

A BASIC GUIDE TO WOMEN'S HORMONE HEALTH

by: annika duden
BS, FNTPT
Functional Nutritional Therapy
Practitioner



Remember my disclaimer: As a Functional Nutritional Therapy Practitioner, I am not a doctor, and therefore cannot diagnose or treat any specific disease or medical condition. I am trained to evaluate nutritional needs, and make recommendations of dietary change and nutritional supplements, NOT diagnose or prescribe. No comment or recommendation from me, as your Nutritional Therapy Practitioner, should be construed as medical diagnosis or prescription.

W E L C O M E

28 - 32 day cycles.

CAN RANGE FROM 21 TO 35 DAYS

Every woman is on a hormone cycle that usually lasts between 28 and 32 days.

There are 4 phases of the cycle, each phase plays a different and important role.

4 phases of the cycle.

MENSTRUAL | FOLLICULAR | OVULATORY | LUTEAL

6 signs of imbalanced hormones.

PERIOD PROBS | BC | ACNE | LOW LIBIDO | GI UPSET | STRESS

Keep reading for 6 signs your hormones may be out of whack.

4 easy ways to help support your hormones and your cycle.

4 easy hormone boosters.

HORMONES 101

BEFORE you dive in... ***read this page thoroughly*** so you understand the terms and definitions you'll be seeing throughout this ebook.



Hormones

Messengers that are constantly working to coordinate and control activities in the body. Female reproductive hormones are predominantly estrogen and progesterone. The balance and flow of these two hormones play a critically important role in the menstrual cycle, fertility, emotions, sex drive, and more.

The Four Phases

There are FOUR phases of your hormonal cycle. Each phase plays a very different and important role in the regulation of your hormones
(see page 3).

Basal Body Temperature (BBT)

BBT is your body's waking temperature. This means that at the start of the day, before even getting out of bed, your body's temperature is giving you important information and clues as to what's going on in your cycle.

I suggest taking your basal body temperature every morning BEFORE getting out of bed, in order to be able to most accurately track your cycle. You can check BBT with a regular thermometer, a BBT specific thermometer that comes with an app for tracking, or a BBT tracking device like the ava bracelet.

Your lowest temperatures indicate menstruation and pre-ovulation

A temperature spike indicates ovulation

An extended period of increased BBT indicates post-ovulation

Cervical Mucous

Yep, this is the white stuff in your undies. But guess what? Turns out it's really cool and important, and it's telling you things like when you're ovulating.

Xenoestrogens

A endocrine disruptor that mimics estrogen. Endocrine disruptors are chemicals that mimic a hormone (xenoestrogens mimic estrogen), but ALTER the normal function of that hormone. Therefore, they are not only disruptive, but dangerous to our health.

THE FOUR PHASES OF THE FEMALE CYCLE

PHASE IV: Luteal Phase

Energy dips and appetite increases during this phase.

Estrogen declines & progesterone continues to rise.

Lighter exercise or rest is best, as muscle building is turned off and fat storage is turned on in this phase.

Higher BBT.

PHASE I: Menstrual Phase

Uterine lining is shed (bleeding occurs)

Estrogen & progesterone are LOW.

This is the phase for REST & RENEWAL. Do not engage in intense activity or overexert yourself during this time.

Lower BBT.

PHASE III: Ovulatory Phase

Energy levels are usually at their highest.

Estrogen + testosterone reaches highest point & progesterone rises.

Exercise will feel fun and energizing.
Libido increases.

BBT spikes.

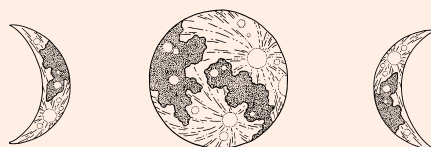
PHASE II: Follicular Phase

Energy levels begin to rise.

Estrogen & progesterone are steadily increasing.

May notice a decreased appetite and desire to move and exercise.

Lower BBT.



6 SIGNS THAT YOUR HORMONES/CYCLE COULD BE OFF

You have period problems

- Infrequent periods
- Spotting
- PMS
- Tender and swollen breasts
- Painful cramps
- Mood swings
- Anxiety/depression



You're on hormonal Birth Control

- Birth control interferes with natural hormone cycles
- BC is designed to prevent some or all steps of the cycle from occurring in order to prevent pregnancy

You have adult acne

- Hormonal acne (breakouts in certain locations during certain times of the month)
- Cystic acne





Your libido is in the toilet

You just can't get in the mood. And even when things get frisky, you still aren't feeling it.

- Low sex drive
- Vaginal dryness

Your GI system is not happy

- Gas/bloating after meals
- Constipation
- Diarrhea

The gut and hormones influence each other. They need to be balanced and working in harmony in order to create digestive comfort.

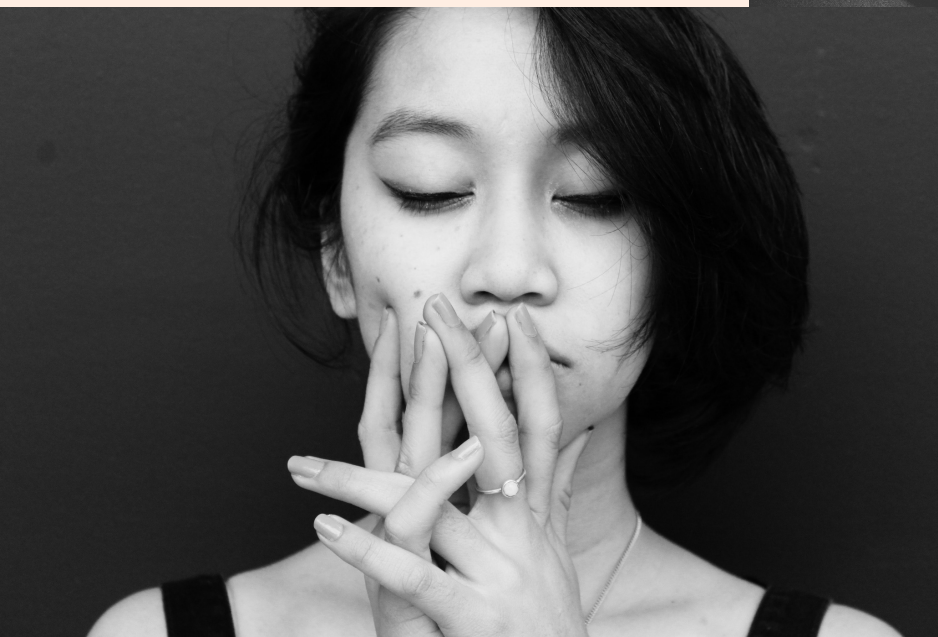


You're stressed

Stress can impact EVERYTHING.

A good diet, healthy movement, and sleep can't even combat stress.

Stress needs to be reduced as much as possible to optimize hormone function.



S O O . . . I T H I N K M Y H O R M O N E S A R E
O F F .

W H A T D O I D O ?

HORMONE SUPERFOOD= MACA POWDER

Maca powder is a hormone-supporting superfood that naturally aides in hormone balance in both men + women. It can be found at your local health food store, or can be purchased online.

Maca is known to improve mood, increase fertility, fight free radicals, and increase libido. Maca has amazing benefits and properties, but isn't powerful enough to combat a bad diet. You HAVE to be eating real, whole foods in order to experience the power of maca.

Maca, in conjunction with a healthy and healing diet, has been linked to improving hormonal imbalances such as: low energy levels, low libido, poor concentration/brain fog, mood swings & depression, PMS symptoms, and more.

Warning: maca should not be consumed if you're allergic to iodine, if you have Hashimoto's, or if you have any thyroid growths. Maca contains iodine.

Add approx. 1 tsp daily to smoothies, lattes and drinks for extra hormone support and see recipes below.



M A C A R E C I P E S

Magic Hormone Elixir (AKA maca moca)

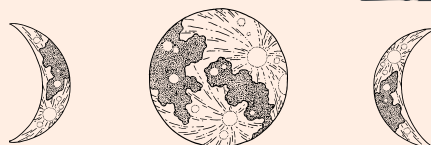
- 1 cup regular or decaf coffee
- 1/4 - 1/2 cup whole milk or coconut milk
- 1/2 tsp cinnamon
- 1 tsp maca
- 1 tbsp cacao powder
- Honey, maple syrup, coconut sugar to taste

Combine all ingredients into a blender. Coffee can be hot or cold. Blend on high until well mixed and serve hot or cold over ice.

Maca Smoothie

- 1 cup fruit of choice
- 1/2 banana
- 1/2 cup yogurt, whole milk, coconut milk, or water
- 1 scoop collagen
- 1 tsp maca
- 1/2 tsp cinnamon
- Optional: ice

Blend on high and add water as needed until thoroughly blended.



1. SUPPORT YOUR CYCLE WITH REAL FOOD



EAT REAL FOOD!

- A diet high in **refined and processed foods, flours, and sugars** will interfere with proper hormone function, which can cause irritability, anxiety, insomnia, and more.
- Eating large quantities of **fast food** (and the associated chemicals) are known hormone disruptors
- A **vegan diet** will deprive you of essential nutrients needed to regulate important hormones
- Consumption of **non-organic foods** (specifically the dirty dozen) leads to a large increase of hormone-disrupting chemicals in the body
- **Low quality meat** from factory farms is treated with hormones that will disrupt yours

FOODS THAT SUPPORT HEALTHY HORMONES ARE:

- High quality animal protein, specifically red meat
- High quality and ideally raw dairy (butter, yogurt, milk/cream, etc.)
- Eggs (specifically the yolks)
- Liver or liver supplement
- Oysters
- Bone broth
- Olive oil
- High quality sea salt
- Ginger
- Avocado
- Coconut (oil, milk, cream, water)
- Fruit & fruit juices like oranges, berries, bananas
- Lemon water with a pinch of salt



2.EAT ONE RAW CARROT SALAD DAILY

Remember when we talked about excess estrogen?

One the best, easiest, and cheapest ways to help your body detox estrogen is eating a raw carrot salad every day.



How it works:



Carrots contain natural antibacterial and anti-fungal properties. The antibacterial fiber in raw carrots aids in natural detoxification by binding to toxins within the intestines and escorting them out of the body through elimination (bowel movements).

When a woman has an estrogen dominance issue, that excess estrogen often becomes trapped in the intestines and intestinal walls if digestion is too slow. Remember the bloating and GI symptoms that we talked about in the beginning? Those are symptoms of a slow-moving GI system, which means that estrogen is hanging around and isn't getting moved through or eliminated.

Thankfully, because that amazing fiber in carrots that binds to estrogen and supports detoxification, we have a way to move that estrogen through and out.

Dr. Ray Peat states: "A carrot salad eaten daily can assist the liver and GI tract in the detoxification process and elimination of endotoxin and excess estrogen, thus improving the function of your metabolism."

We need healthy metabolisms for healthy hormones, so a carrot salad a day boosts our health in many categories.

RECIPE:

Raw Carrot Salad (consume at least one daily)

- 1 - 2 carrots, ribboned, grated, or chopped
- 1 tsp apple cider vinegar or white vinegar
- 1 tsp olive oil
- Optional: 1-2 tsp honey mustard (Annie's is my favorite brand)
- Sea salt

Mix all ingredients together in a bowl and enjoy!

3. REMOVE PUFAS FROM YOUR DIET

PUFAs = Polyunsaturated Fatty Acids

PUFAs are unstable fatty acids, meaning they oxidize when they are exposed to light, heat, and/or oxygen, which leads to an increase in free radicals (unstable atoms that can damage cells, causing illness) and inflammation in the body.

PUFAs also act like estrogen in the body. In a world where most women suffer from estrogen dominance, the last thing we need is to be giving our bodies something that behaves like estrogen and puts our hormones even more out of whack.

PUFAs also deplete vitamin E in the body, which is absolutely essential for fertility and preventing unsaturated fats from becoming oxidized.

AND SO MUCH MORE. PUFAs are mostly found in:



Vegetable Oils

- Safflower
- Sunflower
- Canola
- Walnut
- Soybean
- Corn
- Cottonseed
- Almond
- Peanut
- Wheat Germ Oil
- Etc



Nuts & Seeds

- Almonds
- Brazil
- Pine Nuts
- Pecans
- Walnuts
- Pistachios
- Flax Seeds
- Pumpkin Seeds
- Chia Seeds
- Sesame Seeds
- Etc.



Misc

- Restaurant food
- Nut dips & spreads
- Breads & baked goods
- Protein bars
- Chips
- Packaged Foods
- Mayonaise
- Store-bought baked goods
- Pizza
- Junk food
- Fast food

Why are they such a problem?

Nuts & seeds have replaced milk, flour, cheese, bread, baked goods, and more. We cook with sunflower oil, eat sunflower oil mayo, and dip our almond flour crackers into almond-based dips, put almond butter on our almond flour banana bread, etc.

Rancid oils like canola oil has replaced tallow and lard in fast food chains. Soybean and canola oil are combined to make margarine. Our favorite chips are fried in safflower oil.

So, in other words.... PUFAs are EVERYWHERE. It's in the best interest of our health and our hormones to cut down on these foods. I recommend:

- **COMPLETELY eliminate:** PUFA oils
- **Be mindful of excessive consumption of:** nut butters, nuts & seeds, fish oil supplements (because they are already likely rancid, and I never recommend generalized supplements), nut flours and "replacement" products with nuts.
- **Occasionally consume:** fatty fish and nuts & seeds like macadamia nuts & chestnuts

4. TRASH YOUR TOXIC PRODUCTS

DID YOU KNOW that common kitchen products that you are using EVERY DAY could be wreaking havoc on your hormones?

**DITCH
THESE:**



TEFLON PANS

Teflon is the coating on pans that makes them non-stick. Teflon is the brand name for Polytetrafluoroethylene (PTFE), the chemical use to create non-stick pans.

PTFE and another man-made chemical, Perfluorooctanoic acid (aka PFOA) also used in these pans, have been linked with neuro-toxic effects and health risks such as Alzheimers, dementia, and brain cancers, as well as being known xenoestrogens.

**FOR
THESE:**



STAINLESS STEEL, CERAMIC, and CAST IRON PANS

These pans are NOT coated with teflon, and therefore, do not leave a toxic residue of chemicals and xenoestrogens on your food.

PRO TIP:

These pans can often be found for an amazing price both in sets and separately at Ross, Home Goods, and Marshalls.



DITCH
THESE: ↘



PLASTIC FOOD STORAGE CONTAINERS, PLASTIC BAGS, and PLASTIC WATER BOTTLES

Storing food in plastic, even BPA-free plastic, can have tremendous negative impacts on overall health, but specifically, hormone health. All plastics leach chemicals, and many of these chemicals are xenoestrogens.

When a large amount of these xenoestrogens are present in the body, they create estrogen dominance. Extended periods of time of estrogen dominance and large amounts of xenoestrogens in the body have been linked to breast, prostate, and testicular cancer, obesity, infertility, endometriosis, early onset puberty, miscarriages and diabetes.

FOR
THESE: ↘



GLASS AND CERAMIC STORAGE CONTAINERS

Glass or ceramic food storage containers. Glass is especially easy to find, and can be purchased in sets with lids, just like plastic containers, for prices that are surprisingly close to plastic.

Glass does not contain toxic chemicals that will leach into your food, and these can be heated in the microwave without removing food.

PRO TIP:

Costco and Sam's Club typically offer cheap sets of glass containers (we're talking \$20), but they can also be found at Target, Walmart, etc..

IF NOTHING ELSE, PLEASE HEAR THIS:

DO NOT EVER MICROWAVE OR HEAT FOOD IN PLASTIC CONTAINERS OR FOOD BAGS (EVEN IF THE DIRECTIONS SAY TO). WHEN THE PLASTIC IS HEATED, EVEN MORE XENOESTROGENS AND CHEMICALS ARE RELEASED INTO YOUR FOOD BY HEATING THE PLASTIC.

DITCH
THESE: ↘



SYNTHETIC FRAGRANCE IN SCENTED CANDLES, PERFUMES, AIR FRESHNERS, & DEODORANT

Artificial fragrances are **KNOWN** endocrine disruptors.

Fragrances in artificially-scented candles usually contain phthalates. "The synthetic fragrances that create candle scents usually contain phthalates. As candles burn, phthalates are released into the air where they may be inhaled or absorbed through the skin. Once they enter the bloodstream, they can aggravate allergy and asthma symptoms in some people and have been found to alter hormone levels."

Moms-to-be need to be even **MORE** careful "Similarly, a pregnant woman's use of some fragrances and other cosmetics frequently may expose her growing fetus to diethyl phthal-ate (DEP), a common perfume solvent linked to abnormal development of reproductive organs in baby boys and sperm damage in adult men (Washington Toxics Coalition 2009).

FOR
THESE: ↘



ESSENTIAL OIL-BASED PRODUCTS

Although there is actually some conflicting research on the safety of essential oils, they are natural and a better alternative to synthetics.

Some studies and testimonies have even linked the use of lavender essential oil to estrogen dominance-like symptoms in boys.

The caveat is... they **HAVE** to be high quality, and I recommend Eden's Garden or Goodlight Candles.

And **PLEASE REMEMBER**: not all oils are safe for pregnancy, for babies/kids, and for pets. Please check all oils before using on yourself or loved ones, or diffusing.

Oils are plant extracts, and plant extracts are powerful, so please remember that.

However, anything natural will **ALWAYS** beat artificial.

NATURAL FAMILY PLANNING

I want to preface this next section by reminding you that i am not a doctor, and therefore, you need to consult with a physician before implementing any of the below suggestions.



Here's why Natural Family Planning is necessary in order to achieve true hormonal balance:

To have naturally balanced hormones, one cannot be using a synthetic hormonal birth control.

Why? Because the synthetic hormones are NOT natural to your cycle, and will throw off your hormones, as your hormones become dependent on these synthetic hormones to function. Make sense?

HOWEVER...

If this is not a time in your life where you are willing to learn about this method of birth control so that you can control your desire to become pregnant or to not become pregnant, then Natural Family Planning is not for you. ***It does take research, dedication, and a committed partner to successfully natural family plan. I would not recommend this method if you are not with a committed partner who is willing to learn your cycle with you.***

Personally, I believe that everyone owes it to themselves to be in-tune enough with their body to commit to this method of birth control. In the end, it is up to you, your doctor, and your significant other to decide if this is the best method for you.

PS. condoms are always a good idea!



NATURAL FAMILY PLANNING

Natural Family Planning is the act of tracking your monthly cycle, and timing your intimacy + protection with the phases of your cycle, without the use of hormonal birth control.

What's the point of Natural Family Planning?

Hormonal birth control is consistently emitting synthetic hormones into your body to trick your body that you're pregnant. Hormonal birth control is tampering with natural hormone production, and can cause long-term dysregulation of hormones even after the pill has been stopped or the device has been removed. Natural Family Planning is essentially birth control without the help of a pill or foreign objects in the body, which allows the hormones to act naturally and participate in their natural cycle.

Can I get pregnant using Natural Family Planning?

"If natural family planning is followed correctly, it can be up to 99% effective. This means that 1 woman in 100 who use natural family planning will get pregnant in 1 year. **It is less effective if the instructions aren't carefully followed."** (UK NHS)



HOWEVER...

"According to the Centers for Disease Control and Prevention (CDC), the pill is 99.7 percent effective **with perfect use**. This means that less than 1 out of 100 women who take the pill would become pregnant in 1 year. **However, with typical use, the effectiveness of the pill is 91 percent.**" (Medical News Today).

S O O . . . H O W D O I D O I T ?

NATURAL FAMILY PLANNING

Most importantly, TRACK YOUR CYCLE.

Use the four phases as your outline. Record when you start your period EVERY cycle using an app like [flo](#). This app will also estimate when you're ovulating, but it's best to check yourself.

When am I fertile?

You are MOST fertile during your ovulation phase of your cycle.

Ovulation is defined as "...the release of a mature female egg cell from an ovary which typically happens once during each menstrual cycle. The egg cell lives for up to 24 hours after being released. If it's not fertilized, the egg cell dies and the menstrual cycle progresses to the next phase."

When am I ovulating?

This varies for every woman's cycle, but roughly 12-14 days before your period starts.

How do I know if I'm ovulating?

- 1. Check your Basal Body Temperature (BBT).** If it's spiked compared to a trend of your previous few days, you are likely ovulating.
- 2. Observe cervical mucous changes.** Increased estrogen during ovulation results in stickier and stretchier mucous (like an egg white).
- 3. Take an LH Test** (LH = Luteinizing Hormone). Test for LH, which is secreted by the pituitary gland and stimulates ovulation. If your test is positive, you are likely ovulating.

What should I do during ovulation?

Either abstain from sex if you are very concerned about getting pregnant, or use a condom and take additional precautions such as pulling out.

Consult with your doctor

If you think getting off the pill or hormonal contraception is something you want to do, please consult with your doctor. I am not a doctor and therefore cannot diagnose, treat, prescribe, or offer medical advice. This is an important decision and is best made with the advice and guidance from medical professionals.

HERE'S YOUR HOMEWORK:

1. Download a period tracking app

such as [flo](#) or [myflow](#).

2. Track EVERY period

This way you can start to get a sense of your cycle.

Observe things like:

How long your menstrual phase is. How many days you bleed. How much you bleed. If you have cramps, acne, mood swings, bloating, etc.

3. Become a detective

It might seem a little weird at first to do things like observe your cervical mucous and take your temperature every day, but each of these practices teaches you to be more in-tune with your body and listen to the clues it is giving you.

4. Observe your mood

Notice when you're feeling low, down, or depressed, and see where that correlates with your cycle. Pay attention to this when your next cycle comes around, and see if it's a pattern.

5. Remove processed sugars and PUFAs from the diet

Replace processed and refined sugar with organic white sugar, brown sugar, honey, maple syrup, date sugar, coconut sugar, etc. PUFAs are inflammatory and suppress optimal hormonal function.

6. Raw Carrot Salad Daily

To help detoxify from the overload of estrogen that most women (and even men) are exposed to. Raw carrots bind with estrogen and escort it out of the body through the GI tract.

7. Ditch the Toxic Products

I promise, your health is more important than the few dollars it will cost you to replace your pans and containers. If xenoestrogens aren't removed from the body, the body won't be able to balance hormones naturally.

Natural Family Planning

I understand that natural family planning can be a big and intimidating leap. I suggest starting with cycle tracking, doing more research, and reading my next e-book (coming soon!) on Natural Family Planning.

I'll be the first to tell you it's not the easiest thing in the world, but nothing good comes easily. I've learned so much about my body and my sex life has greatly benefitted from it.

YOU DID IT

Congrats! You've made it through your first crash course on hormones.

Let's review the three things you've learned:

1. You have learned six indicators that your cycle may be off:

1. Period Problems
2. You're on hormonal birth control
3. You suffer from acne
4. You have low sex drive (libido)
5. Your GI System is not happy
6. You're stressed



2. More importantly, you've learned about three things you can consider implementing into your daily routine that will help naturally regulate your hormones.

Even implementing just one of these factors (I recommend starting with #1), your body will be thanking you profusely:

1. Eating REAL foods
2. Raw carrot salads
3. Ditch PUFAs
4. Ditch toxic kitchen products

3. BUT Most importantly, you have learned that in order to be in the flow of your cycle and best support your body and hormones, you HAVE to be in tune with your body at all times.

If you listen closely, track your cycle, and observe the gentle reminders that your body is constantly giving you, you WILL start to learn and understand your cycle.



THANK YOU



Annika
BS, FNTF
Functional Nutritional
Therapy Practitioner

I believe it's my God-given mission in life to educate women on how their bodies work.

Believe it or not, your body works *for you, not against you*. Your hormones are trying as hard as they can to make your life better, NOT worse.

Today's modern diet and lifestyle, however, greatly interfere with God's plan for our bodies.

If we can live in harmony with our bodies again by incorporating nourishing foods and practices, I believe we get closer to God's vision of the harmonious life He envisioned for the beautiful women He loves.

xo, Annika

STAY TUNED!

Following my Instagram is the best way to stay in-the-know when it comes to hormone and health info.



SOURCES

- <https://www.healthline.com/health/womens-health/guide-to-cycle-syncing-how-to-start#four-phases-of-cycle-syncing>
- <https://www.womenshealthnetwork.com/hormonalimbalance/hormonal-imbalance-caused-by-sugar.aspx>
- <https://www.mindbodygreen.com/articles/how-protein-affects-your-hormones>
- <https://www.nhs.uk/conditions/contraception/natural-family-planning/>
- <https://www.medicalnewstoday.com/articles/322799>
- <https://www.naturalcycles.com/cyclematters/what-is-ovulation-and-when-will-i-ovulate>
- <https://www.thebump.com/a/ovulation-symptoms-signs-of-ovulation>
- <https://www.hormone.org/your-health-and-hormones/glands-and-hormones-a-to-z/hormones/luteinizing-hormone>
- <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/reproductive-hormone>
- <https://hellociue.com/articles/cycle-a-z/the-immune-system-and-the-menstrual-cycle>
- <https://saltedplains.com/no-bake-chocolate-maca-cookies-gluten-free/>
- <https://nourisheveryday.com/maca-coconut-flour-pancakes-for-one/>
- <https://www.natalieshealth.com/turmeric-maca-powder-cacao-energy-balls-no-bake-vegan-gluten-free/>
- https://ccli.org/what-is-NFP/?gclid=EAlaIQobChMIiLHOn_T16AIVEJSzCh2QWAz7EAAYASAAEgKVBfD_BwE
- <https://womeninbalance.org/2012/10/26/xenoestrogens-what-are-they-how-to-avoid-them/>
- <https://www.medicalnewstoday.com/articles/221205.php>
- <https://www.npr.org/2011/03/02/134196209/study-most-plastics-leach-hormone-like-chemicals>
- <https://womeninbalance.org/2012/10/26/xenoestrogens-what-are-they-how-to-avoid-them/>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2254523/>
- <https://www.ewg.org/research/not-so-sexy>
- <https://www.healthline.com/health/are-candles-bad-for-you#healthiest-candles>
- <https://www.haywardscore.com/articles/the-truth-about-scented-candles>
- <https://www.pureenergypdx.com/blog/carrot-salad-recipe>
- <https://www.floliving.com/maca-hormones/>