



Seed Cycling Guide for Hormone Balance

Lisa Hodari
BSc DipCNM mBANT rCNHC
Registered Nutritional Therapist

NutriSoul
www.nutrisoul.co.uk
lisa@nutrisoul.co.uk

Table of Contents

1. Introduction	3
2. What is Seed Cycling?	3
3. Hormone Cycles	3
4. Forms Of Oestrogen	4
5. What is Oestrogen Dominance?.....	4
6. Symptoms of Oestrogen Dominance	5
7. Causes of Oestrogen Dominance	6
8. Health Risks Associated with Oestrogen Dominance.....	8
9. Testing For Oestrogen Dominance	9
10. Steps to Help Reverse Oestrogen Dominance Naturally	10
11. How to Seed Cycle and How Does it Work?	12
12. Before You Start.....	14
13. FAQ's	14
14. Recipes	16
15. References.....	19

1. Introduction

Recently, in the final year nutrition clinics that I supervise, I've been seeing a lot of women with symptoms caused by oestrogen dominance. Being at the perimenopausal age, having Hashimoto's (autoimmune thyroid disease) and an under active thyroid, I've decided to balance my hormones naturally to help my thyroid function and ease those perimenopausal symptoms.

Oestrogen is produced by the ovaries, adrenal glands, and fat tissue. It is seen mainly as a female hormone, as it responsible for physical changes experienced by women during puberty, such as breast growth, regulation of the menstrual cycle, maturation of the womb lining, and impacting mood and libido. However, oestrogen also affects both sexes; it increases good cholesterol, promotes bone formation, and improves the collagen content of your skin. In men, oestrogen helps develop sperm and maintain healthy libido.

2. What is Seed Cycling?

Seed cycling is a powerful tool used to naturally balance two of the main female reproductive hormones, no matter what stage of life you are in – reproductive years, postpartum, perimenopausal, or post-menopausal. It is based around the two phases of your menstrual cycle, using the nutrients found in seeds. By boosting oestrogen in the first phase of your cycle, and progesterone in the second phase, seed cycling can help relieve PMS, increase fertility, ease pain from conditions like ovarian cysts, endometriosis, and PCOS (polycystic ovary syndrome), and help regulate irregular cycles. Seed cycling guides your body into a natural rhythm by either eliminating excess hormones or stimulating their production. Women who are not menstruating, along with men, can seed cycle by following the Moon Cycle (I will explain a little later).

3. Hormone Cycles

Before discussing how seed cycling works, it's important to briefly outline what happens to hormone levels during the menstrual cycle and the symptoms that may be experienced if they are out of balance. The menstrual cycle may be divided into 2 phases (based on a typical 28-day cycle):

Follicular Phase – Day 1-14

This phase begins on the first day of menstruation. Oestrogen and progesterone levels are low with oestrogen levels increasing steadily in preparation for ovulation, which typically happens on day 14. Oestrogen is dominant in this phase.

Luteal Phase – Day 15-28

This phase begins right after ovulation. Oestrogen levels drop immediately, then slowly rise, along with progesterone in preparation for pregnancy. If implantation doesn't occur, both hormone levels drop, the womb lining sheds, and menstruation begins. Progesterone is dominant in this phase.

4. Forms Of Oestrogen

There are 3 main forms of oestrogen, the 4th is only produced during pregnancy:

Estrone (E1) is produced in the ovaries. It has the weakest effect in the body and protects bone health. It is the only form of oestrogen that the body continues to produce after menopause, albeit in small amounts.

Estradiol (E2) is produced in the ovaries in the years before menopause. It is the main oestrogen found in women during the reproductive years and acts to maintain the female reproductive system.

Estriol (E3) is produced in the placenta during pregnancy. It is responsible for foetal development. It is also present in small amounts in pre-menopausal women.

Estetrol (E4) is produced by the developing foetus during pregnancy.

5. What is Oestrogen Dominance?

Oestrogen dominance, although not an official diagnosis, is the most common hormonal imbalance experienced by women. Although hormone levels might be within the normal range, oestrogen dominance occurs when the level of oestrogen is relatively high compared to the level of progesterone. This can occur when:

Oestrogen Levels Are Very High

This is the most common situation and might be caused by oral contraceptive pill, HRT, obesity, impaired liver detoxification of oestrogen, impaired gut function, xenoestrogens acquired from the environment, and genetics.

Oestrogen Levels Are Normal or High, but Progesterone Is Low

Low progesterone can be caused by stress, anovulatory cycles (where ovulation does not occur), post pregnancy, or during perimenopause where progesterone is the first hormone to decrease.

Oestrogen Levels and Progesterone Levels Are Low

Menopause officially kicks in when the ovaries produce so little oestrogen that eggs are no longer released and menstruation ceases. However, you can still be oestrogen dominant with low oestrogen. This is because oestrogen levels drop by approximately 40% at menopause while progesterone levels plummet by approximately 90%. When progesterone levels decrease at a faster rate, no matter how little oestrogen you have in your body, you are likely to experience many of the symptoms associated with oestrogen dominance. (1)

Men can also experience oestrogen dominance. When they reach their forties, falling progesterone levels lead to a fall in testosterone levels. As both the progesterone and testosterone levels decline, the male body becomes oestrogen dominant.

6. Symptoms of Oestrogen Dominance



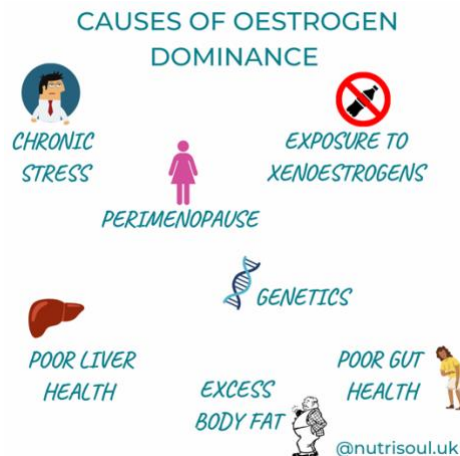
In Women:

- Irregular, heavy, or painful periods
- Menstrual blood clots
- Mood swings (teary, frustrated, irritable)
- Breast tenderness and fibrocystic breasts
- Increased breast cancer risk
- Headaches and migraines
- Brain fog
- Fluid retention
- Fibroids
- Endometriosis
- Ovarian cysts
- Thyroid nodules
- Elevated anti-thyroglobulin antibodies
- Low thyroid function
- Fatigue
- Bloating
- Weight gain or difficulty losing weight
- Storing fat (hips, stomach, and thighs)
- Blood sugar imbalances
- Hot flashes
- Night sweats
- Decreased libido

In Men:

- Enlarged breasts
- Low libido
- Infertility
- Increased body fat (upper chest/ obliques)
- Irritability
- Abdominal weight gain
- Lethargy/fatigue
- Mood swings
- Brain fog
- Depression/ Anxiety

7. Causes of Oestrogen Dominance



Poor Liver Health

Over 50% of the metabolism of oestrogens takes place in the liver. Oestrogen is metabolised down one of 3 pathways into oestrogen metabolites: 2-hydroxyestrone, 4-hydroxyestrone, and 16-hydroxyestrone. (2) The 2-hydroxyl metabolite is considered the weakest. It does not stimulate cell growth and blocks the action of stronger, potentially cancer-causing oestrogens. The other two are potentially harmful, with 16-hydroxyestrone metabolites increasing breast cancer risk. If your liver is not functioning optimally, or if you have a liver condition, then you may not be able to properly remove oestrogen, leading to re-circulation, reabsorption and potentially, oestrogen dominance. [Please see my 14 Day Health Reset Programme for improved liver function and detoxification.](#)

Chronic Stress

The adrenal glands make and release the hormone cortisol, also known as the 'stress hormone', into your bloodstream. When we are chronically stressed, our body uses progesterone to make cortisol, leading to low progesterone levels. Stress can also suppress ovulation, further decreasing your chances of producing sufficient levels of progesterone. (3)

Gut Dysbiosis

The gut produces an enzyme called beta-glucuronidase to regulate circulating oestrogen. If you have gut dysbiosis (imbalanced gut bacteria), these enzymes can't properly metabolise oestrogens, causing them to recirculate in the body. Also, once the liver has processed oestrogen, you then need to be able to eliminate it. If you are constipated, there is a good chance your oestrogen is being recirculated in your body. (4) [Please see my 6 Week Gut Healing Package to restore healthy gut function.](#)

Body Fat

Excess body fat (especially stored on the hips, waist, and thighs) is one of the leading causes of oestrogen dominance. Fat cells produce oestrogen and having high oestrogen will signal your body to produce more fat cells, resulting in a cycle, potentially leading to oestrogen dominance. (5)

Exposure To Xenoestrogens

Xenoestrogens imitate oestrogen. They are synthetic, chemical compounds that are found in our food, water, plastics, and body care products. They bind to oestrogen receptors, mimicking oestrogen and sending false signals, disrupting our endocrine system, and resulting in oestrogen dominance. Some examples of xenoestrogens are:

- Hormonal oral contraception (contraceptive pill, IUD, implant)
- Hormone replacement therapy (HRT)
- Bisphenol-A (BPA - found in some plastics, lining of cans and receipts) (6)
- Synthetic fragrances (like perfumes and air fresheners due to the addition of phthalates) (7)
- Non-organic fruits and vegetables (where pesticide residue is present) (8)
- Personal care products such as: cosmetics, shampoo, lotions, and soaps (where toxic chemicals like parabens, preservatives, and artificial fragrances are present, which can cause oestrogenic behaviour) (7)

Perimenopause

Perimenopause occurs well before you officially hit menopause. A common cause of oestrogen dominance during perimenopause is low progesterone, as ovulation begins to slow down. [Please see my 4 Week Perimenopause Package for balancing hormones.](#)

Poor Diet

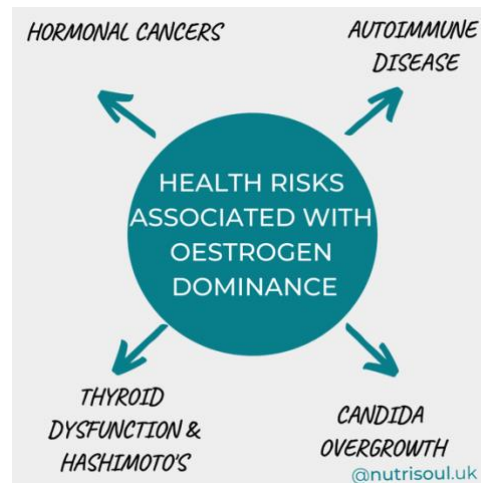
Non-organic fruit and vegetables are potentially full of pesticides, contributing to the toxic load in the body, which may interfere with the natural hormone balance. Alcohol changes the way the body breaks down oestrogen therefore causing increased levels. (9) Coffee puts extra burden on your liver so try to replace it with green tea. Refined sugar, processed foods, and refined carbohydrates (such as white bread, white pasta, cakes, biscuits, deep fried foods) can cause blood sugar imbalances, leading to hormonal imbalances. (8) Gluten causes inflammation, which makes hormone imbalance worse.

Genetics

Nutritional status, liver health, stress, diet, and sleep all determine which pathways are used to metabolise oestrogen. Genetic alterations, known as Single Nucleotide Polymorphisms (SNP's), on the COMT and MTHFR genes also impair your ability to methylate and detoxify your hormones, possibly leading to oestrogen dominance. (10) [Please contact me if you wish to discuss DNA testing further.](#)



8. Health Risks Associated with Oestrogen Dominance



Hormonal Cancers

The biggest risk associated with oestrogen dominance is hormone-dependent cancer. Breast cancer in both women and men, uterine, ovarian, and prostate cancer. [\(11\)](#)

Candida Overgrowth

Candida is a yeast that occurs naturally in our gut. Oestrogen supports the growth of candida; therefore, oestrogen dominance is one of the primary causes of yeast infections. [\(12\)](#)

Thyroid Dysfunction and Hashimoto's

High oestrogen suppresses thyroid function by slowing down the conversion of inactive T4 (thyroxine) to the active T3 form. Thus, excess oestrogen can lead to hypothyroidism (under active thyroid). Prolonged exposure to excess oestrogen can lead to an increase in antithyroglobulin antibodies, and the development of autoimmune thyroid conditions such as Hashimoto's. [\(13,14\)](#)

Autoimmune Disease

The Th1 branch of the immune system is associated with inflammation. The immune system attacks cells it recognises as foreign cells. High oestrogen and low progesterone enhance the Th1 response, increasing the antibodies that attack the body's own tissues. There may be a connection between sharp fluctuations in oestrogen levels with low progesterone, (occurring around childbirth and perimenopause) and autoimmunity, which could explain why autoimmune conditions are more common among women. However, oestrogen has been found to be beneficial for people with the autoimmune condition, multiple sclerosis (MS). [\(15\)](#)

9. Testing For Oestrogen Dominance

If you suspect you have oestrogen dominance, you can ask your GP for a test.

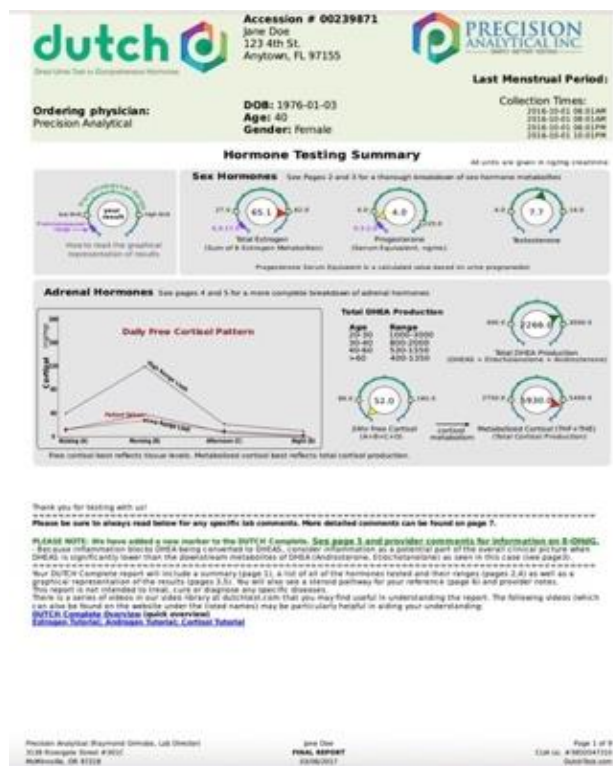
Remember to always check your progesterone/oestrogen ratio. Even if your oestrogen levels are normal, you can still have oestrogen dominance if progesterone levels are low. If menstruating, this test is to be taken during the mid-luteal phase i.e., days 19-21 of a 28-day cycle. Estradiol (E2) is the form of oestrogen used to work out the ratio.

There is a functional test called [DUTCH Complete](#) from Precision Analytics. DUTCH stands for Dried Urine Test for Comprehensive Hormones. This test can help identify the root cause of hormone imbalances in men and women. Additionally, the test can be used to gather baseline measurements for the administration and monitoring of HRT (Hormone Replacement Therapy).

The profile analyses 35 different hormones: oestrogen, progesterone, testosterone, DHEA-S, and cortisol along with their metabolites. It also measures daily free cortisol, the oxidative stress marker 8OHdG, melatonin and six organic acids including markers for vitamin B12, norepinephrine/epinephrine and serotonin, which are important if you are having any mood issues, anxiety, fatigue, or issues with sleep.

The DUTCH test is simple and easy to use. Unlike blood tests, which give a snapshot in time, this test analyses 4 or 5 urine samples taken using filter paper collection strips over a 24-hour period.

[Full DUTCH Complete Sample Report](#), first page seen below.



10. Steps to Help Reverse Oestrogen Dominance Naturally

Boost Liver Detoxification

An efficiently functioning liver is essential for clearing high oestrogen levels. The liver also requires magnesium, glycine, selenium, and B-vitamins so be sure that any deficiencies of these nutrients are addressed. [To discuss my 14 Day Health Reset Programme for improved liver function and detoxification, please contact me.](#)

Heal the Gut to Promote Oestrogen Elimination

A healthy microbiome and regular, daily, stools are required for efficient elimination of excess oestrogen. Consume probiotic rich foods such as kimchi, sauerkraut, kombucha, kefir, and natural yoghurt help to support a healthy gut microbiome, and if you are dairy free, please choose coconut kefir (can be found in most supermarkets). Remember to consume plenty of fibre and drink at least 2 litres of water a day. Insoluble dietary fibres, such as lignin (found in flax seeds, the bran layer of grains, beans, and seeds), bind to oestrogen in the intestine and eliminate through the bowel. Soluble fibre, found in onion, garlic, leeks, dandelion leaves, green bananas (or green banana powder), plus more, are prebiotic, feeding the healthy bacteria in our gut.

[To discuss my 6 Week Gut Healing Package, please contact me.](#)

Manage Stress and Reduce Body Fat

As mentioned in section 6, managing stress, and reducing body fat is essential to maintain hormone balance. This can be achieved by following a recommended dietary and lifestyle plan. [To discuss this further, please contact me.](#)

Reduce Exposure to Xenoestrogens (environmental oestrogens)

Examples include:

- Eat organic fruit and vegetables. Print a copy of the [UK dirty dozen list](#) which includes data collected in 2018, '19, and '20 and buy as much organic as you can from this list
- Use stainless steel or glass water bottles instead of plastic
- Use glass storage containers instead of plastic
- Use a water filter, such as Brita
- Buy natural personal care products
- Buy natural cleaning products
- Use natural soy-based candles
- Remove plug in fragrances

Eat An Oestrogen Balancing Diet

Eating foods that naturally lower high oestrogen levels, and promote the breakdown of oestrogen in the liver, are imperative to reversing oestrogen dominance. Eating a diet of processed foods, sugar, alcohol, caffeine, refined carbohydrates, and gluten, can lead to increased oestrogen levels in the body. As discussed above, taking steps to boost liver detoxification and aid gut healing, are essential for reversing oestrogen dominance naturally. Remember to also consume plenty of the following foods...

Cruciferous Vegetables

Also known as 'brassicas' - include cauliflower, cabbage, Brussels sprouts, kale, rocket, watercress, and radishes. When digested, a phytochemical called indole-3-carbinol is converted into a compound called Diindolylmethane (DIM), which helps your body to eliminate excess oestrogen. It encourages the production of oestrogen metabolites away from 16-hydroxy in favour of 2-hydroxy metabolites. (16)

You can incorporate them throughout your day in smoothies, soups and as part of your main meal. We should aim to eat 7 portions of vegetables per day (1 portion being the size of a closed fist). If you have hypothyroidism, be sure to cook cruciferous vegetables as they contain goitrogens, a naturally occurring substance that interferes with the function of the thyroid gland. Cooking lessens the goitrogenic properties so avoid juicing them raw.

Healthy fats

We need to consume an adequate amount of healthy fats daily, for hormone production. Low intake of necessary nutrients for hormone building can result in symptoms of low oestrogen and low progesterone. This can also be seen with restrictive eating patterns, low calorie diets, a poor diet consisting mostly of processed foods, or very low-fat diets. Sources of healthy fats include olive oil, avocado oil, avocado's, raw unsalted nuts (e.g., walnuts, almonds, hazelnuts, and pecans), seeds (especially sesame, sunflower, flax, and pumpkin seeds), nut and seed butters. (17)

Phytoestrogens

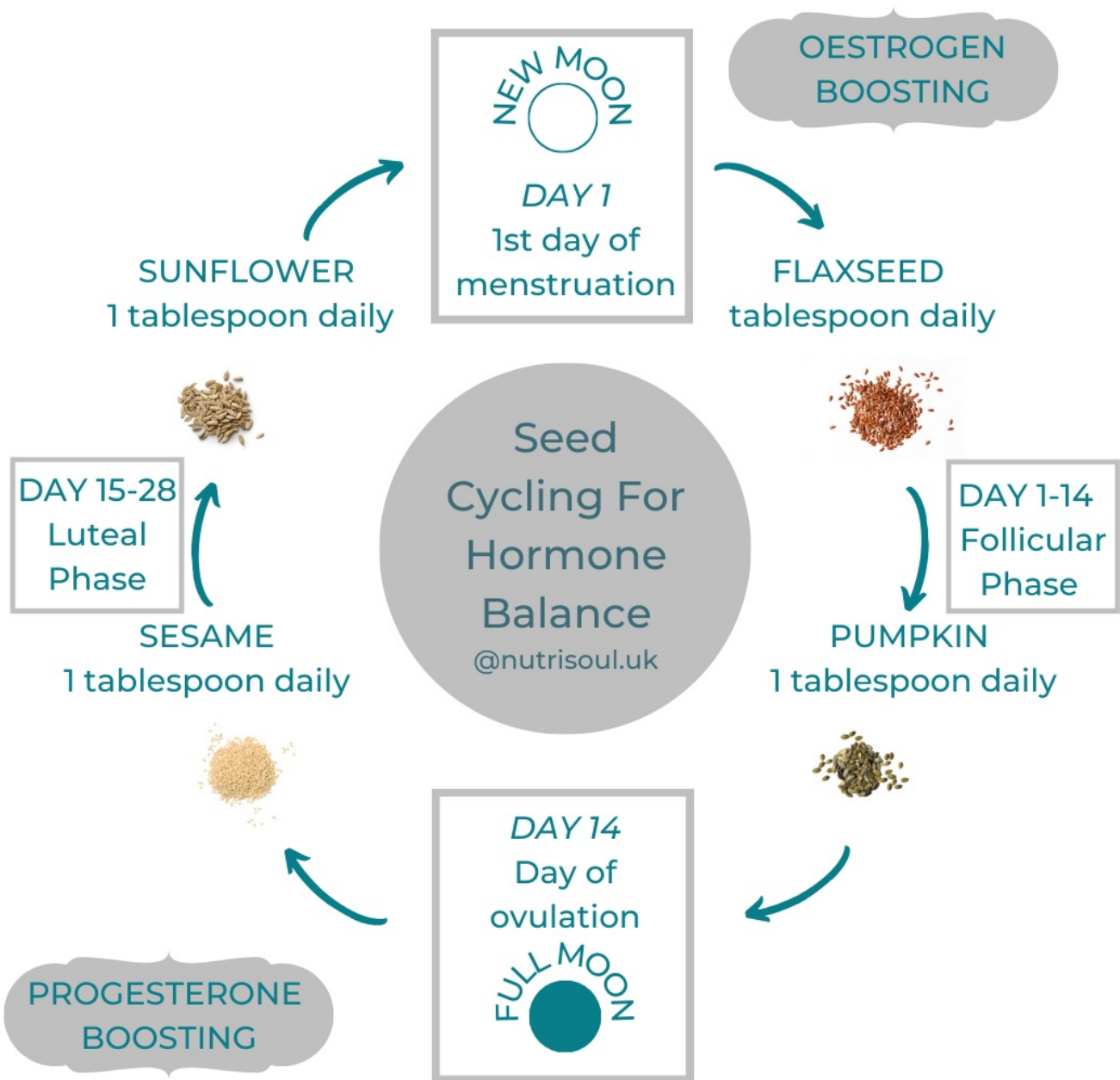
Phytoestrogens are plant derived compounds that have a similar structure to oestrogen, but a much weaker effect on the body than xenoestrogens. They have been shown to have both oestrogenic and antiestrogenic effects, meaning that some phytoestrogens have oestrogen-like effects and increase oestrogen levels in your body, and others block its effects and decrease oestrogen levels. (18) Phytoestrogens such as flaxseed and pumpkin seeds, encourage oestradiol metabolism to produce more of the protective metabolite 2-hydroxy-estrone, than the more harmful 16-hydroxy-estrone. Other foods high in phytoestrogens are sunflower seeds, sesame seeds, legumes (e.g., mung beans, chickpeas, and black beans), garlic, dried apricots, dates, prunes, organic tempeh, and miso (other soy products are best avoided in oestrogen dominance). (19)

To discuss my [4 Week Perimenopause Package](#) for balancing hormones, please [contact me](#).

A good way to incorporate healthy fats, fibre, protein, and phytoestrogens into your daily diet is to **SEED CYCLE!**



11. How to Seed Cycle and How Does it Work?



FOLLOWING THE MENSTRUAL CYCLE

Follicular Phase – Day 1-14

Day 1 is the first day of menstruation. This is when you want to consume:

- 1 tablespoon organic, raw, freshly ground flax seeds
- 1 tablespoon organic, raw, freshly ground pumpkin seeds

The aim in this phase is to balance oestrogen and remove the excess efficiently. Pumpkin and flax seeds are consumed to help improve our oestrogen levels while preventing excess oestrogen. Flax seeds are considered phytoestrogens, plant-based compounds that have a weak oestrogenic effect in the body, (20) and naturally support healthy oestrogen production. They contain lignans, which can help to bind excess oestrogen for elimination. Research shows that flax seeds help to lengthen the luteal phase, improving ovulation, and reducing common PMS symptoms such as breast pain and cramping. (21) Pumpkin seeds are high in zinc and phytoestrogens, stopping the oestrogen from converting to a harmful form of testosterone, and help with progesterone production as you move towards the progesterone rise in the second phase of the menstrual cycle. (22,23) Omega 3, found in pumpkin seeds, can also be useful during this phase to regulate inflammation, which contributes to balanced oestrogen and progesterone. (24)

Luteal Phase – Day 15-28

Day 15 is the first day following ovulation. This is when you want to consume:

- 1 tablespoon organic, raw, freshly ground sunflower seeds
- 1 tablespoon organic, raw, freshly ground sesame seeds

During the second phase of your cycle (luteal phase), sesame seeds and sunflower seeds are consumed. They are rich sources of vitamin E, zinc, and selenium, which help progesterone production, and supports the liver detoxify excess oestrogen. They also contain lignans that help block excess oestrogen while progesterone rises. Sesame seeds are beneficial to post-menopausal women by improving blood lipids, antioxidants, and sex hormones. (25)

FOLLOWING THE MOON CYCLE

The moon is extremely powerful, it controls the ocean and the tides, and it can also affect our centre of gravity and menstrual cycle. The moon cycle and average menstrual cycle are both 28 days. If you are a woman, and have irregular or missed periods, you can seed cycle using the moon cycle. Men can also seed cycle using the moon cycle but by switching the seeds around. Day 1 is always counted as the first day of the New Moon. Please click here to find the [Moon Phase Calendar](#).

Women (same seeds as the menstrual cycle)

Days 1-14 (new moon to full moon): 1tbsp pumpkin and 1 tbsp flax seeds

Days 15-28 (full moon to new moon): 1tbsp sunflower and 1tbsp sesame seeds

Men (opposite seeds to the menstrual cycle)

Days 1-14 (new moon to full moon): 1tbsp sunflower and 1tbsp sesame seeds

Days 15-28 (full moon to new moon): 1tbsp pumpkin and 1 tbsp flax seeds

12. Before You Start

Type Of Seeds

Use raw, organic seeds. I buy mine online from [Whole Food Earth](#).

Grind Your Seeds

Use a coffee grinder designated for your seeds. I use [this one](#) from Amazon, any will do. I grind 2 weeks' worth depending on which phase I am about to begin. This makes it easy as I know that when I run out, I am starting a new phase. Approximately 6g of seeds produces 1tbsp ground mixture. So, for a 14-day phase, grind 82g of each seed, mix them together, and take 2tbsp per day. Do not overgrind as the oils make the mixture lumpy. Pulsing the grinder helps to avoid this from happening.

Store In the Freezer

To prevent the seeds from oxidizing or going rancid, store the ground mixture in a glass container in the freezer. If you don't have access to a freezer then grind one weeks' worth of seeds at a time and store in a glass container in the fridge.

13. FAQ's

What Are the Side Effects of Seed Cycling?

The consumption of these seeds is very safe. The seeds are full of nutrients, so even if it doesn't help to balance your hormones, you are still benefitting as they are good sources of omega-3's, protein, fibre, plus vitamins A, B, C and E and the minerals calcium, magnesium, potassium, zinc, iron, selenium, and manganese.

How Do I Incorporate Seeds into My Diet?

I find it easy to incorporate ground seeds in my breakfast as that means I'll never forget. I add them to smoothies, overnight oats, porridge, sprinkle over granola and smashed avocados on toast.

How Long Does It Take for My hormones To Balance?

It depends on several factors, for example, how imbalanced your hormones are, stress, diet, lifestyle, and medication. It can be quite quick to see changes but typically takes 3 cycles (i.e., 3 months).

What If My Cycle Is Not 28 Days?

You can use a period tracker app to work out when you ovulate. If you overlap a few days consuming the incorrect seeds, there won't be any detrimental effects. It is of course more beneficial to consume the correct seeds at the appropriate phase.

What If I Have Had a Hysterectomy?

Women who have had a partial or complete hysterectomy might not feel the hormonal benefits from seed cycling, however they will still benefit from all the added nutrients.

Can I Seed Cycle If I am taking the Oral contraceptive Pill or Hormone Replacement Therapy (HRT)?

Seed cycling will not negatively affect your medication, however, not all the benefits will be experienced due to the synthetic hormones. You can still benefit from:

- Improved sleep and mood due to tryptophan, which the body uses to produce serotonin (happy hormone) and melatonin (sleep hormone)
- Youthful skin, due to collagen production
- Thyroid support from zinc and selenium

I Am Trying to Conceive – Can I Seed Cycle?

Yes, you can seed cycle when you are trying to conceive to help support fertility. It is also beneficial during pregnancy, and then post pregnancy, to restore your cycle. Please speak to your GP first and then seek advice from a nutritional therapist specialising in women's hormones and fertility.

What If I'm Going Through Perimenopause or Menopause?

You can still seed cycle using the Moon Cycle for women as described in section 10. Some women may find this helps with hot flushes, night sweats, and mood swings. ([26,27](#)) You can also follow the moon cycle if your periods are sporadic.

Can I Seed Cycle If I Am a Man?

Men can suffer from the same metabolic imbalances as women, but they have fewer hormone fluctuations, therefore fewer symptoms. Use the Moon Cycle for Men as described in Section 10. However, one clinical study carried out showed that there were no effects of soy protein (a phytoestrogen) on reproductive hormones in men. ([28](#))

What Foods Make Oestrogen Dominance Worse?

Examples of foods that can increase oestrogen levels, and possibly worsen oestrogen dominance are coffee, refined sugar, alcohol, meat products, dairy products, gluten, and refined carbohydrates (e.g., white bread, cakes, and biscuits).

Does Consuming Phytoestrogens Cause Oestrogen Dominance?

Women need oestrogen (in the correct ratio); phytoestrogens are gentle plant oestrogens that are a great natural source. The key is to be able to breakdown and excrete the oestrogen in our body.

Can I Seed Cycle If I Have Oestrogen Receptor (ER) Positive Breast Cancer?

Always consult your medical practitioner before making any changes to your diet. You can read an interesting article [here](#).

Is There Any Research to Support Seed Cycling?

Although there is no scientific evidence proving the effectiveness of seed cycling as such, many studies have been carried out showing the benefits of the individual seeds on hormone levels.

14. Recipes



You can adapt the following smoothie and overnight oats recipes to suit your taste and add toppings to the oats such as sliced bananas, berries, or cacao nibs. Always try to include the following, and remember to add your ground seeds:

- **Protein** – good quality protein powder/collagen peptides, seeds
- **Fibre** – fruit, vegetables, seeds
- **Healthy fats** – 1 tbsp nut butter, ¼ avocado, seeds (see energy support below)
- **Green vegetables/fruit** – I use spinach, kale, or herbs such as flat leafed parsley or coriander, berries, kiwi & bananas. If using fruit, pls try to have no more than 2 portions per day (1 portion = ½ cup blueberries, ¾ cup blackberries, ¾ cup raspberries, 2 plums, 2 satsumas, 2 kiwi's, 7 strawberries, 14 cherries, 1 apple, 1 medium banana, 1 pear, 1 orange, ½ grapefruit, 1 large slice pineapple, 2 slices mango).

Protein and healthy fats help slow the release of glucose into the blood stream, so always include them especially when consuming fruit, due to its high sugar content.

You can also add the following to your smoothies for an added boost:

Energy Support:

- *Coconut oil* – healthy fat known as medium-chain triglycerides (MCTs)
- *Bulletproof XCT oil* – helps to fuel the brain and increase energy levels

Immune System Support:

- *Oranges and lemons* – high in vitamin C
- *Bee pollen* – antibacterial and antiviral properties, kick start immune system, ease inflammation, and alleviate allergies

Digestive System Support:

- *Turmeric powder* – helps heal the gut, anti-inflammatory
- *Green banana powder/flour* –insoluble fibre, a prebiotic
- *Collagen peptides* –helps rebuild intestinal lining

BREAKFAST SMOOTHIES

Combine all the ingredients and blend. Add more dairy free milk if looser consistency is desired.

Chocolate Banana

1 medium banana
½ -1 tbsp organic almond butter
2 tbsp (13g) collagen peptides (I use Hunter & Gather [bovine](#) or [marine](#))
½ -1 tbsp organic cacao powder (higher nutritional content than cocoa powder)
1tbsp agave nectar
¼-½ tsp vanilla extract
½ cup (120ml) dairy free milk (I prefer Plenish almond milk)
1 cup of ice
2tbsp ground seeds

Very Berry

½ medium banana
½ cup berries (blueberries, raspberries and/or blackberries)
2 tbsp (13g) collagen peptides
½ cup (120ml) dairy free milk
1 cup of ice
2tbsp ground seeds

Green Goddess

½ courgette, sliced
¼ avocado
1 kiwi, peeled
2 handfuls chopped kale or spinach leaves
½ lemon or lime squeezed (optional)
2 tbsp (13g) collagen peptides
½ cup (120ml) dairy free milk
1 cup of ice
2tbsp ground seeds

Salted Caramel Heaven

1 medium banana
½ -1 tbsp organic almond butter
1 teaspoon cinnamon
1 teaspoon vanilla extract
2 tbsp (13g) collagen peptides
½ cup (120ml) dairy free milk
1 cup of ice
2tbsp ground seeds
Add sea salt to taste

OVERNIGHT OATS

Add all the ingredients into an airtight glass jar and shake well. Add more dairy free milk in the morning if looser consistency is desired.

Chocolate Dream

50g sprouted or rolled oats
½ tbsp almond butter
½ tbsp organic cacao powder
2 tbsp collagen peptides
½ -1tbsp agave nectar
½ cup (120ml) dairy free milk
2 tbsp ground seeds

Blueberry Muffin

50g sprouted or rolled oats
¼ cup blueberries
½ tbsp almond butter
½ tsp cinnamon powder
½ tsp vanilla extract
2 tbsp collagen peptides
½ -1 tbsp agave nectar
½ cup (120ml) dairy free milk
2 tbsp ground seeds

Bananarama

50g sprouted or rolled oats
½ medium banana mashed or chopped
½ tsp cinnamon powder
2 tbsp collagen peptides
½ -1tbsp agave nectar
½ cup (120ml) dairy free milk
2 tbsp ground seeds
2 tbsp chopped nuts (optional)

Thank you for reading my guide, I hope you found the information interesting. At present, I am one month into seed cycling and enjoy incorporating the seeds into my breakfast, which ensures I start the day with healthy fats, protein, fibre, vitamins, and minerals.

For more information, or to discuss anything further, please [contact me](#) or visit my website www.nutrisoul.co.uk

15. References

1. [Mason A. The menopause: the events of the menopause. Royal Society of Health journal. 1996;96\(2\):70-71.](#)
2. [Estrogen Metabolism | Revolution Health & Wellness \[Internet\]. Revolution Health & Wellness. 2022 \[cited 17 January 2022\].](#)
3. [Herrera A, Nielsen S, Mather M. Stress-induced increases in progesterone and cortisol in naturally cycling women. Neurobiology of Stress. 2016;3:96-104.](#)
4. [Kwa M, Plottel CS, Blaser MJ, Adams S. The Intestinal Microbiome and Estrogen Receptor-Positive Female Breast Cancer. J Natl Cancer Inst. 2016;108\(8\):djw029.](#)
5. [Cleary M, Grossmann M. Obesity and Breast Cancer: The Estrogen Connection. Endocrinology. 2009;150\(6\):2537-2542.](#)
6. [Bittner G, Yang C, Stoner M. Estrogenic chemicals often leach from BPA-free plastic products that are replacements for BPA-containing polycarbonate products. Environmental Health. 2014;13\(1\).](#)
7. [Golden R, Gandy J, Vollmer G. A Review of the Endocrine Activity of Parabens and Implications for Potential Risks to Human Health. Critical Reviews in Toxicology. 2005;35\(5\):435-458.](#)
8. [Mnif W, Hassine A, Bouaziz A, Bartegi A, Thomas O, Roig B. Effect of Endocrine Disruptor Pesticides: A Review. International Journal of Environmental Research and Public Health. 2011;8\(6\):2265-2303.](#)
9. [Alcoholic Beverages as a Source of Estrogens. Alcohol Health and research world. 1998;22\(3\):220-228.](#)
10. [Wall E, Hewitt S, Case L, Lin C, Korach K, Teuscher C. The role of genetics in estrogen responses: a critical piece of an intricate puzzle. The FASEB Journal. 2014;28\(12\):5042-5054.](#)
11. [Patel S, Homaei A, Raju A, Meher B. Estrogen: The necessary evil for human health, and ways to tame it. Biomedicine & Pharmacotherapy. 2018;102:403-411.](#)
12. [Fidel P, Cutright J, Steele C. Effects of Reproductive Hormones on Experimental Vaginal Candidiasis. Infection and Immunity. 2000;68\(2\):651-657.](#)
13. [Wang S. 2-Methoxyestradiol, an endogenous estrogen metabolite, induces thyroid cell apoptosis. Molecular and Cellular Endocrinology. 2000;165\(1-2\):163-172.](#)
14. [Santin A, Furlanetto T. Role of Estrogen in Thyroid Function and Growth Regulation. Journal of Thyroid Research. 2011;2011:1-7.](#)
15. [Cutolo M, Sulli A, Straub R. Estrogen metabolism and autoimmunity. Autoimmunity Reviews. 2012;11\(6-7\):A460-A464.](#)
16. [Fowke J, Longcope C, Hebert J. Brassica vegetable consumption shifts estrogen metabolism in healthy postmenopausal women. Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the Amer](#)

18. [Mumford S, Chavarro J, Zhang C, Perkins N, Sjaarda L, Pollack A et al. Dietary fat intake and reproductive hormone concentrations and ovulation in regularly menstruating women. The American Journal of Clinical Nutrition. 2016;103\(3\):868-877.](#)
19. [Davis S, Dalais F, Simpson E, Murkies A. Phytoestrogens in health and disease. Recent progress in hormone research. 1999;54:185-210.](#)
20. [Guan Y, He Q. Plants Consumption and Liver Health. Evidence-Based Complementary and Alternative Medicine. 2015;2015:1-10.](#)
21. [Kajla P, Sharma A, Sood D. Flaxseed—a potential functional food source. Journal of Food Science and Technology. 2014;52\(4\):1857-1871.](#)
22. [Phipps W, Martini M, Lampe J, Slavin J, Kurzer M. Effect of flax seed ingestion on the menstrual cycle. The Journal of Clinical Endocrinology & Metabolism. 1993;77\(5\):1215-1219.](#)
23. [Zinc Depletion Causes Multiple Defects in Ovarian Function during the Perioviulatory Period in Mice. Endocrinology. 2012;153\(2\):873-886.](#)
24. [Habib F, Maddy S, Stitch S. Zinc induced changes in the progesterone binding properties of the human endometrium. Acta Endocrinologica. 1980;94\(1\):99-106.](#)
25. [Zachut M, Dekel I, Lehrer H, Arieli A, Arav A, Livshitz L et al. Effects of dietary fats differing in n-6:n-3 ratio fed to high-yielding dairy cows on fatty acid composition of ovarian compartments, follicular status, and oocyte quality. Journal of Dairy Science. 2010;93\(2\):529-545.](#)
26. [Wu W, Kang Y, Wang N, Jou H, Wang T. Sesame Ingestion Affects Sex Hormones, Antioxidant Status, and Blood Lipids in Postmenopausal Women. The Journal of Nutrition. 2006;136\(5\):1270-1275.](#)
27. [Calado A, Neves P, Santos T, Ravasco P. The Effect of Flaxseed in Breast Cancer: A Literature Review. Frontiers in Nutrition. 2018;5.](#)
28. [Lowcock E, Cotterchio M, Boucher B. Consumption of flaxseed, a rich source of lignans, is associated with reduced breast cancer risk. Cancer Causes & Control. 2013;24\(4\):813-816.](#)
29. [Hamilton-Reeves J, Vazquez G, Duval S, Phipps W, Kurzer M, Messina M. Clinical studies show no effects of soy protein or isoflavones on reproductive hormones in men: results of a meta-analysis. Fertility and Sterility. 2010;94\(3\):997-1007.](#)

Health Disclaimer

The information in this document is for educational purposes only. It is not intended to provide medical advice, or to take the place of advice from a medical doctor. It is recommended that the readers/viewers of this content always consult their doctors, or qualified health professionals, regarding specific health issues. All viewers of this content, especially those individuals with serious health conditions which require prescription medication, should always first consult with their general practitioner before beginning any nutritional, supplement, or lifestyle programme.