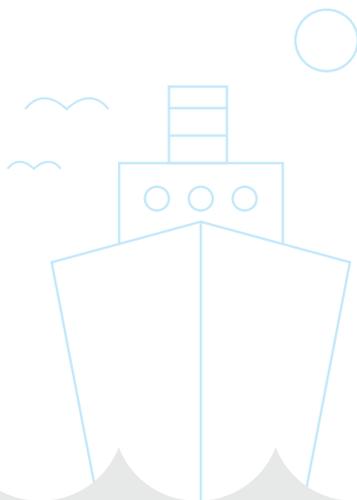


Too often the stress levels and emotional needs of men have not been considered when dealing with an infertile couple.

—Peter Schlegel MD, Vice President of the ASRM.

YOUR RELATIONSHIP

When it comes to the stress and emotions of fertility treatment, **some couples sail through and others end up with a lot of water in the boat.** If you find yourself searching for a bucket, here are a few things you can try.



They say laughter is the best medicine, so when you can, try to keep it light.



Remind yourselves that things won't always be this way.

Fertility treatment won't be your easiest chapter, but it also won't go on forever.

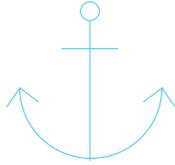


Try not to withdraw.

Find a comfortable way to express your needs, fears, and frustrations – journal, write letters, walk and talk, text – any communication is good communication! Also recognize and respect when your partner needs space.



Get support... together and/or separately.



REMEMBER MEDICATIONS HAVE REAL SIDE EFFECTS

If either of you have any depression symptoms, get professional help.



Find ways to open up to each other. To keep communication lines open about such an emotional topic was difficult but worth it.

Regardless, you come out stronger, because you see how supportive your partner is.

—Anonymous



Honor your differences. Each of you will likely feel different things at different times and cope in different ways. Try not to point fingers and get support when you need it – together or separately.



Grieve together. Each month and treatment cycle that goes by can feel like a loss. Recognizing that can help you both persevere.



Take a break from it all. If at all possible, try to forget about it all for a weekend, a night, or even a couple of hours.



Try to approach the whole process with level heads.

Fertility treatment is not a guarantee. Approaching the whole thing with cautious optimism is a safe bet.



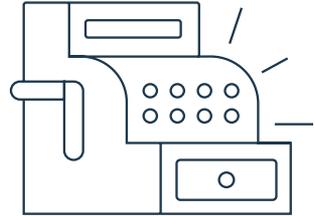
AVERAGE TREATMENT COST*

Medications.....(\$100 - \$3,000)

Insemination and IUI
.....(\$50 - \$1,000)

Male Fertility Surgeries
.....(\$3,000 - \$15,000)

In Vitro Fertilization (IVF)
.....(\$10,000 - \$20,000/cycle)
.....
.....



BESIDES PAYING CASH UP FRONT, THERE ARE A FEW WAYS TO PAY FOR TREATMENT



FINANCING

Most fertility clinics and many private companies offer specially designed financing options that allow you to pay for treatment over time, including credit cards, medical loans, unsecured personal loans, and finance programs. Shared risk and multi-cycle discounts are options which include more than one treatment cycle for a flat fee. Usually this fee is less than the cost of the same number of cycles paid for individually, and in many plans you will receive a partial or total refund of the fee if you are unsuccessful.

We're not going to sugarcoat it – infertility diagnosis, medications, and treatment can get pricey. Here are some things to know about paying for it all.

Keep in mind! Many plans and financing options have eligibility requirements and fine print. It is important to read materials closely so that you fully understand your options.

FSA, HSA & TAX DEDUCTIONS

Flexible Spending Accounts (FSA) & Health Savings Accounts (HAS) allow you to put pre-tax dollars aside for infertility-related expenses and are a great way to cut down the total cost of your treatment. Also, some (but not all) patients qualify for tax deductions. Talk to a tax professional or check out IRS Publication 502, Medical and Dental Expenses to figure out if you qualify.

INSURANCE

Currently, only 15 US states have laws* requiring insurers to cover infertility and roughly 25% of US health insurance plans offer coverage. To fill the gap, many companies now offer fertility benefits to their employees. Here are a few steps you can take to figure out what, if any coverage you may have.

HOW TO RESEARCH YOUR COVERAGE OPTIONS:

- Look up the laws in your state
- Ask your health insurance provider
- Ask your employer if they offer (or plan to offer) fertility benefits
- Ask your doctor for resources or check out our resources list on page 30

*Keep in mind! State laws and insurance plans vary greatly and often diagnosis is covered but treatment is not.

MEDICAL RESOURCES

Fertility treatment and everything it encompasses is no small subject to tackle. This list of organizations can help you learn more about the specifics that are important to you. From financial support – to specific diagnosis and detailed treatment information.

THE AMERICAN UROLOGICAL ASSOCIATION

The AUA is the premier urologic association in the United States. Through its Urology Care Foundation it provides the most current, comprehensive, and reliable urologic health information available for patients and the public.

urologyhealth.org

AMERICAN SOCIETY FOR REPRODUCTIVE MEDICINE

ASRM is non-profit organization devoted to advancing reproductive medicine through education, research, and advocacy. Their website covers everything you ever wanted to know about the emotional and physical aspects of male and female infertility.

reproductivefacts.org

THE SOCIETY FOR ASSISTED REPRODUCTIVE TECHNOLOGY

SART is the primary organization of professionals dedicated to the practice of assisted reproductive technology (ART). In addition to a comprehensive list of topics related to infertility and ART, they also report on data and success rates from over 90% of US fertility clinics.

sart.org

FINALLY, A FERTILITY APP FOR MEN



01 GET A PERSONAL ASSESSMENT



Identify your fertility risk factors and receive a Trak Score based on six health and lifestyle categories shown to impact sperm production.

02 GET A GAME PLAN

Receive personalized recommendations designed to help you try to improve your reproductive health.

03 TRACK & IMPROVE

Log your Trak test or semen analysis results and use the app to track improvement over time.

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