

Naturally Nourishing Fertility

Part 1: Assessment & Creating a Treatment Plan

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What we'll cover...

- How to walk through a **comprehensive assessment** for infertility cases
- **Questions to ask clients** to get at the root cause of their fertility issues
- **Counseling strategies** & common pitfalls
- How to prioritize and **develop a plan** of action

Plus...a special announcement at the end!

What we won't cover...

- Specific protocols or interventions*
- Functional or conventional labs interpretation*

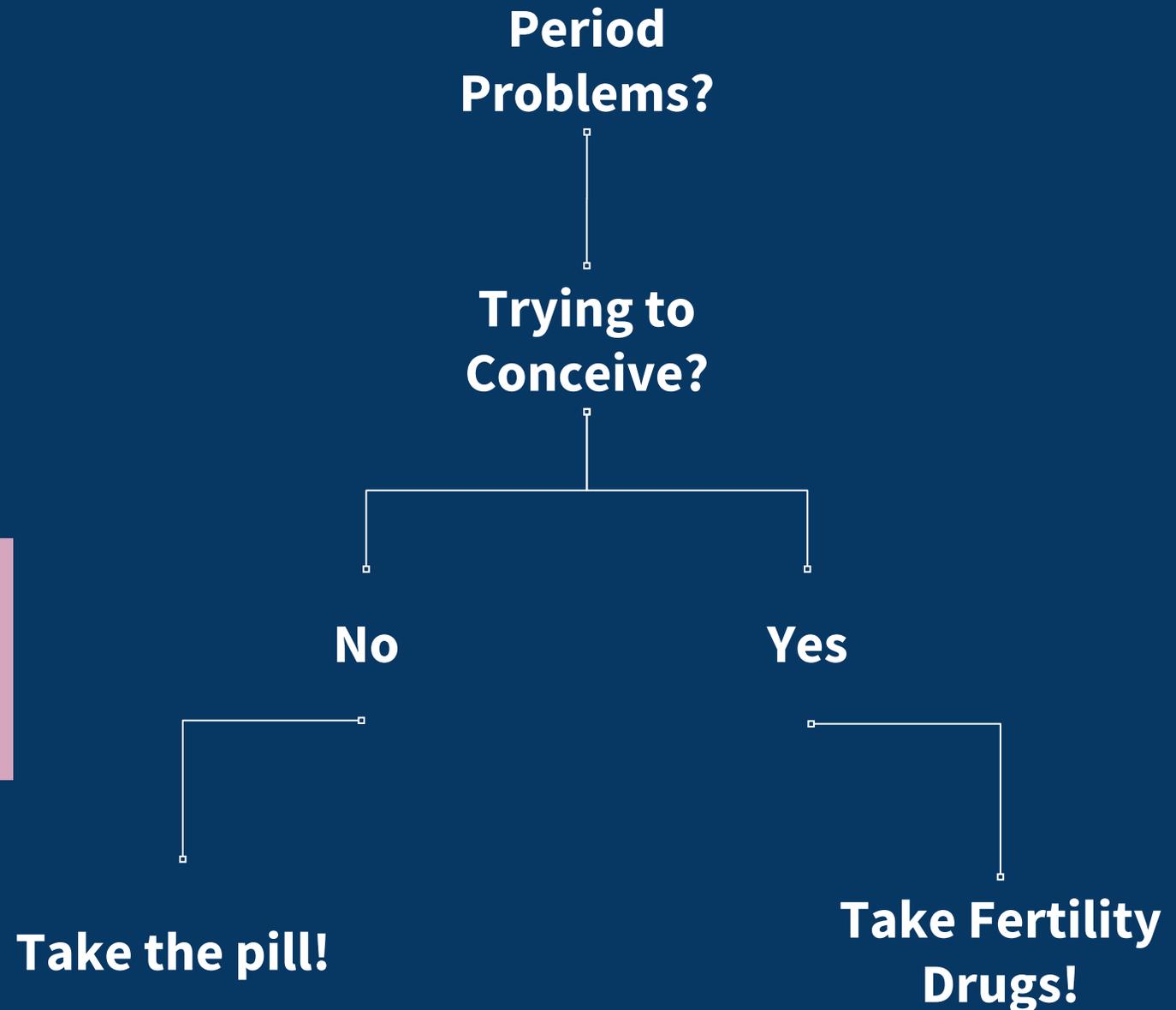
*Look for these specific topics in other parts of this series!

**Fertility is about more
than having a baby.**

It's a sign of health and vitality.

Medical Model

→ **Counseling tip:** honor all choices and paths clients have taken. Try not to bring judgement



Adapted from The Period Repair Manual by Lara Briden

A Better Way

→ Get at the **underlying, root causes** of reproductive health issues. Infertility assessment is assessing the health/function of these 4 areas:

The 4 Fundamental Factors

1. Inflammation & Oxidative Stress
2. Digestive and Immune Function
3. Detoxification pathways
4. Cellular Energy production



All
dependent
on nutrients!

Goals are to create a **treatment plan** that addresses these 3 areas:

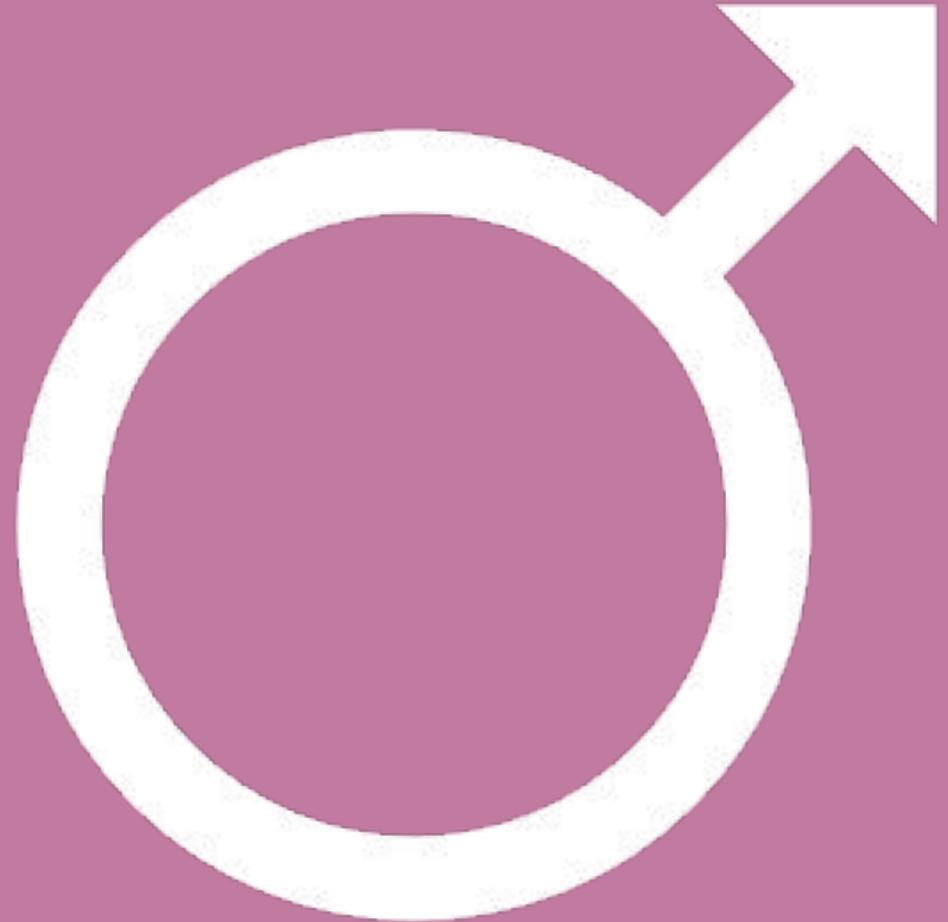
1. Digestive Health
2. Detoxification
3. Blood sugar balance

Because then you influence → egg, sperm & fluid quality, hormone balance, implantation and embryo development, nutrient absorption & assimilation, epigenetics, pregnancy & birth outcomes

Partner's History

American Society of Reproductive medicine estimates that in **40% of infertility cases the male partner contributes to, or is the cause of, the infertility**

- **Semen analysis** not always the entire story/changes
- Have **infections** been ruled out?
- **Thyroid** testing?
- Evaluate **chronic stress**
- Excess **body fat**
- **Alcohol**, Cannabis → oxidative stress



Assessing Hormone Balance

Remember that hormone imbalance is a **symptom** of one or more of the 4 Fundamental Factors

Use information from the **menstrual cycle** to guide you.

Once you have a sense of the imbalance **make the connection** to one of the 4 Fundamental Factors.

What does a healthy cycle look like?

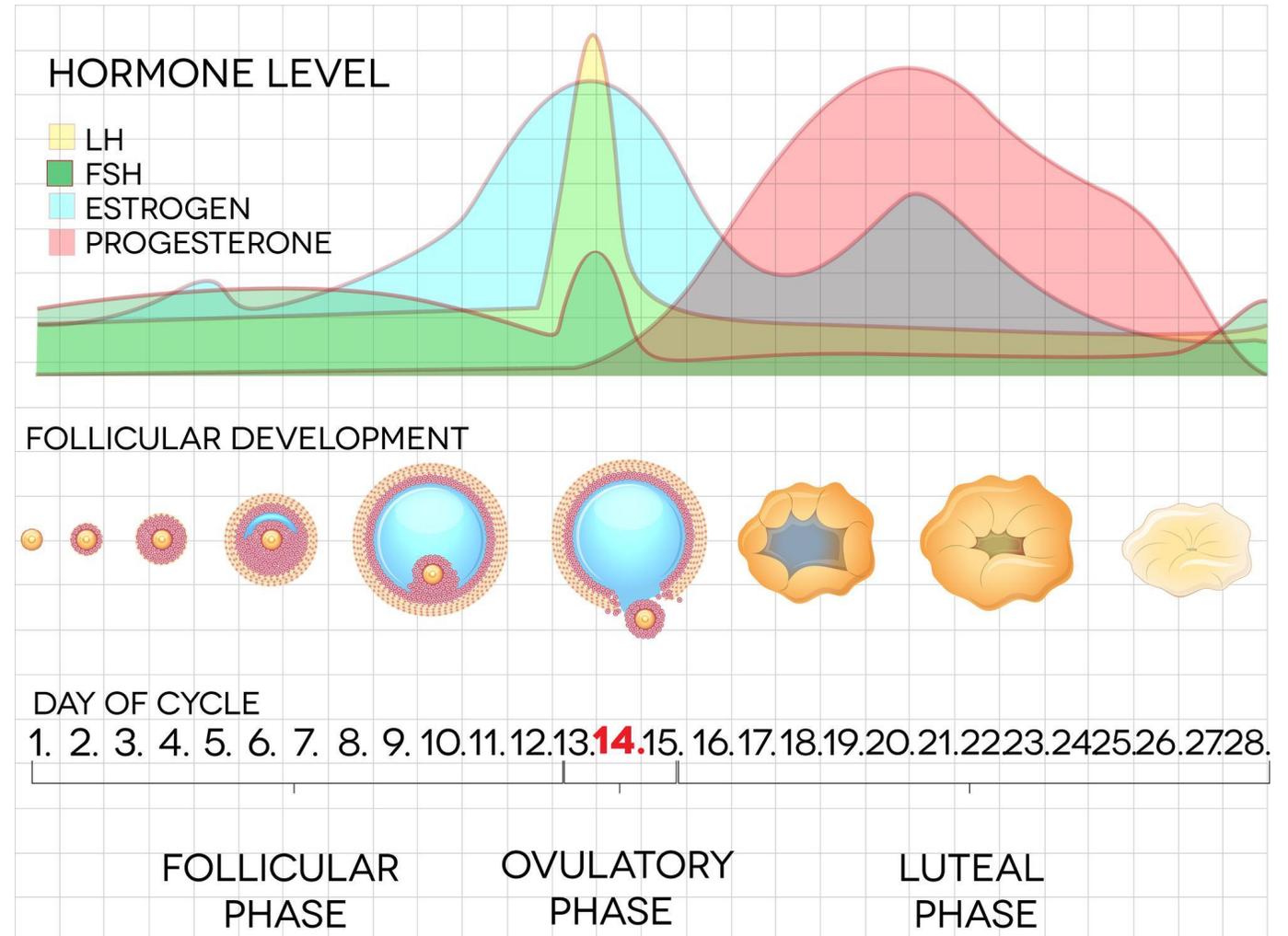
Follicular Phase (7-21 days)

Ovulation (1 day)

Luteal Phase (10-16 days)

= **21-35 days**

The 100 Day Journey



What does the **menstrual cycle** reveal?

- **No cycle:** anovulatory, Amenorrhea, stress/trauma, possibly PCOS
- **Skipped cycles:** anovulatory, stress/trauma, possibly PCOS
- **Cycles longer than 35 days:** anovulation, possibly PCOS
- **Cycles shorter than 21 days:** luteal phase defect (and see “luteal phase shorter than 10 days”)
- **Luteal Phase shorter than 10 days:** low progesterone due to inadequate follicle or corpus luteum development: think egg quality, inflammation, thyroid disease, insulin metabolism issues, nutrient deficiencies (especially, magnesium, B vitamins, Vitamin D, iodine, zinc, selenium)
- **Heavy flow:** estrogen dominance (also typically present: painful cramps, tender breasts, headaches, fluid retention, mood swings)

What does the **menstrual cycle** reveal?

- **Light flow/Dark or brown color:** inadequate corpus luteum development/uterine lining thickening, low estrogen, FSH, LH
- **Menstrual fluid odor:** possible infection, dysbiosis
- **Cramping:** estrogen dominance
- **Bleeding outside of menstruation:** spotting in luteal phase: low progesterone production, think follicular/corpus luteum development
- **Vaginal discharge/cervical mucus:** dry → sticky → creamy → **egg white** → sticky → dry

Questions to ask:

Ask: (For clients with a cycle)

*Do you know if you ovulate?
How do you know? Signs
include: fertile mucus, positive
urine ovulation test, regular
cycle, rise in basal body
temperature, some women feel
ovulation*

Questions to ask:

Ask: (For clients without a cycle)

*Emotional or physical stress?
Traumatic brain injury? Had a cycle
since stopping hormonal birth
control pill? Undereating?
Over-exercising? Ketogenic diet?*

*And also the following questions
(see next slide)*

Questions to ask:

Ask: (for clients with very long cycles, skipped cycles and no cycles)

*Have you been evaluated or diagnosed with PCOS? Does anyone in your family have PCOS? When was the last time you had a pelvic ultrasound? Ovarian cysts? Excess hair on your face, chest, or arms? Thinning head hair? Acne? Skin tags –especially on the upper neck and upper torso? Irritability or excessively aggressive/angry episodes? *Request recent lab work to assess fasting blood sugar, insulin, Hemoglobin A1C*

Fertility History

Recurrent miscarriages:

Nutrient deficiencies	Metabolic dysfunction/obesity
Dietary/environmental endocrine disruptors	Insulin resistance
Oxidative stress	Endometriosis
Hypothyroidism (including subclinical)	Follicular/corpus luteum development (egg quality)
PCOS	Low progesterone
Infection	Smoking
Inflammation	Stress/trauma

Fertility History

- **Common labs run by Reproductive Endocrinologists/fertility clinics:**
 - **Day 3 FSH:** Less than 9 is generally ideal, FSH increases as ovarian reserve declines
 - **FSH/LH ratio:** ideally 1:1 if FSH is much greater than LH may also indicate poor ovarian reserve
 - **AMH:** an additional measure of ovarian reserve that can change based on other factors, not a stand alone evaluative tool. Low may be indicative of low ovarian reserve. Very high levels can be a marker of PCOS

Fertility History

Hx of IVF:

Ask:

- How many eggs were retrieved?
- Did any embryo's survive? How far did they make it?
→ If poor outcome, think egg quality



Signs and Symptoms of Underactive Thyroid

Constipation

Always cold/sensitive to temperature changes

Low libido

Brain fog

Hair loss, dry hair

Thin, brittle fingernails

Fatigue

Slow heart rate

Metabolic system and the **Reproductive system** are reciprocally regulated.

Think: **Is the body “resting and repairing”?** Why?

Counseling Tip: This is a good opportunity to point out that there is nothing wrong with her body; in fact, it is doing exactly what it was designed to do: survive during times of stress

Weight and Fertility

Excess body fat can negatively impact fertility but consider the following before making this the primary focus:

- **Age:** Is there a reasonable amount of time to achieve healthy body fat loss?
- Hx of **eating disorder**
- Currently undergoing **ART**
- **Stress**
- Is it really a **blood sugar balance** issue?
- **Body composition measurement** v. overall weight loss or BMI monitoring
 - InBody 570 as a practice tool

Assessing Environmental Factors

The 4 P's:

Plastics

Pesticides

Pollution

Personal Care Products

Nutrition Physical: dark circles under the eyes, skin issues: eczema, rashes, acne



Assessing Sleep

Circadian rhythm affects hormones

- Cortisol levels
- Melatonin production → egg quality

Poor quality sleep

- Light sleeping/lack of deep sleep → low progesterone
- Waking frequently to urinate → sign of chronic stress
- Waking between 1-3am, night sweats → liver detoxification



Good **quality** sleep, and **enough of it** is critical for hormone balance and thus, fertility

What role is **stress** playing?

- **Common pitfall** = overlooking/not addressing stress
- **Chronic stressors** → oxidative stress, inflammation, immune dysfunction, thyroid suppression (“rest and repair”)

Counseling tip: If you are going to work with infertility cases, be sure to have at least a few easy to teach, evidence-based stress management techniques

Whole Body Log

Self-evaluative tool as well as a counseling opportunity.

Are the “buckets” balanced?

When one area is neglected, how does it affect the others?

BOSTON FUNCTIONAL NUTRITION

WHOLE BODY | MIND | SPIRIT DAILY LOG

NUTRITION

LIST YOUR MEALS AND SNACKS. INCLUDE TIME EATEN.

EMOTIONS

ANGER GRIEF
 CONTENT HAPPY
 DEPRESSED WORRY
 FEAR OTHER: _____

NOTES: _____

REST & SLEEP

QUANTITY (HOURS): _____
QUALITY: POOR FAIR GOOD
DREAMS: YES NO
WAKE TO PEE? YES NO
HOW MANY TIMES? _____ WHEN? _____

TRIBE & COMMUNITY INTERACTION

YES NO
DESCRIPTION: _____

 Shared a meal with others
WHO/WHEN/WHERE: _____

 Had a conversation with a friend
OTHER/NOTES: _____

LIFE BALANCE

What took the most energy today?

What gave me the most energy today?

MOVEMENT

DESCRIPTION: _____

SPIRITUAL PRACTICES

YES NO
DESCRIPTION: _____

**adapted from Deanna Minich's Daily Life Log, part of the Food & Spirit Practitioner Training*

Prioritize!

Bring it back to digestive health, detoxification, and blood sugar balance.

If there are any signs and symptoms of hormone imbalance & digestive issues → work on **gut health**

Infuse antioxidants, nutrients, anti-inflammatory foods to support **detoxification**; Remove environmental & dietary toxins*

Balance meals & deal with chronic stressors to **balance blood sugars**

Evaluate supplements for quality and fit (ex. folic acid v. methylfolate? poor quality fish oil?)

Counseling tip: pick a couple of “big bangs for your buck” and avoid trying to change too much at once + always draw the line between what you are recommending and how it improves fertility

Set Expectations & Evaluate Readiness to Change

Counseling Tips

Set expectations

- MNT for infertility requires more than one or two nutrition visits, encourage consistent visits over months. Lay out a timeline
 - Timeline to conception: minimum 4 months, average 4-9 months

Encourage both partners to engage in **diet and lifestyle modification** plans.

Assess readiness to make dietary changes, take supplements as directed, incorporate physical activity and stress management techniques

Prioritize lifestyle changes and focus on the **big impact** changes

Introducing the **Women's Health Nutrition Academy!**

A collaboration between Ayla Barmmer, MS, RD & Lily Nichols, RD



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