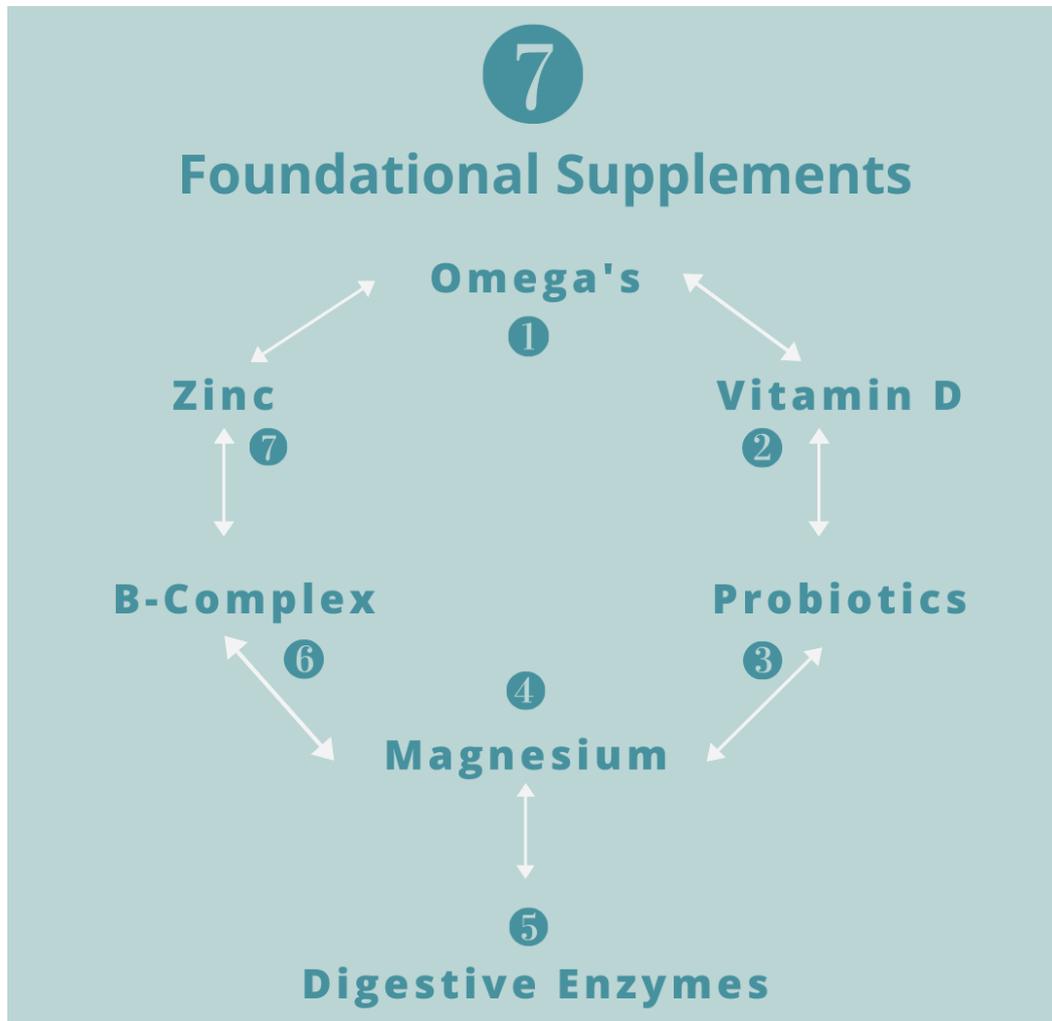


# Supplement Guide



I know we'd all love to think we can get everything we need from the food that we eat, but it's simply not true. Our soil is so depleted and devoid of minerals and the very nutrients required to grow food that is rich in phytonutrients, enzymes and life that our body requires. Stack on the added needs from our system due to stress, toxins, the environment, illness and health imbalances, I firmly believe we all need additional support.

In this guide I dive into the 7 key foundational supplements I feel every woman should consider adding to her hormone reset protocols.

# Omega-3's

Omega-3s" is another name for omega-3 fatty acids. These fats are found in the human body, as well as in certain foods like oily fish.

Essential fatty acids are "essential" because the body cannot synthesize them on its own, therefore we must get these fats from the diet. Unfortunately, many women fail to get enough omega-3 in their diets, resulting in omega-3 deficiency.

## **Signs of omega-3 deficiency can include:**

- Impairments in learning and attention span. Attention deficits, anxiety, restlessness, poor concentration (aka brain fog), or memory loss can develop.
- Mood-related changes, such as irritability, symptoms of depression and anxiety, or mood swings.
- Changes in the appearance of skin, hair and nails. Skin may become inflamed, dry, flaky, sensitive or red. Hair can become brittle and thinner. Nails may break easily and be very weak.
- Joint pain and stiffness, arthritis, osteoarthritis
- Signs of dehydration, including increased thirst and dry mouth/throat.
- Frequent urination.
- Excessive ear wax.
- Symptoms of allergies, such as eczema, asthma, hay fever, hives, etc.

## **There are three different types of "omega-3s."**

The types of highly protective omega-3s we hear the most about are called EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid). These are the omega-3s found in seafood like salmon, sardines, etc.

Another omega-3 called ALA (alpha-linolenic acid) also is associated with certain health benefits. It is found in plants that contain natural oils, such as flaxseed, walnuts and chia seeds.

While most women consume enough of the other kinds of essential fatty acids, known as omega-6s (found in modified cooking oils like canola, sunflower and safflower oil, plus some nuts), most women's diets are low in omega-3s, therefore supplementing with fish oil can be very beneficial.

Omega-3 fatty acids are now among the most commonly prescribed supplements worldwide.

I recommend that you aim to get at least 500 to 1,000 milligrams per day of combined EPA/DHA. This is a general recommendation, however in my practice I have seen women benefit tremendously with a higher intake of about 4,000 to 5,000 milligrams of total omega-3s (ALA/EPA/DHA combined).

Because many fish oil supplements contain mercury and/or other harmful contaminants, I recommend that you purchase supplements from a reputable source that clearly tests for these health-hazardous contaminants. Look for supplements that have been tested by a third-party and have a certificate of analysis that indicates the levels of purity.

### **Brands I personally use and recommend...**

IQ Mega® from doTERRA. One daily serving provides 1,300 mg of pure, micro-filtered marine lipids with 900 mg of DHA and 400 mg of EPA omega-3 essential fatty acids tested to exceed the requirements for toxins and heavy metals. Start with 1 teaspoon daily.

Or if you'd prefer to take it in a softgel, I recommend the xEO Mega® also from doTERRA. Start by taking 4 softgels per day, with food.

I also like Genuine Health Omega 3+ Joy Liquid Natural Orange or the Genuine Health Omega3+ Joy Large Pack (softgels)

# Vitamin D

Would you believe that the majority of the population — up to 90 percent of adults are believed to have a vitamin D deficiency?

Many physicians are starting to take this vitamin deficiency very seriously. In fact, this vitamin is one of the most recommended supplements by physicians today in order to treat and/or prevent vitamin D deficiency symptoms.

## What Is Vitamin D?

Vitamin D is a fat-soluble vitamin that's stored in the liver and fatty tissues. This means that increased body fat has the ability to absorb this vitamin and keep it from being used within the body.

It's somewhat different than other vitamins because the body makes most of it on its own, rather than solely relying on food sources.

## Vitamin D Benefits:

1) **Contributes to Bone Health:** Vitamin D plays a role in calcium absorption into the bones. Calcitriol (converted D vitamin) works with the parathyroid hormone to maintain calcium levels.

A deficiency in vitamin D can result in the softening of your bones, which is called osteomalacia, or a bone abnormality called rickets. Additionally, a deficiency increases your risk for developing osteoporosis and experiencing fractures or broken bones.

Studies have shown that doses of 800–5,000 international units per day can improve musculoskeletal health by naturally slowing the aging of the skeletal structure and reducing the rate of fractures and falls in older adults that are over 65. Older adults with adequate vitamin D levels are more likely to be active, have improved muscle strength, and are less prone to falls and injuries.

**2) Helps Manage Blood Sugar Levels and Can Prevent Diabetes:** Diabetes symptoms result from a lack of insulin or inadequate insulin secretion following increases in insulin resistance. According to research conducted at the London School of Medicine, calcium is necessary for insulin secretion, and vitamin D promotes calcium absorption and utilization, therefore contributing to the regulation of insulin secretion.

According to a 2015 study published in *Current Diabetes Reviews*, vitamin D replacement has beneficial effects on all aspects of type 2 diabetes, including the incidence, control and complications of the disease. There is also mounting evidence linking low vitamin D levels to diabetes.

**3) Protects Against Cancer:** Vitamin D deficiency symptoms have been correlated with increased risks for cancer development, especially breast, colon and prostate cancers. According to research published in *Frontiers in Endocrinology*, D vitamin plays a role in factors that influence tumor growth, cell differentiation and apoptosis.

Research shows that it can affect the risk of breast, colon and ovarian cancers possibly due to its role in the cell life cycle or its ability to block excess estrogen. According to research published in the *American Journal of Clinical Nutrition*, improving vitamin D and calcium nutritional status substantially reduces the risk of cancer in postmenopausal women.

**4) Enhances the Immune System:** Vitamin D helps with healthy cell replication and may play a role in protecting against the development of autoimmune conditions in addition to less serious common colds and the flu.

Our immune cells contain receptors for vitamin D, and it's been shown that this vitamin seems to prevent prolonged or excessive inflammatory responses.

Studies indicate that inflammation is often at the root of many modern, chronic diseases and autoimmune disorders, including:

- multiple sclerosis
- rheumatoid arthritis
- irritable bowel syndrome and other digestive disorders
- high blood pressure

**5) Facilitates Hormone Regulation and Helps Improve Mood:** Because it acts like a hormone within our bodies and affects brain function, vitamin D deficiency has been linked to an increased risk for mood disorders, including depression, seasonal affective disorder, and severe mood problems experienced during PMS, insomnia and anxiety.

Low levels can also interfere with proper testosterone and estrogen production, leading to imbalances that can result in many unwanted symptoms.

**6) Helps with Concentration, Learning and Memory:** Several studies have shown that vitamin D also affects our ability to make decisions, concentrate and retain information. Researchers indicate that people with lower levels perform poorly on standardized tests, may have poor decision-making skills, and have difficulty with tasks that require focus and attention.

### **Deficiency Symptoms**

There is a great body of evidence that shows that people with vitamin D deficiency are at an increased risk of developing health complications and conditions such as...

- osteoporosis
- heart disease
- high blood pressure
- cancer
- autoimmune diseases
- depression
- insomnia
- arthritis
- diabetes
- asthma
- multiple sclerosis
- chronic pain
- psoriasis
- fibromyalgia
- autism

Researchers suggest that anyone with these health conditions or the following symptoms should be tested for vitamin D deficiency:

- weakness
- chronic
- fatigue
- depression
- trouble sleeping
- anxiety
- weak or broken bones
- weakened immune system
- inflammation and swelling

### **Ask your Doctor for this test...**

The only way to know if you are deficient is to have your doctor perform a test called a 25-hydroxy vitamin D test, sometimes also called the 25(OH) D test. This will tell you if, and how severely, you are deficient.

Some other types of vitamin D tests can show normal or even elevated levels, which are actually inaccurate and can hide a serious deficiency, so the 25(OH) D test seems to be the most accurate when determining your true vitamin D levels.

When your doctor performs a blood test and gives you the results for your vitamin D levels, keep these numbers in mind:

- 50+ equals a good level
- 30–50 means you want to supplement with vitamin D
- less than 30 means you are very deficient and definitely want to take immediate action to bring those levels up

Talk with your doctor about supplementing with higher doses of vitamin D if you are severely deficient or have a very low level according to the tests.

## **Supplements and Dosage**

How much vitamin D should you take?

The RDA for vitamin D is 600 IU per day for adults. However, getting more like 5,000 IU per day may be more effective, especially since there is little risk in over-supplementing with vitamin D and many benefits to gain from having adequate levels.

Keep in mind that this is a general recommendation, and there is no way to know the exact amount that's best for you without a blood test. You may need a higher or lower amount and should speak to your doctor.

Ideally, you want to supplement with a high-quality, whole food-based multivitamin or vitamin D supplement until your blood level of vitamin D is between 50–60 nanograms per milliliter.

### **Brands I personally use and recommend...**

I love Genestra D-Mulsion 1000. It is an emulsified vitamin D supplement. It is prepared using the proprietary WisDOM emulsification process for enhanced bioavailability and improved palatability.

Each serving provides 1000 IU of vitamin D3. In a clinical study conducted on 55 vitamin D deficient participants, emulsified vitamin D3 had significantly greater bioavailability compared to a capsule-based supplement.

I also love the Thorne Research Liquid Vitamin D or the Liquid D/K2 Vitamin.

# Probiotics

Probiotics have generated quite a bit of buzz in the health and wellness circuits lately. Not only can you now get your daily dose through supplements and fermented foods, but this beneficial form of bacteria is also frequently added to snack bars, cereals, ice creams and even chewing gums.

However, not all probiotic supplements are created equal, and certain types of probiotics stand out for both their quality and potential health benefits.

So do probiotics do anything? And what is the best probiotic supplement?

Let's look at why you should consider adding a probiotic to your supplement protocols and how to pick the best one.

## What Are Probiotic Supplements?

Probiotics are a type of beneficial bacteria found in the digestive tract that play a role in nearly every aspect of health, from immune function to digestion and beyond. Even a minute imbalance in the delicate gut microbiome can have a huge impact on health, worsening certain conditions and causing gastrointestinal issues like bloating and stomach pain.

Taking a probiotic supplement is an easy way to boost the beneficial bacteria in your gut to promote better health. Available in capsule, powder and pill forms, probiotic supplements typically contain a wide range of unique bacterial strains, plus billions of probiotics in every serving.

## 5 Benefits of Probiotic Supplements

**1) Improves Mental Health:** Some research shows that gut health may be closely tied to mental health. In fact, several studies have found that probiotic supplementation could be beneficial in the treatment of several mental health conditions, including depression, anxiety, obsessive-compulsive disorder and autism spectrum disorder.

**2) Supports Digestion:** Adding probiotic supplements to your daily routine can bring huge benefits when it comes to digestive health. Not only can it aid in the prevention and treatment of inflammatory bowel disorders like Crohn's disease and ulcerative colitis, but it may also improve symptoms of irritable bowel syndrome, a condition characterized by bloating, gas, diarrhea and constipation.

**3) Boosts Immune Function:** More and more mounting evidence has found that gut health may be closely connected to immune function. In addition to blocking the growth and spread of harmful bacteria in the gut, probiotics have also been shown to reduce the risk of certain types of infections, including respiratory infections and urinary tract infections in both children and adults.

**4) Promotes Weight Loss:** Many types of probiotics have been shown to boost fat-burning and weight loss through several different mechanisms. For example, some strains of probiotics may alter levels of specific hormones in the body that regulate appetite and hunger, helping you feel fuller between meals to kickstart weight loss.

Other types also prevent fat absorption by increasing the excretion of fatty acids in the stool. One study in the *British Journal of Nutrition* actually showed that taking low doses of *Lactobacillus gasseri* led to an 8.5 percent reduction in belly fat over 12 weeks.

**5) Enhances Skin Health:** Thanks to their ability to fight inflammation and block the growth of bacteria, probiotics are thought to be therapeutic for a number of different skin conditions. In fact, one Canadian study found that women who used probiotics while pregnant or breastfeeding significantly reduced the risk of eczema in infants.

### **How to Choose the Right Probiotic**

There are several factors to consider when picking the best probiotic supplement to fit your personal needs and preferences.

Here are a few of the top things to look for when choosing your probiotic supplement.

**Brand quality** — Buy from reputable retailers with readily available probiotic reviews from customers.

**High CFU count** — Be sure to purchase a supplement that has a higher number of probiotics, anywhere from 15 billion to 100 billion.

**Survivability and strain diversity** — Check for strains like *Bacillus coagulans*, *Saccharomyces boulardii*, *Bacillus subtilis*, *Lactobacillus plantarum*, *Bacillus clausii* and other cultures or formulas that ensure that probiotics make it to the gut and are able to colonize.

**Prebiotics and supplementary ingredients** — Prebiotics provide the fuel necessary for probiotics to grow and thrive. High-quality probiotic supplements should have both prebiotics and other ingredients designed to support digestion and immunity. Examples of these ingredients are (preferably fermented) flaxseed, chia seed, cañihua seed, astragalus, ashwagandha, hemp seed, pumpkin seed, milk thistle, peas, ginger, mung bean and turmeric.

**Stability and organism types** — Some probiotic strains need to be kept cold in order to preserve their potency while others are shelf-stable and don't require refrigeration. Unfortunately, most refrigerated probiotics never make it past the stomach because they aren't stable. Instead, look for a shelf-stable product that contains soil-based organisms.

**Sugar** — A synbiotic is a dietary supplement that contains both prebiotics and probiotics. The best synbiotics contain healthy plant starches and fiber rather than sugar to help feed the probiotics and help them grow.

**Living vs. dead** — “Live and active cultures” are a better bet than “made with active cultures.” After fermentation, the product may be heat-treated, which helps extend shelf-life, but kills off both good and bad bacteria in the process.

## **Brands I personally use and recommend...**

PB Assist®+ Probiotic Defense Formula by doTERRA

Genuine Health Advanced Gut Health Probiotic Women's Daily 50 Billion CFU

Genestra HMF Intensive Probiotic Formula

## **Magnesium**

Magnesium is arguably the most important mineral in the body when you take into consideration all of the important roles that magnesium plays in the body — and the fact that a magnesium deficiency is one of the leading nutrient deficiencies in adults with an estimated 80 percent being deficient in this vital mineral — it's a good idea to consider taking a magnesium supplement regularly.

The amount of research regarding the benefits of magnesium and the need to take magnesium supplements to counteract a deficiency is staggering.

**For many people, a magnesium deficiency causes noticeable negative symptoms such as:**

**1) Leg Cramps:** Seventy percent of adults and seven percent of children experience leg cramps on a regular basis. Turns out, leg cramps can be more than a nuisance — they can also be downright excruciating!

Because of magnesium's role in neuromuscular signals and muscle contraction, researchers have observed that magnesium deficiency is often to blame.

We're seeing more and more health care professionals prescribing magnesium supplements to help their patients who suffer from restless leg syndrome.

**2) Insomnia:** Magnesium deficiency is often a precursor to sleep disorders, such as anxiety, hyperactivity and restlessness. It's been suggested that this is because magnesium is vital for GABA function, an inhibitory neurotransmitter known to "calm" the brain and promote relaxation. Taking a magnesium supplement before bed can help dramatically quiet a racing mind and make it easier to get a good night's sleep.

**3) Anxiety:** As magnesium deficiency can affect the central nervous system, more specifically the GABA cycle in the body, its side effects can include irritability and nervousness. As the deficiency worsens, it causes high levels of anxiety and, in severe cases, depression and hallucinations. Supplementing with magnesium has been shown to help calm the body, the muscles and help improve mood. It's a vital mineral for overall mood. I have personally experienced great results from taking a magnesium supplement for the treatment of anxiety.

**4) Fatigue:** Magnesium is used to create "energy" in your body by activating adenosine triphosphate, also known as ATP. This means that without enough magnesium, you don't have the energy you need and can suffer from fatigue more easily.

Inadequate magnesium intake also means you tire more quickly and need a higher level of oxygen during exercise. One study conducted by the ARS Community Nutrition Research Group found that when magnesium-deficient women exercised, they needed more oxygen to complete low-level activities and had a higher heart rate compared to when their magnesium levels were higher. Powerful right?!?

**5) Poor Digestion and Constipation:** Magnesium helps relax muscles within the digestive tract, including the intestinal wall, which controls your ability to go to the bathroom. Because magnesium helps neutralize stomach acid and moves stool through the intestines, taking magnesium supplements is a natural way to help you poop! Keep in mind, however, that if you experience a laxative effect when taking magnesium supplements, you may be taking too high of a dose. Taking the proper dose of magnesium should help you go to the bathroom easily on a normal schedule but shouldn't cause discomfort or diarrhea.

**6) Constant Chocolate Cravings:** Cravings for specific foods could be an indication of a deficiency in a micro or macro nutrient. In particular, a craving for chocolate could suggest a magnesium deficiency.

So if you have those days when you feel like nothing in the world will be right until you get your hands on some chocolate, in particular those days leading up to your period, it could actually be a sign of a magnesium deficiency.

### **Types of Magnesium Supplements:**

**Magnesium Chelate** — highly absorbable by the body and the kind found in foods naturally. This type is bound to multiple amino acids (proteins) and used to restore magnesium levels.

**Magnesium Citrate** — magnesium combined with citric acid. Magnesium citrate may have a laxative effect in some cases when taken in high doses, but is otherwise safe to use for improving digestion and preventing constipation.

**Magnesium Chloride Oil** — an oil form of magnesium that can be applied to skin. It's also given to people who have digestive disorders that prevent normal absorption of magnesium from their food. Athletes sometimes use magnesium oil to increase energy and endurance, to dull muscle pain, and to heal wounds or skin irritation.

**Magnesium Glycinate** — highly absorbable, this is recommended for anyone with a known magnesium deficiency and less likely to cause laxative effects than some other magnesium supplements.

**Magnesium Threonate** — has a high level of absorbability/bioavailability since it can penetrate the mitochondrial membrane. This type is not as readily available, but as more research is conducted, it may become more widely used.

**Magnesium Orotate** — these supplements have orotic acid, and magnesium orotate is beneficial to the heart.

## **Brands I personally use and recommend:**

CanPrev Magnesium Bis-glycinate 300 Ultra Gentle liquid

Natural Calm Magnesium Chloride Balm

Natural Calm Canada's Magnesium Chloride Liquid

Natural Calm Magnesium Citrate Powder

# Digestive Enzymes

## **What Are Digestive Enzymes? And What Do They Do?**

Digestive enzymes help break down large macromolecules found in the foods we eat into smaller molecules that our guts are capable of absorbing, thus supporting gut health and making sure the nutrients are delivered to the body.

Digestive enzymes are split into three classes: proteolytic enzymes that are needed to digest protein, lipases needed to digest fat and amylases needed to digest carbohydrates.

## **How do digestive enzymes work?**

Digestion is a complex process that first begins when you chew food, which releases enzymes in your saliva. Most of the work happens thanks to gastrointestinal fluids that contain digestive enzymes, which act on certain nutrients (fats, carbs or proteins).

We make specific digestive enzymes to help with absorption of different types of foods we eat. In other words, we make carbohydrate-specific, protein-specific and fat-specific enzymes.

Digestive enzymes aren't just beneficial — they're essential. They turn complex foods into smaller compounds, including amino acids, fatty acids, cholesterol, simple sugars and nucleic acids (which help make DNA).

Enzymes are synthesized and secreted in different parts of your digestive tract, including your mouth, stomach and pancreas.

For women without digestive enzyme insufficiency (lack of digestive enzymes), most of the work is done by the body.

For others, supplementation is needed and helps this process along.

### **What are the benefits of digestive enzymes?**

The answer is simple: Without them, we couldn't process food. With that said, there are three main reasons why many women should take digestive enzymes:

- Help treat leaky gut and other conditions like celiac disease by taking stress off the gastrointestinal tract.
- Assist the body in breaking down difficult-to-digest protein and sugars like gluten, casein and lactose (milk sugar).
- Greatly improve symptoms of acid reflux and irritable bowel syndrome.
- Enhance nutrition absorption and prevent nutritional deficiency.
- Counteract enzyme inhibitors naturally in foods like peanuts, wheat germ, egg whites, nuts, seeds, beans and potatoes.

### **How do you know if you should take digestive enzymes?**

If you're lacking specific enzymes that are needed to break down certain nutrients, you might experience symptoms like bloating, gas, abdominal pain and fatigue due to undigested foods and other enzyme issues.

## **Other signs that you might benefit from taking digestive enzymes supplements are:**

- Acid reflux
- Cravings for certain foods
- Thyroid problems
- Heartburn, indigestion or burping
- Hair that is thinning or falling out
- Dry skin
- Trouble concentrating or brain fog
- Morning fatigue
- Trouble sleeping well
- Arthritis or joint pain
- Muscle weakness or feeling too tired to exercise
- Mood swings, depression or irritability
- Headaches or migraines
- Worsened PMS

## **How Digestion Affects Your Hormone Imbalances**

Below I've listed a few of the most common hormonal imbalances with the hopes of giving you a more holistic understanding of how your gut health and hormone health are intertwined.

- The hormones that control your appetite are affected when your gut is unhealthy because it promotes the growth of unhealthy bacteria. This imbalance between good bacteria and bad bacteria alters the levels of ghrelin and leptin. Ghrelin is like an alarm that rings every time you're hungry and it's time to eat, and leptin lets you know you're full and it's time to put the fork down. Interestingly an imbalance between healthy and unhealthy bacteria in your gut also affects which foods you crave and what foods you enjoy eating.
- Did you know that around 80% of serotonin and melatonin in your body are made in your gut? An imbalance in serotonin (the happiness hormone) and melatonin (which optimizes sleep) get completely out of whack when you have Irritable Bowel Syndrome (IBS), Leaky Gut Syndrome or other complications with your digestive tract. An imbalance in the hormones directly responsible for your happiness and quality of sleep may result in feelings of depression, anxiety, trouble sleeping and more.

- Suffering from leaky gut syndrome or irritable bowel syndrome (IBS) also causes your inflamed gut to create an increased stress response in your body. You become easily triggered increasing cortisol levels. Many studies have shown that taking probiotics daily can lower your cortisol levels and reduce your stress response.

- When your gut health is off, so are your Estrogen levels. When you suffer from IBS or leaky gut syndrome it's impossible for your body to effectively remove estrogen from your body keeping it in circulation which causes an Estrogen Dominance. A dominance in estrogen causes an imbalance of estrogen and progesterone which need to be in perfect balance in order for your body to properly support menstrual functions, promote fat burning and lower fluid retention. Estrogen dominance also alters your weight, stress levels, sleep patterns, appetite, and slows your metabolism.

- If your gut is unhealthy your bodies ability to convert the T4 thyroid hormone into the more effective T3 form is compromised because this function occurs in your gut. This explains why many women with digestive issues that take Synthroid, a synthetic type of the T4 hormone, often have issues converting it into T3. Additionally, diseases such as **\*\*hyperthyroidism, \*\***caused by an imbalance in the thyroid, can result in symptoms such as anxiety, thinning of the hair, slowed metabolism, irregular periods, sporadic weight loss or weight gain, insomnia and more.

- Your blood glucose level is also directly related to the health of your digestive tract. The healthier your gut is the more stable your blood glucose level, the less sugar and sweets you crave, and the less insulin you release. Inversely, an unhealthy gut can create an insulin resistance lowering your bodies fat burning ability. Unsurprisingly, an unhealthy gut can also be to blame for diabetes, vision loss, fatigue, weight gain, skin problems, etc.

Now that you're aware of some of the ways your gut health can negatively impact your hormone balance, supplementing with digestive enzymes, as well as Probiotics is a natural way to heal your hormones.

## **Brands I personally use and recommend...**

doTERRA has a wonderful collection of digestive support products.

My go to's are...DigestZen® Digestive Blend Essential Oil. Taken in the following 3 ways:

- 1) Diffusion: Use three to four drops in the diffuser of your choice.
- 2) Internal use: Dilute one drop in 4 fl. oz. of liquid.
- 3) Topical use: Apply one to two drops to desired area. Dilute with doTERRA Fractionated Coconut Oil to minimize any skin sensitivity.

DigestZen TerraZyme® Digestive Enzyme Complex: Take one to three vegetable capsules with meals throughout the day. If your meal includes lots of fresh, raw foods, take one capsule. If your meal includes highly processed, cooked foods or food products known to cause specific GI discomfort, take two to three capsules with meal.

DigestTab®: Chewable Tablets: Designed to relieve occasional heartburn and indigestion, while promoting the overall health of the gastrointestinal tract. Use with or between meals as needed, for relief from occasional stomach upset, indigestion, and heartburn.

I also love St. Francis Herb Farm Canadian Bitters: Take 1-1.5 ml, 3x daily in a little water on an empty stomach.

# Vitamin B12

Are you struggling with fatigue, low energy levels, mood changes and a lack of focus?

This can be a sign that you're dealing with a vitamin B12 deficiency. If that's the case — you're not alone. About 40 percent of people have low levels of vitamin B12.

Vitamin B12 deficiency is thought to be one of the leading nutrient deficiencies in the world.

## **What does Vitamin B12 do?**

Vitamin B12 benefits your mood, energy level, memory, heart, skin, hair, digestion and more. It is also an essential vitamin for addressing adrenal fatigue, multiple metabolic functions — including enzyme production, DNA synthesis and hormonal balance — and maintaining healthy nervous and cardiovascular systems.

Because of its wide-reaching roles within the body, a vitamin B12 deficiency can show up in many different negative symptoms, many of which are very noticeable, such as chronic fatigue, mood disorders like depression, and chronic stress or feeling run down.

## **Top 8 Vitamin B12 Benefits:**

**1) Helps Maintain Energy Levels:** Vitamin B12 benefits your metabolism because it's needed to convert carbohydrates into useable glucose in the body. Glucose from carbohydrate foods is used as a form of energy, so this is the reason why people with vitamin B12 deficiencies often experience fatigue.

Vitamin B12 is also needed for neurotransmitter signaling that helps your muscles contract and gives you energy to go about your day without feeling tired and run down.

Women often ask me whether vitamin B12 benefits weight loss. Because a vitamin B12 deficiency can lead to sluggishness, chronic fatigue, and mood and appetite changes, it can be hard to lose or maintain weight with these symptoms. It's not that increasing your vitamin B12 levels alone will make you lose weight, but correcting a deficiency will boost your energy levels and regulate your appetite so you can continue your health regime.

## **2) Prevents Memory Loss and Lowers Risk of Neurodegenerative Disease:**

A vitamin B12 deficiency may cause various neurologic and psychiatric disturbances. Because of its role in nerve health and neurotransmitter signaling, vitamin B12 benefits cognitive function and is used to lower the risk of neurodegenerative diseases, including Alzheimer's disease and dementia.

## **3) Boosts Mood and Helps the Nervous System to Properly Function:**

One of the most researched vitamin B12 benefits is its ability to help in healthy regulation of the nervous system, including reducing such mood disorders as depression and anxiety. Vitamin B12, along with folate, is needed as a major determinant of one-carbon metabolism, which produces the compound called SAM (S-adenosyl methionine). SAM is crucial for neurological function, dealing with stress and mood regulation.

Vitamin B12 is also needed for concentration and cognitive processes, such as learning, so a vitamin B12 deficiency can result in difficulty focusing and an increased risk for attention disorders.

**4) Plays a Role in Maintaining Heart Health:** Vitamin B12 benefits cardiovascular health in several ways, which is important considering the fact that heart disease is currently the No. 1 cause of death worldwide. Vitamin B12 helps reduce elevated homocysteine levels, which is now considered a major risk factor for heart disease.

Homocysteine is an amino acid, and its levels in the blood are influenced by blood levels of B-complex vitamins, including vitamin B12.

Vitamin B12 helps protect against heart disease like a heart attack or stroke by lowering high homocysteine levels in the blood.

**5) Needed For Healthy Skin & Hair:** Vitamin B12 is essential for healthy skin, hair and nails because it plays a major part in cell reproduction. Vitamin B12 benefits skin health by reducing redness, dryness, inflammation and acne blemishes — and can be applied to the skin for psoriasis and eczema. It can also reduce hair breakage and help nails become stronger.

**6) Aids in Digestion:** Due to its role in helping with digestive enzyme production, vitamin B12 is needed to support a healthy metabolism and the breakdown of foods within the stomach. One of the ways that vitamin B12 benefits digestion? It helps foster healthy bacteria within the gut environment. The elimination of harmful bacteria in the digestive tract — and simultaneously the presence of beneficial bacteria — is what prevents digestive disorders like inflammatory bowel disease or candida.

**7) May Help Prevent Cancer:** Vitamin B12 supplementation is now being studied as a way to help lower the risk of certain kinds of cancers, especially when taken with folate. Some preliminary research shows that vitamin B12 benefits the immune system enough to potentially help prevent cancer, including cervical, prostate and colon cancers.

**8) Helps Produce Red Blood Cells and Prevent Anemia:** Vitamin B12 is needed to help produce a healthy level of red blood cells. It helps prevent a type of anemia called megaloblastic anemia, which results in symptoms like chronic fatigue and weakness.

### **Vitamin B12 Deficiency Symptoms & Signs**

Vitamin B12 deficiency can be hard to detect, especially considering how common the symptoms of a vitamin B12 deficiency can be, such as feeling tired or unfocused.

A diagnosis of vitamin B12 deficiency is typically based on the measurement of serum vitamin B12 levels within the blood. However, alarmingly, studies show that about 50 percent of patients with diseases related to vitamin B12 deficiency have normal B12 levels when tested.

There are more precise screening options available to detect a deficiency, but these are usually not given to patients unless they have a known case of anemia or heart disease-related symptoms.

If you suspect you might have a deficiency but your initial blood test shows that your levels are normal, you may want to talk with your doctor about performing secondary tests, especially those that check for high homocysteine levels.

### **Symptoms of a vitamin B12 deficiency can include:**

- Constantly feeling tired or chronic fatigue
- Muscle aches and weakness
- Joint pain
- Difficulty breathing or shortness of breath
- Feeling dizzy
- Poor memory
- Inability to concentrate well
- Mood changes, like increased depression and anxiety
- Having abnormal heart problems, such as palpitations
- Digestive problems like nausea, diarrhea or cramping
- A poor appetite
- A more serious deficiency can also cause a form of anemia called pernicious anemia, a serious condition that can cause memory loss, confusion and even long-term dementia.

### **How to Overcome Vitamin B12 Deficiency**

- Take a probiotic supplement daily. Taking a high-quality probiotic on a regular basis can help to improve the health of your gut and your body's ability to properly absorb vitamin B12 and other nutrients.
- Work on healing your gut. Again, in order to properly absorb vitamin B12 and other nutrients, you need a healthy digestive system. Improve the health of your gut by cutting out inflammatory foods, add more whole foods to your diet and take a probiotic supplement.

- Take the right supplements. You can take a high-quality vitamin B12 supplement or take a B-complex vitamin. There are also vitamin B12 sprays available.

- If you have a confirmed vitamin B12 deficiency, another option is intramuscular vitamin B12 injections, which can be done under the care of your doctor or health care practitioner.

### **Vitamin B12 Supplements + Brands I use and Recommend**

Vitamin B12 can be taken in tablet form, in drops that you place under the tongue (called sublingual B12), in oral spray form, as gel formulations or even in the form of injection. You can use any of these types of vitamin B12 supplements, but make sure you are choosing a high-quality product from a reputable source. If you are curious about vitamin B12 injections, talk to your doctor about confirming a deficiency and how to go about this process. And keep in mind that sometimes people do better supplementing with drops and oral spray forms of vitamin B12 because they have trouble absorbing the vitamin from the stomach.

### **Brands I Love....**

Douglas Laboratories Liquid B12 Formulated with Methylcobalamin

Genestra Active Chewable B12 with L-Methylfolate

Garden of Life MyKind Organics Vitamin B-12 Organic Raspberry Spray

# ZINC

## What Is Zinc?

Zinc is a type of metal and an essential trace element. It's present within all bodily tissue and needed for healthy cell division. It acts like an antioxidant within the body, fighting free-radical damage and slowing the aging process.

Zinc also has a major impact on hormonal balance, so for this reason, even a small zinc deficiency can result in an increased risk for infertility or diabetes. Without enough zinc present in your diet, it's possible to experience negative reactions like frequently getting sick, feeling like you're always tired and run down, and experiencing poor concentration, and the inability to heal wounds.

## What are the health benefits of taking zinc?

Well, zinc benefits the body in many ways — it helps with hormone production, proper growth and repair, improved immunity and promoting normal digestion. It's needed by the body and zinc deficiency can lead to major health issues.

Zinc benefits also include its ability to act as an anti-inflammatory agent, which means that zinc may have significant therapeutic benefits for several common, chronic diseases like cancer or heart disease.

Are you getting enough zinc in your diet? Maybe low zinc levels are to blame for your chronic fatigue, digestive issues or hormonal problems. There's no denying that zinc benefits are vast and you actually depend on them to thrive.

## Top Zinc Benefits:

**1) Increases Immunity and Fights Colds:** Zinc is often taken as a natural over-the-counter remedy for fighting colds and symptoms of illnesses. When taken for at least five months, zinc may reduce your risk of becoming sick with the common cold, plus supplementing once you already feel sick can speed up the healing process.

**2) Acts as a Powerful Antioxidant that May Help Fight Cancer:** Zinc is an effective anti-inflammatory and antioxidant agent, helping fight oxidative stress and decrease the chance for disease development, including as a natural cancer treatment. Especially in elderly patients, zinc benefits include its ability to support healthy cell division, preventing cancerous cell mutation and stunting tumor growth.

**3) Balance Hormones:** Zinc benefits hormonal health and fertility because it plays an important role in hormone production, including increasing testosterone naturally, which has very widespread roles in both men and women.

Zinc also impacts female sex hormones and is even involved in the creation and release of eggs within and from the ovaries.

Zinc is needed for the production of estrogen and progesterone in women, which both support reproductive health. Either too high or too low levels of estrogens can cause problems with menstruation, mood swings, early menopause, infertility and possibly even increase the risk for certain cancers.

**4) Fights Diabetes:** Zinc is needed to balance most hormones, including insulin, the main hormone involved in the regulation of blood sugar and as a diabetes natural treatment.

Zinc benefits blood sugar levels because it binds to insulin so insulin is adequately stored in the pancreas and released when glucose enters the bloodstream. It also allows for proper utilization of digestive enzymes that are necessary for insulin to bind to cells so glucose is used as fuel for the body, instead of stored as fat.

**5) Maintains Heart Health By Supporting Blood Vessels:** Zinc is needed to maintain the health of cells within the cardiovascular system, while also lowering inflammation and oxidative stress. The endothelium, the thin layer of cells that lines the blood vessels, partially relies on adequate levels of zinc.

Zinc benefits heart health by supporting healthy circulation, since it helps as a natural remedy for high blood pressure and cholesterol levels from clogged or damaged arteries.

**6) Increases Fertility:** Studies show that zinc plays an important role in fertility. Dietary zinc restriction and deficiency in normal young men is associated with a significant decrease in serum testosterone concentrations, which can negatively impact fertility and lower libido.

What does zinc do for you sexually? It can potentially improve low sex drive by increasing testosterone levels.

Zinc also impacts women's fertility since adequate levels of zinc are needed during the growth process of the female's eggs, otherwise eggs cannot properly mature and ovulation suffer.

**7) Aids in Nutrient Absorption and Digestion:** Zinc affects protein synthesis and is required by the body to use amino acids from foods. It's also involved in the breakdown of carbohydrates from foods, which are one of the main sources of energy for the body. For this reason, deficiency in zinc can cause low energy levels and contribute to adrenal or chronic fatigue, whereas consuming enough zinc benefits ongoing energy and a healthy metabolism.

**8) Supports Liver Health:** Supplementing with zinc is shown to reduce the incidence of infection and correlated with lower levels of liver damage. Zinc can help with a liver cleanse to reduce inflammation in the liver, reduces free radical damage, helps with nutrient absorption and allows for proper waste elimination.

**9. Helps With Muscle Growth and Repair:** Zinc plays a crucial role in cell division and cell growth, so zinc benefits muscle repair and growth by making it possible for the body to heal itself and maintain strength in the muscular and skeletal systems. Zinc also helps with the release of testosterone, growth hormone and insulin-like growth factor-1 (IGF-1), all of which build muscle mass and a healthy metabolism.

Zinc benefits muscle mass because it helps increase the amount of testosterone the body is able to produce following exercise — especially weight-training and high intensity interval training — because it enhances the conversion rate of androstenedione to testosterone.

## **Symptoms of Zinc Deficiency**

Who is most at risk for zinc deficiency?

Anyone following a plant-based diet that doesn't include meat or dairy products (like vegans or vegetarians) are usually at the greatest risk since their diets eliminate the top zinc food sources.

People who suffer from severe stomach-acid issues, chronic digestive problems like leaky gut syndrome or alcoholism, are also more likely to have a zinc deficiency.

Finally, it's believed that women taking birth control pills or who are on hormone replacement therapy drugs may also be at a higher risk, since this can interfere with zinc's hormone-related roles in the body.

The most common signs and symptoms associated with zinc deficiency include:

- Changes in appetite, including food cravings for salty or sweet foods
- Changes in ability to taste and smell
- Weight gain
- Hair loss
- Digestive problems
- Chronic fatigue syndrome
- Infertility
- Hormonal problems, including worsened PMS or menopause symptoms
- Low immunity
- Poor concentration and memory
- Slowed ability to heal wounds, skin infections or irritation

## **Zinc Supplements + Brands I use and Recommend**

Typically, prescribed zinc supplements (like zinc sulfate) are taken by mouth, but sometimes patients receive zinc injections under the care of a healthcare professional. Orally zinc supplements are available in both tablet and capsule forms. You can also find zinc lozenges.

Zinc supplements are most effective when they are taken 1–2 hours after meals. For people that experience stomach pain or digestive issues after taking zinc, it may be helpful to take the supplements with meals instead.

Keep in mind that it is possible to take too much zinc. The tolerable upper limit for zinc for adults is 40 milligrams per day. Anything above that amount may lead to zinc overdose side effects, so speak to your healthcare professional before increasing your dosage.

Eating foods high in zinc is still the best way to maintain proper zinc levels, so supplements should only be used as a back up if you are unable to consume enough zinc regularly.

### **Brands I love...**

Genestra Zinc Glycinate Liquid

Genestra Zinc Picolinate Formula Capsules

Douglas Laboratories Zinc Lozenges

**\*\* BONUS SUPPLEMENT RECOMMENDATION \*\***

## Ashwagandha

Ashwagandha...what is it and why you should you take it!

Ashwagandha is an adaptogenic herb that's popular in Ayurvedic medicine and has been used for more than 2,500 years. It's actually the most commonly used and extensively researched adaptogen herb. It's valued for its thyroid-modulating, neuroprotective, anti-anxiety, antidepressant and anti-inflammatory properties, which are just some of the many ashwagandha benefits.

In India, ashwagandha is known as the “strength of the stallion” because it has traditionally been used to strengthen the immune system after illness. It has also been referred to as “Indian ginseng” because of its ability to enhance your stamina and work as a natural stress reliever. In fact, it’s ashwagandha’s ability to work as a stress-protective agent that has made it such a popular herb. Like all adaptogenic herbs, ashwagandha helps the body to maintain homeostasis, even in moments of emotional or physical stress. But the many ashwagandha benefits don’t stop there. This powerful herb has shown incredible results for lowering cortisol levels and balancing thyroid hormones. Plus, it’s been used for mood disorders and in the prevention of degenerative diseases.

### **Eight Benefits of Ashwagandha:**

1. **IMPROVES UNDERACTIVE THYROID FUNCTION:** One of the most incredible aspects of adaptogenic herbs like ashwagandha is that they help people with thyroid problems. Ashwagandha has been shown to support a sluggish thyroid for people diagnosed with Hashimoto’s disease, or underactive thyroid. For the millions of people who are struggling with thyroid problems, many of whom don’t even know it, ashwagandha may serve as the solution they’ve been waiting for, it sure was for ME!

2. **RELIEVES ADRENAL FATIGUE:** Research shows that ashwagandha may be useful in supporting adrenal function and helping you to overcome adrenal fatigue. Your adrenals are endocrine glands that are responsible for releasing hormones, specifically cortisol and adrenaline, in response to stress.

If your adrenals are overtaxed due to an overabundance of emotional, physical or mental stress, this can lead to a condition referred to as adrenal fatigue. When your adrenals become exhausted, this can also disrupt other hormones in your body, including progesterone, which can cause infertility and lower levels of DHEA, a hormone that’s tied to longevity and maintaining a strong body

**3. COMBATS STRESS AND ANXIETY:** One of the most well known ashwagandha benefits is its ability to work as a natural remedy for anxiety. In a 2009 study published in PLOS One, ashwagandha was shown to be comparable to common pharmaceutical drugs lorazepam and imipramine, without the side effects. A major ashwagandha benefit is that there are no or minimal adverse reactions when taking it, compared to antidepressant and anti-anxiety medications that may cause drowsiness, insomnia, loss of sexual desire and increased appetite, among other side effects.

**4. IMPROVES DEPRESSION:** Not only does ashwagandha benefit people who deal with anxiety and chronic stress, but it can also be helpful for people who experience signs of depression. Ashwagandha improves our resistance towards stress and studies show that it thereby improves people's self-assessed quality of life. As stress is a known cause of depression, as is hormonal imbalances, ashwagandha can potentially work as a natural remedy for depression.

**5. REDUCES BRAIN CELL DEGENERATION AND IMPROVES MEMORY:** Emotional, physical and chemical stress can all have damaging effects to the brain and nervous system. Recent research has proven that ashwagandha is more than a stress reliever, it also protects the brain from cell degeneration, which can lead to neurodegenerative diseases like Alzheimer's and Parkinson's. One of the main reasons ashwagandha is so effective at healing the brain is because it contains powerful antioxidants that destroy the free radicals that cause aging.

**6. BOOSTS IMMUNE FUNCTION:** Because ashwagandha works as an adaptogen that can reduce the body's stress hormones, it can help to boost your immune system and reduce inflammation within the body.

**7. INCREASES STAMINA AND ENDURANCE:** Studies have shown that ashwagandha can boost endurance during physical activity by sharpening brain function and reducing bodily pain. Due to its positive calming, yet energizing effects on the brain, and its ability to lower stress hormones, ashwagandha showed improvements in concentration, motivation and stamina in conducted studies.

8. HELPS TO INCREASE MUSCLE STRENGTH: Perhaps a surprising ashwagandha benefit is its ability to increase your muscle mass and strength. For this reason, ashwagandha can be a helpful tool for people engaging in resistance training and other forms of exercise that can be strenuous on your muscles. Even with increased muscle mass, your joints must be strong to operate at peak performance levels. Ashwagandha can help with that, too! Clinical trials studying general joint pain and joint pain related to rheumatoid arthritis have found extremely positive results, with ashwagandha relieving major pain and causing no documented side effects.

### **Ashwagandha Types, Usage & Dosage:**

Ashwagandha supplements are widely available online and in health food or vitamin stores. The most popular form of ashwagandha is the root extract, but leaf extracts are also available. You can find the extracts in capsule and powder forms.

When purchasing ashwagandha supplements, make sure it's standardized for human consumption. The withanolide content should range from 1–10 percent, but not all supplements are labeled with this information. Purchasing a high-quality supplement produced with gold-star standards is the best way to guarantee you get a product high in withanolides. The higher the withanolide content, the stronger the effects of the supplement.

When supplementing with ashwagandha, I recommend starting with 300 to 500 milligrams per day, with withanolides in a range of 5–10 percent. Slowly increase your dosage, watching for potential side effects; many supplements recommend between 1,000–1,500 milligrams per day at full dosage.

Various sources have claimed the optimal amount to take may be as high as 6,000 milligrams each day.

You may find that ashwagandha doesn't have the most appealing smell or taste, but if you choose to use it in powder form, you can mix it with other foods or drinks to make it more pleasant. I prefer to add it to my daily smoothie.

## **Brands I personally use and recommend:**

Organic Traditions Ashwagandha Powder

St. Francis Herb Farm Ashwagandha Liquid

St. Francis Herb Farm Ashwagandha VegiCaps

# Melatonin

## **What Is Melatonin?**

Melatonin (N-acetyl-5-methoxytryptamine) is a hormone secreted by the pineal gland in the brain. The pineal gland is located just above your middle brain and is only the size of a pea. Its synthesis and release are stimulated by darkness and suppressed by light.

Melatonin is responsible for maintaining your body's circadian rhythm. Why is that important? Your circadian rhythm is the fancier term for your own personal internal clock, which also runs on a 24-hour schedule just like the day. This internal clock plays a critical role in when we fall asleep and when we wake up.

When it's dark, your body produces more melatonin, but when it's light, the production of melatonin goes down. This is why people who are blind or work night hours can have problems with their melatonin levels. But for anyone, a lack of exposure to light during the day or exposure to bright lights in the evening can disrupt the body's normal melatonin cycles.

When you're exposed to light, it stimulates a nerve pathway from the retina in the eye to an area in the brain called the hypothalamus. This is where the suprachiasmatic nucleus (SCN) is located, and the SCN initiates the turning on of the pineal gland. Once the SCN turns on the pineal gland, it starts making melatonin, which is then released into your bloodstream.

The precursor to melatonin is serotonin, a neurotransmitter that's derived from the amino acid tryptophan. Within the pineal gland, serotonin is processed to yield melatonin. For this to be possible, a naturally occurring chemical called acetylserotonin must act as the intermediary. Serotonin produces acetylserotonin, which is then converted into melatonin. Besides its role as a precursor in the synthesis of melatonin, acetylserotonin is also known to have antidepressant, anti-aging and cognitive-enhancing benefits.

Once serotonin is transformed into melatonin, the two neurotransmitters don't interact again. Like melatonin, serotonin is known to affect the way you sleep and it transmits signals between nerve cells that alter your everyday brain functions. But many of the health benefits that are thought to be due to increasing serotonin levels may actually be coming from serotonin's ability to make melatonin production possible.

The pineal gland typically starts producing melatonin around 9 p.m. Your melatonin levels then increase sharply and you begin to feel more sleepy. If your body is running as it should, your melatonin level remains elevated while you sleep, for a total of approximately 12 hours. Melatonin levels then drop, and by around 9 a.m., the level is back to a barely detectable level where it remains during the day.

Melatonin is also crucial to female reproductive health as it plays a role in controlling the timing and release of female reproductive hormones. It helps decide when a woman starts to menstruate, the frequency and length of menstrual cycles, as well as when a woman stops menstruating completely (menopause).

## **Melatonin Uses and Benefits**

1. **NATURAL SLEEP AID** Melatonin for sleep is by far its best known usage as a natural remedy. When it comes to sleep trouble, conventional medical treatment typically involves pharmaceutical drugs, but these medications frequently lead to long-term dependence and come with a laundry list of possible side effects. This is why many people want to find something more natural to help them have a more restful night's sleep.

**2. DECREASES NEGATIVE MENOPAUSE SYMPTOMS:** Melatonin supplements have been shown to improve sleep problems experienced during menopause. In a study of perimenopausal and menopausal women ages 42 to 62, within six months of a daily melatonin dosage, most of the women reported a general improvement of mood and a significant mitigation of depression. The findings of this study appear to demonstrate that melatonin supplementation among perimenopausal and menopausal women can lead to recovery of pituitary and thyroid functions that is more in the direction of a youthful pattern of regulation.

**3. EASES JET LAG**Jet lag is a temporary sleep disorder experienced by air travelers who rapidly travel by plane across multiple time zones. It happens as a result of the slow adjustment of the body clock to the destination time, which causes sleep and wakefulness to be out of sync with the new environment. Supplementing with melatonin may be able to help “reset” your sleep and wake cycle when you experience dreaded jet lag.

**4. RELIEVES BLADDER DYSFUNCTION**Melatonin receptors are found in the bladder and the prostate. It works to prevent elevations in levels of malondialdehyde, which is a marker for oxidative stress. Through the reduction of oxidative stress, melatonin helps to combat age induced bladder dysfunction. It also limits bladder contractions and induces relaxation, helping to relieve issues like overactive bladder. A 2012 study suggested that nightly production of melatonin helps to improve sleep and reduce habitual nightly urination. Melatonin also increases bladder capacity and decreases urine volume due to its effects on the central nervous system.

**5. HELPS RELIEVE STRESS:** Melatonin levels change when you are experiencing stress. Stress decreases melatonin concentrations at night and increases melatonin production during the day, which is due to the increase of cortisol, the stress hormone. Melatonin can help to relieve stress by controlling the level of stimulation experienced by the body. If you are feeling anxious, melatonin helps to ease anxiety symptoms like daytime fatigue, drowsiness, insomnia and restlessness. It also promotes a calm mood and it supports brain function.

## **How to Use Melatonin and Proper Melatonin Dosage**

You can easily find melatonin at your nearest health store or online in a number of forms: capsule, tablet, liquid, lozenge (that dissolves under the tongue) and topical cream. Melatonin pills are a very common selection, especially the sublingual lozenges designed for rapid absorption.

Another option is topical melatonin, which is said to help skin quality as well as sleep. Researchers have found that melatonin penetrates into the outer layer of skin, reinforcing the skin's capacity for repair, renewal and revitalization during the night.

Most doctors and researchers recommend no more than five milligrams per day, but recommendations can vary by person and condition.

It is possible to purchase 10 milligram melatonin supplements, which are often sold as "extra strength" or "maximum strength." It's an especially good idea to check with your doctor before taking a melatonin 10 mg product.

### **Can You Overdose On Melatonin?**

As with any medicine or supplement, it's possible to take too much melatonin, which is why you should read product instructions carefully and consult with your healthcare provider about the best dosage for your health concern.

There's currently no standard recommended dose for melatonin supplements. It's important to know that people react differently to taking melatonin. For people who are very sensitive, lower doses appear to work better. For sleep troubles, you should know that the right dose of melatonin will have you sleeping well with no daytime tiredness or irritability, so if you're always tired, melatonin is a great option to reverse that trend.

It's always a good idea to start off with a very low dose of melatonin and see how you do. You can follow supplement directions on the label or consult an expert if you are feeling unsure.

## Melatonin Dosage

Here are some recommendations for how much melatonin to take for different health concerns:

**For insomnia or occasional sleeplessness:** According to the National Sleep Foundation, “Between two tenths of a milligram and five milligrams 60 minutes before bedtime is a typical dose for adults. Too much melatonin can disrupt your sleep cycle, so start with the smallest dose of two tenths of a milligram and increase it as needed.”

**For jet lag:** 0.5 to five milligrams of melatonin by mouth one hour before bedtime at final destination has been used in several studies. Another approach that has been used is one to five milligrams one hour before bedtime for two days prior to departure and for two to three days upon arrival at final destination.

**For circadian rhythm sleep disorders in people with and without vision problems:** a single dose of 0.5 to five milligrams by mouth before bed or as a daily dose for one to three months.

**For delayed sleep phase syndrome:** 0.3 to six milligrams by mouth (with five milligrams being most common) daily before sleeping for two weeks to three months.

If you want the best melatonin dosage for sleep, it’s really important not to over do it. People commonly take too high of a dosage, especially initially, or they take a pill too soon before bed, decide it isn’t doing the job quick enough and take another.

Some people also wake up during the night and take another melatonin dosage. It’s important to know that higher doses of melatonin doesn’t equate to better sleep. In fact, taking too much can have the opposite of the desired effect and disrupt sleep. Too much can also lead to unwanted melatonin side effects, including dizziness, headaches, nausea, or irritability.

If you're now wondering, how long before bed should I take melatonin?

To encourage a better night's sleep, 30 minutes to one hour before bed is a common recommendation.

How long does it take for melatonin to work?

According to Johns Hopkins sleep expert Luis F. Buenaver, Ph.D., C.B.S.M., you should stop taking melatonin if it doesn't work after a week or two. He also advises, if melatonin is helpful, most people can safely take it nightly for one to two months, but after that, it's a good idea to stop and see how you sleep without it.

## **Potential Melatonin Side Effects and Interactions**

Is Melatonin Safe?

It's generally considered safe for most adults when taken by mouth for short periods of time.

Is it bad to take melatonin every night?

Long term melatonin use can be safe for some people. Melatonin has been used safely for up to two years. However, check with your doctor before taking melatonin for longer than a month or two.

Some people experience vivid dreams or nightmares when they take melatonin. These "melatonin nightmares" are typically a sign that you need to decrease your dosage. You never want to start out with the melatonin max dose. Instead, you want to start small and gradually increase if needed. Taking too much melatonin can disrupt circadian rhythms.

Other possible side effects of melatonin include headache, dizziness, daytime sleepiness, short-term feelings of depression, stomach cramps, irritability and decreased libido. If you experience drowsiness the morning after taking melatonin, try taking a lower dose.

Melatonin can decrease the effectiveness of some medications while actually decreasing side effects from others.

In general, these are some possible melatonin drug interactions to be aware of:

- Antidepressant medications
- Antipsychotic medications
- Benzodiazepines
- Birth control pills
- Blood pressure medications
- Beta-blockers
- Blood-thinning medications (anticoagulants)
- Interleukin-2
- Nonsteroidal anti-inflammatory drugs (NSAIDs)
- Steroids and immunosuppressant medications
- Tamoxifen

Speak with your doctor first before taking melatonin if you have any ongoing health concerns or are currently taking any other medications.

Never drive or use machinery within five hours of taking melatonin. If you take an excessive amount of melatonin intentionally or by accident, seek medical attention immediately.

### **Final Thoughts on Melatonin**

Remember that more is not necessarily better when it comes to melatonin. Higher melatonin dosage can actually lead to side effects that disrupt your rest. However, when used properly, melatonin has been shown to help several different sleep issues, whether it's the temporary woes of jet lag or a more chronic sleep issue like insomnia. The scientific findings when it comes to cancer and heart health are also highly impressive.

I recommend keeping your dose and duration of melatonin on the lower side unless a health professional advises you otherwise based on your specific health concern. If you've been taking melatonin for two weeks or longer and don't see any improvement in your sleep, then your body's sleep issues might be the result of another issue, like anxiety and depression, and you'll have to address these issues differently.

### **Brands I love...**

Douglas Laboratories Melatonin Sublingual

Genestra Melatonin Spray

Natural Calm Heavenly Sleep Liquid Melatonin

***DISCLAIMER:*** Please speak with your doctor first before taking any supplements referenced in this guide, especially if you have any ongoing health concerns or are currently taking any other medications.