PROVEN WAYS TO BOOST IMMUNITY & PREVENT ILLNESS

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Introduction: Good Germs, Bad Germs

GERMS! Just the word can make our skin crawl. But honestly, isn't "germs" kind of a vague term? What we're really talking about is an array of microorganisms that are so teeny that we can't see them without a microscope.

But did you know that every human being is made up of 10 times more microorganisms than human cells?¹

This begs the question, "what is the difference between good germs and bad germs?"

Sure, germs can be harmful like bacteria and viruses, but microbes serve a purpose in our bodies! Indeed, microorganisms once thought to be 'bad,' are actually crucial to the functioning of our bodies!

The bacteria that live on our skin and in our guts are responsible for keeping germs from making us sick. Not only that, but bacteria break down our food so we can absorb nutrients from every meal. While they process those vitamins and minerals, they also filter out potentially harmful microbes.

One study revealed that we come into contact with a shocking amount of pretty gnarly germs just by being alive in the world today. Even some of the most unsuspecting things can be a breeding ground for bacteria. Things like ATM keypads, public railings, and even bathroom soap dispensers can be up to 40% covered in harmful bacteria at any given time.

That's why it's so important that we practice basic hygiene on an everyday basis and do our very best to boost our immune systems every way we possibly can.

However, for every extreme, there is an equal and opposite extreme. That's why acknowledging duality in the world and in ourselves is vital! Where bacteria can be harmful, we have to be exposed to them for our bodies to know how to fight them off. That seems counterintuitive, so think of this analogy: in sports, you have to scrimmage in order to know what it's like to play a real game!

There's a scrimmage going on in your body every time you go downtown on date night, meet up with friends to go hiking, or take the kids to the museum.

The data that has come out about the number of infectious microbes has led many parents to create cleaner environments for their kids. It's easy to see how that could make sense, but a study² done at Northwestern has proven that allowing children to

¹ https://www.nih.gov/news-events/news-releases/nih-human-microbiome-project-defines-normal-bacterial-makeup-body

² https://www.sciencedaily.com/releases/2009/12/091208192005.htm

interact with germs builds their immune response (and the same goes for adults³).

Exposure to potentially harmful microbes trains the body's inflammatory response. So living in hyper-sterile homes or over-doing it on the hand sanitizer actually does us a disservice! If we've never scrimmaged bad bacteria, our untrained bodies will never know how to win come game time.

Your Body's Self-Defense Team

It's important to know how the body operates because everyone is different. Some people have conditions that make them immunocompromised, some have allergies that trigger an immune response, other people have a family history of cancer, and others might have something less life-threatening, like eczema.

But regardless of each person's unique body, we operate the same way on a baseline level. So in order to create a life that is fulfilling and illness-free, we have to know how our bodies ward off sickness and make sure that we are well supported.

Your Skin

It all starts with the skin

Your first line of defense is literally skin deep. Your **Integumentary System**, made up of your skin, hair, and nails, are responsible for preventing germs from entering your body. Your skin is actually the largest organ of your body!

Your skin protects you on 3 levels:

- 1. The pH of the top layer of skin, controlled by the oil glands, can kill bacteria on the spot.
 - 2. The physical boundary of skin cells keeps the outside world out and our insides in.
- 3. The layer of mucous membrane that lines our skin flushes toxins that get caught in the mucous cells down into the digestive system where they are broken down by the gut flora.

How can we support the Integumentary System?

Strengthening the integumentary system really comes down to one simple practice: **Hygiene**.

What has been considered to be hygienic standards have changed over the years. As a society we've gone from "dirt don't hurt," to pocket hand sanitizers. And even

³ https://www.sciencedirect.com/science/article/abs/pii/S1521691817301038

though antibacterial hand soap and wipes seem like a relatively good idea, the issue is that they work like antibiotics in your gut - taking out all the good guys, as well as the bad guys.

This creates a syndrome called "dysbiosis⁴," which is just the fancy way to say that the ecosystem of your body is off kilter. When your healthy bacteria is wiped out, your skin is left defenseless and germs of all kinds have access to your body through your pores.

So how can we stay clean without wiping out our first line of defense?

There are more than 150 species of good bacteria on our hands alone. Since our hands come into contact with various infected surfaces throughout the day, we have to do something to stop us from getting those germs from our hands to our mouths.

The answer is incredibly simple. Wash your hands with regular soap and not the antibacterial⁵ kind. According to the U.S. Food and Drug Administration (FDA), there isn't enough evidence to support that anti bacterial soaps are actually more effective than regular soap and water. So you may as well save your skin microbiome!

Your Gut Flora

The next line of defense is another microbiome - your gut flora!

To make it plain, the intestines are home to literally trillions of bacteria... more than all human cells in the body. So it's only logical to assume that this ecosystem plays a huge role in your body. Researchers have proven⁶ that keeping your GI system strong and healthy is the #1 way to ensure that your immune system is strong and healthy too!

A healthy gut can process your food to get the most nutritional value out of every meal while flushing the toxins and harmful pathogens out of your body.

So let's take a quick dive into each part of your detoxification system so that you can understand the grand scheme of things.

My close friend, KP Khalsa, did an amazing full-body detox course with us last year. These points come from his Ayurvedic teachings on proper digestion.

1. Proper digestion is key. Make sure that your diet consists of gut-nourishing fibers that will feed the good bacteria in your microbiome by implementing more probiotics and fermented foods. A Ukrainian scientist named Elie Metchnikoff⁷ won the Nobel Prize in the 1800s because she was the first to realise that you can ingest live cultures of bacteria to add to the number of healthy microbes that live in your gut!

⁴ https://www.ncbi.nlm.nih.gov/pubmed/25548803?dopt=Abstract

⁵ https://www.fda.gov/consumers/consumer-updates/antibacterial-soap-you-can-skip-it-use-plain-soap-and-water

⁶ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3337124/

⁷ https://www.britannica.com/biography/Elie-Metchnikoff

- 2. Next up is your liver. Your liver⁸ performs some pretty serious functions, but the biggest task is filtering the blood of toxins that need to be flushed and hormones/neurotransmitters that need reuptake.
- 3. The kidneys⁹ are also intensely important! They're responsible for filtering your blood and processing water soluble toxins through your urine.
- 4. Finally we have your intestines. Your small and large intestine are responsible for absorbing all the nutrients from your foods before passing the rest on to be excreted from your body through your waste.

The good microbes in these organs work together to ensure that your body is getting the nutrients it needs while flushing out every potentially harmful microbe in the 6-8 hours¹⁰ it takes to process a meal.

If your digestion is off, it is easier for illness-causing bacteria to enter into your body and cause bigger problems. Now at this point, any bad germs are met by your immune system.

How does the Immune System Protect the Body?

If harmful bacteria enter into your system and aren't taken out by the skin or digestive microbiome, they are met by a series of immune responses.

- 1. Your body creates chemicals that stop bacteria and viruses from multiplying.
- 2. Special cells called macrophages eat bacteria, kill them, and alert the rest of the immune system that security has been breached.
- 3. When macrophages sound the alarm, your body increases blood flow to the infected area. There, white blood cells kill the bacteria and promote cell division to heal up any damaged tissues. This results in inflammation another important part of the immune response. Inflammation is easily misunderstood, especially because our society has made it into an enemy of sorts (and it can cause pain), but it is a sign that your immune system is on the defense.
- 4. Then if things get really bad, your body raises its temperature to burn up the bacteria.

Immune system functions can be strengthened through diet, herbal remedies and lifestyle habits! Doing everything we can do to boost immunity is absolutely key because no matter what, we come into contact with microorganisms that can cause us harm.

And sometimes, we get infected without knowing and it leads to long term illness when untreated.

⁸ https://www.medicalnewstoday.com/articles/305075#functions

⁹ https://www.kidney.org/kidneydisease/top-5-jobs-kidneys-do

¹⁰ https://www.mayoclinic.org/digestive-system/expert-answers/faq-20058340



Two words you never want to read together, right?

But I'm not talking about diseases that crouch in the dark waiting to get you... I'm talking about infections that do not yield the symptoms that we typically associate with illness.

There is a lot of talk about "carriers" right now with COVID-19 sweeping the globe. This also leads to a lot of misconceptions surrounding this topic, so let's clear some of that up.

Since we know that germs are everywhere, the likelihood of getting sick is almost a toss up. Most infections are spread through touch or are "airborne" - meaning coughs, sneezes, and spit.

What's worse is that many pathogens don't manifest symptoms right away... The immune responses I mentioned earlier sometimes don't show up until the infection has significantly progressed¹¹.

One accessible example is tuberculosis¹². Once contracted throughthe upper respiratory droplets from an infected person, it hides under the radar. It attacks your immune system slowly and lays in wait until the conditions in the body are perfect for them to multiply - that's when you start to show symptoms.

Unfortunately, regardless of what stage of infection a carrier is at, asymptomatic infections like TB are transmissible.

Which is the reason that the strength of our Immune Health should be a priority.

We should be actively working towards balance and wellness so that our bodies can not only survive illness, but thrive in our everyday lives.

Stress and the Immune System

Thriving in our everyday lives plays an intense role in our overall health.

Though it has been a hot topic in holistic wellness circles, how stress¹³ affects the immune system cannot be magnified enough.

Simply put, when you're stressed, your body turns off its defense system in order to conserve energy and keep your heart pumping and lungs breathing - which is

¹³ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC 1361287/

appropriate when there's a lion chasing you or you're in a car accident.

But if you're keyed-up on a regular basis, that stress wears on your body and makes you more susceptible to illness. This happens because your body thinks it's in danger and signals your endocrine system to release hormones that heighten our senses so you can survive. But if you're not in a truly dangerous situation, stress increases the body's cortisol levels, slows the body's immune response to infectious microbes, and stops it from repairing damaged tissues entirely.

In the 80's, scientists at the Ohio State University College of Medicine studied¹⁴ medical students' stress-to-immune system axis and found that their immunity weakened every year when the main perceived source of stress was taking exams. After studying, the students' blood was tested and found that they had lower levels of "natural killer cells" and their immune boosting cells were weakened severely.

There are over 300 studies that have proven the idea that stress adds to immune problems.

So in addition to the dietary changes and herbal remedies that immediately come to mind when you think about immune health, make sure you check in with yourself and see where you can reduce stress.



At the end of the day, no one knows your body better than you do. Remember, your body isn't like a car - you can't simply take it to a mechanic to fix it.

That's where this book comes in. We provide 15 different Ways to take your healing into your own hands.

We cover 4 basic categories:

- 1. Herbal Allies for the Immune System
- 2. Science-Based Stress Relief
- 3. 'Alternative' Medicines
- 4. Dietary Support

Think of this as a guide to all-natural and easy ways to support yourself and your family - each and every one of them **proven** by science.

¹⁴ https://www.apa.org/research/action/immune

Part 1: Herbal Allies for the Immune System

#1 Herbs for Immune Health

Right out of the gate, the first thing we should discuss is herbal support. There is a lot of debate about whether or not herbs can (or should) be used for immunity because of the rising number of immune disorders, such as thyroid issues.

So before we even dive in, it's incredibly important that you communicate with your health team about what holistic alternatives and healing remedies you are implementing. That being said, the 3 herbs we're diving into are considered to be immunomodulators - meaning they neither boost nor weaken immune function. They work to bring your immune system into balance.

eEchinacea (Echinacea purpurea / angustifolia / pallida)

This flower, also known as Coneflower, has gotten really popular lately. It's possibility for immune healing is virtually endless. Not only does it support the overall system, it is incredibly helpful for symptoms of infection.

Here's why!

Echinacea stimulates your body's bacteria-fighting cells¹⁵.

An <u>analysis</u> of several studies concluded that echinacea lowers the risk of respiratory infection by modulating immune cells when necessary in order to fight bacteria and viruses and bring down inflammation.

Echinacea petals and leaves are used to make delicious teas, while their roots are made into more potent tinctures.

To prevent illness, you can have 1 cup of tea daily. When currently ill, you can take echinacea tincture 1-3 times per day.

Astragalus (Astragalus Membranaceus)

This Traditional Chinese Medicine herb is important to the immune system for 2

https://www.researchgate.net/publication/11222165_Echinacea_stimulates_macrophage_function_in_th e_lung_and_spleen_of_normal_rats

reasons:

- 1. It is an immunomodulator.
- 2. It is an adaptogen.

Research¹⁶ shows Astragalus root increases immune cells development and calls the existing T-cell and natural killer cells to attention.

As an <u>adaptogen</u>, astragalus works with two intense systems: immune-neuro-endocrine system and the hypothalamic-pituitary-adrenal axis. These two systems essentially help regulate the body's response to both emotional and physical stress.

Other herbs that work just like this are reishi¹⁷ and ginseng¹⁸ - so I typically recommend using them together! Together they make a tasty, woody tea that you can safely take on a daily basis.

Elderberry (Sambucus Nigra)

This is easily the most well known herbal remedy for colds and flus. It's a time tested herbal tradition that has been proven time and time again to be effective against an array of bacteria and viruses.

In one placebo-controlled, double-blind study¹⁹ some 90% of the participants that took elderberry saw a significant improvement in their acute symptoms within two days!

On top of that, during the H1N1 scare of 2009, elderberries were proven²⁰ to be effective against the virus.

The reason that elderberry is so effective is because it carries a specific protein that stops viruses from being able to infiltrate cells.

Try one of these herbs and take note of how you feel in your body. Herbs work differently than medications - they're not a "pop 1 and call me in the morning" type of medicine. It can sometimes take 2-3 weeks for you to feel the effects of the herbs. And since everyone is different, your body may take to one herb better than the other!

The most important thing is listening to your body. It knows what you need.

#2 Green Cleaning

Did you know that plant medicine comes in many forms? Not just teas, loose leaves or powders...

The ancient art of fermentation has literally re-shaped healing. With the help of some microscopic friends, plant matter is broken down and then born anew.

Humanity has been celebrating this process for eons. This is alchemy, transformative

medicine, and it's probably sitting in your kitchen cupboard right now!

Common household vinegar has roots dating back to Babylon (5000 BCE) and is still enjoyed by cultures around the world for it's incredible health-promoting benefits. From reducing blood sugar in diabetics, preventing heart disease, and just being an overall antioxidant phenom - this tart liquid also makes for one of the 'greenest,' cleanest, ecofriendly disinfectants.

According to Harvard²¹, if you're not cooking with vinegar, you're cleaning with it. The antimicrobial properties have been well-known, and ancient physicians used vinegar to protect against infectious pathogens. A special compound in all vinegars, acetic acid, has been proven to remove E. coli from surfaces, promote apoptosis, inhibit microbial growth, and even decrease blood pressure²².

Research has demonstrated that just 0.1% acetic acid can inhibit the growth of Salmonella enteritidis, Staphylococcusaureus, Bacilluscereus, and other potential disease-causing²³ microbes. The FDA requires vinegars to have at least 4% acetic acid, so the vinegar in your kitchen is strong enough.

Here is our Easy Natural Cleaning Solution:

- 1. **Grab a spray bottle**. We prefer this as a convenient way to apply the solution.
- 2. **Use a 1:1 dilution**. For example, 4 cups of water to 4 cups of white distilled vinegar.
- 3. **Freshen it up**. If you have some essential oils lying around, blend them in. We like Tea Tree, Eucalyptus, or any citrus for this application.
- 4. Shake it up and store.

For this recipe, white distilled vinegar is a wonderful option. Regardless of what kind of vinegar you select, always dilute with water. The acidity of this tart liquid can be too strong for some surfaces, and don't forget its powerful aroma.

Spray down the dirty area and wipe to spread the solution - allow this to dry naturally! Doing so gives the vinegar mixture enough moments to do its job. As a rule, vinegar alone can take care of many bugs, but not all of them.

Personally, I've used this recipe for years and years as my go-to budget-friendly, green home cleaner. Learn from my lessons and avoid spraying this on any wood furniture, and granite or marble countertops - the low pH of vinegar may damage those materials or family heirlooms.

²¹ https://www.hsph.harvard.edu/nutritionsource/food-features/vinegar/

²² https://www.researchgate.net/publication/324034570_Potential_Uses_of_Vinegar_as_a_Medicine_and_Related_in_vivo_Mechanisms

²³ https://www.researchgate.net/publication/324034570_Potential_Uses_of_Vinegar_as_a_Medicine_and_Related_in_vivo_Mechanisms

#3 Essential Oils

Key components to any home cleaning kit are essential oils.

These crucial botanical components are popping up everywhere these days. You've probably seen them infused with your favorite shampoos, lotions, and soaps as we are wising up to the fact that "fragrances" are toxic and manufacturers are hearing the demand.

So, how can these volatile oils create a harmonious home and prevent disease?

First, the simplicity of aromatherapy. We all know that having a fresh smelling home brings about an inner state of aliveness and relaxation. What is even better is that these volatile oils have microbial actions.

In fact, EOs (essential oils) have many routes to stop bacteria, fungus, viruses, and other tiny beings from wreaking havoc in our body. They do this by disrupting the cell membrane, damaging membrane proteins, increasing permeability, reducing ATP levels, and overall degrading cell integrity.²⁴

As you might expect, each EO has a specific interaction with different microbes. This is great to know, especially if you are into making your own blends.

With a little knowledge, you can take your green cleaning to the next level.

Scientists researching EOs for a novel synergistic therapy reviewed their action on different microorganisms. **Tea Tree** and **Oregano** have powerful actions upon Escherichia coli, killing and collapsing these cell lines respectively. **Eucalyptus** works for Staphylococcus epidermidis, while **Rosemary** is better for Staphylococcus aureus.²⁵

Quorum sensing (QS) is one way bacteria resist antibiotics. Which is exactly why research has been targeted to design new methods to deter this from occurring. Actually, they can signal and coordinate to form a biofilm. Think of this like a shield and invisibility cape at the same time. Yup, these microbes are extremely intelligent.

Now, researchers are looking at phytopharmaceuticals with the use of common antibiotics plus EOs ... and they are getting promising results. What they're seeing is that EOs are fantastic at breaking down bacterial membranes.

It's good to know that some EOs are caustic - so be careful not to get it directly on your skin - and other EOs may have some ill effects to pets and young children, so be sure to study up before experimenting.

Switching from Regular to Green

Making the switch to eco-friendly, natural cleaning products is a very smart move. Research has proven that workers exposed to traditional cleaning products suffer a higher incidence of upper and lower respiratory symptoms (along with bothersome skin

²⁴ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3873673/

²⁵ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3950955/

conditions) than those who use "environmentally preferable" cleaning products.²⁶

Cleaning product exposure is a known occupational hazard and in a world of increasing hyper-sterilization, could we be doing more harm than good?

#4 DIY Soapmaking

Your gut isn't the only place in your body that houses its very own ecosystem teeming with separate colonies of microflora. The term 'microbiome' actually refers to the microorganisms that live IN and ON you!

These tiny organisms are intelligent and they protect your body... because it is their home too. Microbes live on your skin and act as a barrier from potentially pathogenic critters. They also are able to communicate with your inner biome, as well as the biomes in our surrounding environment (possibly, the biome's of other people, animals, and plants too). Remember quorum sensing discussed above - this is how bacterial colonies coordinate action.

So, skin health is intimately connected to our overall health. Indeed, you can say our skin is the 'magic mirror' reflecting what is going on inside of us. This is a very ancient notion and a form of diagnostic assessment that our ancestors would use in medicine. We still use this type of evaluation today - one example is in a liver pathology known as jaundice.

We also know that our skin biome educates our immune system! Research shows that our dermal micro-defense system tags potentially harmful microbes, teaching our T cells who to target. Now, it is proven that our skin microbiome functions to prevent invasion from pathogenic microorganisms.²⁷

You might expect that the biome of your feet is different from the biome of your head. This is true! Different species inhabit various parts of your outside body, and we know this to be necessary for a healthy existence.

So, why is this so important? Well it turns out that your skin naturally has a slightly acidic pH (another measure of protection).

If you are using any skincare product with a more acidic pH, or even an alkaline topical, this can greatly disrupt the natural ecosystem that lives on you and protects you.

Thankfully, there are some common sense and easy to apply ways to promote a healthy microbiome, inside and out.

According to Dr. Kara Fitzpatrick, these tips include things like staying hydrated and eating clean foods, avoiding inflammatory foods and keeping your gut health high. But she also mentions "minimizing the use of hand sanitizers and soaps." ²⁸

She is absolutely correct - we know from our hyper focus on eliminating "bad little critters" that we have actually engendered "superbugs" that infiltrate our homes and

hospitals.

So what can you do? Make your own soap!

Synthetic chemicals, fragrances, and other toxic substances that your body does not recognize are found throughout the commercial skincare industry. Just like cooking at home is generally your best option, so is making your own hygiene products!

Soapmaking is an art humans have refined for millennia.²⁹ It involves the use of a caustic agent, called Lye. You may find this labelled as "sodium hydroxide." No worries - we'll show you how to use this safely and properly.

Lye is highly basic with an alkaline pH. This helps to turn oil into soap through a process called saponification. It does liberate some heat, so be sure to follow the directions below fully. And there is no lye remaining in the final soap bar product! You'll get soap and glycerin, which is well known for its skin rejuvenating properties.³⁰

From here, you can customize and create something special for yourself, a loved one, or a special occasion.

Equipment:

- Digital Scale (that measures volume) or measuring cups
- Thermometer
- Blender (immersion style for easier mixing)
- Gloves and Goggles
- Mixing Bowls (made of stainless steel, tempered glass or enamel)
- Mixing Spoons (made of silicone or styrene plastic)
- Soap Molds (could use silicone baking pans)

Ingredients:

- 6 oz. Distilled Water
- 2 oz. Lye (sodium hydroxide)
- -5 oz. Olive Oil
- -5 oz. Coconut Oil
- -3 oz. Shea or Cocoa Butter
- -3 oz. Sweet Almond, Sunflower, Safflower or Grapeseed Oil
- -*Optional: 1.5 tbsp of powdered herbs, flower petals, ground oatmeal

Instructions:

- 1. Protect yourself and your workspace. Make sure to secure your gloves and goggles. You may use towels or newspapers to cover your soapmaking area.
- 2. NOTE: Always add lye to water! Do not add the water to the lye, it may create a dynamic reaction. And do the next step in a well-ventilated area.

²⁹ https://blog.mountainroseherbs.com/how-to-make-herbal-soap

³⁰ https://www.sciencedaily.com/releases/2003/12/031203075525.htm

- 3. Measure out your water in a separate mixing bowl or canning jar. Be sure to add the lye slowly to the water and keep stirring. Fumes will be released from this action, so you could wear a mask, if you prefer. Once the water is 'clear' you may move on.
- 4. Place all your oils in a pot, (or place the pot in warm water) and heat up to 120F or approx 49C.
- 5. Check temperatures. Your lye is probably cooled by now. Take a reading from the thermometer. You're looking for both the oils and the lye mixture to cool to between 95F and 105F (or 35C and 41C).
- 6. Pour the oils in a mixing bowl and begin slowly pouring in the lye mix. Stir, stir, stir. Do this part by hand for approx 5 minutes, or until mixed together. Your intention is to get as much of the lye to interact with as much of the soap as you can.
- 7. Now, you can use the immersion blender to get a more homogenous mixture.
- 8. Look for trace. This is when your soap is ready. You'll know you're there when the mixture looks like vanilla pudding thick and light in color.
- 9. Add your herbs or customizations. Place some dried herbal powders or drops of essential oils now. To create your own herbal powders, take any loose herb (rose or chamomile petals, whole oatmeal or coffee) and place in a blender, grinder or mortar and pestle. Be curious and experimental!
- 10. Stir it up again, pour into your chosen molds, cover, and wrap it all up in an old towel. This keeps the mixture warm and helps to promote the saponification process.
- 11. Check in 24 hours. If still warm or soft, let it sit another 12-24 hours.
- 12. Once firm, take your soup out of the molds and let this cure in the open air for 4 weeks. Once a week, flip your bars to let it be exposed fully to the air.
- 13. Get clean naturally!

Soapmaking may seem daunting at first. No worries though - anything you do for the first time may feel a bit awkward or intimidating initially!

It's good to know that our ancestors have been doing this for a very long time, and that was before gloves, goggles, and all the amenities we enjoy today.

Know that by doing this simple task, you are ensuring the integrity of your personal ecosystem!

Part 2: Science Based Stress Relief

Since we've already looked at the effects of stress on the immune system, here are some easy ways to implement scientifically proven ways to reduce stress in your everyday life.

#5 Qigong and Meditation

Getting your body moving is easily the #1 way to boost your immune health other than sanitary preventions and dietary support.

One of my favorite ways to connect my body, mind, and spirit and release stress is through qigong. I'm passionate about it because I learned it from a monk and healer my friend, Pedram Shojai. Qigong is a time-honoured practice that has been studied³¹ and proven to be effective at boosting the immune system while quelling chronic stress.

If you're unfamiliar with qigong, it's a movement/meditation hybrid that uses gentle and deliberate movements with breathwork to connect your body, spirit, and mind. The different positions you take strengthen and stretch your muscles without the intensity of modern day circuit training. And the controlled breathing and meditation bring peace to your mind.

The interconnectedness of the mind and body cannot be stressed enough. One major field of study devoted to this is called psychoneuroimmunology which focuses on how your nervous system, your hormones, and your immune system interact with one another.

Your body has the power to modulate the immune system by regulating its natural inflammatory response and increasing the number of your natural killer cells. But they can only do this when your stress hormone levels are low enough for the body to resume its self-healing abilities.

³¹ https://www.researchgate.net/publication/329479535_Meditation_and_Immune_Function_The_Impact_of_Stress_Management_on_the_Immune_System

Meditation is an option that's a little more accessible for those who prefer (or require) a more stationary approach to mind/body connection.

Studies have proven that a simple mindfulness practice can heal parts of your brain that are affected by traumatic events. This healing process can look as simple as 20 minutes of quiet, intentional breathing every single day for at least 4 weeks.

The release of serotonin from meditaiton builds your immune system by fighting inflammation in the body.³²

#6 Emotional Freedom Techniques (EFT)

This low impact, but incredibly effective, method works to bring down stress and boost your immunity by activating the parasympathetic nervous system³³.

The parasympathetic nervous system, also known as the rest and digest part of the autonomic nervous system, boosts your immune system by modulating your hormones so that your body's healing mechanisms can get back into full swing.

One of the most popular forms of EFT is Tapping.

Tapping is a form of mindfulness meditation that involves applying rhythmic pressure on acupressure points along the meridians on your face, neck and upper torso.

Here are the basics of tapping:

- 1. Identify the situation that is causing you to stress.
- 2. Take that acknowledgement and turn it into an affirmation statement. For example, if work is stressing you out, you could say this, "Work is stressful right now. I allow myself to feel that frustration."
- 3. Then tap on each of the following points while repeating that statement. You can switch it up as needed.
 - a. Blade of your hands
 - b. Crown of your head
 - c. Third eye/inner eyebrow
 - d. Side of the eye
 - e. Cheek bones
 - f. Cupid's bow
 - g. Chin
 - h. Collarbone
 - i. Under arm

³² https://www.sciencedirect.com/science/article/pii/B9780128000502000103

³³ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4374437/

You can repeat this as many times as you wish - as long as it feels good. But the recommended number of rounds is 2-3 times.

Tapping/acupressure has been proven³⁴ to be supportive to the immune system because it encourages the production of natural killer cells that can keep our bodies free of infection.

#7 Hot/Cold Therapy

Hydrotherapy has been a part of world healing traditions for as long as humans have been around³⁵. It makes sense that something we attribute to being necessary for life to exist at all would be fundamental to medicine!

Whether through external or internal application of water, hydrotherapy can be in many forms. You may hear it called balneotherapy, water therapy, aquatic therapy, cold water immersion, hyperthermic therapy, and more. No matter the variation, the main consistency is the use of water and temperature.

Cultures across the world have known about this for quite a while. You may have heard of saunas, banyas, sweat-lodges, temazcal, hot springs, and other ways humans engage water for curative and preventive medicine.

Finally, science is proving that we've all been right about this all along!

It has been shown over and over again that hydrotherapy has positive effects on multiple systems in the body. For instance, whole body immersion (with head out) in warm water (32C or 90F) for an hour lowered heart rate by 15% and lowered blood pressure by over 10%³⁶.

Basically, science supports warm baths!

That same review showed that chronic heart failure patients were seen to have decreased levels of LDL (low density lipoprotein) along with increased levels of HDL (high density lipoprotein) after only 15 minutes!

Again, science has demonstrated that these traditional practices have medical merit. Who knew that enjoying a warm bath could improve your cholesterol level, and therefore your overall cardiovascular health status?

Now, before you go reshaping your life to spend your days in the sauna, it's good to know that a short dose a few times a week is all you need. Plus we have not even touched the benefits of cold water.

Yup, that thing we all dread when taking a shower - a surprise blast of cold water - is actually good for you!

³⁴ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3135660/

³⁵ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6479732/

³⁶ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4049052/#ref1

Without digging into the entire concept of General Adaptation, let's just say that stress is complex. In fact, we have a good form of stress that allows us to learn in school, improve our skills in any activity, and become stronger - it's called eustress.

Think of it this way - just enough challenge makes you better by pushing past your 'boundaries' but not over the edge. Too much challenge brings about diminishing results, this is called distress.

When you expose yourself to a dosed amount of **eustress**, you adapt, and ultimately function more optimally.

Cultures have used this to their advantage in building robust immune systems, capable of propelling a human beyond 'normal' or 'known' limits. In Russia, children and adults regularly go outside in knee high snow for a run. Oh yeah, they are barefoot and wearing next to nothing!

Some may find this extreme, but a person who can go outside with very little protection from the elements in the peak of winter and does this year after year and does not get sick... well they've developed extreme immunity!

Research has demonstrated that acute cold exposure acts as an immunostimulant, while repeated exposure increases activity of leukocytes and natural killer (NK) cells.³⁷

Okay, so before you jump outside in your birthday suit, let's talk about where these practices meet.

Enter Therapeutic Contrasting!

At times, it may be called something else, but if it includes "contrast" and anything to do with water for healing - we're on the same page.

The practice is deceptively simple, yet the internal exercise going on is not.

Basically, expose yourself to heat for time, then alternate to cold for time. Repeat this, and voila, you are now doing what world-class athletes have been swearing by for decades!

Contrasting uses sudden and abrupt changes in temperature to impact target tissues or the whole body. What this causes is enhancement of your capacity to tolerate dynamic shifts in the environment.³⁸

This may occur on a physiological level, though psychological performance is equally influenced.

Alternating between hot and cold stimulates vasodilation and vasoconstriction - meaning your circulation of blood and lymph improves. Imagine exercising your cardiovascular system... without movement. That is just one of the benefits of this practice.

³⁷ https://www.apa.org/monitor/2013/11/music

³⁸ https://www.painscience.com/articles/contrasting.php

Now, let's dive into the methods you can use today to benefit from this elemental medicine.

You can perform this at home, on vacation, or anywhere with access to 1) towels / sinks / tubs / buckets and 2) hot / cold water.

There are three easy ways to do this (there are more ways too if you're curious). One is by **immersion**. That means jumping in a hot tub, pool, bath, or dipping part of your body in a smaller vessel of water, like a sink or bucket. This is known to be the most effective method.

Second would be **wrapping**. Here you could soak a towel in hot water, the other in an ice bath. Then you simply wrap the area. This seems to be more effective than simply showering.

Lastly, you could use the **steam - spray - shower** method. With this, you could bring water to a boil and allow the steam to work on an area. You could spray the area with warmed or cooled water. Or you could do contract bathing, where you alternate between hot and cold.

Contrasting Pro Tips:

- 1. Begin on hot, and always end on cold! The hot water opens up the pathways in the body, while cold delivers resources back to the internal organs.
- 2. Up the intensity in each session to tolerance. That means, with your own discretion, see if you can tolerate a hotter hot and a colder cold.
- 3. For home use, think about at least 3 cycles and up to 6. That is to say, alternate hot and cold for 3-6 cycles. You can do 1-2 minutes of Hot, and 1 minute of Cold. Or start with 30 seconds of each.

Try this at home, just a couple times a week. Do it for a month and see how you feel. What is interesting is that this practice is not only used to build up a strong and adaptive immune system, but they also use this to treat acute diseases and injuries.

I've done this <u>many times</u> in the past when I've felt like I was coming down with something, and the turnaround never ceases to amaze me!

#8 Expressive Art Therapies

Science has undeniably proven that a negative mindset does reduce immune function. So much so that cancer recovery research has been directed towards methods that promote a sense of well-being.

Indeed, a whole new discipline came from this revelation to Western medicine.

Psychoneuroimmunology seeks to understand the intricate and innate connection between the mind, the nervous system, the endocrine system, and the immune system.³⁹

Another field, called Positive Psychology, has shown that optimism can correlate to higher cellular immunity, given the circumstances.⁴⁰

There are many ways we can influence ourselves into a mindset with positive emotions. What normally impairs us is our own thoughts or someone else's. We can be spell cast with words.

Forget sticks and stones, we know that words can affect our health. Why? As adults, we hold on to words, which creates tension in our bodies, or we simply choose harmful behaviors. Down the road a simple word or phrase can influence our entire lifestyle and finally, our health.

What if we could somehow bypass all the verbal triggers - voiced or internalized?

Most people may think that psychotherapy is only talk therapy. If talking through our problems was the best way to work through them - no one would be quiet.

What is now evidence-based and proven is that non-verbal psychotherapies may work better than conventional talk-based treatments.

There are practices to access the depths of your psyche and subconscious mind. This is where we may house something that continues to deteriorate our health.

We know that continuous stress impairs immune functioning. What if you have a stress-related condition but do not even know it? What if you are suffering from something you are not even aware of?

Expressive Art therapies are psychotherapies that do not include just talking. Here, therapists access memory and emotion through nonverbal and verbal techniques. Imagine a therapist, with all the training and advances since Freud, and instead of sitting on a couch, you start drumming or drawing.

Well, that's the magic of this method. Instead of being destination-oriented (absence of symptoms), it is process-oriented (root cause of the symptoms).

This is so well-researched that these therapies are considered evidence-based medicine. Meaning that the best available science, the consensus of experts and committees, plus the preference and self-reporting of patients all conclude that these are proven remedies.

Play that funky music!

Science is showing that just listening to music can enhance your immune functioning⁴¹. Upon conducting a meta-analysis of over 400 studies, researchers noted

³⁹ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2742420/

⁴⁰ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC 1948078/

⁴¹ https://www.apa.org/monitor/2013/11/music

that immunoglobulin A and natural killer cells production was boosted in the body (both responsible for dispatching viral invaders and other pathogenic microbes).

We probably all know the benefits of music. Adding the experience and guidance of a trained clinician brings music-listening up to medical-grade standards. Still, there is a lot we can do with music at home, in the car, and while working out to experience the good vibes!

Try a Prescriptive Playlist:

- 1. What journey would you like to take? Create a playlist that gets you there.
- 2. Music can be triggering so avoid anything (sound, word, tone) that is not pleasing or just makes you uncomfortable.
- 3. Without a therapist around, having a journal before / during / afterwards is helpful in processing what may come up.

Images and Immunity

Art therapy can be more in-depth than simply coloring in a mandala, but if you did just do that - you'd still be boosting your immune function! Researchers have found that positive immune responses were seen in participants who colored a mandala design.⁴²

Similar research has been organized around the knowledge that stress and immunity are inherently linked. And now scientists are looking at creative expression as a therapeutic tool.⁴³

This resonates with ancient understandings of emotion - energy in motion. At least, it ought to be. The ancestral physicians knew that stuck emotions lead to disease. They knew which emotions corresponded to what organs and areas of the body, and they would treat accordingly. Remember psychoneuroimmunology? Yeah, it took those academics a while to catch up!

If we allow emotions to flow freely, we may experience them and not be controlled by them. Sounds pretty ideal if you ask me.

#9 The Great Outdoors

Nature is our true source. Is there a more appropriate place to seek out the best medicine for our needs?

Humanity has used the healing force of nature since time immemorial. In our common, day-to-day language, we have been provided clues to caring for ourselves. I cannot count the times when I was feeling funky or low or drained, and someone reminded me to "go outside" or "take a walk and get some fresh air."

⁴² https://www.psychologytoday.com/us/blog/arts-and-health/201606/art-making-and-stress-reduction

⁴³ https://www.sciencedaily.com/releases/2016/06/160615134946.htm

a) Forest Bathing

This rite has long been practiced in Asia, at least since we've been recording history. Indigenous tribes the world over have utilized the elements of nature for medicine and actualization too.

Known as Shinrinyoku in Japan, the wealth of research insights coming from forest bathing are astounding. The natural aroma from the phytoncides of trees and other plants have been proven to restore NK cell activity and other needed immune components.⁴⁴

What are phytoncides? Aromatic, volatile compounds found in plants, like essential oils.

Get 120 minutes of nature every week, at least, for an optimized immune system, relief from depression, and better stress management.

b) Earthing

Perhaps one of the most important discoveries, or revelations, to hit the modern world has been that this earth supplies us in more ways than we know.

The surface of the earth is abundant with free electrons, or negative ions. What if these invisible subatomic particles that are fundamental to every molecule we know of were curative?

Mother earth gifts us with free energy in every moment! Simply place your bare skin to the skin of the earth and you are connected directly to that energy.

The research on earthing is undeniable. From influencing the zeta-potential of your red blood cells to prevent clots, decreasing pro-inflammatory markers in minutes, and easing pain so folks can get a good night's rest - earthing is fast becoming a household term.

Free radicals roam our bodies, stealing electrons from other molecules and disrupting their integrity. These free radicals are not biased - any molecule is a target. So what if the best electron donor we have access to is right under our feet?

That is what researchers Dr. Jim Oschman and Dr. Gaetan Chevalier assert. They have demonstrated that an electron deficiency does impact mitochondrial functioning and weakens our overall immune response⁴⁵.

How can you take advantage of this free, abundant healing resource?

Get your bare feet, your bare hands, your bare anything, on the earth. The transfer of ions is immediate! Do this anytime you are feeling run down, jet lagged, or energetic.

We suggest earthing every day, for at least 15-20 minutes.

⁴⁴ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2793341/

⁴⁵ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4378297/

#10 Nourish Your Garden

Gardening is one of the easiest ways to combine Nature therapy and Earthing!

Gardening, in and of itself, is highly therapeutic. So much so that researchers have compiled robust science to offer to policymakers as the rise of healthcare costs continue to soar⁴⁶.

Essentially, science has proved that gardening not only saves lives, it saves money!

Horticulture therapy can play an important role in treating the epidemic of lifestyle diseases we are seeing - cardiovascular disease, cognitive dysfunction, metabolic disorders, psychological conditions, and a great deal more.

See for yourself the joy of planting a seed and watching it grow. Cultivate your garden, heal yourself, help the planet...

"The single greatest lesson the garden teaches is that our relationship to the planet need not be zero-sum, and that as long as the sun still shines and people still can plan and plant, think and do, we can, if we bother to try, find ways to provide for ourselves without diminishing the world." - Michael Pollan

Part 3: Alternative Inedicines

Now, let's explore some things you can do to take it to the next level!

#11 Photobiomodulation

Photobiomodulation is a fun way of sang that light modulates biological processes. You may have heard of low-level laser therapy, photomedicine, infrared sauna, or any form of light therapy - this is all photobiomodulation, or PBM.

The science on PBM goes back to Europe almost a century ago. What research has proven is that PBM works in at least 3 ways: 1) it boosts blood Nitric Oxide (so, you'll get a boost of energy), 2) it increases ATP production (increases your energy reserves), and 3) decreases ROS, or reactive oxygen species (DNA damagers)⁴⁷.

By protecting your genetic material and your mitochondria, your immune system will be preserved, as well as the integrity of your entire body.

For immunobiology, PBM has been shown to enhance the phagocytic activity

⁴⁶ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5153451/

⁴⁷ https://www.ncbi.nlm.nih.gov/pubmed/28748217

of leukocytes⁴⁸. That is their ability to detect and dispose of foreign bodies. Meaning, shining specific light wavelengths on the body augments your innate ability to protect and repair.

What is fascinating is that Brain Photobiomodulation, where they shine light onto and into your cranium, has been producing incredible results in Parkinson's and Alzheimer's patients. In fact, researchers are saying it may be equal to or more effective than drugs.⁴⁹

Remember in the early days of school, we were introduced to the electromagnetic spectrum. On it, we saw our own visual spectrum, which was but a sliver to the whole grandeur of what is around us...

Did you know that you emit a light that you cannot even see? It's called infrared light. PBM uses these frequency bands for treatment, and many others.

You are bioelectric, biomagnetic... and also biochemical.

Without diving into electrophysiology, it is well established that your body produces electrical signals. Before a neurotransmitter is released, a hormone is secreted, biochemicals are circulated, there is an electrical signal paired with a magnetic field.

In fact, each organ and tissue has its own signature. If you've ever experienced an ECG / EKG (electrocardiogram) or EEG (electroencephalogram), you've seen this in action.

Funny that biomedicine embraces this notion for diagnostic purposes, but has <u>essentially nothing</u> to offer by way of effective treatment.

Interestingly enough, magnetic field therapy has been long approved by the FDA for nonunion bone fractures. This means that a bone is not mending properly, even with the best that allopathic medicine has to offer. Basically, in this instance, magnetic field therapy outperforms standard medical care!

Pulsed Electromagnetic Field (PEMF) therapy has been studied throughout the scientific community, mostly outside the US. By applying different magnetic fields to the body, we can move resources in the body - a magnetic field can influence the movement of ions.

PEMF has been shown to work on gene expression as it applies to inflammation - especially the reduction of inflammation.⁵⁰

Dr. William Pawluk, our friend and medical authority on magnetic field therapy, was an integrative physician before the term was coined. He provides numerous resources to those interested. From his research insights, product reviews, and video help you can find all you need on his site.

⁴⁸ https://www.jstage.jst.go.jp/article/kjm1952/42/4/42_4_180/_article

⁴⁹ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3643261/

⁵⁰ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4346366/

A note on chiropractic:

The study provided states "No credible, scientific evidence that spinal adjustment / manipulation has any clinically relevant effect on the immune system was found."

The consensus seems to be conflicting on if chiropractic or spinal manipulations are helpful for immune markers.

Part 4: Dietary Support

#12 Elimination Diet

"Inflammatory food" is a huge buzzword these days. Between anti-inflammatory diets and cleanses, the notion of reducing systemic inflammation through our food choices has become highly popular. The idea that inflammation underlies most, if not all, diseases is being distilled to the public and we are becoming more aware of how the foods we eat impact our health.

It seems silly that we need studies to tell us that foods can be helpful or harmful. We all know how to eat well, even though sometimes we choose to not do so.

But sometimes, we may not be aware that what we are eating is causing a symptom. Take dairy for example. Some folks do fine when they consume dairy products while others may experience a wide range of digestive disturbance. This may show up quickly (runny nose, phlegmy throat) or many hours after the meal (diarrhea, constipation, bloating, gas).

Now, what if you are eating something that compromises your immune system? How would you know?

Your body is always reponding to what you put in it, whether that be food, drink, or medications. The signs of inflammation can be subtle at first, occasional eczema or runny nose, slight upset stomach. These minor inconveniences can manifest as full-blown autoimmune disorders, or severe symptoms such as chronic allergies, depression, heart disease, diabetes and more.

You may be wondering what the most highly inflammatory foods are, and the answer is not always simple. There are certain foods considered to be inflammatory to most people, but there are a number of less frequently discussed triggers that can be highly individualized. Diets high in refined sugar and starch, as well as saturated and trans-fats, are understood to be the most inflammatory.⁵¹ Just as foods can contribute to inflammation, there are other foods with powerful potential to decrease inflammation and in fact heal our bodies. ⁵² The specific anti-inflammatory actions of individual foods have not been studied sufficiently to understand which foods would be best to incorporate into one's diet.

⁵¹ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2868080/

⁵² https://www.ncbi.nlm.nih.gov/pmc/articles/PMC538513/

Additionally, there are several cooking methods that can reduce inflammation. Sprouting and fermenting can reduce the presence of inflammatory compounds such as phytates and lectins found in beans and grains.

#13 Gut Healing Foods

In addition to cutting highly inflammatory processed foods out of your diet, incorporating gut-healing foods can help to repair damage done by inflammation more quickly. Some excellent choices include fermented vegetables and healthy fats such as Omega-3s.⁵³ You can get omega 3 fatty acids from flax and chia seeds, from low-mercury wild fish (if you do choose to eat fish), and from algae-based EPA and DHA supplements.

Opt for warm, cooked foods rather than salads or raw foods. From a Chinese medicine perspective, Congee is a highly beneficial gut-healing meal.

Here is our recipe for an easy, homemade congee you can make at home!

Ingredients:

- -1 cup sushi rice (or another rice of your choice)
- -4 cups vegetable broth
- -1-inch piece of ginger, diced
- -4 cloves of garlic, diced
- -1/2 cup dried shiitake mushrooms
- -1/2 cup dried mixed mushrooms (I like maitake, porcini, lion's mane)
- -2-3 baby bok choy
- -1 bunch kale (or another dark, leafy green such as chard or collard greens)

Instructions:

- 1. Soak rice for at least 2 hours, or ideally 4-6 hours. Rinse well and drain. In a large pot, add the rice, vegetable stock, ginger, and garlic. Bring to a boil, then turn the heat down and simmer with cover, stirring occasionally.
- 2. While rice is cooking, soak dried mushrooms in 4 cups of warm water. Set aside. Wash and cut the baby bok choy and kale into small pieces, removing tough central stalk. Set aside.
- 3. After 45 minutes, add the mushrooms into the congee. Add 3 cups of the mushroom soaking water to the congee and continue simmering, stirring occasionally, for another 30 minutes.
- 4. After 30 minutes, stir in the kale and baby bok choy. Continue to simmer, stirring occasionally, for another 15 minutes. If the rice grains have fully softened and absorbed most of the water, the congee is finished. If the congee is too watery, simmer uncovered until more of the water has been

⁵³ https://draxe.com/health/leaky-gut-diet-treatment/

absorbed, and if the congee is too thick you can add water.

5. Top with kimchi or another fermented vegetable for an added guthealing boost! You can also add some flavoring, such as fish sauce, toasted sesame oil, or tamari if desired.

#14 Test, Don't Guess

Testing can provide additional information to understand your unique body and any sensitivities you may have. While there are several common triggers to inflammation, such as sugar, refined wheat, and dairy, testing can help determine your own unique sensitivities and feel more at ease with your choices. You can ask your doctor about immune deficiency, autoimmune, and allergy testing to better understand any symptoms you may be experiencing. Below is a description of when each of these three tests may be appropriate.

One common form of testing is immune deficiency testing. General immune deficiency can contribute to frequent illness, infection, and even a greater propensity toward autoimmune disorders. The primary method of testing is a blood test, which can measure levels of immunoglobulin (an infection-fighting protein), immune system cells, and blood cell levels.⁵⁴

Autoimmune disorders can be very difficult to diagnose for several reasons. Many are asymptomatic or have delayed symptoms, they can manifest with common symptoms, and autoimmune disorders can also show up as co-conditions. Lab testing can also help to evaluate autoimmune disorders, whether by confirming a diagnosis, or determining the severity of the disease. This can include a number of testing components, such as blood count, metabolic panel, and other inflammatory markers. One common test is an antinuclear antibody (ANA) test, which can find high levels of autoantibodies, usually indicating an autoimmune condition.

There are an extensive number of allergy tests available, for a range of costs, that can help identify potential allergy triggers for individuals. Skin allergy tests can cost between \$60 and \$300, while blood tests cost up to \$1,000.55 Along with your medical history, these tests can help to identify allergies to foods, medicines, pollen, dust, molds and more.

Here are some sources to get your own testing done:

Ulta Labs
WellnessFX
Great Plains
Laboratory Cyrex Labs

⁵⁴ https://www.mayoclinic.org/diseases-conditions/primary-immunodeficiency/diagnosis-treatment/drc-20376910

⁵⁵ https://www.choosingwisely.org/patient-resources/allergy-tests/

#15 Supplements

From multivitamins to trace minerals, herbal supplements and more, it can be confusing to decipher which ones may be right for you. There are a huge variety of supplements, so it's important to do your research and understand where your supplement is made, the quality of ingredients, and the efficacy of that supplement.

High-quality supplements can be helpful for us to get the vitamins and minerals we need that we are unable to get from our diet. For various reasons, including poor soil quality, industrialized farming, processing, and storage and transportation of our food, even if your diet is good it can be hard to get everything you need from food alone.

Some common deficiencies include vitamin D, omega-3 fats, folate, zinc, magnesium, and iron.

A few good places to start with supplementation can be a high-quality, absorbable multivitamin, vitamin D, probiotics, and fish oil.⁵⁶ With all supplements, it's important to remember that they are not a magic pill: you still need to eat a varied and balanced diet.

One Harvard study found taking a multivitamin did not have any effect in reducing the risk of cardiovascular disease, but that it did have an 8% increase in preventing new cancers from developing.⁵⁷

The history of vitamins is interesting, as it was formed as a therapeutic treatment for scurvy. So, the inception of vitamins was for medicine! Now, studies reveal how powerful these micronutrients can be for a strong immune system.

Research proves that Vitamin D, Vitamin A, and Vitamin C are incredible immunomodulators. Vitamin D3 and Vitamin A enhances our adaptive immunity (very specialized)⁵⁸, while Vitamin C supports both our innate and adaptive immunity and has antiviral actions.⁵⁹

Though there is very little regulation of the supplement industry, the National Institutes of Health did establish the Office of Dietary Supplements⁶⁰ where you can find fact sheets regarding the most common, and not-so-common, products on the market.

Bottomline: Find a company whose values align with yours, and where the standards meet your requirements for clean, pure, effective medicine.

⁵⁶ https://drhyman.com/blog/2015/04/02/do-you-need-supplements/

⁵⁷ https://hms.harvard.edu/sites/default/files/assets/Sites/Longwood_Seminars/Nutrition_3_5_13.pdf

⁵⁸ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2906676/

⁵⁹ https://www.ncbi.nlm.nih.gov/pubmed/29099763

⁶⁰ https://ods.od.nih.gov

Conclusion

We hope you have enjoyed our top 15 ways to improve your immunity and boost your natural resilience!

Pick out 2 or 3 modalities that speak to you and give them a go. Be gentle with yourself and only do what feels good for you. We desire you to walk out from a self-care session feeling rejuvenated and enlivened.

You have a sovereign birthright to good health. And all the resources we need for good health have been provided in the home we come from.

We are of this earth and created from nature. It stands to reason that the truest, purest medicine would be from our origins, the source of our existence.

Self-care involves radical self-love. No one knows you like you know yourself. Therefore, no one can love you the way you can love yourself. Celebrate your being and open up your awareness by trying out some of the practical and accessible tips we provided in this guide.

What is really proven is that we have a lot more to learn...

Stay curious.