

Fertility Testing: An Overview of Female Mainstream & Holistic Testing (Includes Nutritional & Supplement Recommendations)



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Introduction

Testing Is Trending

Testing, testing, testing. Fertility testing is trending. And yes, testing can be enormously helpful—especially when it sheds light on a nutritional deficiency, a hormonal imbalance, or a genetic marker that may be standing in the way of a healthy, full-term pregnancy.

That said, in the last couple of years, I've received a flurry of emails from Fertile Heart moms sharing stories like this:

"I wouldn't recommend the functional medicine person I worked with. I stopped working with her after she pressured me to do a second 90-day cleanse/supplement regimen for a parasite that wasn't actually causing any problems. She also ordered a ton of tests through labs she was connected with. After doing my own research, I realized many of the tests were unnecessary."

So let's pause for a moment and ask:

- How many of these tests are truly necessary?
- Who is profiting from prescribing them?
- And who is profiting from all the supplements that are supposed to "fix" us?



Introduction (continued)

Are we spending time and money chasing numbers, when the next right step would be the same—regardless of our test results?

What follows is not a prescription, nor an exhaustive list. It's a practical overview—a reference for you to compare against what you've been offered or prescribed. A list to take into conversation with your trusted provider. A resource to help us compare notes.

Let's Compare Notes:

It would be deeply helpful—and healing—for all of us to gather our collective wisdom on this path. If you feel moved, **consider sharing your experience at this link** or by emailing us at info@fertileheart.com.

Here are a few guiding questions to spark reflection:

- Were there any tests that offered meaningful insights or shifted your approach?
- Were you encouraged to take tests that, in hindsight, felt unnecessary?
- Did you feel nudged toward certain labs or supplement brands your provider was affiliated with?

Your story might be exactly what someone else needs to hear.

Making Sense of It All

Before diving into test specifics, a reminder: the path to parenthood is rarely linear.

No single test unlocks the mystery of fertility. These are clues—pieces of a mosaic. Even the most sophisticated labs are only as helpful as the care and clarity that accompany them.

In the Fertile Heart OVUM process, we hold test results lightly. They're not verdicts. They're invitations to deeper listening: What is your body asking for? What nourishment, rest, or release does it need?

If I've learned one thing after nearly three decades walking beside people hoping for a child, it's this: In the Kingdom of Baby Making, the power of veto belongs to Her Majesty the Heart.

Because if the frightened, panicked Orphan part of us is in the driver's seat, we can test and supplement all we want—but the medicine won't get to where the trouble is.

1 - Hormonal Assessments

FSH (Follicle-Stimulating Hormone)

- **What it is:** A measure of how hard your pituitary gland is working to stimulate your ovaries to produce eggs
- **Test type:** Blood test, ideally done on cycle day 3
- **Optimal range:** Under 10 IU/L; over 15 may suggest diminished ovarian reserve
- **Why it matters:** Think of FSH as the volume knob on a radio. If your ovaries aren't responding, your brain turns up the volume.
- **What might help:**
 - ~ Supplements: CoQ10 (200–600 mg), DHEA (25 mg 3x/day—under supervision), Vitamin C (500–1000 mg)
 - ~ Nutrition: Berries, leafy greens, avocados, walnuts

LH (Luteinizing Hormone)

- **What it is:** A hormone that works with FSH to stimulate egg development and release
- **Test type:** Blood test on day 3, or mid-cycle to detect LH surge
- **Optimal range:** 1.5–8 mIU/mL (Day 3); an LH:FSH ratio >2:1 may suggest PCOS
- **Why it matters:** LH triggers ovulation. Chronically high LH can be misleading in OPKs and common in PCOS.
- **What might help:**
 - ~ Supplements: Inositol (2–4 g), NAC (600–1200 mg)
 - ~ Nutrition: Whole grains, legumes, reduce refined carbs

Hormonal Assessments (continued)

AMH (Anti-Müllerian Hormone)

- **What it is:** A measure of ovarian reserve
- **Test type:** Blood test, any day of cycle.
- **Optimal range:** 1.5–3.5 ng/mL
- **Why it matters:** Gives a rough idea of how many eggs remain, though not egg quality.
- **What might help:**
 - ~ Supplements: CoQ10, Omega-3s (2000 mg), Resveratrol (200 mg)
 - ~ Nutrition: Cruciferous vegetables, flaxseeds, fatty fish

Estradiol (E2)

- **What it is:** A form of estrogen from developing follicles
- **Test type:** Blood test on cycle day 3
- **Optimal range:** 25–75 pg/mL
- **Why it matters:** High levels may suppress FSH and mask underlying issues.
- **What might help:**
 - ~ Supplements/Nutrition: Support liver detox (DIM, cruciferous veggies, flax)

Progesterone

- **What it is:** Prepares the uterine lining for implantation
- **Test type:** Blood test 7 days after ovulation (cycle day 21 in a 28-day cycle)
- **Optimal range:** >10 ng/mL in a natural cycle
- **Why it matters:** It's the "soil" for implantation, without enough, the seed (embryo) may not implant.
- **What might help:**
 - ~ Supplements: Vitex (chaste tree), B6, Vitamin E
 - ~ Nutrition: Healthy fats, sunflower seeds, leafy greens

2 - Thyroid Function & Micronutrient Deficiencies

TSH (Thyroid-Stimulating Hormone)

- **What it is:** Regulates thyroid function, which affects metabolism, energy, and fertility
- **Test type:** Blood test, any time during the cycle
- **Optimal range:** 1–2 μ IU/mL (for fertility); above 2.5 may hinder conception
- **Why it matters:** Thyroid dysfunction can disrupt ovulation and increase miscarriage risk.
- **What might help:**
 - ~ Supplements: Selenium (200 mcg), Iodine (150 mcg, if not autoimmune), Ashwagandha (250–600 mg)
 - ~ Nutrition: Brazil nuts (selenium), seaweed (iodine), gluten-free diet if Hashimoto's suspected

Free T3 and Free T4

- **What they are:** Active thyroid hormones crucial for metabolic and reproductive health
- **Test type:** Blood test
- **Optimal ranges:**
 - ~ Free T3: 3.2–4.2 pg/mL
 - ~ Free T4: 1.1–1.8 ng/dL
- **Why it matters:** Low levels suggest hypothyroidism.
- **What might help:**
 - ~ Supplements: Zinc (30 mg), Tyrosine (500–1000 mg)
 - ~ Nutrition: Protein-rich foods (eggs, poultry); minimize raw goitrogens (like raw kale)

Thyroid Antibodies (TPO & Tg-Ab)

- **What they are:** Markers for autoimmune thyroid conditions like Hashimoto's
- **Test type:** Blood test
- **Optimal level:** Undetectable
- **Why it matters:** Even with normal thyroid hormone levels, antibodies indicate immune dysregulation.
- **What might help:**
 - ~ Supplements: Myo-inositol, Vitamin D (5000 IU), Omega-3s
 - ~ Nutrition: Anti-inflammatory diet; include turmeric, ginger, wild salmon

You may also refer to the following Fertile Heart thyroid related pages:

[Thyroid & Fertility: Foods that Help, Foods that Harm](#)

[Thyroid and Fertility: A Tiny Gland that Might Unlock Some of the Mysteries of Our Fertility Woes](#)

Micronutrient Deficiencies (continued)

Vitamin D

- **What it is:** A fat-soluble vitamin critical for immune function, implantation, and hormone balance
- **Test type:** Blood test (25(OH)D)
- **Optimal range:** 50–80 ng/mL for fertility
- **Why it matters:** Deficiency is linked to poor implantation and higher miscarriage rates.
- **What might help:**
 - ~ Supplements: Vitamin D3 (5000–10,000 IU depending on levels)
 - ~ Nutrition: Fatty fish, egg yolks, fortified foods, sun exposure

Ferritin (Iron Stores)

- **What it is:** A storage protein for iron, crucial for oxygen transport and energy
- **Test type:** Blood test
- **Optimal range:** 70–100 ng/mL
- **Why it matters:** Low iron can disrupt ovulation and cause fatigue.
- **What might help:**
 - ~ Supplements: Ferrous bisglycinate (30–60 mg with Vitamin C)
 - ~ Nutrition: Red meat, lentils, spinach + citrus to enhance absorption

Omega-3 Fatty Acids

- **What they are:** Essential fats that reduce inflammation and support hormone production
- **Test type:** Blood spot or serum
- **Optimal intake:** 2000–3000 mg daily (EPA:DHA ~2:1)
- **Why it matters:** Deficiencies can impair egg quality and reduce uterine receptivity.
- **What might help:**
 - ~ Supplements: High-quality fish oil
 - ~ Nutrition: Salmon, sardines, chia seeds, walnuts

3 - Blood Sugar, Oxidative Stress & Gut Health

Fasting Insulin

- **What it is:** A hormone that helps regulate blood sugar levels.
- **Test type:** Fasting blood test
- **Optimal range:** 2–8 μ U/mL
- **Why it matters:** Elevated insulin can interfere with ovulation and contribute to conditions like PCOS.
- **What might help:**
 - ~ Supplements: Myo-inositol and D-chiro-inositol (4:1 ratio, 2–4 g), Chromium (200 mcg)
 - ~ Nutrition: Low-carb, high-fiber diet; emphasize non-starchy vegetables and whole foods

8-OHdG (8-hydroxy-2'-deoxyguanosine)

- **What it is:** A marker of oxidative DNA damage
- **Test type:** Urine test
- **Optimal range:** <10 ng/mL
- **Why it matters:** High levels indicate oxidative stress, which can impair egg and sperm quality.
- **What might help:**
 - ~ Supplements: NAC (600 mg), Alpha Lipoic Acid (300 mg), Vitamin C
 - ~ Nutrition: Berries, green tea, leafy greens, dark chocolate (80%+ cacao)

Oxidative Stress & Gut Health (continued)

Zonulin

- **What it is:** A protein that regulates intestinal permeability (leaky gut)
- **Test type:** Stool or blood test
- **Optimal range:** <120 ng/mL
- **Why it matters:** Elevated levels suggest compromised gut barrier, which can trigger systemic inflammation.
- **What might help:**
 - ~ Supplements: L-glutamine (5000 mg), Probiotics (50 billion CFUs)
 - ~ Nutrition: Bone broth, fermented foods

Gut Microbiome Diversity

- **What it is:** Assessment of the balance and variety of gut bacteria
- **Test type:** Comprehensive stool analysis
- **Key findings:** Dysbiosis, pathogens, inflammation
- **Why it matters:** A healthy microbiome supports immune regulation, hormone metabolism, and nutrient absorption.
- **What might help:**
 - ~ Supplements: Broad-spectrum probiotics, antimicrobial herbs (oregano oil, berberine)
 - ~ Nutrition: Prebiotic-rich foods (asparagus, garlic, onions), variety of plant fibers

4 - Genetic Polymorphisms

Relevant Genetic Polymorphisms

A polymorphism is a small, natural variation in your DNA—a kind of genetic detour—that can slow traffic or make the journey bumpier.

These forks don't necessarily cause traffic jams (disease), but they can make it harder for your body to function optimally under stress, especially when the terrain is already tricky (as it often is during fertility challenges).

Here's how that plays out with a few common polymorphisms:

- **COMT (Catechol-O-Methyltransferase):** Affects estrogen and stress hormone breakdown. Slower activity may increase potentially harmful estrogen metabolites.
 - ~ Support: Magnesium, SAMe, methylated B vitamins
- **VDR (Vitamin D Receptor):** Influences how your body utilizes vitamin D.
 - ~ Support: Higher doses of vitamin D3, guided by lab results
- **FUT2 (Fucosyltransferase 2):** Affects gut microbiome composition and B12 absorption
 - ~ Support: Methylated B12, probiotics, gut-healing nutrients

MTHFR Genetic Testing

- **What it is:** A test that identifies mutations in the MTHFR gene affecting folate metabolism
- **Test type:** Blood or saliva
- **Why it matters:** Variants can impair methylation and increase homocysteine, impacting egg quality and increasing miscarriage risk.
- **What might help:**
 - ~ Supplements: Methylfolate instead of folic acid; B6, B12 (methylated), riboflavin, magnesium
 - ~ Nutrition: Leafy greens, legumes, beets, eggs

Genetic Polymorphisms (continued)

A Guiding Note on Genetic Polymorphisms Testing:

Here's one example of a test that's been gaining traction in recent years—but might not always serve us, as patients, in the way it promises to. Genetic polymorphism testing—often highlighted in functional medicine—is designed to spotlight potential glitches in how our bodies process nutrients, detoxify, balance hormones, or manage inflammation. But here's the catch: these tests don't tell us what's actually happening in our bodies. They only show what might happen based on our genetic blueprint.

In many cases, it turns out to be a costly detour to information we could've gathered through simpler, more direct lab work. Nutrient imbalances flagged by these genetic panels can usually be picked up through standard blood tests—ordered by your gynecologist or primary care provider—for a fraction of the price.

So what's more useful than knowing you might have a gene variant? It's asking:

- Is your body actually methylating well?
- Do you have enough active folate (5-MTHF), B12, magnesium, and zinc?
- Are your homocysteine, methylmalonic acid, and vitamin levels where they should be?
- Is your estrogen being metabolized properly—which can often be seen in estradiol and SHBG levels?

These are straightforward labs. They don't require fancy panels or deep pockets—and they give you answers about what your body is doing right now, not just what it might be predisposed to do someday.

5 - Detox Support

Mercury

- **What it is:** A heavy metal that can accumulate in the body from seafood, dental fillings, and environmental exposure.
- **Test type:** Blood, urine, or hair analysis
- **Optimal level:** Undetectable or very low
- **Why it matters:** Mercury is a neurotoxin that can interfere with hormonal signaling and fertility.
- **What might help:**
 - ~ Supplements: Chlorella, cilantro extract, NAC (N-acetylcysteine)
 - ~ Nutrition: Avoid high-mercury fish (swordfish, tuna); include garlic, cilantro, selenium-rich foods

Detoxification Support

- **Why it matters:** Proper detox helps clear excess hormones, environmental toxins, and supports cellular health.
- **What might help:**
 - ~ Cruciferous vegetables: Rich in sulforaphane and DIM, support estrogen metabolism
 - ~ Wild blueberries, spirulina, barley grass juice powder, Atlantic dulse
 - ~ Supplements: Calcium-D-glucarate, milk thistle, NAC
 - ~ Lifestyle: Sweat regularly (infrared sauna or exercise), ensure regular bowel movements, hydrate well

