



EPIGENETIC NUTRITION AND YOUR HEALTH: A POWERFUL WAY TO TAKE CONTROL OF YOUR “GENETIC FATE”



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INTRODUCTION: YOU ARE IN CONTROL

Over the past several decades, news about how your genetics “hardwire” you to be more or less predisposed to cancer, Alzheimer’s, heart disease, diabetes, obesity, early aging and more has become commonplace. Along with it the belief that you’re in large part “doomed to your DNA” has become widespread.

However, there is some other very important and very good news you need to know: a wide and fast-growing body of research is now showing that regardless of your genetic makeup, you have the ability – a tremendous ability – to shift your “gene expression” through nutrition and other means.

This is what the science of “epigenetics” is all about, and the bottom-line is that even when it comes to your genetics, **your actions – your knowledge and the choices you make for yourself based on it – play an extreme role in avoiding and beating disease, looking and feeling amazing no matter what your age, and living a very long life.**

You are in control of your health, even in the genetic sense.

That is the driving force behind everything we do for you here at Organixx, from our [free weekly e-newsletter](#) providing you the most in-depth and useful health and nutrition insights, to our [complete line-up of the world’s purest, most effective supplements](#) based on the epigenetic principles, such as our Turmeric 3D and our Bone Broth Protein.

And because epigenetics is perhaps THE most powerful new knowledge you need if you want to avoid and beat disease, live long, and look and feel amazing into your 70s and beyond, we’ve pulled together this important free report for you. Take the time to read it – this info can make a world of difference in your life – and then “pay it forward” by passing this report on to others you care about.

Enjoy!

ARE WE DOOMED TO LIVE OUT OUR DNA INHERITANCE?

There has been much discovered about the genome and our DNA in recent decades. These days, getting a printout of your own specific genetic markers and your genetic “predisposal” to certain disease just takes some saliva and a credit card.

It would be easy to see such information and feel helpless. It would be easy to look at your family history, too, and feel fated. *If Cancer is in my family, I must almost certainly be at a high risk too? If Mom has Alzheimer's, what does that mean for me? For my kids? Dad had anxiety and depression, it's no wonder I do as well.*

We won't get into the power of belief, and what “believing” you'll get certain afflictions may or may not do to your body, but we will say emphatically: **Your genes alone do not determine your future health and wellness.**

This can be said with certainty, because along with the incredible findings on the genome and the unravelling of DNA, has come the discovery and increased research into the *epigenome*.

The epigenome is part of your genetic structure, but – and this is the kicker – unlike your DNA/genetic code, its characteristics are not set in stone. They are changeable. They can be directly influenced to turn ON or turn OFF genetic markers. **That is empowering news.** That is the growing study and practice of epigenetics.

WHAT IS EPIGENETICS?

Here's the dictionary definition of epigenetics:

ep·i·ge·net·ic
noun

THE STUDY OF CHANGES
IN ORGANISMS CAUSED
BY MODIFICATION OF GENE
EXPRESSION RATHER
THAN ALTERATION OF
THE GENETIC CODE ITSELF.¹

The scientific definition of epigenetics is: *“As an organism grows and develops, carefully orchestrated chemical reactions activate and deactivate parts of the genome at strategic times and in specific locations. Epigenetics is the study of these chemical reactions and the factors that influence them.”*²

But let’s break that down even further...

Your DNA contains all the building blocks to your body. However, there is more. Your DNA wraps around proteins called histones. Both DNA and histones have chemical “tags.” Some of these tags are present at gestation and through to birth, determined by your parents’ DNA.

This second layer of structure, the histones and chemical tags on the DNA, is called the epigenome. The physical structure of the genome itself is shaped by the epigenome.

The epigenome can tightly wrap genes up in little bundles so that they are inactive, or they can unwrap and make them accessible.

So, if you have a certain genetic marker, it can be made accessible (active), or inaccessible (inactive), depending on the chemical reactions of the epigenome.

These chemical reactions depend on factors independent of your DNA. Namely, your environment. That is why the gene expression (activity) and tags present when you are conceived can change even while in the womb.

You see, the environment of a fetus directly affects the gene activity. Factors such as the mother’s diet and stress levels can change the behavior of a fetus’ genes. Likewise, once a baby is born, the baby’s environment continues to affect the epigenome. This became very evident while studying twins.

Twins have identical DNA. In studies, their epigenomes at age three are nearly identical as well. However, fast forward 50 years and the epigenomes of twins are drastically different. The genetic expression (which genes are doing what) is not the same.³

What does this tell you?

This tells you that the life and experiences each twin had – their diet, their stress levels, their physical activity, their happiness, exposure to toxins, their differing lives... all these things had unique effects on that one person’s body. **It wasn’t genes that determined what happened in their body; which genes were active, and which were not. It was their epigenomes.**

WHY DOES EPIGENETIC RESEARCH MATTER?

Research on epigenetics has exploded in recent years. There have already been tens of thousands of studies and reviews published, from around the world.⁴ Millions upon millions of dollars are being funneled into this research arena. The FDA, universities, even whole countries have active short and long-term projects looking at the correlation between epigenetics and virtually every disease or issue you can think of:

Cancer, diabetes, aging, heart disease, mental illness, HIV, addiction, Alzheimer's, Parkinson's autoimmune diseases, arthritis, obesity, etc.

Scientists are also closely examining the specific effects of various compounds, medicines, plants, toxins, and lifestyle factors as they relate to individual diseases and to the epigenome (as it is expressed in health and wellness) as a whole.⁵

Why does this matter?

It matters because if reputable institutions and even industry are pouring money into something, you can bet significant, promising findings have been noted in the realm of disease. If not, the funding would soon dry up.

It matters because instead of guessing at what may or may not help the outcome of proactive changes to your lifestyle and diet, **we're learning precisely what factors positively influence your epigenetics.**

The epigenome never stops responding to outside influence, from birth into old age. "Epigenetic changes can be reversed"^{6,7} and, more importantly, "rates of epimutation can be much faster."⁸

Epigenetics matters because **it means you are in the driver's seat more than you may ever have suspected.**

Epigenetics and the Genes You Inherit (and Pass On)

Scientists used to think that all hereditary information was passed from parent to child through the DNA alone. While more study needs to be done, epigenetic research has indicated that **not only can you change the behavior of your genes by influencing the epigenome, but that these changes are passed on to your children, and future generations.**^{9, 10, 11}

Therefore, both positive and negative changes to your epigenetics not only affect your own health and wellness, but that of your offspring, and potentially their kids, and so on.

That news may be intimidating. However, it can also be regarded as empowering. But before getting into some ways you can take charge of your health and wellness by igniting changes in your own epigenetic experience, let's look at some more important and interesting facts that illustrate the power and importance of the epigenome.

Epigenome Abnormality and Methylation

A word that comes up repeatedly in epigenetics is “methylation,” a chemical process where nutrients from food are extracted and transformed. They “enter metabolic pathways where they are manipulated, modified, and molded into molecules the body can use.”¹² One of the key pathways is the creation of methyl groups, which play an important role in epigenetic activity.

The fundamental point to understand with regards to methylation is that there is overwhelming evidence that the levels of methyl in a cell directly influences its activity. With adequate methyl signals, genes are turned off.

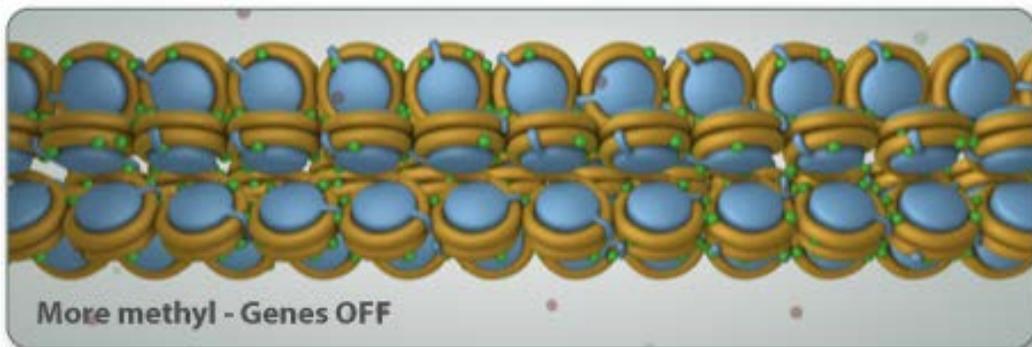


Photo Credit: <http://learn.genetics.utah.edu/content/epigenetics/control/images/Tight.jpg>

With decreased levels of methyl, genes are turned on.

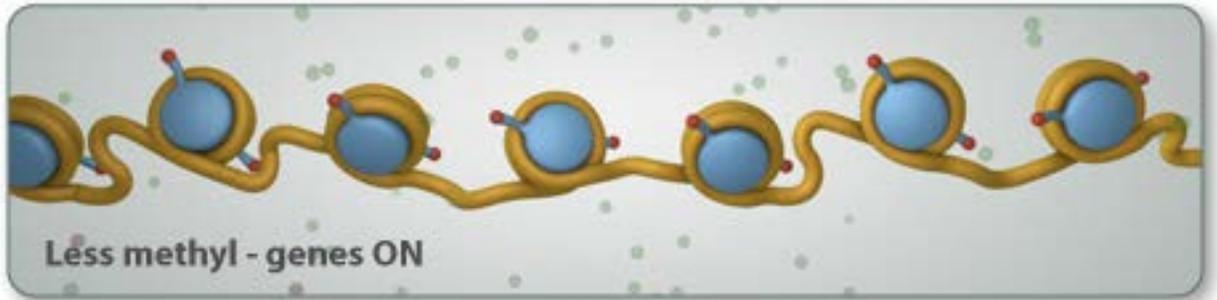


Photo Credit: <http://learn.genetics.utah.edu/content/epigenetics/control/images/Loose.jpg>

One of the most vivid illustrations of this is seen in a study of the “agouti” gene in mice.

We mammals all have a gene called agouti. A mouse with a properly methylated agouti gene is “normal.” It’s brown, healthy weight, and at lower risk of disease.

On the other hand, a mouse of the same age which has an unmethylated agouti gene is yellow, obese, and likely to have both cancer and diabetes. The second mouse has an “epigenetic mutation.”¹³

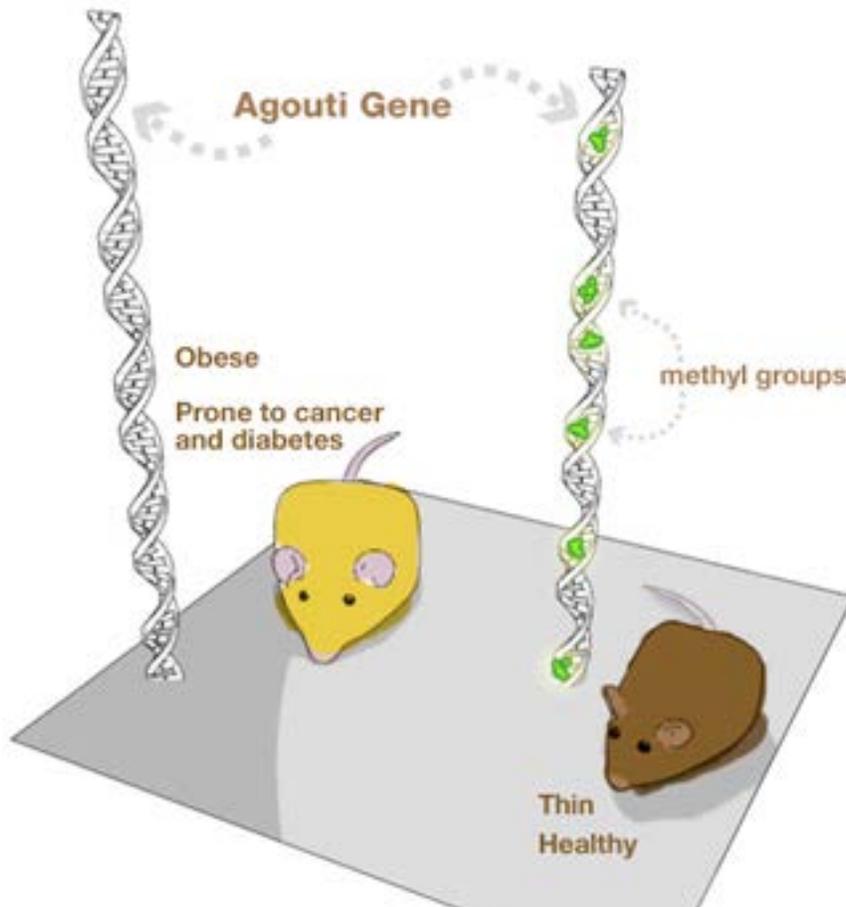


Photo Credit: <http://learn.genetics.utah.edu/content/epigenetics/nutrition/images/agouti.jpg>

While much of methylation is attributed to diet, other factors come into play, like toxins that enter the body. The chemical Bisphenol A (BPA) is one example.

You've probably heard of BPA, if you are at all health conscious. This compound is used to make plastic, and is present in a vast array of products.

Due to controversy over the safety of BPA to consumers, many manufacturers have stopped using BPA. However, it is still very present in our daily lives. This is significant because research indicates the methylation of the agouti gene is reduced when BPA is present. A 2007 study showed that mouse offspring are more likely to be yellow and obese when fed BPA. Unchecked, the chemical creates epigenomic abnormalities that are passed down to the mice's children.¹⁴

The upside of this research is that when the BPA-fed parents were fed foods rich in methyl, the abnormality disappeared in their offspring.¹⁵ Further evidence that 1) methylation is a key factor in epigenetics and gene expression, and 2) that even with toxins directly introduced into the environment, the negative effects of these can be influenced with certain choices (in this case diet).

These Two Mice are Genetically Identical and the Same Age



While pregnant, both of their mothers were fed Bisphenol A (BPA) but **DIFFERENT DIETS:**

The mother of this mouse received a **normal mouse diet**

The mother of this mouse received a diet **supplemented** with choline, folic acid, betaine and vitamin B12

Photo Credit: <http://learn.genetics.utah.edu/content/epigenetics/nutrition/images/mice.jpg>

WHAT DOES EPIGENETICS MEAN FOR YOUR OWN HEALTH & WELLNESS?

Epigenetics & Cancer

According to Japan's National Cancer Center Research Institute, "epigenetic mechanisms are one of the five most important considerations in the cancer field, and they account for one-third to one-half of known genetic alterations."¹⁶

Cancer cells of all types have defined epigenetic abnormalities,¹⁷ with DNA methylation [the most widely understood and most easily studied] first being observed in human cancer, in 1983.¹⁹

In fact, the disruption to patterns of DNA methylation is considered "a hallmark of cancer."¹⁹

Cancers that are being associated with epigenetic mutations or abnormalities in scientific studies include, but are not limited to: breast, bladder, prostate, skin, lung, colorectal, and, leukemia.^{20, 21, 22, 23}

While the processes involved are naturally complex and include a variety of factors inside and outside of the cell, notably, "cancer cells have been shown to be hypomethylated overall when compared to normal cells"²⁴ ("Hypo" indicating low levels of methylation.)

In general, well methylated cells are not susceptible to cancer and cell overgrowth (as well as the lack of programmed cell death and DNA repair abilities usually observed in cancer). In contrast, lower levels of methyl are linked to chromosome instability, and the expression of genes promoting cellular overgrowth.²⁵

However, genes can be active and others inactive, even in the same cell. Seemingly contrary to the above, high levels of methyl can have adverse, or potentially adverse, effects. For example, a gene you would not want to shut off is a tumor suppressor cell.²⁶

Yet "hyper"methylation (too much methylation) has been observed in genes "involved in tumor cell invasion, cell cycle control, DNA repair and other processes where silencing would lead to the spread of cancer."²⁷

There is an upside in this apparent contradiction found in the research being conducted to see if hypermethylation markers (which are relatively easy to observe) can act as early diagnostic indicators for certain types of cancer.²⁸

Bottom line take-away for you?

Cancer is indeed affected by epigenetics.²⁹ It is also reasonable to suggest that the success of the natural treatments encouraged at sites such as The Truth About Cancer are due to the effects made on a person's epigenome. More on this later.^{30, 31}

Epigenetics & Other Health Issues

It's not just cancer that is connected to your epigenome. A "wide variety of illnesses, behaviors, and other health indicators already have some level of evidence linking them with epigenetic mechanisms."³² These include neurobehavioral, respiratory, reproductive, cardiovascular, and autoimmune illnesses, as well as cognitive dysfunction.

The epigenetics of all the above are being studied, including Diabetes, heart disease, lupus, Alzheimer's, Parkinson's, arthritis, Rheumatoid Arthritis (RA), HIV, asthma, COPD, addiction, suicide, mental illness, and many more.^{33, 34, 35}

It probably won't shock you to see common issues such as heart disease, Diabetes, Alzheimer's, irritable bowel (IBS), aging, or arthritis on the list of health problems being studied for links to epigenetics. However, **behavioral aspects, such as suicide or mental illness may come as a surprise.**

In fact, a "scan of epigenetic markers in the brain identified about 60 genes that are different between psychiatric patients and healthy people. Many of these genes code for proteins that are important for signaling between brain cells."³⁶

Consider, too, defined methyl abnormalities have been found in the RNA and rRNA genes of those that commit suicide.³⁶

Even long term memory is connected to your epigenome. A 2009 review reported "environmental enrichment has long been known to have positive effects on memory capacity, and recent studies have suggested that these effects are at least partly due to the recruitment of epigenetic mechanisms by environmental enrichment."³⁷

Once again, the fundamental point is this: **you are not doomed to live out the map of your DNA alone.** Epigenetics is showing that you can directly influence your health and overall wellness by influencing your epigenome.

But how? What precisely are these "factors" that can affect your health and wellbeing, even mental health, so profoundly?



Factors that Affect the Epigenome

A 2006 article published in *Environ Health Prospect* answers this question in part, saying, “known or suspected drivers behind epigenetic processes include many agents, including heavy metals, pesticides, diesel exhaust, tobacco smoke, polycyclic aromatic hydrocarbons, hormones, radioactivity, viruses, bacteria, and basic nutrients.”^{38, 39}

It doesn't stop there. Drug use, child abuse, trauma, physical activity (or lack thereof), social interactions... the list goes on.

To quote a 2014 study on understanding and treating human disease: “In the last two decades we have witnessed a paradigm shift in our understanding of cells so radical that it has rewritten the rules of biology.”⁴⁰

This is empowering information, because you have tremendous control of your environment.

You can limit your exposure to toxins and heavy metals, make defined lifestyle choices, eat healthy, organic foods, detoxify, exercise, drink pure water, meditate, laugh more, reduce inflammation, and a host of other actions.^{41, 42} This includes utilizing high quality natural remedies and supplements.



POSITIVELY INFLUENCING YOUR EPIGENETICS FOR OPTIMUM HEALTH

One of the beautiful aspects of this global surge in epigenetic and disease research is the increased study into natural treatments and medicines. Credibility is finally being given to traditions and substances that have been present in the most ancient of medicinal arsenals, including the ancient Egyptians, and both Ayurveda and Chinese medicine, for thousands of years.^{43, 44}

To quote one study, “Given the known limitations in Western medicine to treat a broad range of inflammatory related illness as well as the emergence of antibiotic resistance, there is a renewed interest in complementary and alternative medicines (CAMs) to achieve these means.”⁴⁵

Some of the most exciting research into these ancient practices is in the realm of specific supplements you can use to support your biology in a variety of ways to achieve better health and vibrant longevity, including positive influence over your epigenetics.

Areas being studied include:

- **reducing inflammation**
- **increasing bioavailability of nutrients**
- **aiding absorption of nutrients**
- **balancing hormone levels**
- **relieving stress**
- **assisting with ridding the body of toxins and harmful organisms**
- **allowing healthy intestinal flora balance**
- **aiding bowel repair**
- **reversing mineral and vitamin deficiencies**
- **acting as antibacterial and antiviral agents**
- **improving immunity**
- **improving cognitive function**
- **providing anti-cancer and anti-aging benefits**

SUPPLEMENTING FOR ULTIMATE HEALTH

Substances and supplements of note that are being studied for efficacy in supporting long-term health and wellness, include:

1. Fulvic and humic acid
2. Mushrooms (*reishi, shiitake, and others*)
3. Shilajit
4. Moringa⁴⁷
5. Enzymes
6. Vitamin D
7. Ashwagandha
8. Probiotics
9. St. John's Wort
10. Curcumin (*Turmeric*)
11. Anaerobes
12. Retinoic acid
13. Resveratrol⁴⁶
14. Sulforaphane
15. Tea polyphenols
16. Essential Oils

Some of the Most Effective Essential Oils for Supporting Healing & Wellness Include:

- Myrrh
- Frankincense
- Turmeric
- Eucalyptus camaldulensis^{48, 49}
- Peppermint^{50, 51, 52}
- Oregano
- Lavender^{53, 54}
- Rosemary⁵⁵
- Tea Tree (Melaleuca)
- Orange⁵⁶
- Clove

Why does this matter?

To answer that question, let's review a few key properties of just a choice selection of the researched substances, in order to demonstrate their powerful potential to influence your overall, long-term health and wellbeing.

Ashwagandha

This wonder herb is the subject of many studies, with research indicating it contains multiple healing properties that include those that act as chemoprevention, anti-stress, antioxidant, anti-inflammatory, and antitumor agents. In addition, ashwagandha has been observed to have positive influences over “the endocrine, cardiopulmonary, and central nervous systems,” all the while proving to be a safe compound.⁵⁷

In fact, there is far more research available on this plant than we can list here, but in terms of cancer specifically, studies of phytochemicals into medicinal plants, including Ashwagandha, demonstrate the ability to “target mitochondria to provoke cancer cell-selective death program.”⁵⁸

Anaerobes

Anaerobes are organisms that assist in fermentation. As they do so, they create “bioactive compounds including anticancer, antihypertensive and antioxidant substances,” thought to be at the core of the widely accepted health benefits observed in the eating of fermented foods.⁵⁹

Anaerobes have been indicated in assisting with bowel and gut repair, and even “to detect and cure cancer.” Also, “evidence is emerging that anaerobes constituting the microbiome are linked to our overall health. A dysfunctional microbiome is believed to be the cause of many diseases including cancer, allergy, infection, obesity, diabetes and several other disorders.”⁶⁰

Another benefit of consuming fermented foods, and thus the anaerobes, is the increase in absorption of nutrients they provide.⁶¹ You can have the best plant or tablet containing the best quality vitamins and minerals in the world, but if they are not bio-available to you, and thus easily absorbed into your body, they are useless to you, and your epigenomes.



Curcumin (Turmeric)

You may already be aware that inflammation is a main factor in cancer and a host of other diseases,⁶² and that turmeric is a powerful anti-inflammatory. In addition, curcumin (one of the key compounds in the turmeric root) is an “anti-oxidative and anti-lipidemic agent and has recently been shown to modulate several diseases via epigenetic regulation.”⁶³

The benefits of curcumin are widely studied and have been shown to benefit everything from cancer treatment, leaky gut, diabetes, metabolic syndrome, gingivitis, pulmonary diseases, Parkinson’s disease, Alzheimer’s disease, and arthritis, just to name a few.^{64, 65}

In March 2016, a new study suggested “copper chaperone binding with small molecular may relate to the treatment of cancer.”⁶⁶

This is significant because in separate research, as reported in a November 2016 study published in the Netherlands, curcumin (turmeric) was observed to “vividly” bind with copper,⁶⁷ giving it even more credibility in the treatment of cancer.

It’s obvious why curcumin is known as the “King” of spices. For millennia it’s been used to treat disease, but now **science is catching up and verifying its many uses in improving health and epigenetics.**

Fulvic Acid

Fulvic acid is essential to metabolic function. It works to allow the retention and absorption of nutrients, as well as assist the body in utilizing them. “It is well absorbed in the intestinal tract and eliminated within hours from the body.”⁶⁸ Fulvics also assist the body’s homeostasis (balance) by helping carbon, hydrogen, and oxygen to stay active in the body, longer. This chemical compound improves how your cells use electrolytes and antioxidants,⁶⁹ making it an epigenetic support for the brain, digestion, and anti-aging.⁷⁰ As well, fulvic’s ability to combat free radical damage show this supplement has a tremendous impact on longevity and disease.^{71, 72}

Shilajit is found in the Himalayas, and contains high amounts of fulvic and humic acids. “Traditional uses include its action in genitourinary disorders (relating to the genital and urinary organs), jaundice, digestive disorders, enlarged spleen, epilepsy, nervous disorders, chronic bronchitis, and anemia. Shilajit has also been useful for the treatment of kidney stones, edema, and hemorrhoids, as an internal antiseptic, and to reduce anorexia.”⁷³ Studies have also shown that fulvic acid blocks tau self-aggregation (specific proteins in the brain), giving it benefits in Alzheimer’s therapy.⁷⁴

Essential Oils

Essential oils are extracts from medicinal plants, representing a powerhouse of beneficial agents, 40 to 50 times more powerful than the plant itself. While these oils have been used globally in all forms of ancient healing traditions, they are mistakenly most well-known in the West as tools for the practice of aromatherapy. Or worse, merely a way to make a room smell nice.

This misunderstanding is unfortunate, because the health benefits of essential oils are countless. The list of benefits, and ways to utilize these healing gifts from nature, is truly far too long to present in this report. But here follows a list of some of the most important essential oils used to support health, wellness, and longevity.

- **Frankincense**

Most people have at least heard this word, but they likely do not know this ancient oil has been used to treat inflammatory⁷⁵ and arthritic diseases for thousands of years. Not only has Frankincense essential oil been seen to have cytotoxic activity, it was recently demonstrated to be **“as effective” as the common cancer treatment drugs doxorubicin and 5-fluorouracil, in treating cancer.**⁷⁶

Other health benefits of frankincense essential oil include: treating candida overgrowth,⁷⁷ boosting immune function, improving circulation, regenerating tissues, providing neurological support, destroying toxins, relieving arthritis pain, balancing hormones, encouraging skin health, and aiding digestion.⁷⁸

- **Lavender**

True lavender (*Lavandula angustifolia*) is a well-known anti-bacterial agent, and natural method to promote relaxation, better sleep, support the immune system, as well as assist with both anxiety and depression. It's been shown to influence genetic activity, by way of helping the body fight infection.^{79, 80}



- **Myrrh**

While many people have heard of Myrrh from its biblical reference, this essential oil is another that has remained somewhat obscure in the West. Yet, the benefits are vast. Among its medicinal uses, myrrh essential oil has demonstrated abilities to help prevent abnormal cell growth,^{81, 82} as well as promoting hormone balance. It's anti-inflammatory, anti-fungal, and a long-used pain reliever.^{83, 84}

Special Note: The anti-tumor efficacy in using a combination of frankincense and myrrh⁸⁵ is also being researched, with one study of a patient with bladder cancer presenting in the lungs reporting after only natural treatment, “The size and number of multiple metastatic nodules in both lungs were markedly decreased and the symptoms had disappeared.”⁸⁶

- **Peppermint**

This plant is better known in culinary circles, but should not be dismissed as a flavoring alone.

In traditional medicine, peppermint has been popular for its long list of health benefits, which include anti-inflammatory, antifungal, antimicrobial, and antiseptic components, acting as a pain reliever, and aiding in a variety of digestive issues (including nausea).⁸⁷

- **Turmeric (Curcumin)**

Earlier in this report we listed just a few of the extraordinary benefits of this “King of Spices.” It's important to note that, with regards to the essential oil of turmeric, the potency will be even higher, as well as it being supremely more absorbable.

As a reminder, some of the main properties of curcumin that assist health and wellness benefits include: superior anti-inflammatory properties, cancer tumor suppression, metastasis suppression, apoptosis (programmed cell death) promotion, blood sugar regulation, wound healing, preventing Alzheimer's, easing arthritis, and weight loss support.⁸⁸



Medicinal Mushrooms

Not just a fun addition to a pizza or pasta sauce, mushrooms have been used in natural medicine for the treatment of countless maladies, for millennia. Notably, “there is good evidence that mushrooms are among the most powerful functional food in a growing cancer-fighting and cancer-preventing arsenal.”⁸⁹ Saying this, there are a few that rise to the top as the most beneficial to counteracting DNA deficiencies, and profoundly improving your health and wellness.

- **Shiitake**

Shiitake is widely used in Asia and is a powerful antioxidant.⁹⁰ This mushroom powerhouse is considered to promote longevity by increasing lifespan while improving quality of life.⁹¹ Studies have indicated it has notable cancer fighting characteristics, as well as immune support.

Note: due to the potency of these mushrooms, it is safer to find a quality supplement in order to partake of its benefits, versus direct preparation and ingestion for medicinal purposes.

- **Reishi**

Also known as *Ganoderma lucidum*, this is a “powerful medicinal mushroom found to possess immune-modulating and immune-potentiating capabilities and has been characterized as a wonder herb.”⁹² It’s both anti-inflammatory and antiallergic,⁹² regulates blood sugar and blood pressure, with known inhibitory effects on tumor cell growth.⁹³

- **Turkey Tail**

Extracts of this mushroom were recently shown to effectively target abnormal cells in prostate cancer, as well as demonstrating defined preventative characteristics (chemopreventive).⁹⁴ Among the hundreds of other studies carried out on this common mushroom, it was found to improve the immune system (including the growth of white blood cells). This is thought to be due to it containing a polysaccharide-K used as an active ingredient in chemotherapy drugs.⁹⁵

Vitamin D

According to a 2009 study, an astounding three-quarters of American teens and adults are deficient in this essential vitamin.⁹⁶ While we don’t need to ingest Vitamin D for our body to create it (we can get it from sunlight), the excessive use of sunscreens, and the increased time indoors has led to a deficiency crisis that must be corrected as it’s linked to cancer, diabetes, osteoporosis, rheumatoid arthritis, inflammatory bowel disease, multiple sclerosis and autism.⁹⁷ Bottom line: Get more “safe” sun, and find a good supplement of absorbable Vitamin D.

TAKE CONTROL OF YOUR EPIGENETICS

The question becomes... How can YOU take control of your life, so that your health and wellness is not determined by your genes, alone. The answer...?

Change your epigenetics.

That may sound like a flippant answer, but it's true. The nature of the epigenome means you have the power to take charge of your health and wellness, from the inside out... with proactive potential to cancel out genetic markers in your DNA.

Perhaps you have heard the expression “bio-hacking”? While in some circles it has gained negative connotations of scientists playing around with biology, a more positive definition is one where individuals are empowered to change their health, affect their long-term wellness, and increase their longevity. Influencing your epigenetics can be seen as a kind of bio-hacking, especially as research continues.

So, what can you do right now to change your epigenetics for the better?



Lifestyle & Environment

You control your lifestyle and environment. The following is a shortlist of 10 ways you have marked influence over your current epigenetics.

1 Nutrition

“Nutrients and bioactive food components can influence epigenetic phenomena.”⁹⁸ This is one the most important aspects of epigenetics. Eat better. Cut out processed foods. Eat organic. Eat fresh fruits and vegetables. Avoid foods with added sugars. Listen to your body and learn which foods your body thrives on.⁹⁹

2 Exercise

Physical activity offers more than a body to be proud of. It offers a body that will live longer, be less toxic, more oxygenated, and have a better metabolism. You know the benefits of exercise. If you want to take charge of your health and your epigenetics, you have to include exercise.

3 Reduce Stress

Stress is a killer. Not just in terms of blood pressure, but in the taxation of your entire biological system down to the cellular level. Meditation can help. Essential oils can too (lavender in particular). Do more of what you love, and less of what brings you stress or negative emotions. Whatever it takes, decrease the amount of stress in your body. You'll not only improve its function, but also raise your mood which goes to your overall wellness.

4 Sun

This one is easy – get more sun! Yes, you need to be responsible, but bodies require fresh air and sunlight to thrive, and to get the best form of Vitamin D there is; that which your body manufactures from natural sunlight.

5 Reduce Inflammation

Whether it is through eating more alkaline foods, reducing stress, cooking with or taking supplemental turmeric, or using an essential oil like peppermint, you must find ways to reduce inflammation in your body.

6 Increase Antioxidants

Nature has given us many gifts to fight free radicals, and help us repair our cells. Use them. Blueberries, ashwagandha, peppermint, shiitake, fermented foods. Take your pick, but make these something you actively (and frequently) consume.

7 Reduce Environmental Toxins

Drink the purest water possible. Avoid plastics, parabens, harsh cleaning chemicals, preservatives, irradiated foods, microwaves, aluminum, etc. Be aware of toxins that can be present in cosmetics, deodorant, and feminine and personal hygiene products.

8 Detoxify Your Body

Consistent, healthy habits and lifestyle changes will do more long-term good than a sudden, drastic cleanse. However, done correctly, a detox can jumpstart the changes you wish to make to your health and wellness.

9 Eat Fermented Foods

Kimchi, sauerkraut, kombucha. There are many ways to make sure you are getting the most out of your nutrients and vitamins, by giving your body the benefit of the anaerobes and their bi-products that increase bioavailability.

10 Consume High Quality Supplements

Take advantage of the growing list of research on epigenetics. Find supplements that are GMO-free, bioavailable, and of the purest quality. Make sure your vitamins are actually able to be absorbed by your body. The best nutritional supplements will most often be: free of gluten, dairy, soy, grain, nuts and have no yeast, corn, starch, artificial coloring, flavoring, or preservatives.



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