



**THE  
FIGHT  
FOR  
FERTILITY**

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## **HIS LIBIDO WAS SHOT AND HIS MOOD WAS BLUNTED.**

Living at a constant low, Damien suspected his T levels were sinking and booked a visit to the doctor. Turns out he was right: he was a nine on the scale, a bad grade when you're looking at a slider that starts throwing out red flags when you hit single digits. But it was salvageable. The doc put him on a series of testosterone injections and his levels jumped to 29, supercharging his hormones and putting his energy-levels back on track.

"Problem sorted, right?" he says.

Wrong. The sudden surge left him with a new diagnosis: oligospermia. In layman's terms: his sperm count was low and his chances of having kids were nearly non-existent. For a guy in his forties who wanted to start a family, it could've been a crippling blow. But Damien, who had fathered children in his early thirties, just remembers being "mildly annoyed".

While urologist Amir Zarrabi says there can be a myriad of reasons behind male infertility, from incurable genetic defects to bad habits such as smoking and drug use, Damien knew exactly why he was suddenly infertile: injectable testosterone.

"That's when I started researching," he says.



**JUST A YEAR EARLIER, ANOTHER MAN WAS SITTING** in a doctor's room in silence. For the past six months, Jared and his wife had been trying to have a child. They were in their late twenties and excited to become parents, but nothing was happening. And when tests ruled out that his wife was infertile, Jared went to have his sperm tested. "Turned out I was basically firing blanks," he laughs.

But at the time, the revelation left him reeling. He remembers just sitting there speechless as his doctor told him that based on his low sperm count, he had less than 10% chance of conceiving a child. "And the worst part was, every day my odds were getting worse."

Turns out men do have an expiration date on their chances of becoming dads. You know all those stories you've heard of prolific actors and celebrities fathering children in their late sixties and seventies? They're the exception, not the rule.

New research has shown that men above the age of 35 are half as fertile as men under the age of 25. And those odds get worse as you break 40. This was the type of figure Jared ran into during his obsessive research following his diagnosis, and he spiralled into a bout of depression.

"We were still trying but nothing was happening," he says. "I kept thinking, I've got this rapidly closing window



- and what happens if I miss my opportunity?"

According to a report published by the American Urological Association and Practice Committee of the American Society of Reproductive Medicine, infertility is defined clinically in both women and men who cannot achieve pregnancy after a year of having intercourse without birth control.

Around 15% of couples are unable to conceive after a year, and a tenth of couples are still unsuccessful after two. The Centres for Disease Control and Prevention reports that one-third of infertility cases are caused by male reproductive issues, one-third by female reproductive issues, and one-third by a combination of male and female reproductive issues or unknown factors.

That final stat is telling, as it illustrates that despite rapid advances in medicine, it's still difficult to pinpoint the exact cause of a large portion of infertility cases.

Zarrabi lumps the causes into three main categories. Chromosomal

abnormalities are among the most severe conditions. These typically affect the growth of the testicles, stunting or completely eradicating sperm production. In most cases, the effects of chromosomal abnormalities are irreversible. The good news? According to a study on chromosomal disorders and male infertility published in the *Asian Journal of Andrology*, just 0.6% of the population is affected by chromosomal aberrations. The bad news? Scientists are quickly uncovering new genetic disorders that could be linked to infertility, so that previous unknown variable could be chalked up to an incurable cause.

Damage to the testicles can also lower your sperm count. However, that cricket ball you took square to the gonads back in high school is unlikely to affect your testicular functions. Instead, the real damage is wrought by infections, such as sexually transmitted diseases. Many can cause inflammation of the tubes which transport sperm, resulting in a blockage. "You're still producing enough sperm, but the swimmers have no way of reaching their destination," says Zarrabi.

Lifestyle factors play a big, and often underestimated role, in causing infertility. These can include, but are not limited to, smoking, alcohol consumption, obesity, stress, anxiety, insomnia, fitness, illness, or activities that increase scrotal temperature. Zarrabi adds that there has however not been any solid scientific evidence that suggests that tight underwear, saunas, hot tubs, cycling or horse riding will cause infertility in men. Same goes for laptops and cellphones which have long been vilified for emitting sperm-vaporising radiation. There have been numerous studies, but none have shown that either pose a major threat to male fertility.

What we do know for certain is the traditional perception that infertility is almost always a female issue is dead wrong. Reality: in 50% of cases, a male factor is present, says Zarrabi.

**"INFERTILE MEN WILL OFTEN FEEL LIKE 'LESS of a man' for not being able to produce offspring. For many men, fathering children lies central to their identity and role within a family structure and a community,"** says Zarrabi. In the context of a relationship, these stressors become even more pronounced. "When the male is identified as the infertile one, there is a large amount of self-doubt, poor self-esteem and compromised gender identity on his side."

Following his diagnosis, Jared says he underwent an existential crisis that left him in a constant foul mood. While his wife was supportive, he couldn't help projecting his feelings of insecurity onto her. "You know, she would be irritated with something and I'd immediately tell myself she was disappointed because I couldn't give us a child."

He kept thinking back to the moment they had first start speaking about starting a family, how excited she had been when they chatted about baby names during wine-fuelled conversations curled up on the couch, or how he had started planning for his future child's university fund and even bookmarked a few pages for cots, prams and toys.

That warmth during the planning stages where making a baby was a certainty, not a lottery, dissipated in that doctor's room. They were still trying, but he often approached sex with a sense of dread. For the first time in his life he had performance anxiety.

**"Turns out men do have an expiration date on becoming dads."**



"It's like all the fun had been sucked out of life," he says. "Whether I was at work, at home, going out, it didn't matter."

Endocrinologist Zane Stevens, who treats men for hormone-related infertility causes, adds that feeling of inadequacy can affect every part of a man's life. "Men often associate virility and fertility with masculinity," he says.

Jared's turning point began when he booked a session with a psychologist. It's something both his doctor and his wife had suggested, and feeling miserable and bankrupt on options, he bit the bullet and showed up at a small waiting room in Cape Town.

It was a long teething process. Jared admits he's not adept at talking about his feelings, but by the fourth session he was starting to cut through the weeds around his existential crisis.

"I started to realise I still had a chance: I could still start this family. And if my genetics weren't up to the task, then that was my lot in life – I had other options. There was no defeat in opting for adoption."

He started to see that while he may only have a 10% chance, he could hedge his bets. "That meant living healthier by following every scrap of advice I had written down, like quitting drinking and exercising."

Jared's new approach is backed up by science. Stevens says that your chances of fathering a child can improve if you pay more attention to your overall health. "Exercise regularly, maintain a healthy diet, watch your weight, never smoke and avoid excessive alcohol," he says.

According to a study published in *Human Reproduction* in 2013, men with a high BMI (between 25 and 30) have a higher chance of having a lower sperm count than men in a healthy weight range. "We are not sure why this happens," says Stevens. "But the theory is that changes in hormone levels and too much heat around the scrotum may play a part."

Zarrabi adds: "Some of the first changes that we advise for men who struggle with fertility is to stop smoking and to cut down on their alcohol consumption." Jared was by no means obese. However, by

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ILLUSTRATIONS MARCO GORAN ROMANO ICONS MICHAEL BRANDON MYERS

his own admission, he had gained around 10kg since his varsity days. "I never really worked out. I think the most strenuous thing I did was walk my dogs," he says. "I'd read the studies and I knew there had to be something there."

On a crisp winter's morning in 2013 he broke out his running shoes, and hit the tarmac.

**MEANWHILE, DAMIEN'S RESEARCH HAD LEAD HIM** to the offices of Zane Stevens. It was clear that his high testosterone levels had tanked his sperm count, and he was certain the impact was reversible.

"Looking online, I'd seen a lot of positive talk about Clomiphene Citrate," he says. Also known as the CC pill, this treatment has traditionally been used to treat infertility in women by stimulating the pituitary gland to release hormones needed to stimulate ovulation. However, it can also restore normal sperm production in men who are suffering from low or high testosterone levels.

While women are typically given the drug for five days of their cycle, men need to take clomiphene on a daily basis as sperm production occurs every day. The treatment is a delicate balancing act as it's possible for men to over-respond to even the smallest dosage by producing too much testosterone and sinking sperm

counts even further. As a result, it's vital that men on the drug have their hormone levels monitored on a regular basis. "For men with anabolic steroid induced infertility or as a result of testosterone supplements, fertility may be treated by stopping the offending medication and considering clomiphene citrate," says Stevens.

It's why the doctor was willing to go off-label when Damien approached him with the idea of trying the drug. After a year of regular use, Damien was taken off of the drug in November 2015 when his testosterone levels stabilised at around 22 and he was fertile again.

"I knew it would work. I'd read the research and I was certain this was my golden ticket," he says. "But even then, I was relieved. I could do this, we were having a kid."

In early February 2016, Damien and his wife had sex twice four days apart. "She was in charge," he laughs. "Her and her pregnancy app."

After the second time she fell pregnant. When she told him, he remembers feeling a rush of relief. "I wanted my wife to have the joy of children and to share that with her. Now we had that chance."

Damien says that his story is proof that there is hope for men in his position. While there are several untreatable causes, there are just as many, if not more, situations where infertility can be reversed.

**JARED WAS A NEW MAN. THROUGH CONSISTENT** exercise and healthy eating, he not only had hope that starting a family was still a reality, but the focused routine was keeping his mood up and his confidence intact.

He and his wife had now been trying to have a child for almost two years but Jared wasn't despondent. Deep down he was certain that that 10% chance, plus his hedged bet of a refreshed lifestyle, would finally pay out.

"I've had worse odds at the casino and walked away with money," he laughs.

In July 2015, Jared's wife phoned him at work. She couldn't wait until he got home. "She was pregnant," he says. "I couldn't believe it, she was finally pregnant."

Last year the couple welcomed their child into the world, a healthy baby boy. He's changed their lives.

"Me, my wife, we couldn't be happier. For so long we lived in doubt, not knowing if this would ever be possible. And now every morning we wake up to this bundle of joy," he says.

Are they going to try for a second child? He laughs. "We're not ruling it out."

In a world where more and more men are being told that they might never be fathers, there is still hope. Zarrabi says there isn't any proof that infertility is on the rise.

"We might just be getting better at picking up cases of male fertility than we were in the past... And modern men are also more likely to seek help for this very personal and often stigmatised problem."

Those same advancements in medical science that have improved our ability to diagnose fertility issues are also equipping doctors with the ability to treat them.

"Modern life may play a role in dwindling fertility," adds Zarrabi. "We live in a faster, more stressful world, and stress has been shown to reduce a man's testosterone levels and lower his sperm counts."

And that may be at the root of Jared's journey of self-discovery. Maybe it wasn't losing weight or cutting booze that bolstered his reserves - but that a healthier lifestyle and purposeful routine lowered his anxiety and gave him an identity outside of his ability to be a father. **MI**

## 4 Fertility Myths, Mansplained

**THEY'VE TOLD YOU EVERYTHING FROM YOUR UNDERWEAR TO YOUR MORNING COMMUTE ARE KILLING YOUR SPERM. WE'RE HERE TO TELL YOU WHY THEY'RE WRONG**

### 1. LAPTOPS

According to a study published in the *Journal of Fertility and Sterility* in 2010, exposing your testicles to consistent and high heat can affect the quality and quantity of your sperm. Researchers at the State University of New York found that while perching your laptop on your lap could discourage sperm formation, moderate usage did not project enough heat to negatively affect your fertility. Keep your laptop lap sessions to a minimum and use a desk when you can.

### 2. CYCLING

Worried that your stints in the saddle may be tanking your sperm count? While researchers at University College London found that the tight lycra in combination with seat pressure could lower sperm counts or result in abnormal sperm, technological advances in the development of saddles and cycling equipment have lowered that risk. If you are training for a long-distance ride, invest in a high quality saddle and breathable fabrics.

### 3. MASTURBATION

A surprisingly high number of men and women believe that regular masturbation can have a negative impact on your sperm count. However, because men's bodies produce sperm at a steady rate, ejaculating does not have any impact on your sperm, according to a study published by the European Society of Human Production and Embryology. In fact, their research found that ejaculating at least once a day could improve your sperm's swimming ability.

### 4. TIGHT UNDERWEAR

Think those briefs are restricting your sperm count? A study published by the Department of Urology at the State University of New York found that while tighter underwear can cause your testicles to heat up, the change in temperature isn't enough to affect sperm production.