

FEMALE BIOHACKING GUIDE



**MONTH-LONG
PROGRAM
INSIDE**



3 STEP PROCESS

SLEEP

SLEEP IS CRUCIAL FOR OVERALL HEALTH AND WELL-BEING, ESPECIALLY FOR WOMEN. IT PLAYS A SIGNIFICANT ROLE IN HORMONE REGULATION. THIS GUIDE PROVIDES SIMPLE AND ACCESSIBLE TOOLS TO IMPROVE SLEEP QUALITY.

ENERGY

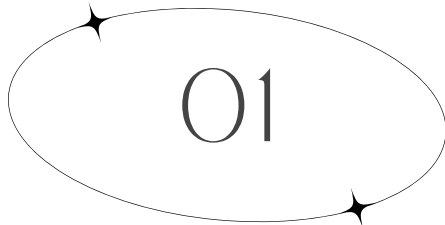
COMBAT FATIGUE WITH EFFECTIVE STRATEGIES IN THIS GUIDE. BALANCE SUGAR LEVELS, UTILIZE ANTIOXIDANTS, AND REGULATE DOPAMINE LEVELS TO IMPROVE OVERALL HEALTH AND LONGEVITY.

GUT HEALTH

THE GUT MICROBIOME PLAYS A KEY ROLE IN MAINTAINING IMMUNE FUNCTION, REGULATING METABOLISM, AND EVEN INFLUENCING MOOD AND BEHAVIOR. DISCOVER WAYS TO IMPROVE THE GUT MICROBIOME THROUGH FOOD, PROBIOTICS, PREBIOTICS, AND BOOSTING SEROTONIN LEVELS.

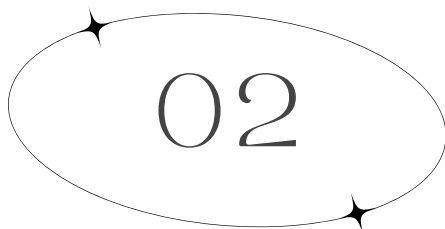


3 STEP PROCESS



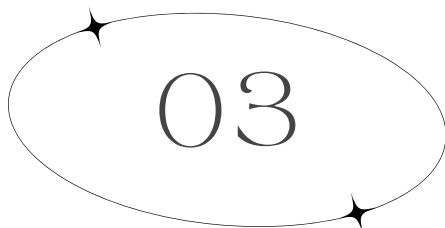
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- CONSIDER CAFFEINE-FREE OPTIONS FOR ENERGY
- ENSURE YOU GET ENOUGH VITAMIN D
- MASTER THE USAGE OF BLUE, GREEN AND RED LIGHTS
- CONSIDER SUPPLEMENTATION



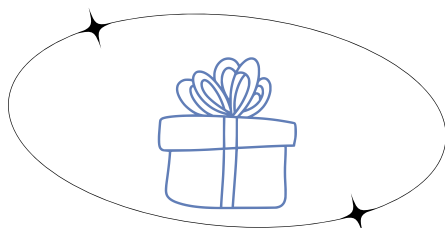
ENERGY & MOTIVATION

- BALANCING BLOOD SUGAR LEVELS WITH NUTRIENTS
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GUT HEALTH

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MONTH-LONG FEMALE BIOHACKING PROGRAM



STEP 1

SLEEP

SLEEP IS CRUCIAL FOR OVERALL HEALTH AND WELL-BEING, ESPECIALLY FOR WOMEN. IT PLAYS A SIGNIFICANT ROLE IN HORMONE REGULATION. THIS GUIDE PROVIDES SIMPLE AND ACCESSIBLE TOOLS TO IMPROVE SLEEP QUALITY.

Studies have shown that sleep plays a critical role in the regulation of hormones in women, including those involved in reproductive health. Irregular sleep patterns or lack of sleep can disrupt these hormones and negatively impact a woman's menstrual cycle, fertility, and even increase the risk of pregnancy complications.

Additionally, women who suffer from chronic sleep problems, such as insomnia or sleep apnea, are at a higher risk for developing depression, anxiety, and other mental health issues. Lack of sleep can also lead to fatigue, decreased cognitive function, and impaired immune function, all of which can impact a woman's overall health and quality of life.

Moreover, sleep is essential for the body's repair and restoration processes, including the repair of tissues, muscle growth, and the removal of toxins. Without adequate sleep, the body may struggle to perform these essential functions, leading to a variety of health problems.

It's wonderful to highlight the crucial role that sleep plays in neuroplasticity! Neuroplasticity refers to the brain's ability to change its structure and function over time. Those who regularly engage in deep meditation, for example, tend to have stronger and more myelinated brain tracts that support attention and focus.

It's important to note that neuroplasticity is also vital for memory and learning. During sleep, specific genes linked to neuroplasticity changes are activated in the hippocampus, which is a brain region involved in learning and memory recall. This is why getting quality sleep is particularly crucial for supporting neuroplasticity.

By promoting neuroplasticity through healthy sleep habits, we can enhance our ability to learn, create, and tap into our full potential. This is especially important for women, as creativity plays a crucial role in personal and professional growth. So let's prioritize our sleep and support our brains in achieving their fullest potential!



YOU MAY BE FAMILIAR WITH THE TRADITIONAL RECOMMENDATIONS FOR IMPROVING SLEEP, SUCH AS STICKING TO A CONSISTENT SLEEP SCHEDULE, CREATING A BEDTIME ROUTINE, AVOIDING STIMULATING ACTIVITIES BEFORE BED, AND LIMITING CAFFEINE AND ALCOHOL INTAKE. HOWEVER, WE HAVE SOME EXCITING BIOHACKING TOOLS THAT CAN TAKE YOUR SLEEP TO THE NEXT LEVEL.

CONSIDER CAFFEINE-FREE OPTIONS FOR ENERGY

Did you know that caffeine can provide a quick energy boost within half an hour of consumption, but it can also stay in your system for up to 10-14 hours?

The length of time caffeine stays in your body can vary based on factors such as kidney and liver function, as well as genetics. A helpful tip is to drink your last cup of coffee between 8-10 am if you want all caffeine to be out of your system by 10 pm, so you can avoid any potential sleep disruptions.

Keep in mind, fast caffeine metabolizers may be able to tolerate coffee later in the day than slow metabolizers. But if you love your coffee, don't worry - we've got some tips for you too!

- **Herbal teas** - teas such as peppermint or ginseng can help improve mental focus and increase energy levels without the caffeine crash. Or you can consider taking Ginseng 1200 mg per day as a supplement if you really lack energy.
- **Nuts and seeds** - almonds, walnuts, and pumpkin seeds are a great source of protein, healthy fats, and fiber, which can help maintain steady energy levels.
- **Breathing exercises** - taking a few deep breaths and focusing on your breathing can help reduce stress and increase energy.
- **Mushroom drinks** such as Chaga and Cordyceps. Chaga mushrooms are believed to have immune-boosting properties and are a rich source of antioxidants. They are also believed to help reduce inflammation, improve digestion, and support liver health. Cordyceps mushrooms are believed to have energy-boosting properties and are often used to help improve athletic performance and endurance.
- **Vitamins and supplements** - vitamins and supplements such as vitamin B12, iron, and magnesium can help support healthy energy levels.



- **Breathing exercises** - taking a few deep breaths and focusing on your breathing can help reduce stress and increase energy.
- **Dark chocolate** - dark chocolate contains small amounts of caffeine, but also has natural compounds like flavonoids and theobromine, which can increase mental alertness and provide a natural energy boost.
- **Cold shower** - taking a cold shower can help increase blood flow and oxygen to the body, which can improve mental clarity and energy levels.
- **Meditation or yoga** - practicing meditation or yoga can help reduce stress and increase mental focus, providing a natural energy boost.
- **Music** - listening to upbeat music or your favorite songs can help increase motivation and provide a natural energy boost.

Remember, everyone's body is different and may respond differently to certain energy-boosting techniques. Experiment with different options to find what works best for you and your body.



ENSURE YOU GET ENOUGH VITAMIN D

Did you know that vitamin D is more than just a vitamin?

It's actually a hormone precursor that can affect the function of more than 2,000 genes in our body through the vitamin D receptor (VDR). That's why having sufficient vitamin D levels is crucial for our overall health and wellbeing, including our sleep.

The best way to get vitamin D is through sun exposure for at least 15 minutes a day, especially during midday when the UVB rays are most intense. However, during winter or for those living in the North, vitamin D supplements are often needed. It's important to choose a supplement that includes vitamin K as they work together synergistically.

For women, assessing vitamin D levels is particularly important, especially during the darker months. According to Harvard Health, a vitamin D level of 20 ng/mL or higher is considered adequate.

However, a study from Cambridge University found that the lowest mortality rate was recorded when the vitamin D level in the blood was 90 nmol/L or above.

If you're pregnant or breastfeeding, it's recommended to take a 10 mcg vitamin D supplement daily throughout the year. By prioritizing our vitamin D levels, we can help ensure a good night's sleep and overall health.

MASTER THE USAGE OF BLUE, GREEN AND RED LIGHTS

Blue light waves, emitted by devices like phones, computers, and TVs, can interfere with the body's production of melatonin and disrupt circadian rhythms for up to 3 hours. Green light can also affect melatonin production for up to 1.5 hours.

To prevent this disruption, try the following methods:

- Adjust the computer display for red tones (using software like f.lux)
- Use a blue light filter or night mode on your phone (such as the Twilight app)
- Wear blue light blocking glasses for 3 hours before bedtime
- Use red lights, salt lamps, or dim lighting for 2-3 hours before bed
- Install a smart lighting system in your home (such as Phillips Hue)
- Get red light exposure in the evening

Frequent exposure to red light (below 3000 K, over 850 nm wavelength) in the evening can improve melatonin production over time. In fact, one study found that 30 minutes of daily red light exposure over a period of 14 days increased serum melatonin levels and improved sleep in female athletes.

There are several ways to get red light:

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- Install red light bulbs: You can purchase red light bulbs for your lamps and light fixtures.
- Use a red light therapy device: There are various red light therapy devices available in the market that emit red light.
- Use a red light therapy panel: You can use a red light therapy panel to get a wider coverage of red light.
- Get sunlight: The sun emits red light, and getting sunlight in the morning or evening can help improve melatonin production.
- Use a red light therapy app: There are some apps available that use the flash on your phone to emit red light.



CONSIDER SUPPLEMENTATION

Supplements and nutrients can help promote a good night's sleep by increasing the production of sleep-hormone melatonin or relaxing the body through increased neurotransmitter GABA.

Some of these supplements and foods include:

- **Tryptophan-containing foods**, such as banana, pumpkin seeds, eggs, nuts, whole grains, white fish, and avocado, which are precursors to melatonin and support circadian rhythm and sleepiness.
- **L-Tryptophan supplements**, which increase brain serotonin and melatonin levels, and can be taken in doses of 200-3000 mg two hours before bedtime.
- **Kiwi fruit**, which contains serotonin precursors and antioxidants that lead to substantial improvements in sleep quantity and quality when eaten an hour before bed.
- **Magnesium supplements**, which promote sleep-related hormonal balance and deep sleep, and can be taken in doses of 300-500 mg an hour before bedtime. The best-absorbed forms of magnesium are glycinate, taurate, malate, citrate, chloride, lactate, and aspartate.
- **Glycine supplements**, which promote relaxation and can improve sleep quality, especially for those who have poor sleep quality.
- **Taurine supplements**, which support relaxation and decrease stress and anxiety by affecting the GABAergic neurotransmitter system.
- **Valeriana supplements**, which contain valeric acid, isovaleric acid, and antioxidants that increase GABAergic activity in the brain.
- **Reishi mushroom tincture supplements**, which have a sleep-inducing effect and have been used traditionally in Asian herbology. They can be taken in doses of up to 3 grams in the evening.
- **Ashwagandha supplements**, which promote relaxation and reduce anxiety by promoting GABAergic signaling in the brain. They can be taken in doses of 500 mg an hour before bedtime.
- **L-Theanine supplements**, which promote relaxation and increase alpha activity in the brain, a slow-wave activity that naturally occurs when you shift from the wakeful state into sleep. They can be taken in doses of 50-200 mg before bedtime.

It is important to ensure adequate intake of precursors of melatonin, such as L-tryptophan, folate, vitamin C, vitamin B6, and zinc. While supplementing with melatonin can have a strong sleep-inducing effect, it is recommended to optimize melatonin production naturally before taking the supplement. This can be done through behavioral sleep hacks or taking precursor supplements.

STEP 2

ENERGY & MOTIVATION

ONE OF THE MOST COMMON CAUSES OF FATIGUE IS THE LACK OF RESTORATIVE SLEEP, WHICH IS WHY WE STARTED THIS GUIDE BY EMPHASIZING THE IMPORTANCE OF GETTING QUALITY SLEEP. HOWEVER, IT'S NOT JUST SLEEP THAT CAN CONTRIBUTE TO FATIGUE. OTHER FACTORS LIKE DIET, WORK ENVIRONMENT, AND JOB DEMANDS CAN ALSO PLAY A ROLE. WE'RE HERE TO PROVIDE YOU WITH HELPFUL TIPS AND STRATEGIES TO COMBAT FATIGUE AND INCREASE YOUR ENERGY LEVELS.

BALANCING BLOOD SUGAR LEVELS WITH NUTRIENTS

Maintaining balanced blood sugar levels is crucial for overall health and well-being. Fortunately, there are many nutrient-packed foods and lifestyle choices that can help keep our blood sugar levels in check!

- Some of the natural ingredients that are particularly effective in balancing blood sugar levels include **cinnamon, turmeric, ginger, and lemon**.
- Additionally, **bilberry and garlic** have been shown to have positive effects on blood sugar regulation.
- **Apple cider vinegar** is another great option, as it has been shown to improve insulin sensitivity and lower blood sugar levels.
- **If you're a coffee or cacao lover, you're in luck** - these delicious treats can also help regulate blood sugar levels! It's also helpful to choose foods with a low glycemic index and to follow a sugar-free diet, as high sugar intake can contribute to imbalanced blood sugar levels.
- For those who are looking to take it a step further, a **low-carb or ketogenic diet**, as well as intermittent fasting, may also be beneficial.

By incorporating these nutrients and lifestyle choices into our daily routines, we can support our bodies in maintaining balanced blood sugar levels and promoting overall health and well-being.



BOOST YOUR ENERGY NATURALLY WITH A (CYCLICAL) KETOGENIC DIET AND KETONE SUPPLEMENTS

When it comes to boosting energy levels, there are many natural options to explore, including the use of a cyclical ketogenic diet or ketone supplements!

Ketones, such as caprylic acid, provide a quick source of energy to the brain and can be taken as a supplement to increase energy levels. They can be found in sources like **MCT-oil products, coconut oil, and exogenous ketones like ketone esters and BHB salts**. The body also produces ketones naturally after fasting or following a ketogenic diet. Additionally, intermittent fasting can be helpful in increasing metabolic flexibility and balancing insulin levels.

Not only can these methods help boost energy, but they can also support weight loss and fat burn by increasing the body's reliance on fat for fuel.

ANTIOXIDANTS

Let's not forget about antioxidants, which can protect cells from inflammation and oxidative stress. These powerful nutrients can be found in **dark-colored berries and vegetables**, making it easy to incorporate into a healthy diet.

By exploring these natural methods for boosting energy and overall health, we can take control of our well-being and feel our best every day!

Antioxidants work by neutralizing free radicals, which are unstable molecules that can cause cellular damage and inflammation if left unchecked. Free radicals can contribute to many health issues, including cancer, heart disease, and aging.

Women have unique antioxidant needs due to their reproductive health and the natural aging process. Antioxidants can support reproductive health by protecting eggs from oxidative stress and maintaining hormonal balance. Additionally, as women age, their bodies become more susceptible to oxidative damage, which can lead to wrinkles, age spots, and other signs of aging. Antioxidants can help slow down the aging process and keep the skin looking youthful and radiant.

Some of the best sources of antioxidants for women include **dark-colored fruits and vegetables, such as berries, spinach, kale, and broccoli**. These foods are rich in vitamins A, C, and E, as well as other important antioxidants like carotenoids and flavonoids. Other antioxidant-rich foods include **nuts, seeds, and whole grains**.

In addition to dietary sources, women can also benefit from antioxidant supplements. Some popular antioxidant supplements include **vitamin C, vitamin E, and CoQ10**. It's important to speak with a healthcare professional before starting any new supplement regimen to ensure safety and efficacy.

By incorporating antioxidants into their diet and lifestyle, women can protect their health, support their reproductive health, and maintain a youthful appearance. So, let's start adding more colorful fruits and veggies to our plates and embrace the power of antioxidants!

SUPPORT MITOCHONDRIA

Ladies, did you know that the mitochondria in our cells are responsible for producing energy? Making some simple lifestyle changes can actually boost the number and efficiency of our mitochondria, and leave us feeling more energetic and vibrant!

There are a number of factors that have been shown to benefit our mitochondria, including **intermittent fasting and a ketogenic diet, exercise, and even exposure to cold temperatures**. Additionally, certain foods and supplements have been shown to support healthy mitochondrial function, such as **resveratrol (found in red grapes, blueberries, and cocoa), EGCG (found in green tea), and curcumin (found in turmeric)**.

By incorporating these lifestyle factors into our routines and eating a healthy diet, we can support our mitochondria and enjoy more energy and vitality in our daily lives. So why not take a walk in the cold, enjoy a cup of green tea, or add some turmeric to your meals? Your mitochondria will thank you for it!



BOOST DOPAMINE PRODUCTION

There is a growing body of research on the topic of motivation, including studies that specifically address motivation issues for women. While there is no single answer to this complex issue, there are some findings that can help shed light on the topic.

One key factor that can impact women's motivation is the way that they perceive their abilities and potential for success. Research has shown that women are more likely than men to underestimate their own abilities and to attribute their success to external factors, such as luck or help from others. This can lead to a lack of confidence and motivation to pursue challenging goals.

However, it is important to note that there are many individual factors that can impact motivation, and these can vary widely from person to person. Some women may struggle with motivation due to mental health issues such as depression or anxiety, while others may simply be experiencing burnout or fatigue from juggling multiple responsibilities. Overall, while there is no one-size-fits-all answer to motivation issues for women, it is clear that a variety of factors can come into play. By understanding these factors and working to address them, women can take steps to boost their motivation and achieve their goals.

Dopaminergic activity

Increasing dopamine levels can be a way to boost motivation. Dopamine is a neurotransmitter that is linked to feelings of pleasure, reward, and motivation. When dopamine is in balance, it can lead to several positive effects such as having motivation and inspiration to execute tasks and projects, maintaining attention, proper functioning of working memory, high energy levels, good mood, and a sense of satisfaction upon completing tasks and projects. A deficiency in dopamine can result in symptoms like depression, fatigue, poor concentration, poor working memory, muscle aches and pain, as well as problems with weight control, swallowing, and digestion. Conversely, an excess of dopamine can lead to addictions, feelings of euphoria, paranoia, and even hallucinations. Therefore, it is important to be cautious when trying to optimize your dopamine levels.

COMT gene

Genes play a role in determining baseline dopaminergic activity, and the COMT gene specifically influences dopamine-modulated cognitive performance. Those with val-phenotypes have less active dopaminergic activity and may benefit from extra stimulation during cognitive tasks, such as drinking coffee or having background noise. On the other hand, individuals with met-phenotypes naturally have more dopaminergic activity, and additional stimulation or dopamine-boosting supplements could potentially harm their focus.

Explore your dopaminergic activity with our new TruMeLabs Folate Test, which can determine your COMT gene variant.

Take advantage of our 20% discount offer to purchase this test

MOTHERLOVE2023



THIS TEST CAN HELP IF

- You were diagnosed with vitamin B deficiency and taking supplements doesn't help
- Your biological age is higher than your chronological age
- You constantly feel fatigued, weakness, or a general lack of energy
- You experience numbness or tingling in your hands or feet
- Your muscles feel weak and have slow reflexes
- You feel shaky when walking and have trouble keeping your balance
- You are frequently anemic
- You struggle with depression, low-mood, or 'brain-fog'

[LEARN MORE](#)

Research suggests that dopamine levels can be increased in a number of ways, which can in turn help to boost motivation levels in women. Here are some strategies that women can use to increase their dopamine levels and improve their motivation:

1. **Eat a healthy diet:** Certain foods can help to boost dopamine levels, such as those high in protein, such as eggs, fish, and chicken. Additionally, foods high in tyrosine, such as almonds and avocados, can also help to increase dopamine levels.
2. **Practice mindfulness:** Mindfulness practices, such as meditation or yoga, have been shown to increase dopamine levels and improve mood.
3. **Set achievable goals:** Setting and achieving goals can help to boost dopamine levels and improve motivation. Make sure to set goals that are challenging but achievable, and reward yourself when you reach them.
4. **Get enough sleep:** Sleep is important for regulating dopamine levels. Aim to get 7-8 hours of sleep each night to support healthy dopamine levels.
5. **Listen to music:** Listening to music that you enjoy can increase dopamine levels and improve mood.
6. **Seek social support:** Social support from friends and family can also help to boost dopamine levels and improve motivation. Make sure to surround yourself with people who uplift and support you.

While lifestyle changes such as exercise and a healthy diet can help boost dopamine levels, there are also some supplements that have been shown to increase dopamine levels in the brain.

Here are some supplements that may help boost dopamine levels:

1. **Tyrosine:** Tyrosine is an amino acid that is a precursor to dopamine. Taking tyrosine supplements may help increase dopamine levels in the brain.
2. **Mucuna pruriens:** Mucuna pruriens is a plant that contains L-dopa, a precursor to dopamine. Taking Mucuna pruriens supplements may help increase dopamine levels.
3. **Curcumin:** Curcumin is the active compound in turmeric, a spice that has been shown to have anti-inflammatory and neuroprotective effects. Some studies suggest that curcumin may help increase dopamine levels in the brain.

4. **Ginkgo biloba:** Ginkgo biloba is an herbal supplement that has been used for centuries to support brain health. Some studies suggest that ginkgo biloba may help increase dopamine levels in the brain.

5. **Rhodiola rosea:** Rhodiola rosea is an adaptogenic herb that has been shown to have stress-reducing effects. Some studies suggest that it may also help increase dopamine levels in the brain.

It is important to note that while these supplements may help increase dopamine levels, they should be used under the guidance of a healthcare professional.

Additionally, it is important to focus on lifestyle changes such as exercise, a healthy diet, and mindfulness practices to support healthy dopamine levels in the long-term.



STEP 3

GUT HEALTH

GUT HEALTH IS CRUCIAL FOR WOMEN'S OVERALL HEALTH AND WELL-BEING. THE GUT MICROBIOME, THE COLLECTION OF MICROORGANISMS THAT LIVE IN THE DIGESTIVE TRACT, PLAYS A KEY ROLE IN MAINTAINING IMMUNE FUNCTION, REGULATING METABOLISM, AND EVEN INFLUENCING MOOD AND BEHAVIOR.

Research has shown that gut dysbiosis, or an imbalance in the gut microbiome, is linked to a variety of health issues that disproportionately affect women, including autoimmune diseases, mental health disorders, and reproductive disorders. For example, one study found that women with polycystic ovary syndrome (PCOS) had lower levels of beneficial gut bacteria and higher levels of harmful bacteria compared to healthy controls. Another study showed that women with depression had different gut microbiome profiles compared to healthy controls. These findings highlight the importance of maintaining a healthy gut microbiome for women's health.

Constipation is a common digestive problem that affects both men and women, but it is more prevalent in women. According to a population-based study, the prevalence of constipation is higher in women (19.1%) than in men (8.8%). This gender difference in the prevalence of constipation may be due to several factors, including hormonal differences, anatomical differences, and lifestyle factors.

Hormonal changes during a woman's menstrual cycle and pregnancy can affect gut motility and increase the likelihood of constipation. Women with irritable bowel syndrome (IBS) may also experience constipation as a result of hormonal changes. In addition, anatomical differences, such as a wider pelvic angle in women, may lead to a longer transit time in the colon, increasing the risk of constipation.

Lifestyle factors, such as diet and physical activity, also play a role in constipation. Women may be more likely to follow a low-fiber diet, which can lead to constipation. In addition, women may be less likely to engage in regular physical activity, which can also contribute to constipation.

It is important for women to address constipation, as it can have negative impacts on their quality of life and overall health. Chronic constipation has been associated with an increased risk of colorectal cancer and other gastrointestinal disorders.



MICROBIOME

The microbiome plays a crucial role in gut health. The gut is an ecosystem of bacteria, fungi, and viruses that are collectively known as the gut microbiome.

The human intestinal microbiota is estimated to consist of up to 100 trillion microbial cells, which is ten times the amount of human cells. The majority of these microbes are located in the colon, which has the highest microbial density of any known ecosystem.

The role of bacteria in the gut is to ferment carbohydrates that the body would not otherwise be able to digest. The body receives an estimated 5-10% of the total energy it consumes from the fermentation products of the intestinal microbiota. This means that the gut microbiome also plays a role in energy production.

Moreover, the gut microbiome helps to break down food and produce short-chain fatty acids (SCFAs) through fermentation. SCFAs are important for the health of the intestinal mucosa and are linked to epigenetics, which is the ability to increase or silence the expression of certain genes. SCFAs also help to maintain the pH balance in the gut and provide a source of energy for colon cells.

The gut microbiome also plays a role in the development and regulation of the immune system. It interacts with the immune cells in the gut and helps to prevent colonization by pathogenic bacteria. The composition of the gut microbiome can affect immune function, and dysbiosis, or an imbalance in the gut microbiome, has been linked to several health issues, including inflammatory bowel disease, obesity, and even mental health issues.

Early microbial exposure is an important factor in the development of microbial composition. The origin of the microbiome is from the mother. The placenta and amniotic fluid contain microorganisms as well as the birth canal. Immediately after birth, the child also encounters microbes in the caregivers' skin, the surrounding area, and the mother's breast and breast milk. Cesarean section slows down the formation of anaerobic lactobacilli, bifidobacteria, and bactericidal microbiota, resulting in noticeable differences in microbiota composition well into childhood. Normal microbial development may also be disrupted by the use of substitutes instead of breast milk, antimicrobial therapy, and intensive care or prolonged hospitalization.

PROBIOTICS AND PREBIOTICS

Probiotics, whether consumed in supplements or fermented foods, are beneficial bacteria that promote gut health.

Prebiotics, on the other hand, are substances that stimulate the growth of beneficial gut bacteria by serving as their food source. The fibrous content of prebiotics is fermented by gut bacteria to produce short-chain fatty acids (SCFAs), such as acetate, propionate, and butyrate (also known as butyric acid). Butyrate plays a crucial role in maintaining the well-being of the intestinal mucosa.

SCFAs and their ability to alter gene expression are key reasons why fiber is vital to gut health. Although the recommended daily intake of fiber is 20-30 grams, most individuals in Western countries consume only around 15 grams per day.

To enhance the microbiome, individuals can try to consume

- A varied diet rich in **berries, vegetables, and other fiber-rich foods**,
- as well as foods containing **polyphenols** like dark leafy greens, berries, green tea, dark chocolate, and coffee.
- Additionally, **fermented foods** like kimchi, kefir, tempeh, and kombucha can be beneficial.
- Avoid unnecessary antibiotics
- Choosing organic foods and sourcing locally whenever possible can also be beneficial.

In case of microbiome issues, specialized healthcare professionals can test and treat accordingly.

SEROTONIN

The happy hormone serotonin can be indirectly influenced by the microbiome, as it increases levels of tryptophan, which can be converted into serotonin. This can aid in boosting motility and relieving constipation. Serotonin is also a precursor to melatonin, so the gut can impact sleep as well. Certain bacteria, such as *Lactobacillus* and *Bifidobacterium*, produce GABA, a calming neurotransmitter that may benefit individuals experiencing mild depression or anxiety, particularly after menopause. Acetylcholine, on the other hand, is essential for gut motility and the regulation of digestive enzyme release.

The gut-brain connection is noticeable in situations where we feel nervous or excited and experience "butterflies in the stomach." This happens unconsciously through the vagus nerve, which spans from the mouth to the large intestine and regulates digestion and relaxation. When the autonomic nervous system is in the sympathetic state, digestion is hindered as blood flow is redirected to the muscles, a survival mechanism that stresses the importance of avoiding food consumption during periods of stress.

The gut-brain axis highlights how emotions can affect gut health. Studies suggest that individuals who experienced adverse childhood events may have a higher risk of developing inflammatory bowel disease, and patients with ulcerative colitis may experience cognitive impairments, such as memory loss and declining executive functions. The amygdala, which is responsible for fear, can also become overactive.

There are several ways that women can optimize their serotonin levels, including:

- 1. Eating a balanced diet:** Consuming a balanced diet that is rich in complex carbohydrates, such as whole grains, fruits, and vegetables, can increase tryptophan levels in the brain, which is a precursor to serotonin.
- 2. Practicing stress-reducing techniques:** Chronic stress can deplete serotonin levels. Practicing stress-reducing techniques such as yoga, meditation, or deep breathing can help regulate serotonin levels.
- 3. Spending time in sunlight:** Sunlight exposure can increase serotonin levels in the brain. Try to spend at least 20-30 minutes outside in the sunlight each day.
- 4. Taking supplements:** Some supplements, such as omega-3 fatty acids, 5-HTP, vitamin D, and probiotics, have been shown to increase serotonin levels.

FEMALE

BIOHACKING PROGRAM

LOOKING TO TURN THE BIOHACKING GUIDE YOU'VE BEEN READING INTO
REAL-LIFE RESULTS?

CHECK OUT OUR STEP-BY-STEP PROGRAM, DESIGNED TO HELP YOU
IMPLEMENT EVERYTHING YOU'VE LEARNED.

1. Our 4-week program is designed to give you simple and actionable recommendations to improve your wellbeing in three key categories: sleep, energy and motivation, and gut health. While we provide recommendations, feel free to adjust the program to suit your taste, rhythm, and preferences. If you find other biohacks in this guide that you prefer, go ahead and use them.
2. As you move through each week, aim to maintain the routines you implemented in the previous weeks while adding new ones on top. However, if you feel overwhelmed, stick with 2-3 biohacks and make an effort to follow them throughout the month. Small, humble steps are better than not moving at all in the direction of improving your health.
3. In our guide, we recommend some supplements, but they are not included in the program, except for Vitamin D and Curcumin (Turmeric). We suggest that you visit your doctor for a blood test to determine which supplements (in the form of pills or food) you need before taking any action.
4. Our program also includes recommendations for introducing specific foods into your diet. You can find simple recipes to try at the end of this guide.

You can print out the monthly plan page and place it somewhere visible for easy reference. Additionally, we provide further information and explanations for each recommendation included in the plan.



BIOHACKING GUIDE

MONTHLY PLAN

	SLEEP	ENERGY & MOTIVATION	GUT HEALTH
<u>WEEK</u> 1	<ul style="list-style-type: none">• Start taking Vitamin D• Set an alarm for bedtime and avoid screens for at least 2 hours before bed.	<ul style="list-style-type: none">• Identify your strengths and make a plan to leverage them (Virtues in action test)	<ul style="list-style-type: none">• Incorporate fiber-rich foods into your diet.
<u>WEEK</u> 2	<ul style="list-style-type: none">• Replace coffee after 10 AM with one of the options provided or try herbal teas instead.	<ul style="list-style-type: none">• Try a slow yoga routine in the morning or listen to music.• Take a walk in nature at least once a week	<ul style="list-style-type: none">• Get daily sun exposure to boost your serotonin levels. At least 15 mins per day.
<u>WEEK</u> 3	<ul style="list-style-type: none">• Introduce foods that boost your melatonin levels to your diet.	<ul style="list-style-type: none">• Balance your blood sugar levels with nutrients like apple cider vinegar, if you don't have any stomach issues.	<ul style="list-style-type: none">• Try breathing techniques to boost your serotonin levels or focus on one of your hobbies.
<u>WEEK</u> 4	<ul style="list-style-type: none">• Try using a red light to help you fall asleep faster. Or practice short meditation.	<ul style="list-style-type: none">• Introduce turmeric to your diet.	<ul style="list-style-type: none">• Try incorporating fermented foods into your diet.



FEMALE BIOHACKING PROGRAM

For added motivation, we recommend the TruAge test bundle, which includes one test before starting the program and one after a month of following our plan. This bundle lets you track your progress and see tangible improvements in your biological age.

Take advantage of our 20% discount offer to purchase this test

MOTHERLOVE2023



[GET TESTED](#)

WE'D LOVE TO HEAR ABOUT YOUR RESULTS, SO DON'T FORGET TO
SHARE THEM WITH US!
CONTACT@TRUMELABS.COM

WEEK 1

SLEEP:

- TAKE VITAMIN D.
- SET AN ALARM FOR BEDTIME AND AVOID SCREENS FOR AT LEAST 2 HOURS BEFORE BED.

ENERGY & MOTIVATION:

- IDENTIFY YOUR STRENGTHS AND MAKE A PLAN TO LEVERAGE THEM.

GUT HEALTH:

- INCORPORATE FIBER-RICH FOODS INTO YOUR DIET.

Take Vitamin D

Natural Sources

The primary natural source of vitamin D is sunlight. When the skin is exposed to sunlight, it can produce vitamin D3. However, vitamin D can also be found in certain foods, including fatty fish (such as salmon, tuna, and mackerel), egg yolks, beef liver, and cheese. Some foods, such as milk, orange juice, and cereal, are fortified with vitamin D as well.

Supplements

Additionally, vitamin D supplements are widely available over-the-counter. It's important to note that getting adequate vitamin D through diet alone can be challenging, especially for those who don't eat fatty fish or follow a strict vegan diet.

Specificities

There are some specificities of how vitamin D is consumed and digested by the body. Vitamin D is a fat-soluble vitamin, which means it is absorbed along with dietary fat and is stored in the body's fatty tissues. However, it is important to note that the body's ability to produce and use vitamin D depends on various factors such as age, skin color, exposure to sunlight, dietary intake, and medical conditions.

Daily intake

According to the United States National Institutes of Health (NIH), the recommended dietary allowance (RDA) for vitamin D is as follows:

- Infants 0-12 months: 400-600 IU (international units) per day
- Children 1-18 years: 600-1,000 IU per day
- Adults 19-70 years: 600-800 IU per day
- Adults over 70 years: 800-1,000 IU per day

However, some experts suggest that these RDAs may not be sufficient for optimal health, and that higher doses of vitamin D may be necessary. It's also worth noting that people who have limited sun exposure or who have difficulty absorbing vitamin D may need higher doses. It's always best to consult with a healthcare provider to determine the appropriate daily intake of vitamin D for your individual needs.

How can an adult get 600-800 IU per day?

There are several food sources of vitamin D that can provide an adult with 600-800 IU per day. These include:

- Fatty fish, such as salmon, mackerel, and tuna (3 ounces of cooked fish can provide around 450-600 IU)
- Fortified dairy products, such as milk and yogurt (1 cup of fortified milk or yogurt can provide around 120 IU)
- Fortified orange juice (1 cup of fortified orange juice can provide around 100 IU)
- Fortified breakfast cereals (check the label for specific amounts)

The amount of sun exposure needed to produce vitamin D in the body varies depending on factors such as time of day, season, latitude, and skin pigmentation. As a general rule, exposing your arms, legs, and face to the sun for about 5 to 30 minutes twice per week without sunscreen during peak hours (10 a.m. to 3 p.m.) is usually enough to produce adequate vitamin D levels. However, it is important to note that excessive sun exposure can increase the risk of skin cancer, so it's important to balance sun exposure with sun protection measures. Additionally, individuals with darker skin may require more sun exposure to produce the same amount of vitamin D as someone with lighter skin.

Here are some interesting readings on Vitamin D:

1. "The Vitamin D Revolution" by Dr. Soram Khalsa: This book explains the importance of Vitamin D for overall health, and provides advice on how to optimize your levels.
2. "Vitamin D supplementation: guidelines and evidence for subclinical deficiency" by the British Medical Journal: This article reviews the latest evidence on Vitamin D supplementation, including recommended dosages and benefits.
3. "The Power of Vitamin D" by Sara Altshul, Health Magazine: <https://www.health.com/nutrition/the-power-of-vitamin-d>
4. "Vitamin D: What It Is, Why You Need It, and How to Get More of It" by Kaitlyn Berkheiser, Healthline: <https://www.healthline.com/nutrition/vitamin-d-101>
5. "The Sunshine Vitamin" by Leslie Goldman, Oprah Magazine: <https://www.oprahmag.com/life/health/a29031400/vitamin-d-benefits/>

Set an alarm for bedtime and avoid screens for at least 2 hours before bed.

Firstly, setting a regular bedtime and waking up time helps to regulate the body's natural sleep-wake cycle, also known as the circadian rhythm. This can help improve the quality and duration of sleep. Using an alarm to remind yourself to go to bed can help you establish a consistent sleep schedule.

Secondly, avoiding screens for at least 2 hours before bed can help your body wind down and prepare for sleep. The blue light emitted from electronic devices such as smartphones, tablets, and computers can suppress the production of the sleep hormone melatonin, making it harder to fall asleep. Instead of using screens, consider engaging in relaxing activities such as reading a book, taking a warm bath, or practicing relaxation techniques such as deep breathing or meditation.

By implementing these two tips, you can help improve the quality and quantity of your sleep, leading to better overall health and well-being.

Here are a few interesting readings on circadian rhythm:

1. "Why We Sleep: Unlocking the Power of Sleep and Dreams" by Matthew Walker
2. "The Circadian Code: Lose Weight, Supercharge Your Energy, and Transform Your Health from Morning to Midnight" by Satchin Panda
3. "Internal Time: Chronotypes, Social Jet Lag, and Why You're So Tired" by Till Roenneberg
4. "The Power of When: Discover Your Chronotype--and the Best Time to Eat Lunch, Ask for a Raise, Have Sex, Write a Novel, Take Your Meds, and More" by Michael Breus
5. "The Body Clock Guide to Better Health: How to Use your Body's Natural Clock to Fight Illness and Achieve Maximum Health" by Michael Smolensky and Lynne Lamberg

These books provide in-depth information on the science behind circadian rhythm, its impact on health and wellbeing, and how to optimize your daily routine to align with your natural body clock.

Identify your strengths and make a plan to leverage them

We recommend taking a Virtues in Action personality test to enhance your motivation.

Psychologists conducting a large-scale longitudinal study have identified 24 positive personality traits that can enhance wellbeing in daily life. These traits are referred to as "character strengths" and each of us has a unique set of strengths that are most typical to us. By learning to identify and utilize our strengths, we can find greater meaning and ease in everyday tasks. These strengths are also associated with positive life outcomes, such as improved mental health, happiness, self-acceptance, and work performance.

If you want to identify and leverage your personal strengths, you can follow these steps:

1. Take the Virtues in Action personality test to discover your top strengths. The test takes about 15 minutes and is available at <https://www.viacharacter.org/>.
2. Select your three highest-ranking strengths and write them down.
3. Identify one or more ways to use each strength in your daily life. For example, if your top strength is creativity, you could make a point of coming up with a new idea or solution every day.
4. Challenge yourself to express each strength in a new way for the next seven days. This could involve trying a new activity, collaborating with others, or finding a different way to approach a familiar task.

Incorporate fiber-rich foods into your diet

Fiber-rich foods are foods that contain a high amount of dietary fiber, which is an essential component of a healthy diet.

Some examples of fiber-rich foods include:

1. Fruits: Apples, berries, oranges, pears, bananas, avocados, and others.
2. Vegetables: Broccoli, cauliflower, spinach, kale, carrots, sweet potatoes, Brussels sprouts, and others.
3. Legumes: Lentils, chickpeas, black beans, kidney beans, navy beans, and others.
4. Whole grains: Oats, brown rice, quinoa, barley, buckwheat, and others.
5. Nuts and seeds: Almonds, chia seeds, flaxseeds, pumpkin seeds, and others.



Ingredients

2 ripe avocados

1/2 cup unsweetened cocoa powder

1/2 cup maple syrup or honey

1/2 cup almond milk or other plant-based milk

2 teaspoons vanilla extract

1/4 teaspoon salt

Optional toppings: berries, nuts, coconut flakes

CHOCOLATE AVOCADO PUDDING

Direction

This dessert is not only delicious, but also a good source of fiber, healthy fats, and antioxidants.

STEP 1

Cut open the avocados and scoop out the flesh into a blender or food processor. Add the cocoa powder, maple syrup or honey, almond milk, vanilla extract, and salt. Blend until the mixture is completely smooth and creamy. Taste and adjust the sweetness or salt as needed.

STEP 2

Transfer the pudding to serving dishes and chill in the refrigerator for at least 30 minutes.

STEP 3

Serve with your desired toppings, such as berries, nuts, or coconut flakes.



Ingredients

1 can of chickpeas, drained and rinsed
1 red bell pepper, sliced
1 green bell pepper, sliced
1 small onion, sliced
2 cloves garlic, minced
1 tablespoon fresh ginger, grated
1 tablespoon soy sauce
1 tablespoon sriracha sauce
1 tablespoon olive oil
Salt and pepper, to taste
Brown rice, cooked

SPICY CHICKPEA AND VEGETABLE STIR-FRY

Direction

Enjoy your high-fiber main dish!

STEP 1

Heat olive oil in a large skillet over medium-high heat. Add onion, garlic, and ginger and sauté for 2-3 minutes.

STEP 2

Add the sliced bell peppers and sauté for 5-7 minutes, or until the vegetables are tender.

STEP 3

Add the chickpeas, soy sauce, and sriracha sauce to the skillet and stir well.

STEP 4

Cook for an additional 5-7 minutes, or until the chickpeas are heated through.

STEP 5

Season with salt and pepper to taste. Serve the stir-fry over a bed of cooked brown rice.

WEEK 2

SLEEP:

- REPLACE COFFEE AFTER 10 AM WITH ONE OF THE OPTIONS PROVIDED OR TRY HERBAL TEAS INSTEAD.

ENERGY & MOTIVATION:

- TRY A SLOW YOGA ROUTINE IN THE MORNING OR LISTEN TO MUSIC.
- TAKE A WALK IN NATURE AT LEAST ONCE A WEEK.

GUT HEALTH:

- GET DAILY SUN EXPOSURE TO BOOST YOUR SEROTONIN LEVELS. AT LEAST 15 MINS PER DAY.

Replace coffee after 10 AM with one of the options provided or try herbal teas instead.

Here are some suggestions for herbal teas:

1. **Chamomile** - A classic herbal tea known for its calming properties and pleasant taste.
2. **Peppermint** - A refreshing and soothing tea that can aid digestion and ease headaches.
3. **Lemon balm** - A citrusy tea with a calming effect on the nervous system.
4. **Hibiscus** - A tart and tangy tea that can lower blood pressure and boost immunity.
5. **Ginger** - A spicy tea that can help with digestion and relieve nausea.
6. **Lavender** - A floral tea that can help reduce anxiety and promote relaxation.
7. **Rooibos** - A nutty and naturally sweet tea that is high in antioxidants.
8. **Turmeric** - A warm and slightly bitter tea that has anti-inflammatory properties.
9. **Echinacea** - A slightly bitter tea that can boost the immune system and reduce inflammation.
10. **Cinnamon** - A sweet and spicy tea that can help regulate blood sugar levels.

You can also try mixing different teas and herbs to create your own unique blends.

Or you can even get more creative and make a tea cocktail!



Ingredients

- 1 teabag of your preferred herbal tea (such as chamomile, peppermint, or ginger)
- 1 oz honey
- 1 oz bourbon (optional)
- 1/2 oz lemon juice
- 1 cinnamon stick

SIMPLE TEA COCKTAIL

Direction

Enjoy your delicious and warm tea cocktail! Happy sipping!

STEP 1

Brew the teabag in a cup of hot water for 3-5 minutes.

STEP 2

Remove the teabag and stir in the honey until dissolved.

STEP 3

Add the bourbon (optional) and lemon juice and stir to combine.

STEP 4

Serve the cocktail over ice, and garnish with a cinnamon stick.

Try a slow yoga routine in the morning

Slow yoga is a type of yoga practice that emphasizes slow, mindful movements and deep breathing. It typically involves holding poses for longer periods of time, rather than moving quickly from one pose to the next. The focus is on cultivating awareness of the body, breath, and mind, and on building strength and flexibility gradually and safely.

Slow yoga can be a great way to reduce stress, improve flexibility, and promote relaxation. It is often recommended for people who are new to yoga, or who have injuries or chronic pain, as it can be adapted to suit a wide range of fitness levels and physical abilities. Some popular types of slow yoga include Hatha, Yin, and Restorative yoga.

In addition to its physical benefits, slow yoga is also thought to have mental and emotional benefits. By promoting mindfulness and relaxation, it can help to reduce anxiety, improve mood, and enhance overall well-being.

You can find numerous tutorials on slow yoga on YouTube.

Get daily sun exposure to boost your serotonin levels. At least 15 mins per day.

Sun exposure can have a positive impact on gut health in several ways. First, vitamin D, which is produced by the body when exposed to sunlight, has been linked to improved gut health. Studies have shown that vitamin D deficiency is associated with various gastrointestinal disorders, including inflammatory bowel disease (IBD) and irritable bowel syndrome (IBS). Adequate levels of vitamin D, on the other hand, have been shown to improve gut barrier function, reduce inflammation, and modulate the gut microbiome.

In addition to vitamin D, sun exposure can also influence gut health by regulating the circadian rhythm. The circadian rhythm is the body's internal clock that regulates various physiological processes, including digestion and gut motility. Exposure to sunlight during the day helps synchronize the circadian rhythm, leading to improved digestion and overall gut health.

However, it's important to note that excessive sun exposure can have harmful effects on the skin and overall health, so it's important to balance the benefits of sun exposure with appropriate sun protection measures. It's recommended to get around 10-15 minutes of sun exposure per day, preferably in the morning or late afternoon when the sun is less intense, and to wear sunscreen and protective clothing when spending prolonged periods in the sun.

Here are some references for pop-science articles and books about gut health and serotonin:

- 1."The Mind-Gut Connection: How the Hidden Conversation Within Our Bodies Impacts Our Mood, Our Choices, and Our Overall Health" by Emeran Mayer
- 2."The Second Brain: A Groundbreaking New Understanding of Nervous Disorders of the Stomach and Intestine" by Michael Gershon
- 3."How the Bacteria in Our Gut Influences Our Minds" by Peter Andrey Smith, published in The New York Times

WEEK 3

SLEEP:

- INTRODUCE FOODS THAT BOOST YOUR MELATONIN LEVELS TO YOUR DIET.

ENERGY & MOTIVATION:

- BALANCE YOUR BLOOD SUGAR LEVELS WITH NUTRIENTS

GUT HEALTH:

- TRY BREATHING TECHNIQUES TO BOOST YOUR SEROTONIN LEVELS OR FOCUS ON ONE OF YOUR HOBBIES.

Introduce foods that boost your melatonin levels to your diet.

Melatonin is a hormone that regulates sleep and wakefulness. While melatonin supplements are widely available, there are also several foods that naturally contain melatonin or promote its production in the body. Here are some examples:

1. **Tart cherries:** Tart cherries are one of the few food sources of melatonin. Drinking tart cherry juice or eating tart cherries before bed has been shown to improve sleep quality and duration.
2. **Almonds:** Almonds are a good source of magnesium, which can promote relaxation and help you fall asleep faster. Magnesium also helps the body produce melatonin.
3. **Bananas:** Bananas are high in both magnesium and potassium, which can help relax muscles and improve sleep quality. They also contain a small amount of melatonin.
4. **Warm milk:** Warm milk contains tryptophan, an amino acid that can promote sleepiness. Tryptophan is a precursor to serotonin, which is converted to melatonin in the body.
5. **Fatty fish:** Fatty fish like salmon and tuna are high in vitamin D, which has been linked to improved sleep quality. Vitamin D can also help regulate the body's production of serotonin, which can affect melatonin levels.
6. **Kiwi:** Kiwis are high in antioxidants and serotonin, which can help improve sleep quality. Some studies have shown that eating kiwi before bed can increase sleep duration and decrease the time it takes to fall asleep.
7. **Herbal teas:** Chamomile, valerian root, and passionflower are herbs that are often used in teas to promote relaxation and improve sleep quality. While they don't contain melatonin, they can still be helpful in promoting a good night's sleep.

While the melatonin content in foods is generally low, incorporating these foods into a balanced diet can still have a positive impact on sleep quality.



Ingredients

- 1 cup of unsweetened almond milk
- 1 cup of frozen cherries
- 1 banana
- 1 tbsp of almond butter
- 1/2 tsp of cinnamon
- 1/2 tsp of vanilla extract

CHERRY ALMOND SMOOTHIE

Direction

Recipe that incorporates some of the melatonin-rich foods

STEP 1

Add all ingredients into a blender and blend until smooth.

STEP 2

Pour the smoothie into a glass and enjoy!

This recipe includes cherries which are a natural source of melatonin. Almonds also contain melatonin as well as magnesium, which can also help improve sleep quality. The combination of these ingredients along with the almond milk and banana make for a tasty and nutritious smoothie that may help promote better sleep.

Get creative and elaborate your own recipe rich in melatonin!

Balance your blood sugar levels with nutrients

Blood sugar levels can be balanced by consuming a balanced diet that includes a variety of nutrients.

Here are some nutrients that can help balance blood sugar levels:

1. **Fiber:** Consuming fiber-rich foods can help regulate blood sugar levels. Foods like fruits, vegetables, whole grains, legumes, nuts, and seeds are good sources of fiber.
2. **Protein:** Including protein in meals and snacks can slow down the absorption of carbohydrates and help prevent spikes in blood sugar levels. Good sources of protein include eggs, chicken, fish, tofu, and legumes.
3. **Healthy fats:** Healthy fats can help slow down the absorption of carbohydrates and help maintain steady blood sugar levels. Foods like avocados, nuts, seeds, and olive oil are good sources of healthy fats.
4. **Magnesium:** Magnesium plays a role in regulating blood sugar levels. Foods like leafy greens, nuts, seeds, and whole grains are good sources of magnesium.
5. **Chromium:** Chromium is a mineral that can improve insulin sensitivity and help regulate blood sugar levels. Foods like broccoli, eggs, and whole grains are good sources of chromium.



Ingredients

1 cup quinoa
1 can black beans, drained and rinsed
1 red bell pepper, diced
1 small red onion, diced
1 avocado, diced
1/4 cup chopped fresh cilantro
2 tablespoons olive oil
2 tablespoons fresh lime juice
1/4 teaspoon chili powder
Salt and pepper to taste

QUINOA AND BLACK BEAN SALAD

Direction

Recipe that incorporates these nutrients to help balance blood sugar levels

STEP 1

Rinse the quinoa thoroughly and cook according to package instructions.

STEP 2

In a large mixing bowl, combine the cooked quinoa, black beans, bell pepper, red onion, avocado, and cilantro.

STEP 3

In a separate small mixing bowl, whisk together the olive oil, lime juice, chili powder, salt, and pepper.

STEP 4

Pour the dressing over the salad and mix well. Serve chilled and enjoy!

Also we're thrilled to recommend "The Glucose Goddess Method" by Jessie Inchauspe!

This fantastic book comes with 100 delicious recipes and an interactive workbook that guides you through four easy and science-proven ways to balance your blood sugar levels. By implementing these methods, you'll experience boundless energy, fewer cravings, clearer skin, slower aging, and better sleep. The best part is, you won't have to count calories or give up your favorite foods. You'll be creating healthy habits that last a lifetime!

Try breathing techniques to boost your serotonin levels

There are several breathing techniques that can help boost your serotonin levels, which can lead to improved mood, better sleep, and reduced stress and anxiety.

Here are a few to try:

1. **Deep breathing:** Take a slow, deep breath in through your nose, filling your lungs with air, and exhale slowly through your mouth. Repeat this for a few minutes, focusing on the sensation of the air entering and leaving your body.
2. **Alternate nostril breathing:** Close your right nostril with your right thumb and inhale slowly through your left nostril. Hold your breath for a few seconds, then close your left nostril with your right index finger and exhale slowly through your right nostril. Inhale slowly through your right nostril, hold your breath, then exhale through your left nostril. Repeat this for a few minutes, alternating nostrils each time.
3. **4-7-8 breathing:** Inhale through your nose for 4 seconds, hold your breath for 7 seconds, then exhale through your mouth for 8 seconds. Repeat this cycle for a few minutes.

Here are some book recommendations on breathing techniques:

1. "Breath: The New Science of a Lost Art" by James Nestor
2. "The Healing Power of the Breath: Simple Techniques to Reduce Stress and Anxiety, Enhance Concentration, and Balance Your Emotions" by Richard P. Brown and Patricia L. Gerbarg
3. "The Wim Hof Method: Activate Your Full Human Potential" by Wim Hof

WEEK 4

SLEEP:

- TRY USING RED LIGHT TO HELP YOU FALL ASLEEP FASTER.

ENERGY & MOTIVATION:

- INTRODUCE TURMERIC TO YOUR DIET.

GUT HEALTH:

- TRY INCORPORATING FERMENTED FOODS INTO YOUR DIET.

Try using red light to help you fall asleep faster.

To improve your sleep quality, try using red lights, salt lamps, or dim indoor lighting for 2-3 hours before bed. Studies have shown that frequent exposure to red light (below 3000 K, over 850 nm wavelength) in the evening can help your body produce more melatonin over time. In fact, one study found that 30 minutes of daily red light exposure over a 14-day period increased serum melatonin levels and improved sleep in female athletes.

Red light is a type of low-level light therapy that uses red light wavelengths to penetrate the skin and stimulate cellular repair and regeneration. It has been shown to have a range of benefits for the body, including improving sleep quality, reducing inflammation and pain, boosting collagen production, and improving skin health.

Red light therapy works by stimulating the mitochondria in cells to produce more ATP (adenosine triphosphate), which is the primary energy source for cellular processes. This increased energy production can help cells repair and regenerate more quickly, leading to improved overall health and well-being.

In terms of sleep, red light exposure has been shown to improve melatonin production and regulate circadian rhythms. This is because the red light wavelengths are less disruptive to the body's natural sleep-wake cycle than other types of light, such as blue light from electronic devices.

Red light therapy can be administered using specialized light therapy devices, such as light panels or lamps, or through professional treatments at a spa or clinic. It is also possible to use red light bulbs or salt lamps in the home as a form of light therapy.

Introduce turmeric to your diet

Turmeric is a popular spice that is commonly used in Indian and Southeast Asian cuisine, and has recently gained attention for its potential health benefits.

Here are some tips on how to introduce turmeric to your diet:

1. **Start small:** If you're new to turmeric, start with a small amount and gradually increase it as your taste buds adjust. A pinch of turmeric can be added to soups, stews, or smoothies.
2. **Try turmeric tea:** Turmeric tea is a delicious way to incorporate turmeric into your diet. Simply steep turmeric root or powder in hot water, along with ginger and honey for added flavor.
3. **Use turmeric in cooking:** Turmeric is a versatile spice that can be used in a variety of dishes, from curries to roasted vegetables. Try adding turmeric to rice, quinoa, or lentil dishes for a flavorful and nutritious boost.
4. **Make a golden milk latte:** Golden milk is a popular Ayurvedic drink made with turmeric, ginger, and coconut milk. It's a comforting and warming beverage that can be enjoyed any time of day.
5. **Consider taking a turmeric supplement:** If you're not a fan of the taste of turmeric, or if you're looking for a more concentrated source of curcumin (the active compound in turmeric), consider taking a turmeric supplement. Be sure to talk to your doctor before starting any new supplements.



Ingredients

1 cup unsweetened almond milk
1 tsp turmeric
1/2 tsp cinnamon
1/2 tsp ground ginger
1/2 tsp vanilla extract
1 tsp honey or maple syrup
(optional)

GOLDEN MILK LATTE

Direction

Enjoy your delicious and nutritious golden milk latte!

STEP 1

In a small saucepan, whisk together the almond milk, turmeric, cinnamon, ginger, and vanilla extract.

STEP 2

Heat the mixture over medium heat, whisking occasionally, until it begins to simmer.

STEP 3

Reduce the heat to low and let the mixture simmer for 5-10 minutes, stirring occasionally, until it thickens slightly.

STEP 4

Remove the pan from the heat and let it cool for a few minutes.

STEP 5

Pour the mixture into a blender and blend on high speed for 20-30 seconds until it's frothy and creamy.

STEP 6

Pour the golden milk latte into a mug and sweeten with honey or maple syrup if desired.

Try incorporating fermented foods into your diet

Fermented foods are foods that have gone through a process of lacto-fermentation in which natural bacteria feed on the sugar and starch in the food, creating lactic acid. This process not only preserves the food, but also produces beneficial enzymes, vitamins, and probiotics, which are good for gut health. Some examples of fermented foods include sauerkraut, kimchi, kefir, yogurt, miso, tempeh, and kombucha.

Fermented foods have numerous beneficial effects on gut health. When consumed, they introduce a diverse range of beneficial microorganisms into the gut, including lactobacilli and bifidobacteria, which can help to rebalance and diversify the microbiome. This can improve digestion, nutrient absorption, and immune function, and may also help to alleviate symptoms of digestive disorders such as IBS and inflammatory bowel disease. Fermented foods can also increase the bioavailability of nutrients, such as vitamins and minerals, in the foods we eat.

If you're feeling adventurous and want to try making your own fermented food, we have a wonderful recipe to share with you! It's for refreshing carrots with lime and ginger - a perfect snack or addition to your salads.

On the next page you will find a recipe which is a great way to introduce fermented foods to your diet, which can promote gut health and digestion. Plus, the carrots, ginger, and lime are all rich in nutrients and antioxidants, making it a healthy and delicious addition to your meals.



Ingredients

2-3 organic carrots

5 cm knob of organic ginger

1 organic lime

Organic sea salt (20g/1 kg of carrot and ginger)

REFRESHING CARROTS WITH LIME & GINGER

Enjoy your delicious and nutritious golden milk latte!

STEP 1

If your carrots aren't organic, peel them. Otherwise, leave the skin on as it contains beneficial bacteria. Wash the carrots and cut them into very thin slices.

STEP 2

Wash the ginger and cut it into thin slices. If it's organic, you don't need to peel it.

STEP 3

Grate the lime zest, being careful not to include the bitter white part.

STEP 4

Add the carrots, ginger, and lime zest to a clean glass jar. Add the salt and enough filtered water to cover everything. Close the jar and shake it to mix everything up.

STEP 5

Leave the jar in a dark place at room temperature for at least 10 days. It should start to fizz when you open the lid.

STEP 6

Put the jar in the fridge and enjoy the fermented carrots as a snack or in salads. Drink the juice like a homemade probiotic lemonade!

PROGRAM TRACKER

TRACK YOUR PROGRESS DURING THE PROGRAM

HABIT / SELF-CARE STEP

WEEK 1

WEEK 2

WEEK 3

WEEK 4

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HEALTH, SELF-LOVE & CONFIDENCE

WISHING YOU HEALTH, SELF-LOVE, AND
CONFIDENCE ON YOUR JOURNEY TOWARDS
WELLBEING!

MAY THIS GUIDE AND PROGRAM ASSIST YOU
IN REACHING YOUR GOALS.

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