That's Health .com

YOUR FERTILITY JOURNEY

A HOLISTIC APPROACH TO SUPPORT
NATURAL CONCEPTION, IVF OR IUI

NOURISH
YOUR BODY

SUPPORT
REPRODUCTIVE HEALTH

NAVIGATE
EACH PATH
NATURALLY

FEEL INFORMED
AND EMPOWERED

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Published by OPTIMUM SOLUTIONS, LLC

3522 Kaliste Saloom Rd. Lafayette, La. 70508

FIRST EDITION

DEDICATION

I want to truly acknowledge every single one of my wonderful clients. There is no way this book could be possible without the experiences I've had in working with each of them. A special "Thank You" to all the medical doctors and holistic practitioners out there for doing what you do to help others achieve true health naturally!

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THE BEGINNING...

You've most likely tried the medical route, maybe even spent THOUSANDS OF DOLLARS at fertility clinics and still no baby. Or perhaps you've been trying naturally to no avail. Or maybe you've suffered several miscarriages and are too scared to try again.

The mental, physical, and emotional toll infertility takes on you and your spouse can be overwhelming.... leaving you both worn out and utterly frustrated. I get it. Been there myself.... so, I truly understand.

So, how is it that we've invested billions in IVF technology, yet only 27-33% of women get pregnant and carry to term after their first cycle? (PMID: 10426683)

Why are we seeing an unprecedented number of low birth rates in the United States? (https://www.cdc.gov/nchs/pressroom/nchs_press_releases/2024/20240525.htm)

The overall risk of miscarriage is about 15% in known pregnancies. This includes people of all ages and all stages of pregnancy. (https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)00682-6/abstract)

Something is obviously being missed in the "standard medical field"!

Let me go over a few basics ... yeah, you probably know much of this already with all you've done but you might just learn a few tiny pieces that can make all the difference to your success.

So let's start at the very beginning...

Sperm meets egg. Sperm fertilizes egg. And a baby is born 9 months later. It sounds like an easy process, but for a woman struggling with infertility, it can be an elusive process – one with no easily explained reason why she can't get pregnant.

The path to delivering a healthy full-term baby is a multistep, intricate process. If there is a breakdown in any one of the steps, the final result will not occur. If we can understand each step, and potentially correct the issue, the likelihood of conception and delivery increases.

Chapter 1: Conception Basics — Timing, Ovulation, Cervical Mucus, and Progesterone

Sperm Meets Egg

It's easier said than done, and so we should focus on making sure that the path of sperm to the woman's egg is clear and that timing is correct.

The first step in making sure that sperm meets egg is correct timing.

If day 1 is the first day of a menstrual bleed, and day 28 is the day before a woman begins her period again, day 14 is approximately the time of ovulation. Prior to this time, LH (luteinizing hormone) released by the pituitary gland will peak and after this LH surge, an egg will be released approximately 24 to 36 hours later. The egg accompanied by progesterone hormone will then journey through a fallopian tube, where it will be fertilized.

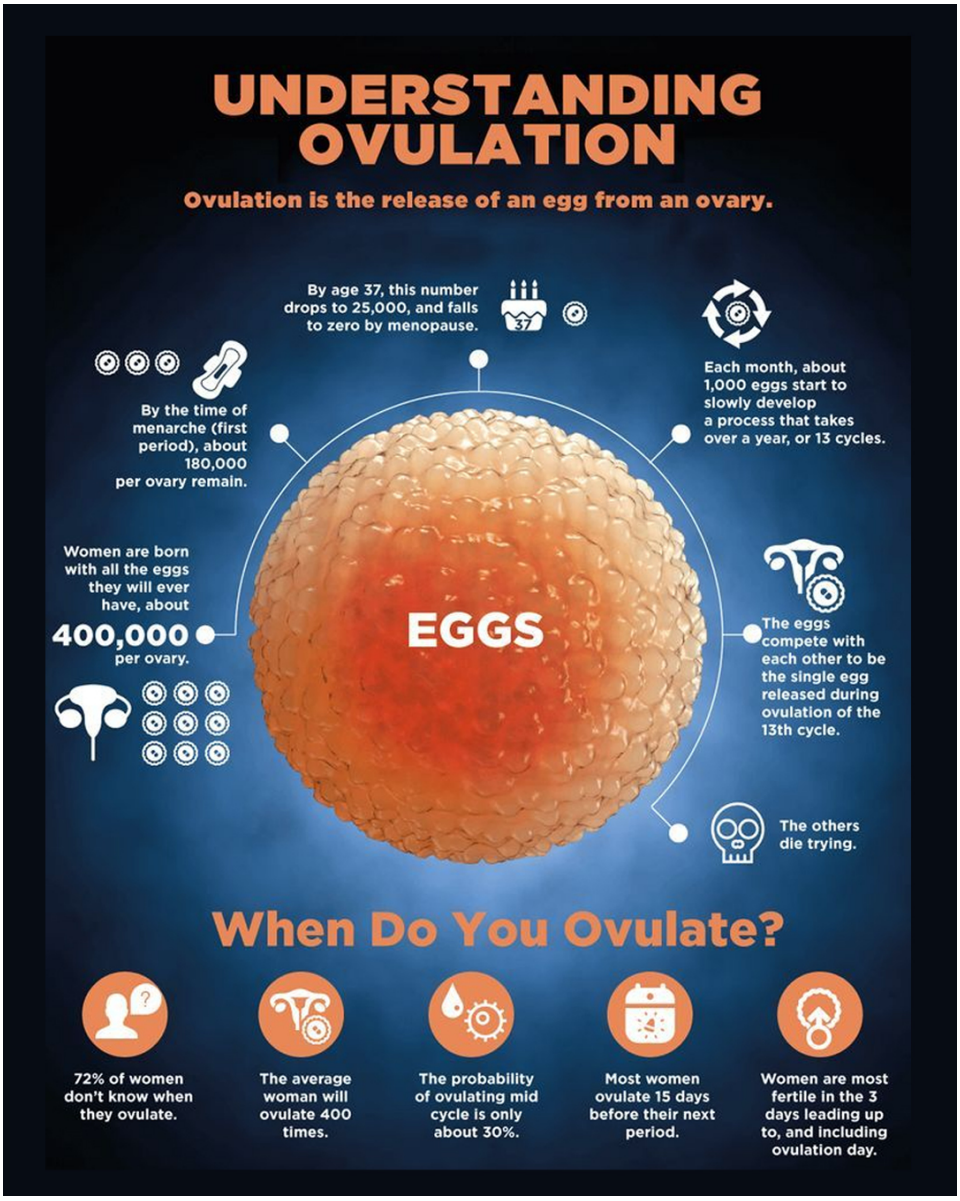
An egg is viable for approximately 12 to 24 hours before it starts to disintegrate, so the sperm must be in place prior. In essence, sex must be timed prior to ovulation to give the sperm time to swim up to the egg. Use of ovulation predictor kits is helpful, as well as looking for fertile cervical fluid, which has a stretchy, egg-white consistency.

As a general rule for clients, I recommend that the couple have sex from day 5, every other day (or daily if sperm counts are normal), until the woman has passed the signs of ovulation. (men should abstain from any sexual emissions for 4-8 days prior to this time). Engaging in enough foreplay to increase male and female secretions is vital as well, so that sperm can have enough fluid to swim through.

To allow the sperm to meet the egg, appropriate lubrication is necessary. Sperm needs an alkaline environment in which to survive. The male and female partners should both eat an alkaline-promoting diet (avoiding heavy coffee, soda, energy drinks, processed meats, and white flour), avoid using saliva as a lubricant during sex as it may harm sperm, and avoid using soaps around the time of intercourse, as soap residue can damage sperm. No purchased lubricant should be used with the exception of Pre-Seed.

For a woman these strategies can help increase cervical mucus:

- Increase water and electrolyte consumption to a minimum of 64 oz of water daily
- DHEA 5 - 25mg daily (only based on proper testing)
- B6 P5P (form)
- Myo-inositol and D-chiro-inositol



Ovulation should occur approximately 14 on days prior to menstruation. These last two weeks in a cycle are known as the luteal phase. If, however, the female is NOT ovulating a full 14 days prior to menstruation, she may have what is termed a luteal phase defect. **This typically is due to a progesterone deficiency in the last half of the cycle.** For many clients, I recommend that they take between 50 and 200 mg of progesterone daily (based on testing YOUR body to determine what you need) after ovulation (starting on day 14 or 16). Progesterone has been shown to prevent miscarriages and improve sperm motility. Medically your doctor might prescribe oral progesterone as that is approved by medical boards. We suggest that most (but not all) use transdermal progesterone which bypasses the liver and gets into your bloodstream the fastest.

For women who have had long-term issues trying to conceive, we MIGHT suggest 2-3 months of using progesterone PRIOR to ovulation. On the 3rd or 4th month to then use progesterone AFTER ovulation. This can have the effect of allowing the ovaries to heal and stay calm.

Chapter 2: Fertility Testing — Recommended Tests for Women and Men

If it is not psychologically stressful, I often ask women (and men) to start testing for fertility roadblocks early in their process of family planning. It's important to know if there is a structural or diagnosable problem.

For women, I recommend the following tests (not all are mandatory, all are based on individual needs)

- **CBC**
- **CMP**
- **TSH, free T3, free T4, TPO**
- **ferritin & iron panel**
- **cycle day 2 FSH and LH**
- anti-Müllerian hormone
- **vitamin D3 25(OH)**
- **DHEA-s**
- free and total testosterone
- prolactin
- **Insulin**
- **Saliva hormone testing for adrenal function to balance estrogen/progesterone, cortisol, etc. done on day 19 of cycle. (read this link to understand why we do NOT use blood testing only for adrenal and ovarian hormones)**
- **ApoB cholesterol test**
- **HAIR TISSUE MINERAL ANALYSIS**
- Ovulation strips: we don't generally push the use of these as monitoring ovulation can sometimes make you MORE anxious. For the first 3 months refrain from looking. On month 4 you can start monitoring.

Imaging(optional):

- pelvic ultrasound
  which can rule out anatomical abnormalities, uterine fibroids or other uterine abnormalities, ovarian cysts or other ovarian growths or abnormalities
- HSG (hysterosalpingogram)
  which can rule out blocked tubes from endometriosis, previous pelvic or abdominal infections or surgeries/procedures resulting in scar tissue

For men, I would recommend the following tests:

Through blood:

- CBC
- CMP
- TSH, Free T3, Free T4
- vitamin D3 25(OH)
- free and total testosterone, estradiol, SHBG

- FSH, LH
- prolactin
- HA1C
- Apo-B
- HAIR TISSUE MINERAL ANALYSIS

Imaging/other (optional):

- semen analysis
- possible testicular ultrasound to rule out varicocele
- Saliva hormone testing for adrenal function for cortisol, etc.

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Chapter 3: PCOS/PMOS, Insulin Resistance, and Fertility

PCOS (now called PMOS) & FERTILITY

One of the most common issues affecting female fertility is PMOS – Polycystic ovary syndrome (PCOS) will now be called polyendocrine metabolic ovarian syndrome (PMOS). Experts say that the new name better reflects the nature of the disease.

Polycystic Ovary Syndrome (PCOS) has officially been renamed Polyendocrine Metabolic Ovarian Syndrome (PMOS)

Symptoms include hirsutism (or increase in body hair), acne, abdominal obesity, high androgen (male hormone) levels, and possible menstrual cycle irregularities. The crux, however, is the lack of ovulation in these clients, and the key cause is **insulin resistance**.

What are the causes of insulin resistance?

Let's take it from the very beginning... the cells of your body need sugar for energy. The sugar they need is *glucose*, which powers your brain, muscles, and other parts of your body, just as gasoline powers a car. To get glucose into your cells, your body makes insulin, a hormone that acts like a key. It attaches to the surface of your cells, allowing glucose to enter.

Insulin is a hormone that is released by the pancreas in response to rising blood glucose. When you consume carbohydrates, the glucose that enters the bloodstream signals the pancreas to make insulin. Insulin serves as the key that unlocks the door to allow glucose to enter body tissues. It tells your cells "HELLO! Pick up this glucose. It's all over the place."

Without insulin, cells in the liver, muscle, and fat have a difficult time vacuuming up glucose from the blood. These tissues can transport only a small percentage (5 to 10 percent) of the glucose in circulation without the help of insulin. When insulin is present, it increases the amount of glucose that can be transported into tissues, allowing them to be properly fed, and keeping blood glucose concentrations in the normal range.

This process of transporting glucose is important because every cell in your body uses glucose for energy. (Besides glucose transport, insulin also escorts amino acids into cells.)

Meanwhile, the glucose that builds up in your blood can harm the blood vessels in your eyes, kidneys, and heart. This condition is called type 2 diabetes, and it has reached epidemic proportions in North America and much of the rest of the world.

There is a significant amount of confusion about what actually causes insulin resistance, and I witness it every day in my work coaching people with diabetes, weight issues, and adrenal issues. A large gap exists between the scientific research on insulin resistance and what the general public understands about it. Most health professionals even misunderstand the science or are not aware of the latest research. Unfortunately, excellent research does no good if the information is not put in the hands of those who need it. This is certainly the case with insulin resistance.

5 Causes of Insulin Resistance (metabolic syndrome, Type 2 Diabetes)

1. Refined carbohydrates / high fats
2. High-fructose corn syrup
3. Preservatives, pesticides, toxins
4. Lack of Exercise & Stress

Why are instances of insulin resistance, metabolic syndrome, and type 2 diabetes on the rise? In many cases, the answer lies in the food we eat — and our lack of movement. Our early ancestors focused on hunting and gathering food. This simple act involved two key elements: they were obtaining whole foods straight from their environment and getting a lot of exercise in the process. In modern society, we sit parked at our desks and in our cars for so much of the day, and food is available at almost every turn — much of which depletes the body rather than nourishing it. Meanwhile, the research is mounting that shows how foods high in refined carbohydrates, preservatives, pesticides, trans fats, toxins and super sugars like high-fructose corn syrup, and lack of exercise, all contribute to insulin resistance.

Researchers using special scanning techniques found one of the most important contributing factors. Looking into the cells of people with insulin resistance, they found tiny particles of fat. These fat particles are especially common in muscle cells. Like gum in a lock, a buildup of fat particles in cells interferes with insulin's ability to open the cell membrane and allow glucose inside.

Just as insulin resistance prevents sugar from entering muscle cells, it also prevents amino acids from entering. So now you can't build or maintain your muscles. You get fatter and you lose muscle.

Your energy level drops, which makes you hungry for more carbohydrates and less willing to exercise. You actually crave more of the poison that is killing you.

BACK TO PMOS...

PMOS is usually suspected by looking at symptoms, blood work, and pelvic ultrasound results. For these clients, I would recommend greatly reducing dietary fats, follow a whole food plant based diet, increasing exercise, and possibly taking supplements to reverse insulin resistance.

A word on metformin: metformin is a medication that is often included in fertility protocols. It makes cells more insulin sensitive, and can thus stimulate ovulation. Taking between 1000 and 1500 mg daily is the general rule. I often have seen this used in fertility protocols, as it does not have any major side effects. We prefer to use a natural supplement that is just as effective as the drug Metformin in clinical trials (our **MODULATOR** supplement).

To have healthy pelvic organs, circulation must be adequate. Nutrient and hormone delivery to these organs requires good pelvic blood flow. To improve pelvic circulation, there are several practices that may greatly improve fertility:

- Yoga: I recommend the DVD *Restoring Fertility*, by Drs. Brandon Horn and Wendy Yu, which can be found on www.amazon.com.

Chapter 4: Vitamin B6 — Pregnancy, Miscarriage, and Hormones

VITAMIN B6 AND PREGNANCY

NOTE FOR PREGNANCY: Folic acid: Low folate is associated with a 47% increased risk of miscarriage; having both low folate and low vitamin B6 increase miscarriage risk by 310%.Vitamin B6 is crucial for the healthy function of the brain and nervous system and thus plays a critical role in the development of your baby. Specifically, it's necessary for the healthy production of serotonin and norepinephrine, key neurotransmitters.

- Your baby requires a supply of Vitamin B6 for the healthy development of its brain and nervous system
- B6 can resolve some cases of morning sickness
- It helps you maintain healthy blood glucose levels
- It plays a role in preventing several issues in newborns, including eczema and low birth weight

Many women are first recommended B6 supplementation early in pregnancy, when nausea and vomiting are at their worst, as B6 can significantly alleviate the issue.

Vitamin B6 and Miscarriage

High vitamin B6 lowers the chance of miscarriage by 50% and improves fertility by 120%

Homocysteine, folate, and vitamins B6 and B12 were measured in preconception plasma. Relative to women in the lowest quartile of vitamin B6, those in the third and fourth quartiles had higher odds of conception (odds ratio = 2.2; odds ratio = 1.6, respectively), and the adjusted odds ratio for early miscarriage in conceptive cycles was lower in the fourth quartile (odds ratio=0.5). Women with sufficient vitamin B6 had higher odds of conception (odds ratio = 1.4) and a lower adjusted odds ratio of early miscarriage in conceptive cycles (odds ratio=0.7) than did women with vitamin B6 deficiency. Poor vitamin B6 status appears to decrease the probability of conception and to contribute to the risk of early miscarriage in this population.

http://www.ncbi.nlm.nih.gov/pubmed/17478435

Vitamin B6, B2, B12 and folate lower in women who miscarry

The median levels of all B vitamins examined, i.e. folate, vitamins B2, B6, and B12, were lower in miscarriage cases compared to the controls, although the difference did not reach significance except for vitamin B6 intake, which resulted in the border of significance (2.1 vs. 1.8 mg). It is important to point out that multivitamin supplementation is low in the Mexican population, as was the case in this small study population. Thus, these findings need to be replicated in larger studies to fully evaluate the protective role of these vitamins on miscarriage risk.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2890227/

Vitamin B6 can prevent stress from affecting fetal growth

High-dose vitamin B6 may counteract the adverse impact of glucocorticoids *(which are increased by stress)* on fetal growth.

http://linkinghub.elsevier.com/retrieve/pii/S0306987799909568

Vitamin B6 and Hormones

Vitamin B6 lowers prolactin

Vitamin B6 appears to reduce the production of prolactin, a hormone that causes testosterone to be taken up by tissues.

http://www.bentham.org/cnf/sample/cnf4-4/D0004NF.pdf

Vitamin B6 acts similarly to progesterone

Vitamin B_6 possesses progesterone-like effect but it does not intensify the action of progesterone. On the other hand, vitamin B_{12} and vitamin A exhibit no progesterone-like effect and do not affect the action progesterone when they were given together.

http://www.springerlink.com/index/n3xp3xt315458323.pdf

Vitamin B6 increases progesterone

Administration of vitamin B6 at doses of 200-800 mg/day reduces blood estrogen, increases progesterone and results in improved symptoms under double-blind conditions.

http://www.ncbi.nlm.nih.gov/pubmed/6684167

We only endorse using the correct form of B6 called P-5-P. Please do not run to drug store and purchase lower quality, wrong form of B6 which can be toxic!

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Chapter 5: Dad-to-Be Protocol — Male Fertility, Stress, Exercise, and Nutrition

DAD-TO-BE PROTOCOL (if indicated by proper testing)

Sperm Fertilizes Egg

Male factor infertility may account for 30% of all fertility issues. Most male infertility problems can be spotted in an abnormal semen analysis – a fairly inexpensive, quick, and noninvasive process. Lifestyle factors that affect fertility to rule out in men would include bicycling, wearing tight clothing, sauna/hot tub use, obesity, excessive alcohol consumption, and smoking (cigarettes or marijuana).

A recent study has revealed that sperm cells can carry traces of stress experienced by the father, potentially influencing offspring health and development. Researchers found that environmental stressors, such as psychological stress or trauma, can induce epigenetic changes in sperm—modifications that affect gene expression without altering the DNA sequence.

These changes, primarily in DNA methylation patterns and small non-coding RNAs, act as molecular "memories" of the father's stress. When sperm fertilizes an egg, these epigenetic markers may be transmitted to the embryo, potentially shaping traits like stress resilience, behavior, or susceptibility to mental health disorders in the offspring.

The study highlights how stress affects the hypothalamic-pituitary-adrenal (HPA) axis, which regulates cortisol production, leaving molecular signatures in sperm. Experiments in animal models, and limited human studies, suggest these alterations can influence the offspring's stress response systems, potentially leading to anxiety-like behaviors or metabolic issues.

However, the exact mechanisms of transmission and their long-term impact remain under investigation. This research underscores the importance of paternal health before conception and raises questions about how lifestyle and environmental factors shape future generations. It also emphasizes the need for further studies to explore interventions that could mitigate these effects.

We're told we get our mitochondria from our moms, and that's true.

In humans, mitochondrial DNA is almost exclusively maternally inherited. Sperm mitochondria do enter the egg, but they're typically tagged for destruction—marked and cleared by mitophagy so the embryo keeps mom's mitochondrial line.

But even though mitochondrial DNA comes from mom, **dad's workouts before conception may still shape a child's endurance capacity and metabolic health**, not by passing on his mitochondria, but by sending tiny sperm microRNA messages that tune early embryonic gene regulation.

In a new study, exercising fathers produced offspring with **greater endurance and more mitochondria**, an effect that tracked to sperm small RNAs that suppress a "molecular brake" on PGC-1α, the classic mitochondrial biogenesis switch.

The findings reframe preconception health as a two-parent story—mom supplies the mitochondria, but dad's training status can still program how those mitochondria are used.

Untrained offspring inherit their father's fitness

For the study, male mice completed 8 weeks of progressive endurance exercise training on a treadmill, a program that successfully enhanced their fitness. Compared to their untrained peers, they were leaner, had higher bone mineral density, superior endurance, greater energy expenditure, increased mitochondrial abundance, more fatigue-resistance type I muscle fibers, and (at the molecular level), increased expression of PGC-1α—the master metabolic regulator.

This better fitness and endurance showed up in their offspring. When male mice trained before conception, their offspring (who never trained) ran longer and farther (with lower post-exercise lactate levels) than mice from sedentary fathers, and their leg muscles looked like those of trained mice, with more slow-twitch/oxidative fibers, higher mitochondrial enzyme activity, and visibly more mitochondria.

They also mirrored their fathers' body composition, with **higher lean mass, lower fat mass, and improved bone mineral density compared to offspring of sedentary fathers**. Metabolically, endurance-trained offspring exhibited higher oxygen consumption and burned more calories throughout the day.

Put on a high-fat diet, offspring of exercising fathers had better blood sugar control than those of sedentary fathers. Skeletal muscle was pinpointed as the main driver. Their muscles pulled in more glucose, stored more glycogen, showed stronger insulin signaling, and had more of the glucose transporter GLUT4.

In short: endurance training is associated with the **same conserved sperm-miRNA pattern in humans and exercised mice**, making it biologically plausible that a father's training status before conception could influence early embryonic gene regulation (even though child outcomes weren't measured in this study).

The importance of parental exercise

Unsurprisingly, most of the research on parental habits and childhood health has focused on the role of the mother before and during pregnancy—her body weight, what she eats and drinks, and other lifestyle habits she engages in or avoids. That's especially true when it comes to exercise. The role of the father, however, is a bit hazier.

For moms, randomized controlled studies show that exercise during pregnancy **reduces the risk of pregnancy complications** (macrosomia, abnormal vaginal delivery, C-section) and **lowers the odds of gestational diabetes, hypertension, and preeclampsia**—which pose short- and long-term health risks for mother and newborn. There are also possibly autonomic and neurodevelopmental advantages, for

example, **better language and cognitive development** in children at age 2 and 5 if their mothers exercised regularly.

For dads, human evidence is limited to molecular-level studies such as the one discussed today—we don't have much information on long-term outcomes after paternal exercise, even though the mechanistic plausibility is there.

But we do know that fitness can be passed down.

Final thoughts

Does all this mean that if you train hard and get extremely fit, your child will be too? We probably need more evidence to make that conclusion, but it's incredible to think that **our fitness habits now could be shaping the health of future generations**.

The health of children starts way before conception—it's why I personally devoted so much time to researching and learning about the factors that would influence my own child's development.

Here are my evidence-based recommendations. You don't have to implement all of these perfectly, but doing as many as possible will likely give you the best chance of a successful pregnancy and a healthy baby.

Even for those who aren't looking to conceive—consider these to be indispensable health habits!

- **Maintain a healthy body weight at least six months to a year before conception** because body weight can influence sperm quality and epigenetic factors that affect the developing baby.
- **Begin taking a high-quality multivitamin/prenatal vitamin (for women)** a year before trying to conceive to build up adequate stores of micronutrients like folate (crucial for preventing neural tube defects) and vitamins C, E, and zinc (which help reduce DNA damage in sperm).
- **Ensure an adequate intake of DHA**, an omega-3 fatty acid important for brain development and mitochondrial function (crucial for sperm motility).
- **Monitor vitamin D levels** because they play a role in fertility and immune function. Levels should ideally be between 40 and 60 ng/mL.
- **Limit caffeine intake during the conception period**, as caffeine has been linked to increase miscarriage rates, even when consumed by the male partner. Caffeine intake can be relaxed once conception has occurred, but it's best to minimize it as much as possible during the conception phase.
- **Avoid using saunas and hot baths in the months leading up to conception (for men),** because heat exposure can reduce sperm quality; it takes about six weeks for sperm motility to recover after significant heat exposure.
- **Engage in regular strength and aerobic exercise** to prepare the body for pregnancy (women) and to promote overall health and body weight/composition.

Simple changes in nutritional status would be a first-line treatment strategy to improve fertility. These are some of the first nutrients that I would consider **for the "Dad to Be" but only if indicated by testing properly:**

- Vitamin A: a necessary antioxidant that, in low amounts in the blood, has been shown to correlate with low sperm counts and anovulation (lack of ovulation).
  Recommended dose of up to 10,000 IU (based on individual test results)
  Avoid high doses of retinols, which have been shown to cause birth defects in excess amounts.
- Zinc: Low levels of this mineral have been associated with low sperm count and abnormal sperm morphology (shape).
- L-arginine: an amino acid that helps improve blood flow, has been shown to improve ovarian response, endometrial receptivity, and pregnancy rate in those undergoing ovarian stimulation protocols.
  Recommended dose 1500 to 3000 mg in divided doses, on an empty stomach.
  In men, has been shown to improve sperm count and quality.
- CoQ10: an energy cofactor in the electron transport chain, which has been shown to improve both sperm quality and motility.
  Recommended dose of 100 mg 3 – 6X daily
- Vitamin D3: a hormone that improves overall hormone function and fertility in the body in both men and women.
  Recommended dose of 1000 to 5000 IU daily, depending on blood levels.
- A good multi vitamin for women and men: reduced the incidence of low birth weight babies in women and improves sperm quality in men.
  I recommend FOUNDATION multi-vitamin that we have produced by our labs
- EFA (essential fatty acids) status: low essential fatty acid exposure to the fetus has been correlated with lower neurological development after birth.
  Recommended dose of at least 2000 mg EPA/DHA supplementation.

Fertility-Friendly Diet

For men and women, I recommend a diet that excludes alcohol, high caffeine/nicotine, added sugars, dairy, and gluten. Eat a more high-protein with complex carb diet… Think more paleoish.

Testosterone Treatment for MEN

If your guy is taking testosterone… we might need to have a little discussion. Testosterone replacement comes in many forms, including shots, gels, patches, or implantable pellets. However, it is important to know that testosterone treatment usually leads to either low sperm counts, or no sperm seen whatsoever in the semen. Interestingly, low testosterone does not directly cause infertility. Sperm production is stimulated by hormones other than testosterone. If your guy stops testosterone treatment while trying to conceive, the sperm should return to the semen within about 3 months, with no permanent damage seen.

It's a delicate balance as having low testosterone can also affect sperm count. Working with someone who can educate you and treat you correctly is important.

Chapter 6: Thyroid and Iodine — Fertility and Pregnancy

Should iodine be used for infertility?

The element iodine is an essential nutrient utilized by the thyroid glands, and deficiency of this element has been linked to reproductive failures. Iodide transporters are also present in reproductive tissues and cells of embryonic origin such as the endometrium and trophoblasts, respectively.

PMCID: PMC7511676 PMID: 32353856

Inorganic iodide and/or iodine is required for optimal cellular function in reproductive tissues, and that iodide transporters may potentially be used as a marker for infertility or for probing potential localized iodine deficiency that may not present in a typical thyroid panel analysis.

- National Health and Nutrition Examination Survey studies show that a significant number of women in childbearing age do not have optimal levels of iodine.
- The need for iodine is not limited to the thyroid glands but its modulatory effects and transporters can be observed in a variety of cells.
- Women with reproductive failures had a significant increase of iodide transporters suggesting a localized iodine deficiency.

Iodine is an essential element that cannot be manufactured in the body and must be obtained through dietary means to ensure adequate metabolic functions. Body organs, including the thyroid, concentrate iodine against a gradient and require adequate iodine levels to produce the necessary thyroid hormones. The World Health Organization (WHO) estimates that almost 2 billion people worldwide do not receive sufficient amounts of iodine.

Localized iodine deficiency could be present in tissues such as the endometrium and may contribute to infertility or reproductive failures by affecting the local immune response and/or regulation of gene expression in reproductive tissues. Given that transporters of iodide have been found in endometrial tissue, it is considered that similar to leukocytes and trophoblastic cells, iodine could affect the functional activity of cells in reproductive tissues including the endometrium. There is no question that iodine deficiency in some women with recurrent reproductive failures is occurring. Iodine is an essential component needed for a successful healthy pregnancy.

The requirement for iodine during pregnancy is substantially increased, by >50%, for multiple reasons. First there is an increased demand for T_4 production as it is needed by the fetus in the first trimester. This fetal requirement along with hormonal changes in pregnancy causes alteration in the mother's thyroid hormone homeostasis and subsequent increased maternal T_4 synthesis (30–100% more than pre-pregnancy levels). Second, the fetus utilizes iodine in later trimesters in order to make fetal thyroid hormones. Third, pregnant women have increased iodine clearance/loss. Alteration of thyroid hormone levels due to iodine deficiencies can lead to fetal neurological damage, congenital hypothyroidism, miscarriages, and eventual reproductive failures. Worldwide analysis by the WHO illustrates that iodine deficiencies are prevalent and that includes women in childbearing age. Although organically bound iodine in the form of hormones is essential, iodides and molecular iodine could also play a part in optimizing reproductive organs and pregnancy.

ORDER IODINE HERE

Can Iodine be used while a woman is pregnant?

In Japan, the average Japanese woman is eating 13.8 mg of iodine per day while the average American woman consumes 100 times less iodine per day (approximately 0.138 mg per day). Iodine is very crucial in the first three years of life from the development of the fetus inside the womb until two years after birth. In the development of a child's IQ, I feel that it would be very advantageous for the mother to supplement her diet during pregnancy and, if she is nursing the child, for the first two years after pregnancy. Pregnant women are notoriously iodine deficient. This data was uncovered in the mainstream press recently. The impact on low birth weight and the baby's IQ is evident in women with even slight iodine deficiencies.

When breastfeeding, evolution has programmed the mother's dietary iodine to reroute the lion's share of her iodine toward nourishing the baby. But the baby still may not get enough from breastfeeding if the mother's intake is low. Unfortunately, moms rely on prenatal vitamins which usually contain inadequate iodine.

ORDER IODINE HERE

Chapter 7: Hashimoto’s Thyroiditis and Fertility

HASHIMOTO'S THYROIDITIS

Can Hashimoto's Thyroiditis cause infertility? **If Hashimoto's Thyroiditis is not well controlled, it can negatively impact reproductive capacity, leading to infertility. Hashimoto’s disease (HT) is the most common autoimmune disease, affecting 5–15% of women of reproductive age. Recent studies have shown that Hashimoto’s thyroiditis can be a risk factor for infertility in women.**

This is due to the disruption of thyroid hormones, which can affect ovulation and disrupt the menstrual cycle. Hashimoto’s is a disease, while hypothyroidism is a thyroid condition that can develop because of it. Not everyone with Hashimoto’s disease will develop hypothyroidism, but it is the most common cause. If you have an underactive thyroid, or too little thyroid hormone in your blood due to an issue like Hashimoto’s, the body is unable to function normally. Symptoms of hypothyroidism often include fatigue, weight gain, dry skin, mood swings and irregular periods causing infertility. Getting a proper work-up (labs) done correctly is vitally important. You can read more about **HASHIMOTO'S here.**

Chapter 8: Fertility Summary — Key Steps for Women and Men

IN SUMMARY

Notice that I keep repeating "based on individual testing". The reason is that no two women or men necessarily need the same things. I never assume or treat you like everyone else. You and your partner are unique.

A couple needs to have done these initial steps to ensure fertility. If pregnancy has not been achieved in 6 months, I would recommend further testing to detect any bacteria or viruses hidden deep in the body that is possibly preventing your body from a successful pregnancy.

- Timing: have sex every day or every other day from cycle day 5 to past ovulation.
- Avoid saliva, oral sex, and lubricants besides Pre-Seed.
- Elevate hips (for women) after sex for at least 20 minutes.
- Begin blood work and imaging/procedures for both men and women.
- Diet: a whole food diet that is mainly plant based with clean animal proteins for both male and female partners, avoiding gluten, maybe dairy, no added sugar, no alcohol, nor high levels of caffeine.
- Do not smoke.
- Increase pelvic circulation through acupuncture, massage, and/or yoga.
- Increase fluids to a minimum of 64 oz of water daily to ensure proper internal lubrication.

*Consider use of myoinositol to improve cervical quality and male fluid quality.

- Supplements for MEN should include a multivitamin, additional zinc/copper formula, L-arginine, CoQ10, vitamin D3, essential fatty acids.

Get a full and thorough work up on thyroid hormones if suspected issues with thyroid or autoimmune diseases: TSH, Free T4, Free T3, TPO AB, Thyroglobulin AB done with a fasting test! (do not swallow thyroid pills morning of blood draw, do make sure you take correctly the day before test)

- For women, diagnosis and treatment of PMOS should be considered along with additional supplements
- For women, exercise intensity and duration should be considered and adjusted.
- For men and women, avoid hot tubs/saunas or medications (prescriptions and over the counter) that could affect fertility.

I've seen correcting small imbalances in fertility help time and time again. I truly believe that a healthy body is a fertile body. Making these changes to lifestyle will go a long way in creating that healthy body and allowing you to create the new life for you and your husband! Sadly, these are the exact points that are NOT considered in most fertility clinics!

ON a monthly basis we have clients calling and texting with their successes in getting pregnant! And in 25 years of helping young ladies, we have never had one baby diagnosed with autism!

Chapter 9: Standard Pre- and Postnatal Protocol

Our STANDARD PROTOCOL (pre- and post- natal)

As a holistic practitioner, I am well aware that all supplements are not created equally. After doing personal trials with many labs I chose to work with a few of the top ones producing supplements that I know are safe, of the highest quality, with clean ingredients, & are 3rd party tested for potency, purity and performance. These labs have also assisted me in the development of my own supplement brand. All of our supplements are gluten and dairy free, all B vitamins are methylated, and all are manufactured following Good Manufacturing Practices (GMP). Please note that other nutrients might also be needed, but what is listed below is non-negotiable based on testing ...

Sustain Prenatal
Iodoral iodine
Assist B6 P5P + magnesium
Immunity D3
Emotion progesterone (dosage based on testing)
Maintain omega 3
COQ10n 100mg minimum up to 600mg
NAC support

You can find each of these on our website with full data on each supplement

ABOUT THE AUTHOR

Marie Pace, DNM, HHP, CNC, is a Certified Nutritional Counselor and in 1999 was board certified as a holistic health practitioner by the American Association of Drugless Practitioners; She received her diploma as a Doctor of Naturopathic Ministries in 2003 from Trinity School of Natural Health. Marie is a Diplomate Member of the American Association of Nutritional Consultants; and a member of the American Holistic Health Association & is a CERTIFIED STARCH SOLUTION graduate from Dr. John McDougall's Health and Medical Center.

Certified Biolayne Levels 1 & 2 Nutritional Coach (through Dr. Layne Norton)

* Certified PreNatal Coaching Specialist

* Certified Post Natal Coaching Specialist

* Certified in "Stopping Antidepressant with Hyperbolic Tapering"

A dynamic speaker, Marie had been the host of her own radio show for over 8 years in South Louisiana. She has been an outspoken educational activist since 1991 enlightening others on the harm of drugging and labeling of our children and women for educational and emotional reasons. She is currently a contributing writer to numerous publications and has published over 500 articles on natural health solutions. Marie has authored 3 books on natural health: ***"Discover Health",*** ***"Anxiety - Natural Solutions",*** and ***"What's Health".***

Following holistic guidelines as mentioned in this E-book, a naturopathic practitioner coaches & teaches individuals about natural solutions to health issues as opposed to utilizing pharmaceutical drugs. A good naturopathic practitioner will involve the whole person, which includes the mind, body, and spirit to get to the root cause of the problem. That is exactly what Marie does with her clients.

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We are Natural HEALTH COACHES: a professional trained to provide lifestyle nutrition and help individuals set and reach their health goals using diet and exercise tools and behavioral psychology principles.

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