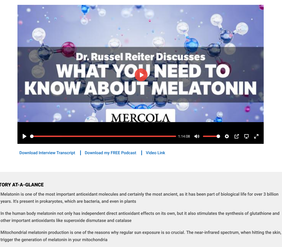

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STORY AT-A-GLANCE

- Melatonin is one of the most important antioxidant molecules and certainly the most ancient, as it has been part of biological life for over 3 billion years. It's present in prokaryotes, which are bacteria, and even in plants.
- In the human body melatonin not only has independent effects on its own, but it also stimulates the synthesis of glutathione and other important antioxidants like superoxide dismutase and catalase
- Mitochondrial melatonin production is one of the reasons why regular sun exposure is so crucial. The near-infrared spectrum, when hitting the skin, trigger the generation of melatonin in your mitochondria
- Considering melatonin's function within the mitochondria, and the fact that mitochondrial dysfunction is a hallmark of most chronic disease, it makes sense that melatonin would be helpful against a number of different diseases, including the two most common — heart disease and cancer.
- Melatonin and methylene blue belong in every emergency medical kit. In cases of an acute heart attack or stroke, melatonin can help limit the damage, while methylene blue augments cytochromes to allow the continued production of ATP even without the use of oxygen, which also helps minimize cell death and tissue damage

In this interview, Russel Reiter, Ph.D. — a world-class expert on melatonin — discusses some of the biological activities and health benefits of this important molecule. With some 1,600 papers to his credit, as well as three honorary doctor of medicine' degrees, he's published more studies on melatonin than anyone else alive.

Melatonin 101

Melatonin is one of the most important antioxidant molecules and certainly the most ancient, as it has been part of biological life for over 3 billion years. It's present in prokaryotes, which are bacteria, and even in plants. In the human body — aside from having direct antioxidant effects — it also stimulates the synthesis of glutathione and other important antioxidants like superoxide dismutase and catalase. Reiter continues:

"Melatonin has been here forever … and its functions have evolved. It has learned to work successfully with other molecules during this three-billion-year evolution. One of the molecules with which it collaborates is glutathione … But the antioxidant activity of melatonin is extremely diverse.

It in fact is a very good radical scavenger. There are other radical scavengers — vitamin C, vitamin E and so forth — but melatonin is superior to those. But beyond that, it stimulates antioxidative enzymes, especially in mitochondria. Mitochondria are small organelles in the cell that generate the bulk of the free radicals.

So, it's very important to have a good antioxidant at the level of the mitochondria and melatonin happens to be located and is, in fact, synthesized in the mitochondria. Melatonin scavenges radicals that are generated, but it also stimulates something called sirtuin-3, which activates or deacetylates super oxide dismutase (SOD), which is a very important antioxidative enzyme.

It also removes free radicals and prevents the degeneration of the mitochondria, and why this is so important is because mitochondria are really the center of the action within a cell. In other words, there's strong evidence that aging, frailty of aging, senescence of cells as we age, relate to molecular damage at the level of the mitochondria, and melatonin seems to be very efficient at protecting mitochondria from that damage."

Melatonin increases glutathione through a genomic effect on the enzyme that regulates the synthesis of gamma glutamylcysteine synthase, the rate limiting enzyme in glutathione synthesis. Melatonin activates that enzyme.

Glutathione tends to be found in high concentrations in cells, although some is also found, to a lesser degree, in the extracellular space and the mitochondria. Meanwhile, 95% of the melatonin in your body is concentrated within the mitochondria inside the cells.

Its antioxidant effects are quite diverse, but include preventing free radical generation by enhancing the efficiency of the electron transport chain so fewer electrons leach onto oxygen molecules to generate super oxide antidrotal.

How Mitochondrial Melatonin Is Generated

Mitochondrial melatonin production is one of the reasons why regular sun exposure is so crucial. Most people understand that sun exposure on bare skin generates vitamin D, courtesy of UVB (ultraviolet B radiation). Few, however, understand that the near-infrared spectrum, when hitting your skin, triggers the generation of melatonin in your mitochondria. Reiter explains:

"Near-infrared radiation penetrates relatively easily the skin and subcutaneous tissues. Every one of those cells contains mitochondria and it appears that near-infrared radiation that is detected in fact induces melatonin production. That is important, because we now think that melatonin within mitochondria is inducible under a lot of stressful conditions.

That is not definitively proven, but it appears that under stress, all cells may upregulate their ability to produce melatonin because it's so highly productive. And typically, under stress, free radicals are generated. That is emphasized by the [fact] that in plants … that happens.

In other words, if you expose plants to drought, heat, cold, ie metal toxicity, the first thing they do is upregulate their melatonin, because all of those situations generate free radicals. And we suspect, although that has not yet been definitely proven, in animal cells as well, including human [cells]."

Identifying the specific wavelengths that trigger melatonin production can be tricky, but generally speaking, it's likely to be the range between 800 to 1,000 nanometers (nm). This range of near-infrared is invisible, and has the ability to penetrate tissue. Visible wavelengths generally do not penetrate the skin, and therefore cannot stimulate your mitochondria.

Anytime your skin is exposed to natural sunlight, however, you can be sure you're receiving the necessary wavelengths of near-infrared to generate melatonin in your mitochondria. Conversely, when indoors under artificial lighting, you can be certain you're not getting any. This is because most window glass is low-e and filters out a good portion of the near-infrared, so even sitting near a window is not going to provide you with this benefit.

To compensate for time spent indoors, I use a 250-watt Photo Beam near-infrared bulb from SaunaSpace in my office. I keep it lit when I'm in my office and have my shirt off. Considering most people spend most of their days indoors, mitochondrial melatonin deficiency is likely rampant. And, since many also do not get enough sleep, they also have a deficiency in the melatonin synthesized in the pineal gland in response to darkness.

The Two Types of Melatonin

As hinted at above, there are two types of melatonin in your body: The melatonin produced in your pineal gland, which traverses into your blood, and subcellular melatonin produced inside your mitochondria.

Importantly, the melatonin that your mitochondria produces does not escape your mitochondria. It doesn't go into your blood. So, you're not going to directly increase your blood or serum level of melatonin by sun exposure. But, bright sun exposure around solar noon will indirectly help your pineal gland to produce melatonin during the night.

It is important to understand that your blood level of melatonin is indicative of the melatonin produced in your pineal gland, and/or oral supplementation. Conversely, the melatonin produced by your pineal gland cannot enter into the mitochondria, which is why it is so important to get regular sun exposure. Reiter explains:

"In other words, if you surgically remove the pineal gland from an animal or human, blood levels of melatonin are essentially zero. Not totally zero — I think what happens is that the mitochondria in other cells continue to produce melatonin and some of that leaks out into the blood and gives you a residual — but you have no circadian rhythm.

Melatonin production in the pineal gland is highly rhythmic, depending on the light-dark cycle. This is not true for melatonin in mitochondria. It's not cyclic. It's not impacted by the light dark environment. It may be affected by certain wavelengths of energy, but it's not affected by the light dark environment.

So, blood levels are derived from the pineal gland, and this rhythm is very important for setting circadian rhythms. In other words, the function of that melatonin is quite different from the function of the mitochondrial produced melatonin. It sets the rhythm. Of course, there's always some scavenging by that melatonin as well, but the real scavenging is involved with mitochondrial-produced melatonin."

Oral Supplementation Neutralizes Free Radicals

Oral supplementation, however, can enter your cells and mitochondria. This is a detail I was wrong about before, and which Reiter clarifies in this interview:

"If you supplement with melatonin, it can also enter cells and get into the mitochondria as well. And that is also very important … As you age, mitochondrial melatonin diminishes. If you supplement with melatonin, it will get into your mitochondria and, in fact, do what melatonin does — neutralize free radicals and protect the mitochondria's function."

Melatonin Is Vital to Heart Attack and Stroke Recovery

Considering melatonin's function within your mitochondria, and the fact that mitochondrial dysfunction is a hallmark of most chronic disease, it makes sense that melatonin would be helpful against a number of different diseases, including the two most common — heart disease and cancer.

As explained by Reiter, one of the situations that is most devastating for the heart and brain is temporary interruption of the blood supply as a result of a cardiac arrest or stroke. This deprives the tissues of oxygen, and without oxygen, they rapidly deteriorate.

When the blood vessel reopens, which is called reperfusion, and oxygen flows back into those oxygen-deprived cells, this tends to be the time of maximum damage, as loads of free radicals are generated once the blood starts flowing again.

"There's a large host of studies, including some in humans, where if you give melatonin to induced heart attack in animals or an accidental heart attack in humans, you can preserve or reduce the amount of cardiac infarct, the amount of damage that occurs in the heart," Reiter says.

"There's a very famous cardiologist in the Canary Islands, professor Dominguez Rodriguez, whom I worked with. And we, about three years ago, published a paper where we infused melatonin directly into the heart after the vessel was opened. That reduced cardiac damage by roughly 40%.

The other thing that happens in a heart attack is that cardiac cells do not regenerate. Once you lose a cardiac cell, they're done … and are replaced by fibrous tissue. Of course, fibrous tissue is not contractile, so you get heart failure.

We just published a paper, again with this same cardiologist, showing that if people who are potentially suffering with heart failure because of a damaged heart, they survive better and longer if they are given melatonin on a regular basis. It's a small study … but I think that would be a worthwhile field to exploit."

Dosage Suggestions for Acute Heart Attack

In terms of dosage, it's difficult to translate doses used in animal studies onto human subjects. In animals, doses between 5 to 10 milligrams per kilogram of bodyweight are used. In humans, however, the dose is calculated on the basis of surface area rather than on body size, and that significantly reduces the amount of melatonin that you have to give.

That said, Reiter stresses that melatonin has no known toxic threshold, so even though we don't know what the ideal dose is, we do know it's safe even at high doses. Additionally, the timing of the dose will be important. The first dose should be taken immediately, and subsequent melatonin dosing should follow circadian biology, so around 10 a.m., 4 p.m., and before bed.

"If I had a heart attack and I had melatonin on my person, I would take melatonin," Reiter says. "The question is how much? … This is not a recommendation to use your patients, but I would not hesitate about taking 50 milligrams at the time, and some subsequently for the next 24 hours, even during the day. Because you don't want to lose any more heart cells than is absolutely necessary …

I have suggested this a number of times. In other words, an emergency medical technician goes out, picks up a patient who has clearly a heart attack. I think on site, immediately, melatonin should be given intravenously rather than orally. It'd be difficult to give it orally. That would be my recommendation."

Emergency Medical Kit for Acute Heart Attack or Stroke

In cases of an acute heart attack or stroke (which have virtually identical tissue damage mechanisms, just one affects the heart and the other your brain), I would also add methylene blue. Methylene blue is well-documented to be highly beneficial for reperfusion injuries,' especially if you do it right at the beginning of the event, because it augments cytochromes to allow the continued production of ATP even without the use of oxygen.

> **"Melatonin and methylene blue belong in every emergency medical kit. In cases of an acute heart attack or stroke, melatonin can help limit the damage, while methylene blue augments cytochromes to allow the continued production of ATP even without the use of oxygen, which also helps minimize cell death and tissue damage."**

So, together, methylene blue and melatonin could act as a one-two punch if you've got a stroke or heart attack. They really should be part of every emergency kit.

As an interesting side note, melatonin can also be useful in people with Type 2 diabetes. Reiter notes he has diabetic colleagues who take 1 gram of melatonin daily to counteract the free radical damage caused by hyperglycemia. Keep in mind that melatonin does not treat the cause of the diabetes. It only helps to counteract the damage being caused.

Ideally, you'd want to use sublingual or intravenous melatonin, because it'll enter your bloodstream much faster. Another option is to make your own rectal suppositories. If you swallow it, it needs to pass through and be metabolized by your liver.

Melatonin Is Also a Potent Antiviral

In addition to its antioxidant potency, melatonin also has antiviral capacity. These two features combined is thought to be why it's been so useful against COVID-19.

"I'm going to give you a very specific example," Reiter says. "Peru, a number of years ago, Dr. Richard Neil, whom I have known for a number of years. When COVID-19 became common, he called me, we discussed it, he started giving 1 mg per kilogram of body weight (once a day) for about five days, at the time of diagnosis. He has now treated more than 2,000 patients, very successfully, with melatonin.

The importance of melatonin in reference to COVID is that it is not specifically for [the original Wuhan strain]. The variants, Delta, Omicron, they're viruses we think will respond. We currently have a paper in press where we showed that in animals, Zika virus toxicity is also prevented by melatonin, and we've checked four different coronaviruses in pigs.

That paper also shows that melatonin prevents the damage — the consequence — of those viruses. I think [melatonin] is generally a quite good antiviral agent and should be considered as useful. When President Trump was hospitalized with COVID, one of the molecules he was given was melatonin. Obviously, the physicians treating him knew this literature."

So, to summarize, if you have symptoms of COVID, you could consider taking oral or sublingual melatonin 30 to 45 minutes before bedtime, first thing in the morning, at 10 a.m. and again at 4 p.m. You clearly want to avoid it a few hours before and after solar noon, as taking supplementation during that time will likely impair pineal nighttime melatonin secretion.

Reiter points out that slow-release melatonin has not been widely studied, and he generally doesn't recommend it for that reason.

Melatonin for Cancer

Melatonin can also be useful in the prevention and treatment of cancer. Reiter explains:

"Cancer cells are clever. They do everything they can to permit their continued survival. It seems counterintuitive, but what they do is they prevent pyruvate from entering the mitochondria, and that reduces ATP production. But as a consequence of doing that, they accelerate something called glycolysis and that's very inefficient in producing ATP, but it does it very rapidly. So, then they have sufficient energy.

The importance of preventing pyruvate from entering the mitochondria, we now think is the fact that pyruvate is a precursor to something called acetyl coenzyme A. Acetyl coenzyme A is a cofactor for the enzyme that regulates melatonin production in the mitochondria.

So, by eliminating or preventing pyruvate from getting into the mitochondria, [the cancer cells] prevent or reduce melatonin production, because they don't allow the necessary cofactor to be produced. In other words, we predicted about four years ago that, in fact, the mitochondria of cancer cells would produce less melatonin.

We have subsequently shown that in two studies, both uterine cancers. Clearly, melatonin levels and the activity of the enzymes in the mitochondria of these types of cancer cells are at least about half what they would normally be. The prevention of pyruvate into the mitochondria, that's Warburg type metabolism.

The other thing is the pyruvate is metabolized into lactic acid. It escapes the cell and produces an acidic environment for the cancer cell, and cancer cells like that acidic environment. So, if you can reduce the Warburg type metabolism, you may be able to limit the growth of cancer cells and perhaps also the metastasis …

Some cancer cells may only be part-time cancerous because [during nighttime] when they

And we know that inflammatory cells — M2 and M1 inflammatory cells — can be converted back and forth by metabolism. The inflammatory cells can be prevented by giving them melatonin [because of] its effect on Warburg type metabolism. So, Warburg type metabolism is common in many, many pathological cells."

The Link Between Metabolic Flexibility, Melatonin and Cancer

One of the reasons for why cancer is so prevalent likely has to do with the fact that 93% of Americans are metabolically inflexible and cannot seamlessly transition between burning carbs and fats for fuel.[1](#) Glucose (sugar) is one of the primary fuels that most people have. Glucose has six carbons and is metabolized into pyruvate, which is a three-carbon molecule. Pyruvate, in turn, is metabolized in the mitochondria to acetyl-CoA.

The reason the Warburg Effect works is by pecausesyruvate dehydrogenase kinase (PDK) inhibits the inflow of pyruvate into the mitochondria so it cannot be converted into acetyl-CoA, and acetyl-CoA is not only needed by the production of melatonin, but is also used to efficiently produce ATP in the mitochondria and is how glucose is used in the mitochondria.

Another source of acetyl-CoA is beta oxidation of fats, which breaks down the fat to the two carbon molecule acetyl-CoA, which enters the mitochondria an active transport molecule, carnitine and MCT (*mono carboxylase transporter*). My point here is that when you are metabolically inflexible, the Warburg Effect becomes massive. But if you're cardiometabolically healthy and can burn fat, you can effectively bypass that defect.

Prior to my interview with Reiter, I certainly knew that limiting carbs and preventing the Warburg effect was important in cancer treatment, but I hadn't realized that one of the metabolic byproducts of acetyl-CoA was needed to produce melatonin. So, being metabolically flexible not only impairs the Warburg effect, but also supplies melatonin to combat the excessive oxidative stress in cancer.

This is why I would strongly encourage each and every one of you to regularly engage in the activities the rest of your life. First, expose as much of your skin as you can to an hour of sunshine a day around solar noon.

Second, you have to eliminate all seed oils from your diet, as excess seed oils are the primary reason why most people are metabolically inflexible. While the average person's consumption of these oils is around 25% to 30% of total daily calories, it should only be about 1% to 2% (nine to 1.5%).

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Great research from Dr. Mercola on the importance of Melatonin. We have great medicines that nature provides us with sunlight, food and a pharmacy of natural products that can help us overcome metabolic and cardiovascular diseases that cause risks for covid, but government institutions do not inform the population, only They want the pharmaceutical multinationals to increase their profits, with vaccines and expensive medicines, because they also bring them power and money. The evidence indicates that oxidative stress and exacerbated inflammation are the main standard processes responsible for the development and progression of multiple pathologies, which have become the main causes of morbidity and mortality in current populations.

The mitochondria is an essential target organelle for antioxidant and anti-inflammatory agents. The wisdom of nature allows mitochondria to maintain optimal cellular homeostasis through their receptors and enzymes that respond to endogenous hormones. Several natural substances, such as melatonin and micronutrients, can prevent or attenuate mitochondrial damage and can preserve a healthy state. optimal health by controlling overall oxidative and inflammatory status. As perspectives, the possible beneficial synergistic effects of the simultaneous administration of micronutrients and melatonin in patients with oxidative/inflammatory diseases of different degrees of severity. www.mdpi.com/.../htm. (2021)

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The synergistic actions of melatonin with vitamin C, vitamin E, and glutathione have been systematically investigated. When melatonin was combined with vitamin C, glutathione, or vitamin C, the protective effects against iron-induced lipid peroxidation were dramatically increased. Although melatonin was added at very low concentrations, it still showed synergistic effects with other antioxidants at certain concentrations. Furthermore, melatonin not only reversed the prooxidative effects of vitamin C, but also significantly increased the survival rate in mice treated with vitamin C and exposed to ionizing radiation. (1997)

onlinelibrary.wiley.com/.../0022285711177747 (2010) The loss of melatonin, a potent antioxidant in mitochondria, has serious consequences in terms of increased oxidative stress and decreased ATP production accompanied by elevated RNS/free radical generation. Melatonin is a critical intramitochondrial antioxidant, functioning as a direct free radical scavenger and by stimulating antioxidant enzymes, including superoxide dismutase (I SOD3), catalase, and glutathione reductase.

Each of these enzymes participates in the maintenance of mitochondrial redox homeostasis. Mitochondrial dysregulation, including aerobic [Warburg] glycolysis, is associated with a plethora of potential pathophysiological conditions, including cancer, neurodegenerative aging, inflammation, fibrosis, Alzheimer's disease, traumatic brain injury, and autoimmunity. www.future-science.com/.../fmc-2020-0235. (2021)

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Melatonin, exhibiting multiple physiological functions (eg, circadian rhythm, immune modulation, and anti-oncogenic action), can be present in almost all organisms and is found in various tissues, including the gastrointestinal tract. Melatonin might participate in lipid metabolism by regulating adipogenesis and lipolysis. Furthermore, many studies have focused on the possible beneficial effects of melatonin in colorectal cancer (CRC). A number of signaling pathways, including those of cell proliferation, migration and invasion, antioxidant activity, and immune regulation. Significantly, the gut microbiota is the primary determinant of all aspects of health and disease (including obesity and tumorigenesis).

www.hindawi.com/.../9749568 (2019) www.sciencedirect.com/science/article/abs/pii/S0955549701002143 (2002) In this review, the bases that support the use of melatonin as adjuvant therapy in breast cancer due to its antioxidogenic properties are studied. The possible bidirectional relationship between the intestinal microbiota and melatonin levels, both impacting on the development of breast cancer, is described. Alterations in melatonin levels (circadian disruption) and an imbalance in the bacterial composition of the intestinal tract base to an increase in estrogen levels that favor the development of breast cancer.

Intestinal bacteria synthesize SCFA short-chain fatty acids that indirectly stimulate melatonin production through the metabolomic pathway. However, oxidative stress and proinflammatory cytokines stimulate the tryosinase pathway, moving tryptophan away from the melatonergic pathway, thus reducing melatonin levels. In addition, this generates changes in the intestinal microbiome and intestinal permeability (butyrate reduction), increasing the inflammatory response and reducing melatonin production. All of the above contribute to the development of breast cancer. www.mdpi.com/.../htm. (2021)

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Melatonin, the favored target of melatonin, which maintains them efficiently, scavenging free radicals and reducing oxidative damage. Here, we discuss the latest evidence for the efficacy of dietary melatonin in age-related skeletal muscle disorders. The most recent evidence of the gut-muscle axis and the influence of exercise and melatonin on the microbiota is considered. This review reinforces the relevance of melatonin as a safe nutraceutical that limits skeletal muscle fragility and prolongs physical performance.

www.mdpi.com/.../htm (2022) The beneficial effects of melatonin (MEL) administration may be related to its influence on mitochondrial physiology. Mitochondrial dysfunction is considered an important factor in various physiological and pathological processes, such as the development of neurodegenerative and cardiovascular diseases, diabetes, various forms of liver diseases, skeletal muscle disorders, and aging. Mitochondrial dysfunction induces an increase in inner membrane permeability, leading to the formation of a permeability transition pore (mPTP) in the mitochondria.

MEL administration has been shown to improve the functional status of mitochondria and inhibit mPTP opening during aging. MEL is known to be able to suppress cancer initiation, progression, angiogenesis and metastasis, as well as sensitization of malignant cells to conventional treatments. Data on the effects of MEL on oxidative stress, aging, and heart failure are also reported. and cancer metastasis. www.mdpi.com/.../htm. (2021)

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Melatonin has antioxidant, anti-inflammatory, immunomodulatory and palliative effects in various virus-induced infections. Melatonin has non-hormonal actions, acting as a free radical scavenger, an antioxidant, and as a modulator of immunity, dampening innate tissue responses to invaders while increasing antibody production against them. Melatonin becomes an anti-inflammatory molecule capable of blocking the two main pathways: the NF-B inflammatory and NLRP3 which, with its ability to restore mitochondrial homeostasis. SARS-CoV-2 infection suppresses mitochondrial melatonin production, which induces a metabolic change that stimulates cytosolic glycolysis, with a reduction in the supply of acetyl-CoA, which acts as a precursor for endogenous melatonin synthesis.

The decreased availability of melatonin consequently contributes to the production of the "cytokine storm". Melatonin promotes the synthesis of NAD + reducing the inflammatory response. Melatonin can restore the optimal circadian pattern of the sleep-wake cycle and improve the clinical condition in coronavirus patients associated with COVID-19 patients. These actions make it a potentially excellent weapon against SARS-CoV-2 virus infection. www.melatonin-research.net/.../125 (2021) www.mdpi.com/.../htm (2021) www.melatonin-research.net/.../18 (2021) www.sciencedirect.com/.../S0162013421001938 (2021)

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The CD147 protein is established as a novel route for SARS-CoV-2 entry. The CD147 protein that is implicated in unfavorable outcomes during viral infections, including SARS-CoV-2. In SARS-CoV-2 infections, CD147, together with angiotensin-converting enzyme 2, can form inflammatory signals in the cytokine storm, contributing to control sleep disorders, delirium, and as an anti-inflammatory agent in acute pain. Its aftereffectsexcess, respiratory diseases, and viral infections. www.ncbi.nlm.nih.gov/.../PMC9042396 (2022) www.sciencedirect.com/.../S0049069721001485 (2022) In this article, the administration of melatonin for its anti-inflammatory, antioxidant, immunomodulatory, sleep-inducing effects, suppressors of CD147, Mpro, pp1 and MMP9 proteins, reducers of nephrotoxicity and highly effective and safe. www.mdpi.com/.../htm. (2022)

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jeffsam8493
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Welcome back, Guillermo! Your presence, wisdom and guidance have been missed. Dr. Mercola offers three strengths in his sleep support!1. 5. 5 and 10 to tablets, 1.5 in spray. Very interesting to know which to get. Anyone else mind doing a moment to break down for those of us in your vast listening audience who has no idea which to buy to keep on hand? Thank you again for giving this time.

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juststeve
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Gui, this all explains a lot why a pleasant sunny day takes away so many aches & pains of past injuries and just makes everything is alright. Free, abundant no prescriptions or permission needed from the Medical Mafia or Frauds like Fauci.

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Thank you jeffsam8493, that is very kind of you. Please check my answer to trin1591

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Guillermo
Joined On 6/17/2015 6:47:48 AM
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Very successful JUST, Consider in addition to melatonin, that when your skin is exposed to sunlight, it produces two types of sulfur: cholesterol sulfate and vitamin D3 sulfate. healthy cholesterol and sulfur levels are also highly dependent on vitamin D levels. Cholesterol sulfate deficiency can cause glucose intolerance, fat cells store more fat to support fuel to muscles, and excess fat accumulates causing obesity and metabolic disorders. Sulfur also plays a critical role in glucose metabolism, electron transport. system, detoxification, vitamin B1 and biotin, to produce energy. synthesize glutathione and proper insulin function Also when sunlight hits your skin, your body releases something called nitric oxide into your blood.

This compound lowers blood pressure and improves heart health. Maintaining a healthy blood pressure can reduce your risks of heart disease and stroke. Feelings of relaxation can also naturally lower blood pressure, so increasing your happiness by soaking up the rays also helps keep your blood pressure down. The sun can be your body's best friend.

Not only does it improve mood and can be an effective part of treating depression and SAD, but its rays have tangible benefits for our physical well-being. Getting some sun increases serotonin and helps prevent seasonal affective disorder (SAD), and sun exposure can also help people with anxiety and depression. Bright lights signal several areas in the retina, triggering the release of serotonin. Therefore, you are more likely to feel happy in the summer or winter, when the days are shorter.

Mark as Spam · Posted On 7/31/2022 5:59:37 AM

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Guillermo
Joined On 6/17/2015 6:47:48 AM
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Because of this connection, one of the main treatments for depression with a seasonal pattern is phototherapy, also known as phototherapy. You can get a phototherapy box to have at home. The box light mimics natural sunlight which stimulates the brain to produce serotonin. This study found an association between decreased exposure to sunlight and an increased likelihood of cognitive decline using a new data source. www.ncbi.nlm.nih.gov/.../PMC5270694/ (2009) As reported by Dr. Mercola, those who live in areas with fewer daylight hours are more likely to have some specific types of cancer than those who live where there is more sun during the year. www.ncbi.nlm.nih.org/.../1548.full

Mark as Spam · Posted On 7/31/2022 6:00:58 AM

Like · Dislike

Guillermo
Joined On 6/17/2015 6:47:48 AM
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New research in people with a range of heart disease risk factors has shown that consuming green tea extract for four weeks can lower blood sugar levels and improve gut health by lowering inflammation and reducing "leaky gut". "There is a lot of evidence that higher consumption of green tea is associated with good levels of cholesterol, glucose and triglycerides, but no study has linked its benefits in the intestine with these health factors," says Richard Bruno, lead author of the study and professor of human nutrition at Ohio State University (United States).

"Such absorption of gut-derived products is thought to be an initiating factor for obesity and insulin resistance, which are central to all cardiometabolic disorders," Bruno said. "If we can improve the integrity of the gut and reduce leaky gut, the idea is that we may be able to not only decrease the low-grade inflammation that initiates cardiometabolic disorders, but potentially reverse them. www.sciencedaily.com/.../120724133430.htm (2012) academic.oup.com/.../4604994 (2022)

Mark as Spam · Posted On 7/31/2022 8:31:29 AM

Like · Dislike

Guillermo
Joined On 6/17/2015 6:47:48 AM
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Many choose to drink a relaxing cup of green tea from time to time to increase focus and concentration. The drink's mind-sharpening properties are due to a unique combination of caffeine, a stimulant that has been shown to improve attention and alertness. www.ncbi.nlm.nih.gov/.../PMC5606589/ (2017) pubmed.ncbi.nlm.nih.gov/27549778 (2016) Unlike coffee and other caffeinated beverages, green tea also contains L-theanine, an amino acid that has calming effects. L-theanine and caffeine work together to improve brain function and mood, without causing the side effects that can accompany caffeine consumption on its own.

The present study has shown that caffeine and L-theanine, in doses equivalent to one or two cups of tea, are capable of modulating cerebral hemodynamics, cognitive performance, and mood. When combined with 75 mg of caffeine, 50 mg of L-theanine abolished a reduction in eye-fix observed after 75 mg of caffeine alone, and this effect was still evident at the end of the evaluation period. pubmed.ncbi.nlm.nih.gov/18296328 (2008) pubmed.ncbi.nlm.nih.gov/18412109 (2008) link.springer.com/.../s00221-015-3995-5 (2015) The polyphenols may reduce the morbidity of Parkinson's disease and Alzheimer's disease by reducing oxidative stress and regulating signaling pathways and metal chelation.

Theanine can inhibit glutamate receptors and regulate the extracellular concentration of glutamine, preventing neuroprotective effects. The bioactive components of the tea could be useful for the treatment of neuronal degeneration in the future. In the present work, the neuroprotection and mechanisms of tea and its bioactive components are reviewed. www.mdpi.com/.../htm (2016)

Mark as Spam · Posted On 7/31/2022 8:37:25 AM

Like · Dislike

Guillermo
Joined On 6/17/2015 6:47:48 AM
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The findings indicate that L-theanine can increase attentional processing of auditory information in a dose-dependent manner. The linear dose-response attention effects were not observed except in further studies with higher doses of L-theanine. www.tandfonline.com/.../10284158.2020.1804890 (2020) The article focuses on the effects of regular consumption of black, green, and herbal tea in relation to markers of human health, cognition, mental well-being, and brain function. Emphasis has

been placed on those due to the growing awareness in this field and the realization that their deterioration contributes greatly to the global burden of non-communicable diseases. A systematic search is performed using the PubMed database and we select studies using specific eligibility criteria.

The studies reviewed indicated that drinking tea, particularly black tea, may benefit aspects of cognitive function. (attention, mind wandering, and concentration), mental well-being (stress, mood), and markers of brain function (sensorimotor). galing, cerebral blood flow). Some benefits could be seen with relatively low intakes equivalent to just one or two cups a day. Tea consumption could be promoted as a way to improve cognitive well-being, mood and concentration, along with other health recommendations. www.researchgate.net/profile/Christopher-Etheridge/publication/34952538...
Mental-Wellbeing-and-Cognitive-Performance.pdf

Mark as Spam Posted On 7/31/2022 8:57:49 AM
Like Dislike

Lovrey
Joined On 8/21/2015 7:41:46 AM
Add as Friend Send Message

Hi All, great posting - thank you. There is so much goodness here to connect with, for our benefit. A cup of tea in the sun while reading comments and in the evening, with the cat for a good day too. Want to mention, once again, I use my handheld Red Light to stimulate melatonin production. They've done small studies that show the red light does work and it's not just me. Also I've been taking Quercetin, that my daughter loves to use, we've noticed a little goes a long way. Also you can train and trust your body to be super efficient with anything you consume.. we all need to realize we are superhumans, and nothing less, as Children Of God.

Mark as Spam Posted On 7/31/2022 11:49:43 AM
Like Dislike

ICONOCLAST
Joined On 6/26/2009 5:27:11 AM
Add as Friend Send Message

I think it was back in January of this year that Dr Mercola first mentioned that 95% of melatonin was produced in the mitochondria in response to the infra-red radiation from the sun. What an incredible revelation! A video featured was of Roger Seheult (pronounced Sha-ult) I think this may have been the one https://youtu.be/7PY_4hcdDNg

Mark as Spam Posted On 7/31/2022 12:49:58 PM
Like Dislike

Guillermoso
Joined On 4/17/2015 8:47:48 AM
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Dear Lovrey your advice is always welcome. Yes, we are children of God and we must know the ways that lead to greater energy to give friendship and love to our fellow men and to all the creatures that God has created. In the mornings I like to drink good quality matcha tea. Although green tea is not virgin in China during the Song dynasty, it was the Zen monks of Japan who popularized this variety of tea more than 800 years ago. During their long days of meditation they drank matcha to remain alert and calm. Serving concentration and clarity of mind. Matcha means powder. Japanese people serve matcha before it is harvested. First, the tea plants are covered to hide them from the sun. Thus, the plant generates more chlorophyll and acquires that darker green color, so characteristic of its leaves.

With this process, the tea grains in amino acids, which means that the tea has a sweeter taste. Some references indicate that it contributes up to 127 times more antioxidants than green tea. It is high in fiber and chlorophyll. It is high in vitamin C and antibiotic properties. A report by Dr. Mercola indicates that matcha is an excellent source of antioxidants, especially epigallocatechin gallate (EGCG), a catechin that can help fight the negative effects of free radicals to protect cells and tissues. Contains high amounts of L-theanine, an amino acid that may improve your ability to focus and memory as it can increase the brain's production of serotonin and dopamine

Mark as Spam Posted On 7/31/2022 12:57:26 PM
Like Dislike

Guillermoso
Joined On 4/17/2015 8:47:48 AM
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Some of the benefits of matcha green tea when not consumed in excess are: - Improves the ability to concentrate and cognitive function. Matcha is high in L-theanine, an amino acid that can help improve concentration and memory by increasing the brain's production of serotonin and dopamine.- Provides a large amount of antioxidants. Matcha contains high amounts of antioxidants, especially epigallocatechin gallate (EGCG), a catechin that can help fight the negative effects of free radicals to protect cells and tissues. Also, it could be helpful in lowering inflammatory levels. - Causes a relaxing effect

The L-theanine content of matcha can increase the production of alpha waves in the brain, which may lower stress levels and reduce mental relaxation. - Promotes endurance and energy. Matcha contains a healthy form of caffeine, which may promote endurance and increase energy levels without causing any negative side effects. - Detoxifies the body. This plant contains high levels of chlorophyll, which can help remove toxic chemicals and heavy metals from the body. - Strengthens the immune system. Matcha is high in antioxidants and L-theanine, as well as small amounts of vitamins and minerals.

Together, these nutrients can help protect the body and strengthen the immune system to fight viruses and bacterial infections. - Promotes eye health. A study published in the Journal of Agricultural and Food Chemistry found that the catechins in matcha green tea could benefit different eye tissues, which may help lower the risk of glaucoma and other eye diseases. In addition to the benefits I've already mentioned, research indicates that matcha green tea may be helpful in fighting a variety of conditions, including various types of cancer, heart disease, type 2 diabetes, and liver disorders.

Mark as Spam Posted On 7/31/2022 12:28:13 PM
Like Dislike

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stonaharbor
Joined On 6/30/2008 1:05:17 PM
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Wow! What a wonderful experience to get to hear the latest on Melatonin from none other than Dr. Russel Reiter himself. Dr Mercola has just provided us with one of the most valuable conversations we could hope to experience with this interview. I happened to read Dr. Reiter's book, 'Melatonin' just 1 year ago, and before that, I had happened on, and informed Dr. Mercola on the many benefits of Sun exposure that the world was unaware of, including the production of Melatonin via infra-red radiation. Dr. Mercola picked up on this subject and has been bringing new information on how the Sun is important to health ever since.

But this is probably the best way to learn what we can do, for free, for better health, and directly from Dr. Reiter, who has noticed from recent articles in Scientific journals, still continues to research the wonders of Melatonin. Please make sure you listen to the discussion here. This is an opportunity of a lifetime to hear about a truly wondrous gift available for free from Sun exposure that doesn't even have to be during the "heat of the day", but is available as long as the Sun lights the atmosphere around you and exposes you to its radiation, even the radiation off of nearby trees that are exposed to direct sunlight!

Thanks again Dr. Mercola for pursuing this interview and bringing Dr. Reiter directly into our lives. Only you seem to be able to line up so many informative interviews with top scientists on the Earth that truly look out for our health, and don't sell out to the medical mafia to distort and hide the truth.

Reply Mark as Spam Posted On 7/31/2022 5:58:21 AM
Like Dislike

Guillermoso
Joined On 4/17/2015 8:47:48 AM
Add as Friend Send Message

Thank you, stonaharbor, your comment is very accurate. Dr. Russel Reiter is rigorously and effectively contributing to spreading the benefits of melatonin. A recent article by Dr. Russel J. Reiter, et al. In addition to clinical trials, etc., indicating that melatonin is effective in aiding the recovery of COVID patients, measured by very parameter considered, there is a large body of experimental data (1530 publications to date) that clarifies why what is effective. 1, 11 Melatonin is a powerful antioxidant and anti-inflammatory molecule that modifies the innate immune response and reduces viral pathogenicity.

12 Melatonin reduces the uptake of viruses in cells and hinders their replication, inhibits sepsis, reduces proteolysis A2 levels, reduces inflammatory cytokines, etc., which contribute to acute respiratory disease and systemic multi-organ dysfunction. Thus, while vital vaccines do and some of the other drugs that are recommended treatments for COVID-19, melatonin greatly enhances the defensive posture of infected patients, making them more resistant to SARS-CoV infection.

2 or any other virus. Melatonin has no substantial side effects even at extremely high doses, overdose has never occurred, and it can be self-administered through various routes. Considering its efficacy in both experimental studies and clinical trials, the portfolio of drugs used to reduce COVID-19 infections should clearly include melatonin. Since melatonin inhibits many types of viruses, it should also be considered as a potential treatment for Ebola, Zika, and hantavirus infections, etc. onlinelibrary.wiley.com/.../jpi.12754 (2022)

Mark as Spam Posted On 7/31/2022 9:16:14 AM
Like Dislike

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stonaharbor
Joined On 6/30/2008 1:05:17 PM
Add as Friend Send Message

Thanks Guo. You have been very prolific in supporting this article today with much additional research. I also always appreciate your input of information you have gathered over the years and post on this Dr. Mercola's articles, *free of charge! We all gain from the research of others, but you are one of the best sources we are blessed with exposure to! Keep up the great work!*

Mark as Spam Posted On 7/31/2022 6:26:33 AM
Like Dislike

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lat36357
Joined On 3/19/2015 5:50:10 PM
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Where or how does a person obtain methylene blue?

Reply Mark as Spam Posted On 7/31/2022 1:38:16 AM
Like Dislike

Guillermoso
Joined On 4/17/2015 8:47:48 AM
Add as Friend Send Message

In a report by Dr. Mercola: Methylene blue supports mitochondrial respiration and improves energy metabolism in the brain. By doing so, you can improve cognitive performance and prevent neurodegeneration Methylene blue is the active molecule of hydroxychloroquine and chloroquine, which are off-patent drugs commonly used to treat malaria and COVID-19 Every emergency room in the world uses it, as it is the only known antidote for metabolic poisons that cause methemoglobinemia, which is when a metabolic poison interferes with oxygen transport in hemoglobin Methylene blue is a hormetic drug, so low doses have the opposite effect of high doses Methylene blue as an electron thermocenter, acts like a battery, but unlike other compounds that do the same thing, it does not cause harmful oxidation in the process.

If something interferes with oxygenation of cellular respiration, such as cyanide, methylene blue can bypass that point of interference through the electron transport process, allowing mitochondrial respiration, oxygen consumption, and carbon production. power function as they normally would. Methylene blue can also be effective in cases where your blood flow prevents the supply of oxygenated hemoglobin to tissues.

In this case, methylene blue helps counter blood flow by optimizing the efficiency of mitochondrial respiration. In summary, within the electron transport chain in your mitochondria there are five complexes, whose main purpose is to conduct electrons generated by food, especially carbohydrates and fats, in the form of acetyl CoA. Sometimes the electron transport chain becomes blocked or impaired, and methylene blue can bypass such blockages.

Mark as Spam Posted On 7/31/2022 4:50:51 AM
Like Dislike

Guillermoso
Joined On 4/17/2015 8:47:48 AM
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El azul de metileno también actúa in vivo como un inhibidor de la monoamino oxidasa (MAO) y un antagonista débil de los receptores de serotonina 5-HT2A. Luego reduce la transcripción de otras enzimas citoprotectoras como el glutatión, superoxido dismutasa catalasa, glutatión peroxidasa, enzimas de fase II, hemo-1 oxigenasa y otras. Cuanto más de los beneficios mis mecanismos del azul de metileno se para presente y tratar la demencia, los enfermedades neurodegenerativas como el Alzheimer y el párkinson, el igual que los tratamientos causadas por derrames cerebrales y lesiones cerebrales traumáticas Para tratamientos leves a bajo plazo se recomienden dosis bajas, de 0.5 mg a 1 mg por kilo de peso corporal.

Por lo general se utiliza para prevenir y tratar la demencia, lesiones cerebrales posteriores a un accidente cerebrovascular y otras, además promueve la mejora cognitiva a optimiza su salud a un ser sano articulos.mercola.com/sites/articulos/archivo/2022/04/24/beneficios-d... (2022)

Mark as Spam Posted On 7/31/2022 4:51:16 AM
Like Dislike

Guillermoso
Joined On 4/17/2015 8:47:48 AM
Add as Friend Send Message

El azul de metileno también actúa in vivo como un factor de transcripción que cuando se activa, ingresa al núcleo de la célula y se une al elemento de respuesta antioxidante (ARE) en el ADN. Luego induce la transcripción de otras enzimas citoprotectoras como el glutatión, superoxido dismutasa catalasa, glutatión peroxidasa, enzimas de fase II, hemo-1 oxigenasa y otras más. Cuanto más de los beneficios mis mecanismos del azul de metileno se para presente y tratar la demencia, los enfermedades neurodegenerativas como el Alzheimer y el párkinson, el igual que los tratamientos causadas por derrames cerebrales y lesiones cerebrales traumáticas Para tratamientos leves a bajo plazo se recomienden dosis bajas, de 0.5 mg a 1 mg por kilo de peso corporal.

Por lo general se utiliza para prevenir y tratar la demencia, lesiones cerebrales posteriores a un accidente cerebrovascular y otras, además promueve la mejora cognitiva a optimiza su salud a un ser sano articulos.mercola.com/sites/articulos/archivo/2022/04/24/beneficios-d... (2022)

Mark as Spam Posted On 7/31/2022 4:51:16 AM
Like Dislike

Guillermoso
Joined On 4/17/2015 8:47:48 AM
Add as Friend Send Message

At the hospital. I've gone a few times asking for it when I had a sore throat and they tell me it doesn't work. I tell them it works for me and effectively it does. My sore throat is cured in 2 days.

Mark as Spam Posted On 7/31/2022 5:17:14 AM
Like Dislike

Guillermoso
Joined On 4/17/2015 8:47:48 AM
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Methylene blue (MB) was the first synthetic antimalarial to be discovered and used in the late 19th and early 20th centuries against all types of malaria. Recently, it has been shown to be effective in inhibiting Plasmodium falciparum. MB was also shown to have potent in vivo activity against drug-resistant strains of P. falciparum and P. vivax. In preclinical studies, MB acted synergistically with artemisinin derivatives and demonstrated a strong effect on gametocyte depletion in P. falciparum. MB, therefore, has been considered a potentially useful partner drug for artemisinin-based combination therapy (ACT), particularly when clearance is the ultimate goal.

The objective of this study was to review the scientific literature published up to the beginning of 2017 to summarize the existing knowledge on the efficacy and safety of MB in the treatment of malaria. bmcmedres.biomedcentral.com/articles/10.1186/s12874-018-0468-3 A systematic review on the efficacy and safety of MB in the treatment of human malaria was carried out, which considered all studies published up to the beginning of 2017. Of the 474 reports identified, 21 studies reporting data from a total of 1504 malaria patients were included. The studies were conducted in Africa (n = 7), Asia (n = 3), the Americas (n = 5), and Europe (n = 8), using different study designs and MB formulations.

Therefore, MB can be considered as an alternative to the gametocytocidal drug primaquine PQ in combination therapy of falciparum malaria, particularly when elimination is the goal of malaria programs. Furthermore, adding MB to existing ACT artemisinin regimens is potentially useful in reducing P. falciparum transmission intensity, increasing treatment efficacy, and reducing the risk of development and spread of artemisinin-resistant malaria parasites. www.sandfordmed.com/.../4787215.2019.1624565 (2019)

Mark as Spam Posted On 7/31/2022 5:17:15 AM
Like Dislike

Guillermoso
Joined On 4/17/2015 8:47:48 AM
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Methylene blue (MB) was the first synthetic antimalarial to be discovered and used in the late 19th and early 20th centuries against all types of malaria. Recently, it has been shown to be effective in inhibiting Plasmodium falciparum. MB was also shown to have potent in vivo activity against drug-resistant strains of P. falciparum and P. vivax. In preclinical studies, MB acted synergistically with artemisinin derivatives and demonstrated a strong effect on gametocyte depletion in P. falciparum. MB, therefore, has been considered a potentially useful partner drug for artemisinin-based combination therapy (ACT), particularly when clearance is the ultimate goal.

Apart from its well-known applications in surgical staining, malaria, and methemoglobinemia, MB's antioxidant properties have recently drawn attention to this century-old drug. Mitochondrial dysfunction has been observed in systemic aging affecting many different tissues, including the brain and skin. This leads to increased oxidative stress and results in later phenotypes in age-related conditions. MB can bypass Complex III activity in mitochondria and decrease oxidative stress to some extent. This review summarizes recent studies on the applications of MB in the treatment of age-related conditions, including neurodegeneration, memory loss, skin aging, and a disease of premature aging, progeria.

In addition to having antioxidant properties, MB also crosses the blood-brain barrier easily, making it a promising candidate for treatment. In AD mouse models, low doses of MB show their ability to relieve oxidative stress and rescue cognitive deficits www.mdpi.com/.../4on... (2021) A decrease in brain energy metabolism and glucose uptake has been reported in patients with Alzheimer's, Parkinson's, and other neurodegenerative diseases. Cancers, on the other hand, have increased glucose uptake and rely on aerobic glycolysis for energy metabolism.

The switch from high-efficiency oxidative phosphorylation to the low-efficiency aerobic glycolysis pathway (Warburg effect) provides macromolecules for biosynthesis and proliferation. Current research indicates that methylene blue can receive electrons from NADH in the presence of trigonelline and divert them to cytochrome c, providing an alternative pathway for electron transfer. Furthermore, methylene blue provides a protective effect on neurons and astrocytes in neurodegenerative diseases.

Mark as Spam Posted On 7/31/2022 5:23:37 AM
Like Dislike

Guillermoso
Joined On 4/17/2015 8:47:48 AM
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The ability to cross the BBB and accumulate in the brain with low toxicity and the high affinity for both neuronal and cancerous tissues AMPK may exert anti-tumor and pro-tumor functions in cancer depending on the context. Therefore, MB-induced activation of AMPK may provide a survival advantage to cancer cells during chemotherapy by giving them the flexibility to cope with metabolic stress. The ability to cross the blood-brain barrier and accumulate in the brain with low toxicity and high affinity for both neuronal and cancerous tissues There is accumulating evidence providing proof of concept that enhancement of mitochondrial oxidative phosphorylation through mitochondrial electron transfer may offer protective action against neurodegenerative diseases and inhibit the proliferation of cancers.

www.ncbi.nlm.nih.gov/.../PMC4877182/ (2021) In this study, MB at a concentration of 15 mg/kg/day was found to improve the cognitive abilities of mice. The data further the understanding of the relationship between MB, cognitive abilities, and the gut microbiome with respect to MB's antibacterial properties. journals.plos.org/plosone/article?id=10.1371/journal.pone.0241784 (2020)

Mark as Spam Posted On 7/31/2022 5:25:12 AM
Like Dislike

Guillermoso
Joined On 4/17/2015 8:47:48 AM
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This study it has also been observed that MB can reduce factors that cause aging and Alzheimer's disease, such as the accumulation of tau proteins in plaques, mitochondrial dysfunction and the increase in ROS due to disorders in the electron transport chain. (TC). Methylene blue has been used in the treatment of Alzheimer's, considering its characteristics of tau protein inhibition, anti-ROS antioxidant properties and ability to regulate ETC. Known for its antimalarial and antioxidant effects, methylene blue has also been used in the treatment of Candida infections as an antifungal agent. In candidiasis infections, MB aims to cause mitochondrial dysfunction in the yeast and treat the patient.

In this review, the history of MB as an antimalarial, antioxidant, and antifungal agent; malaria, Alzheimer's and its role in the treatment of candidiasis. www.journalmedicine.com/.../215 (2021) It was found that methyl blue can act as a multimodal agent by simultaneously targeting various pathogenic mechanisms of COVID-19 such as hypoxic damage, hyperinflammatory reaction, and activation of death signaling. It may also act as a virucidal agent by preventing virus-induced metabolic reorientation. Its high safety profile, low cost, along with the mechanisms discussed here, could be essential criteria for testing MB as an adjuvant therapy against COVID-19.

jgpaw.com/.../jgpaw21_1019_3_3.2.pdf (2021) Intraperitoneal administration of MB immediately or 24 h after arterial surgery reduced infarct volume, ameliorated neurological deficits, and reduced white matter injury through matrix lasso protein (MMP) protection. These findings suggest that MB alleviated white matter injury in addition to neuronal protection and has potential therapeutic effects in ischemic stroke. www.hindawi.com/.../4624591 (2021)

Mark as Spam Posted On 7/31/2022 5:25:33 AM
Like Dislike

Guillermoso
Joined On 4/17/2015 8:47:48 AM
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MB ameliorates oxidative stress through up-regulation of Nrf2/PRDX1 to prevent the progression and relieve pain of osteoarthritis (OA). we found that calcitonin gene-related peptide (CGRP), a neural inflammatory mediator, accumulated around the vessel in synovial and subchondral bone in OA rats. MB administration significantly inhibited CGRP expression through positive regulation of Nrf2 and PRDX1. The effects of MB resulted from dual targets of important antioxidant enzymes, Nrf2 and PRDX1, which were also mutually interdependent and engaged in an interaction to prevent progression and relieve pain in OA. www.nature.com/.../s41401-021-00666-0 (2021)

Mark as Spam Posted On 7/31/2022 5:25:44 AM
Like Dislike

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jam0139
Joined On 11/5/2018 6:59:23 AM
Add as Friend Send Message

Healthranova.com for some product to consider. Not a big fan of supplements, so look for natural sources. Someone on a previous article had recommended because dr Mercola has also recommended MB for UTIs

Mark as Spam Posted On: 7/31/2022 7:38:14 AM

Like Dislike

Thorat1
Joined On 3/15/2021 12:41:34 PM
Add as Friend Send Message

Maybe if the government bans the use of fluoride in our water, drinks, food, clothing, food containers, medications and so on we wouldn't have to deal with the 3 billion dollar a year pollution fraud ploy! After all, that is where the melatonin is produced.

Reply Mark as Spam Posted On: 7/31/2022 7:16:02 AM

Like Dislike

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badboy2
Joined On 11/15/2010 5:58:53 AM
Add as Friend Send Message

I hope people do not take you too literally when exposing as much of their skin to the sun. As they are being arrested, they are telling the police officer, "but Dr. Mercola said I should". The policemans rebuttal may be, "too much moon for the solar noon". In all seriousness, it is a great article Dr. Mercola.

Reply Mark as Spam Posted On: 7/31/2022 3:48:39 AM

Like Dislike

Guillermoo
Joined On 4/7/2015 8:47:48 AM
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Consider in addition to melatonin, that when your skin is exposed to the sun's rays, it produces two types of sulfur: cholesterol sulfate and vitamin D3 sulfate. healthy cholesterol and sulfur levels are also highly dependent on vitamin D levels. Stephanie Seneff is a senior researcher at the Massachusetts Institute of Technology says "Heart disease, I think, is a cholesterol deficiency problem, and, in particular, a cholesterol sulfate deficiency problem..." Cholesterol and sulfur are oxidized after exposure to sunlight. Cholesterol oxidation is the first step in the process by which cholesterol is converted into vitamin D3. Cholesterol sulfate deficiency can cause glucose intolerance; fat cells store more fat to supply fuel to muscles, and excess fat accumulates causing obesity and metabolic disorders.

Red blood cells produce cholesterol sulfate and this molecule protects red blood cells from disintegrating. According to Dr. Seneff, glyphosate is a major problem in our food supply because it interferes with a number of biological mechanisms, including the enzymes responsible for activating vitamin D in the liver and kidneys Sulfur also plays a fundamental role in glucose metabolism, electron transport system, detoxification, vitamin B1 and biotin, to produce energy, synthesize glutathione, and proper insulin function. holistictrimarycare.com/topics/nutrition-e-lifestyle/sulfate-the-must- ...

Mark as Spam Posted On: 7/31/2022 4:32:39 AM

Like Dislike

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sbrink
Joined On 7/9/2009 10:09:07 AM
Add as Friend Send Message

Thankyou, this is very interesting. How would you classify 'seed nuts' in the application of a healthy diet? Is almond oil considered a seed oil? Are they healthy to eat whole? Many thanks, Sharon

Reply Mark as Spam Posted On: 7/31/2022 5:16:52 AM

Like Dislike

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rmalrose
Joined On 11/5/2011 8:59:01 AM
Add as Friend Send Message

Just 4 you? There are 3 other comments today asking for this information. I happened to be on another website this morning www.lorenzofinelli.com/2022/03/joseph-mercola-soybean-oil-may-cause-tren... - read carefully and WATCH the embedded video by Chris Knobbe.

Mark as Spam Posted On: 7/31/2022 7:46:54 AM

Like Dislike

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chrisphillips
Joined On 4/27/2019 9:26:28 AM
Add as Friend Send Message

thanks to you, for years now, i take 1 mg every night... i am 65...i had to work my way up from .25 mg so as not to be groggy the next day..perm stuff i really appreciate knowing this, just in case...

Reply Mark as Spam Posted On: 7/31/2022 6:56:10 AM

Like Dislike

GoldenOldieUK
Joined On 3/7/2020 3:09:29 AM
Add as Friend Send Message

Melatonin is banned in the UK!

Reply Mark as Spam Posted On: 7/31/2022 3:17:39 AM

Like Dislike

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kwk8395
Joined On 7/4/2013 5:50:39 AM
Add as Friend Send Message

GoldenOldieUK. Yes it is which is an absolute scandal. We had a friend who went on a trip to the US back in the 80s. She found out about Melatonin over there and brought a load of it back to UK. She used as a sleeping property for the first time in years and has more energy and vigour. The UK soon banned that as they don't want healthy people. That's why the GOV recommendations for Vit D and D etc are at the lowest possible levels where they will be virtually useless. They need a constant supply of sick people for their experiments in pharma. I did find Dr Mercola sleep support in this UK website but it is low dose and not cheap. It's a generic like I have ordered from them before.
www.neil23.co.uk/dr-mercola-sleep-support-spray-25ml.html Alternatively the only other thing I can think of is SHTP supplement which is said to be a precursor to melatonin and serotonin.

Mark as Spam Posted On: 7/31/2022 4:29:45 AM

Like Dislike

Sheelagh
Joined On 3/16/2008 6:55:12 AM
Add as Friend Send Message

It's also banned in Ireland.

Mark as Spam Posted On: 7/31/2022 4:34:21 AM

Like Dislike

Guillermoo
Joined On 4/7/2015 8:47:48 AM
Add as Friend Send Message

Read also in my reply to tee1591

Mark as Spam Posted On: 7/31/2022 4:40:47 AM

Like Dislike

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juststeve
Joined On 1/5/2012 11:13:54 AM
Add as Friend Send Message

It's currently under attack here in the States along with Vit D and supplements. As usual they cherry pick & promote incomplete information, or use studies not using the right doses, or combinations. Sometimes they use synthetics, and synthetics often tend to take the positives of a nit or supplement in the complete opposite direction of the positives afforded by the real deal.

Mark as Spam Posted On: 7/31/2022 4:53:08 AM

Like Dislike

Liberty11
Joined On 12/11/2006 8:27:28 PM
Add as Friend Send Message

Australia is out of step with the UK and USA then, as Government has recently removed the requirement of a doctor's prescription for Melatonin, it can now be purchased from a pharmacy. I am considering using it however I have some issues regarding supplementing with an antioxidant that the body produces itself. Intuitively I think supplements, other than short term, may interfere with the natural process.

Mark as Spam Posted On: 7/31/2022 5:09:33 AM

Like Dislike

Liberty11
Joined On 12/11/2006 8:27:28 PM
Add as Friend Send Message

Melatonin and methylene blue are both not without side effects and individualised problems. I think anyone looking to experiment with them should be cautious. In some people, they have remarkable benefits, and other people remarkable side effects.

Reply Mark as Spam Posted On: 7/31/2022 8:57:17 AM

Like Dislike

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mohead2321
Joined On 3/30/2012 7:35:09 PM
Add as Friend Send Message

Once upon a time Dr. Mercola had a product called Canna Calm. It provided me with the very best sleep I'd had in years. Then it disappeared. The only thing I could see as a negative was that it was a VERY fine powder and I had to be careful when mixing it that I did inhale a bunch of that "fine dust". But the quality of sleep was magnificent. If only Dr. Mercola would bring it back

Reply Mark as Spam Posted On: 7/31/2022 8:12:11 AM

Like Dislike

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justjoy96
Joined On 7/24/2022 11:02:17 AM
Add as Friend Send Message

That's ridiculous. But I am not surprised. Can you order it online and use it?

Mark as Spam Posted On: 7/31/2022 10:16:22 AM

Like Dislike

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scuppi
Joined On 6/30/2006 2:28:50 AM
Add as Friend Send Message

Melatonin and methylene blue are both not without side effects and individualised problems. I think anyone looking to experiment with them should be cautious. In some people, they have remarkable benefits, and other people remarkable side effects.

Reply Mark as Spam Posted On: 7/31/2022 8:57:17 AM

Like Dislike

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forbiddenhealing
Joined On 2/21/2011 9:51:43 AM
Add as Friend Send Message

This header is misleading: "This 3 billion-year-old antioxidant eats vitamin C for breakfast. In fact, there's a large host of studies that found if you give it to induced heart attack victims, you can reduce the amount of damage that occurs in the heart by as much as 40%."

.....Melatonin and methylene blue may be valuable in acute interventions, as are 100gram infusions of sodium ascorbate/Vit C and hyperbaric oxygen. Electronics is electrons, and they go where attracted by inflammatory positive and acidic charges.

Somehow (head fight), methylene blue and C are the cheapest sources of electrons that prevent listed conditions. Though it is "never just one thing," have reviewed breast cancer in my dog with a few injections of bathing soda soln; cured 3cents. Oxygen does not survive acidity and acidity means low e- electron voltage in the body/your charge tension. Suffocating cells experience HIF1/Hypoxic Induction Factor, back VG C and illicit anaerobic fermentation and angiogenesis seeking glucose...as tumors build an acid marble that repels oxygen.

Charge tension is also a factor in the potential of H2O make/99% of body molecules...easily enhanced by ion UV/IR exposure. My approach is preventive/curative using bowel tolerance megadosing of Vit C/baking soda (sodium ascorbate) along with sulfur packed RAILANCE/sulforaphane from garlic, onions, broccoli, egg yolks or MSM. Overall nutrition, bowel tolerance, diverse lifestyle habits and emotional states figure in as it's "never just one thing."

Reply Mark as Spam Posted On: 7/31/2022 6:34:30 AM

Like Dislike

Guillermoo
Joined On 4/7/2015 8:47:48 AM
Add as Friend Send Message

We must also consider that atherosclerosis is the most deeply associated with the appearance of lifestyle diseases. Control of insulin resistance is very important, avoiding obesity and diabetes. An internal injury, the oxidation and glycation of LDL is implicated in the accumulation in endothelial cells in the formation of atheromas. The expression of inflammatory cytokines and cell adhesion factors, which are induced by the proatherogenic effects of oxidized lipoproteins and advanced glycation end C by binding to receptors for advanced glycation end products (RAGE).

It produces rupture of fibrous capsules that underlie the atheroma, malignant transformation and hemorrhage are factors that promote the formation of thrombin, which induces acute coronary syndrome and cerebral infarction When mineralization occurs, amorphous calcium is deposited in the tissues. This vascular calcification induces arterial stiffness, which is a risk factor for increased pulse pressure, cardiac stress, impaired peripheral circulation, and also destabilizing atherosclerosis. www.tuotsuomi.fi/.../10318-17.pdf Inflammation meets metabolism: receptor axis roles for advanced glycation end products in cardiovascular disease.

This review chronicles examples of the risks that sugars and cholesterol, via RAGE, play in immune cells in instigating maladaptive cell signaling and mediating chronic cellular stress. Emerging roles for the ligand-RAGE axis in metabolism-mediated modulation of inflammatory signaling in immune cells are now being discovered and add to the growing body of factors underlying pathological immunomodulation. www.ncbi.nlm.nih.gov/.../PMC6332814 (2021)

Mark as Spam Posted On: 7/31/2022 7:41:28 AM

Like Dislike

Guillermoo
Joined On 4/7/2015 8:47:48 AM
Add as Friend Send Message

High hemoglobin glycosylation index was associated with increased risk of composite CVD and all-cause mortality after adjustment for multiple conventional cardiovascular risk factors. The association was mainly mediated by the level of HbA1c. www.frontiersin.org/.../full (2021) AGEs as independent CVD risk markers, which has been supported by studies in cell cultures and animal models. All of these data have added to our growing understanding of the structures, measurement, stability and biological actions of AGEs. www.mdpi.com/.../htm (2022) Glycosylated albumin (GA) is a sensitive metric of the glycemic state. It may complement the prognostic information already documented for glycated hemoglobin (HbA1c).

glycated albumin is closely related to ASCVD and may be a predictor of major adverse cardiovascular events. www.ahajournals.org/.../circ.45.suppl_1.I-261 (2020) Some of the nutrients that help inhibit glycation include carnosine, benfotiamine, NAC, glutathione, R-lipo, tomatin, and active forms of vitamin B6 (pyridoxal-5-phosphate). Mitochondria can also be protected by PPQ, taurine and R-lipoic acid. Although we cannot stop the aging process, avoiding sugar and eating highly cooked foods such as grilled meats and fried foods is a reasonable step in prevention.
www.aakibreg.com/advanced-glycation-end-products-ages (2017)

Mark as Spam Posted On: 7/31/2022 7:41:42 AM

Like Dislike

Guillermoo
Joined On 4/7/2015 8:47:48 AM
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In this study, serum soluble RAGE (sRAGE) levels were significantly higher in the asymptomatic group than in the control group. Age, fibrinogen, C-reactive protein, and triglyceride levels were higher, and the sRAGE level was lower in patients with long involvement than in asymptomatic patients. Two soluble forms of RAGE have been identified in human plasma: RAGE, sI? or esRAGE, which results from alternative splicing, and sRAGE, a proteolytic cleavage isoform in the extracellular portion of full-length RAGE. The endogenous secretory receptor for advanced glycation end products (esRAGE) binds extracellular RAGE ligands and inhibits RAGE activation on the cell surface, protecting endothelial cell function.

However, the underlying mechanism remains unclear. www.tandfonline.com/.../15547008.2020.1861099 (2021) www.elsevier.es/es-revista-revista-medicina-e-investigacion-353-articu... (2017) www.hindawi.com/.../8216578 (2018) Oxidative stress, including ROS, is induced by AGEs during normal metabolism, but is physiologically mitigated by the body's antioxidant systems.

However, in a hyperglycemic environment, as is typically seen in patients with diabetes, oxidative stress that cannot be eliminated through the body's antioxidant system causes various diabetic complications, such as organ stress. Maternal hyperglycemia creates an intrauterine intrauterine hyperglycemic environment through the placenta that is involved in the development of various diseases in the offspring www.mdpi.com/.../9145 (2021).

Mark as Spam Posted On: 7/31/2022 7:42:38 AM

Like Dislike

Guillermoo
Joined On 4/7/2015 8:47:48 AM
Add as Friend Send Message

Benfotiamine is the fat-soluble form of vitamin B1, which allows it to pass through cell membranes. Benfotiamine + Beta Carotene same combinations is used for Prevention of complications of diabetes, cancers, heart disease, cataracts and other conditions. examine.com/.../benfotiamine (2017) Activated forms of vitamin B6 www.drjcp/.../9543.shtml NAC antagonizes AGE and presents insulin resistance and long-term complications. www.frontiersin.org/.../full (2017) R-lipoica has anti-glycation properties, improves insulin sensitivity and prevents diabetic joint and cardiovascular complications. bmccomplementalternmed.biomedcentral.com/articles/10.1186/s12906-017-2... (2017) Curcumin can inhibit AGE formation and AGE-induced alterations.

www.tandfonline.com/.../10408398.2017.1396200 (2017) This review suggests that resveratrol REV has the potential to decrease AGE toxicity and inhibit AGE-induced complications. Further clinical trials are suggested to assess the beneficial effect of REV on AGEs in chronic metabolic diseases. REV exerts its effects by influencing RAGE, nuclear factor kappa B (NF-B), peroxisome proliferator-activated receptor (PPAR) , and transforming growth factor (TGF)- activities. tabtak.unlimitedlary.wiley.com/.../doaf.1031 (2019) www.tandfonline.com/.../10810465.2019.1615434 (2022).

Mark as Spam Posted On: 7/31/2022 7:43:19 AM

Like Dislike

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forbiddenhealing
Joined On 2/21/2011 9:51:43 AM
Add as Friend Send Message

Yes Gui, "Never just one thing" I try to keep it simple so folks can address their situations and not get lost in the complexity of multiple opinions.

Mark as Spam Posted On: 7/31/2022 7:53:18 AM

Like Dislike

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tee1591
Joined On 9/1/2017 7:49:43 PM
Add as Friend Send Message

Guillermoo,Which is best brand of melatonin? Dosage, timing, oral or sublingual. Thanks for your research and comments.

Reply Mark as Spam Posted On: 7/31/2022 2:21:49 AM

Like Dislike

Guillermoo
Joined On 4/7/2015 8:47:48 AM
Add as Friend Send Message

Quercetin is a flavonoid with powerful antioxidant and anti-inflammatory properties. It is found in many foods, including onions, apples, berries, and green tea. Quercetin has been shown to have a number of health benefits, including reducing the risk of heart disease, cancer, and diabetes. It is also thought to have neuroprotective effects, which may help to protect against Alzheimer's disease and Parkinson's disease. Quercetin is available as a dietary supplement and is also found in many foods. The recommended dosage of quercetin varies depending on the individual and the condition being treated. However, a typical dosage is 500-1000 mg per day. Quercetin is generally considered safe, but it may interact with some medications. It is important to talk to your doctor before taking quercetin supplements.

Mark as Spam Posted On: 7/31/2022 7:53:58 AM

Like Dislike

Guillermoo
Joined On 4/7/2015 8:47:48 AM
Add as Friend Send Message

Quercetin is a flavonoid with powerful antioxidant and anti-inflammatory properties. It is found in many foods, including onions, apples, berries, and green tea. Quercetin has been shown to have a number of health benefits, including reducing the risk of heart disease, cancer, and diabetes. It is also thought to have neuroprotective effects, which may help to protect against Alzheimer's disease and Parkinson's disease. Quercetin is available as a dietary supplement and is also found in many foods. The recommended dosage of quercetin varies depending on the individual and the condition being treated. However, a typical dosage is 500-1000 mg per day. Quercetin is generally considered safe, but it may interact with some medications. It is important to talk to your doctor before taking quercetin supplements.

Mark as Spam Posted On: 7/31/2022 7:54:00 AM

Like Dislike

Joined On 4/17/2015 8:47:48 AM

Add as Friend Send Message

Thank you TMR. Dr. Mercola markets SLEEP SUPPORT WITH MELATONIN IN SPRAYS. Sleep Support offers the ideal dose of melatonin plus my calming blend of soothing plant extracts and my neuro blend to relax mind and body. When taken one hour before bedtime, as needed, Sleep Support with Melatonin offers a proprietary blend of 8 carefully selected, research-backed ingredients, including: •Botanistic to support deep, restful sleep and immune, metabolic and brain health. •L-Theanine: An amino acid found in tea that acts as a neurotransmitter that promotes relaxation. 5-HTP (5-Hydroxytryptophan): A hydrolyzed form of tryptophan that readily crosses the blood-brain barrier and converts to serotonin, providing a boost to your mood and improving your sleep.

-GABA (Gamma Amino Butyric Acid): A naturally occurring amino acid found in studies to increase the brain's relaxing alpha waves and reduce the "busy mind" beta waves. -L-Tryptophan: An an essential amino acid required for the production of serotonin in the brain and a precursor to melatonin. It has been shown in clinical studies to support normal sleep patterns. • Tart Cherry Fruit Concentrate: Natural cherry juice with anthocyanins, polyphenols, and flavonoids that can help increase the length and quality of your sleep. -Chamomile Flower Powder: Contains an antioxidant called apigenin that binds to receptors in the brain to help you relax and initiate sleep.

In a report Dr. Mercola says: Melatonin has a very safe history, with few reports of adverse events, and may provide additional benefits beyond sleep benefits, including metabolic, anti-inflammatory, immunomodulatory and antioxidant effects While melatonin is believed to be relatively safe when used for short or even medium periods (up to 12 months), the long-term effects of melatonin, even in children, are mostly unknown. If you are having trouble falling asleep or staying asleep, you should first focus on your sleep hygiene.

Mark as Spam Posted On 7/31/2022 3:45:54 AM

Like Dislike

Joined On 4/17/2015 8:47:48 AM

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In his report he says: Like melatonin, CBD appears to be very safe. "[The] most notable benefit of cannabis as a form of treatment is its safety," the researchers noted. "There have been no reports of fatal overdose with any of the cannabinoids and, aside from concerns about its abuse, it has very few major complications." Common adverse effects included mild short-term cannabis use has few overall risk, but more research is needed to clarify potential long-term risks and harms." If you're looking for some natural sleep support, you may want to consider 5-HTP.

Your body makes 5-HTP (5-hydroxytryptophan) from the amino acid tryptophan (found in foods like poultry, eggs, and cheese). The conversion of the chemical 5-HTP in the brain and central nervous system is to promote the production of the neurotransmitter serotonin, therefore it can help improve mood and sleep. 5-HTP has been used therapeutically to treat insomnia, which may be because it helps improve melatonin levels. Because 5-HTP produces serotonin and this can be converted to melatonin, this supplement is used for insomnia and to improve sleep before the body's production of melatonin.

It was found that the combination of 5-HTP with GABA could decrease the time to fall asleep from an average of 32.3 minutes to 19.7 minutes in 18 patients with sleep disorders, as well as increase the time spent in deep sleep. [2] (2018) [3] (2006) articulos.mercola.com/sitios/articulos/archivo/2021/11/06/la-beneficia... This article may also be of interest to you www.healthline.com/health/how-long-does-melatonin-last#side-effects-an...

Mark as Spam Posted On 7/31/2022 3:46:16 AM

Like Dislike

Joined On 1/3/2011 1:15:21 AM

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Plant more cherries. "Montmorency cherries are one of the few known food sources of melatonin. A study conducted by Reiter and colleagues at the University of Texas Health Science Center found that Montmorency cherries contain substantial amounts of melatonin, at levels higher than normally found in human blood. Montmorency cherries, which account for the majority of sour cherries produced in the U.S., contain 13 micrograms (µg) of melatonin per gram (Burkhardt 2001)." (The Montmorency Cherry Nutrition Report, an information booklet by Cherry Marketing Institute - cherrymarketing.uk.co - Technical review of the quality of sweet cherry was provided by: Russel Reiter, Ph.D. Department of Cellular and Structural Biology, University of Texas Health Science Center.)

Reply Mark as Spam Posted On: 7/31/2022 11:26:02 AM

Like Dislike

Joined On 4/3/2015 9:47:39 AM

Add as Friend Send Message

I must be an anomaly. The more sun I get the less I sleep, and the less sun I get the more I sleep. The sun is very bright here at 4,000 m AZ.

Reply Mark as Spam Posted On: 7/31/2022 9:24:42 AM

Like Dislike

Joined On 12/26/2010 3:12:13 AM

Add as Friend Send Message

I had been taking this all year as Dr M recommended it as a powerful antioxidant but mostly to reset my biological clock and keep it that way as I have delayed sleep onset. Last week my doc warned me against it saying continued use was not recommended, one reason being that it has a rebound effect that can cause insomnia, which I now have. She recommended Trazodone which I refused. I'd rather take this. We're unsure what to do so I stopped the melatonin just in case. I now feel worse and had a very bad reaction which may or may not be related to melatonin withdrawal. Nausea, diarrhea, running nose which went away after one day. I really do need to sleep - not getting nearly enough but don't want to do damage either. An uneasy dilemma.

Reply Mark as Spam Posted On: 7/31/2022 9:13:50 AM

Like Dislike

Joined On 10/26/2010 3:17:13 AM

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Quote:

Originally Posted by tmoran

Yes, you are not supposed to take melatonin all the time, maybe like only before work days with weekends off or something like this, or your body stops producing its own. I have been very prone to insomnia all my life, and I tried everything. The most effective thing I found is using transcutaneous vagus nerve stimulator right before sleep. There are instructional videos on youtube. You could buy TENS 7000 unit on amazon for $25, ear clips (black cockatoo) from hmspros.com (and extra electrodes). Red cord goes to ear clip, white goes to left ear (combs concha better than tragus - google it), return electrode goes on left back/shoulder. Set pulse width to 200ms, rate 5Hz for 8 min, change to 4Hz at 6 min, change to 3Hz at 4 min, change to 2Hz at 2 min. This is total 8 min and puts your brain and whole body into the delta and theta wave (going down from 5 to 2 Hz) and will pretty much puts you to sleep. Don't plan to do anything after this, since you will be passing out! Good luck!

Mark as Spam Posted On: 7/31/2022 12:05:05 PM

Like Dislike

Joined On 4/3/2015 1:40:28 PM

Add as Friend Send Message

Dr. Mercola's SleepSupport comes with 3 different dosages of melatonin! 0, 5 and 10 in tablets, 1.5 I spray. Which is the best to have on hand? Thank you.

Reply Mark as Spam Posted On: 7/31/2022 6:26:13 AM

Like Dislike

Joined On 3/14/2021 6:46:59 AM

Add as Friend Send Message

This was great! I learned a ton. Thank you!

Reply Mark as Spam Posted On: 7/31/2022 8:32:46 AM

Like Dislike

Joined On 12/20/2007 4:30:22 PM

Add as Friend Send Message

This is such an informative article. I will be purchasing a bottle of Melatonin. I have a question.....I have noticed lately I have been seeing "CONTAINS NO MELATONIN" on bottles at the store. Is this just another ploy to make us believe that there is something wrong with Melatonin? Curious mind want to know.

Reply Mark as Spam Posted On: 7/31/2022 4:49:30 AM

Like Dislike

Joined On 4/17/2015 8:47:48 AM

Add as Friend Send Message

Quote:

Originally Posted by bburns1955

I sure wouldn't doubt it! They – the elites & pharma – don't want us being healthy. It goes against their agenda.

Mark as Spam Posted On: 7/31/2022 10:16:36 AM

Like Dislike

Joined On 5/23/2013 7:28:10 PM

Add as Friend Send Message

Both articles and comments are quite informative. Thank you. Are there any substitutions for folks who are unable to take melatonin? I've tried many brands and the lowest dose possible and still no cigar. Extreme migraines, pain & nausea is what results for me unfortunately. Also, I read that melatonin (husband takes for sleep without any problems) is dangerous if taken for a long period of time. Any thoughts please.

Reply Mark as Spam Posted On: 7/31/2022 10:00:36 AM

Like Dislike

Joined On 11/15/2015 5:08:52 AM

Add as Friend Send Message

Dr. Mercola, In the last paragraph of your article you state, "you have to eliminate ALL seed oils from your diet." Technically or actually, the name is the seed of the sesame tree, and isn't coconut oil good for you? I do not mean to be critical, but I am afraid that some people may misconstrue your message and eliminate coconut oil from their diet.

Reply Mark as Spam Posted On: 7/31/2022 3:38:14 AM

Like Dislike

Joined On 4/17/2015 8:47:48 AM

Add as Friend Send Message

A timely clarification. Yes, Dr. Mercola: "Many now understand that their omega-6 to omega-3 ratio is very important, and should be 1-to-1 or possibly even 4-to-1, but wildly increasing your omega-3 intake won't counteract the damage caused by excess linoic and (LA). You really need to minimize omega-6 to prevent damage from occurring." "Ideally, consider reducing LA to less than 7 grams daily, which is close to what our ancestors used to consume before all these chronic health conditions like obesity, diabetes, heart disease and cancer became widespread." Consider cooking with suet or lard." The problem with seed oils is that they are incredibly pro-inflammatory +4 and increase excessive oxidative damage in your body.

This oxidative stress, in turn, triggers mitochondrial damage and dysfunction which then drives the disease process. OEAH (LA metabolites) are also cytotoxic, genotoxic, mutagenic, carcinogenic, thrombogenic, atherogenic, and obesogenic. Then there is the issue of direct toxicity from pesticides and herbicides. Most vegetable oils produced today, especially canola, corn, and soybeans, are made from genetically modified crops and are therefore a major source of exposure to toxic glyphosate.

According to Institute, the reason these oils have been able to remain in the food supply, despite their high toxicity is because they are not acute biological poisons, but rather chronic ones. articulos.mercola.com/omega-3-aspx

articulos.mercola.com/sitios/articulos/archivo/2018/12/07/melatonin-can (2018)

articulos.mercola.com/sitios/articulos/archivo/2022/03/31/mesgdbfbs... (2022)

articulos.mercola.com/sitios/articulos/archivo/2022/03/15/el-aceite-de... (2022)

Mark as Spam Posted On: 7/31/2022 4:03:41 AM

Like Dislike

Joined On 11/15/2015 5:08:52 AM

Add as Friend Send Message

Very good point Gui, taking more Omega 3 won't counteract the damage caused by excess intake of Omega6. Eating COOP meats all the time, which have ratio of Omega 6 as high as 15, 22, and even as high as 25, cannot be corrected overnight. Eliminating Omega 6 as much as possible and eating more Omega 3 rich foods like Salmon, Sardines and the like. Supplementing with Krill is the best for your heart, brain, arteries, and rebuilding your RNA telomeres and overall health.

Mark as Spam Posted On: 7/31/2022 4:23:30 AM

Like Dislike

Joined On 6/15/2008 1:05:17 PM

Add as Friend Send Message

There's no need to work so hard on minimizing the intake of omega-6 if you just refrain from eating any refined sources of that polyunsaturated oil, and also refrain from eating animals that have been fed in a CAFO operation on chicken feed in such a way that they are consuming grains that are rich in omega-6. Eat a natural, whole diet. You will get some omega-6. But it's an essential part of the diet. If you use this link www.academia.edu/39434368/Omega_6_omega_3_ratio_and_brain_related_func... You can get a PDF download of the research by Shlomo Yehuda (a direct, unpaid version of the study on line is not available) that proves quite definitively that it is a 4:1 ratio of omega-6 to omega-3 (not 1:1 as often touted) that is the ideal that gives optimum performance in the body.

I recommend people read this research. There's no need to try to "minimize" your intake of omega-6. If you do that, eliminating all intake of nuts, etc., you might actually not be getting enough of this essential nutrient. Just eat real organic food, not produced in factories nor feed lots, and you will be healthy and probably not even need to supplement with additional omega-3.

The human body needs very little of these nutrients, and it's most important to get them by eating the healthiest diet you can manage. Omega-3 supplements are often already rancid by the time you have purchased them. Omega-6 is much more vulnerable to oxidation than is omega-3. There's no way you're ever getting too much omega-3 sources such as Chia seeds.

Mark as Spam Posted On: 7/31/2022 6:15:45 AM

Like Dislike

Joined On 4/24/2008 9:09:26 PM

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This article gives dosage for heart attack and Covid but not for regular use. What is the dosage and type recommended for everyday use?

Reply Mark as Spam Posted On: 7/31/2022 7:03:33 AM

Like Dislike

Joined On 11/15/2015 5:08:52 AM

Add as Friend Send Message

Vitamin E could also be helpful, since it helps brings more oxygen to the heart. It can be helpful on a daily basis, along with CoQ10, Selenium, and Hawthorn Berry.

Reply Mark as Spam Posted On: 7/31/2022 4:55:52 AM

Like Dislike

Joined On 4/17/2015 8:47:48 AM

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Also: The synergistic actions of melatonin with vitamin C, vitamin E, and glutathione have been systematically investigated. When melatonin was combined with vitamin E, glutathione, or vitamin C, the protective effects against iron-induced lipid peroxidation were dramatically increased. Although melatonin was active at very low concentrations, it still showed synergistic effects with other antioxidants at certain concentrations. Furthermore, melatonin not only reversed the preoxidative effects of vitamin C, but its efficacy in reducing lipid peroxidation was enhanced when combined with prooxidative concentrations of vitamin C.

webcitation.org/query.php?...20222301177747 (2010). The evidence indicates that oxidative stress and exacerbated inflammation are the main standard processes responsible for the development and progression of multiple pathologies, which have become the main causes of morbidity and mortality in current populations. The mitochondria is an essential target organelle for antioxidant and anti-inflammatory agents. The wisdom of nature allows mitochondria to maintain optimal cellular homeostasis through their receptors and enzymes that respond to endogenous hormones.

Several natural substances, such as melatonin and micronutrients, can prevent or attenuate mitochondrial damage and can preserve a healthy state. Spiritual practices like contemplation, meditation, and prayer can also induce beneficial synergistic effects of the simultaneous administration of micronutrients and melatonin in patients with oxidative/inflammatory diseases of different degrees of severity. www.mdpi.com/1...1/free (2021).

Mark as Spam Posted On: 7/31/2022 4:49:34 AM

Like Dislike

Joined On 11/15/2015 8:59:01 AM

Add as Friend Send Message

Hi Badboy, you may want to listen to this May 2022 interview:

chrisknesser.com/the-health-benefits-of-biosteinists-with-dr-barrie-ta... - stumbled across it recently

Mark as Spam Posted On: 7/31/2022 7:16:08 AM

Like Dislike

badboy2
Joined On 11/15/2010 5:08:52 AM
Add to Friend | Send Message

I have read that taking Niacin aka vitamin B3 before or after a heart attack can prevent the paralysis after-effects of an attack, such as the left arm and speech impediments. It is good to now know that Metatonin is also helpful.

Reply | Mark as Spam | Posted On 7/31/2022 4:03:41 AM
Like | Dislike

Guillermmo
Joined On 4/17/2015 8:47:48 AM
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Good reference. This meta-analysis of randomized placebo controlled trials to assess the effect of niacin on cardiovascular outcomes in patients with coronary artery disease. A systematic search was performed in the PubMed, EMBASE and Cochrane library databases. Seven studies with a total of 5137 patients met the inclusion criteria. Heterogeneity of studies was analyzed using Cochran Q statistics. The significance of the common treatment effect was assessed by calculating pooled relative risks using the Mantel-Haenszel fixed effects model. Results: Compared with the placebo group, niacin therapy significantly reduced coronary artery revascularization in cardiac mortality (RR 0.770), stroke and total mortality (RR 0.774), stroke and TIA (RR 0.755), as well as a possible non-significant decrease in cardiac mortality (RR: 0.883).

There is increasing evidence of the critical role that HDL-c plays in atherosclerosis.31 and, to date, niacin is the most effective clinical agent for increasing HDL-c levels in addition to its other beneficial effects of modulating HDL-c levels. lipids. journals.sagepub.com/.../10.1258/ijclem.2010.010037 (2010) www.ncbi.nlm.nih.gov/.../PMC2140140 (2011) In this report, niacin promoted cardiac functional recovery after ischemic myocardial infarction.

The beneficial effects of niacin on myocardial ischemia require activation of the prostaglandin D 2 (PGD 2) prereceptor. through DP1-mediated NO polarization and timely resolution of inflammation in hearts. which suggests that the activation of the DP1 receptor may represent a novel strategy for the treatment of cardiovascular disease. www.ncbi.nlm.nih.gov/.../PMC5325076 (2017)

Mark as Spam | Posted On 7/31/2022 4:24:55 AM
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Guillermmo
Joined On 4/17/2015 8:47:48 AM
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A report by Dr. Mercola: Niacin and melatonin have a unique effect on adiponectin, a peptide secreted by fat cells that plays a role in obesity-related diseases such as diabetes. Low levels of adiponectin are the hem. skeletal muscle and vasculature. Niacin helped reduce obesity in a mouse model and in one pilot study reduced abdominal fat by an average of 27% in participants. melatonin deficiency also correlates with obesity and supplementation has led to significant weight loss in treatment groups. Niacin can reduce pro-inflammatory cytokine secretion and has an anti-inflammatory effect. properties which some experts believe may help reduce the severity of COVID-19. Melatonin influences circadian rhythm and the immune system; it also reduces inflammation and is an antioxidant. one group of scientists called it a "silver bullet" in treating COVID-19 patients

Mark as Spam | Posted On 7/31/2022 4:25:14 AM
Like | Dislike

florist
Joined On 4/23/2010 11:35:39 AM
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Are you sure the heart cells do not regenerate? The reason I ask is my husband had nine code blues 2 years ago and after I took him out of icu and home I gave him raw milk meal replacement drink and plant based vitamins through his feeding tube every four hours for weeks. He is now 74 but back then the heart doctor was amazed. Dr Reg McDaniel has videos on YouTube about the item I gave him for months and his videos show many outstanding cures of things like Down syndrome fetal alcohol syndrome and dwarfism. He doesn't take any meds now but still issues with lungs from nerts.

Reply | Mark as Spam | Posted On 7/31/2022 8:21:54 AM
Like | Dislike

hort5117
Joined On 6/23/2010 12:33:19 PM
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Melatonin has a side effect I never see mentioned. It causes some people to experience nightmares. I tried it some years back when it was touted as the hot current supplement, and was busy taking it because of constant nightmares. I know someone else who had the identical experience with it, and also had to stop taking it. Clearly I am not alone, yet I never see this side effect mentioned in articles such as this.

Reply | Mark as Spam | Posted On 7/31/2022 3:39:12 AM
Like | Dislike

badboy2
Joined On 11/15/2010 5:08:52 AM
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Have you tried taking it with something light to eat? Or more liquid after swallowing? Just curious.

Mark as Spam | Posted On 7/31/2022 3:51:46 AM
Like | Dislike

giles22
Joined On 11/13/2010 5:28:00 PM
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yes it does cause nightmares, I can vouch for this and I have met other people who have had similar experiences. The nightmare effects seem to kick in at around 3mg, so if you have a problem with sleep, things should be ok if you take less than this, so I'm glad you brought it up. I would also mention that at least 50% of people who have taken too high a dose experiences this, so this is quite prevalent.

Mark as Spam | Posted On 7/31/2022 5:34:03 AM
Like | Dislike

rmalrose
Joined On 11/15/2011 8:59:01 AM
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Yes, second this side-effect. I was fine for about 2 weeks, slept really deeply. Then crazy dreaming started...would wake up groggy. May have something to do with circadian rhythm and taking it late in the evening. Or may have something to do with down-regulated melatonin rec. Never tried taking it in the morning. May require doing timing trials on yourself

Mark as Spam | Posted On 7/31/2022 7:11:23 AM
Like | Dislike

tan2582
Joined On 3/19/2015 10:40:19 PM
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I had tried different types, different dosages, the end result is the same - makes me sick all night and the day after

Reply | Mark as Spam | Posted On 7/31/2022 10:14:21 AM
Like | Dislike

fundamentalassumptions
Joined On 4/1/2009 1:17:58 PM
Add as Friend | Send Message

Thank you. This is some useful,fascinating information that explains a thing or 2,& mmes the occult learning, It fits perfectly w/ what we know of God who is all light, w/ no darkness in him,& the secondary, material light somewhat typifying that in the sense of Romans 1, 1 John 1,& , of course John 1 KJB and Jesus is whom all the fullness of the Godhead dwelleth bodily (Colossians 2:9 K.J.B), who is the light of the world& Son of righteousness rising w/ healing in his wings, & sha, the Word- the entrance of his word brings light.

The light of the lampstand in the darkness of the Tabernacle/Temple are pictures of this in subconscience, & as well its action on this immaterial& action on a cellular level in the members typifying the whole truth& counsel of God. Psalm 19:7,8& chap. 19, Malachi 4:2, scriptures much there! There is also a counterfeit, incomplete& shadowed created light, self-produced, which Lucifer& his fallen cocome fatawk his ministers bring 2 Corinthians 11:14, Colossians 2:4,8.

In the end, God will be the light there will be no night in the new Jerusalem, the new heavens& earth, Revelation 21&22 KJB. Darkness will be banished to the lake of fire w/ the beast& his lying god& all corruption, w/corresponsent man created in God's image w/ body, soul& spirit. The body's corruption remains until the resurrection. So, I'll still die, & for those receiving it, that is goin to be w/ Christ, who is truth, light, the word(life etc in its ultimate form out of the filling, but this explains why I don't need the scare for energy& well-being in the summer when working daily out in the light,even w/ cancer.

AMAZING! God is good,& tho I believe they are grossly in interpretation& would rahm fully to be careful in those things dealing w/ the fate of their eternal souls& destinies, I'm still stewarding the Lord's goodness to the end of redeeming the time, well-serving the Lord in the responsibilities he gives us here- the Sauna Source photon looks to be a good investment for winter esp

Reply | Mark as Spam | Posted On 7/31/2022 9:51:02 AM
Like | Dislike

dljc99
Joined On 5/26/2010 7:56:30 AM
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I was recently diagnosed with a "hot coddle" skin disease, granuloma annulare. I have been trying different things that I heard about to cure it. It actually started when I was out of state at a funeral for a family member who contrited suicide. Stress can be a factor I'm sure. They say they don't know what causes it and the people or the group I joined have had some success but for each person it seems to be different. About 60% had shingles as I did. That is where it started-where the shingles started. I am wondering if melatonin might be a help with this. Any ideas?

Reply | Mark as Spam | Posted On 7/31/2022 8:51:15 AM
Like | Dislike

Guillermmo
Joined On 4/17/2015 8:47:48 AM
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Dear dljc99, most cases in the literature report herpes zoster (HZ) as the original disease; however, the isotopic responses vary greatly. Including this case, our literature search revealed 32 cases of isotopic granuloma annulare (AG) after HZ. pubmed.ncbi.nlm.nih.gov/23348745/. www.jaadcasereports.org/.../S2352-5126 (18)30070-5/fulltext Elevated levels of total homocysteine (tHcy) and reduced levels of melatonin MLT are associated with the manifestation of herpes zoster HZ. onlinelibrary.wiley.com/.../jnc.12424 (2015) SHINGLES NATURAL TREATMENT: FOODS, SUPPLEMENTS & OILS - draxe.com/.../5-shingles-natural-treatments. 6. NATURAL TREATMENTS FOR SHINGLES www.healthline.com/.../shingles-natural-treatment I have a skin condition called granuloma annulare. I've tried all the steroid creams without improvement. Do you know of any alternative treatments? www.drweil.com/health-wellness/body-mind-spirit/hair-skin-nails/a-life-s...

Mark as Spam | Posted On 7/31/2022 10:20:53 AM
Like | Dislike

ric5998
Joined On 3/23/2021 11:44:36 AM
Add as Friend | Send Message

Another great article, although I disagree with the evolutionary theory that all this evolved over billions of years. Is God so weak He cannot speak the world into existence the way He said He did?

Reply | Mark as Spam | Posted On 7/31/2022 9:18:52 AM
Like | Dislike

Guillermmo
Joined On 4/17/2015 8:47:48 AM
Add as Friend | Send Message

Dear ric5998, most cases in the literature report herpes zoster (HZ) as the original disease; however, the isotopic responses vary greatly. Including this case, our literature search revealed 32 cases of isotopic granuloma annulare (AG) after HZ. pubmed.ncbi.nlm.nih.gov/23348745/. www.jaadcasereports.org/.../S2352-5126 (18)30070-5/fulltext Elevated levels of total homocysteine (tHcy) and reduced levels of melatonin MLT are associated with the manifestation of herpes zoster HZ. onlinelibrary.wiley.com/.../jnc.12424 (2015) SHINGLES NATURAL TREATMENT: FOODS, SUPPLEMENTS & OILS - drax.com/.../5-shingles-natural-treatments. 6. NATURAL TREATMENTS FOR SHINGLES www.healthline.com/.../shingles-natural-treatment I have a skin condition called granuloma annulare. I've tried all the steroid creams without improvement. Do you know of any alternative treatments? www.drweil.com/health-wellness/body-mind-spirit/hair-skin-nails/a-life-s...

Mark as Spam | Posted On 7/31/2022 10:20:53 AM
Like | Dislike

bluerac1955
Joined On 8/1/2011 10:21:55 PM
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I agree with you, ric5998. The interview is great info, but I don't believe we evolved over billions of years.

Reply | Mark as Spam | Posted On 7/31/2022 10:11:25 AM
Like | Dislike

wannabeaknowitall
Joined On 4/4/2008 10:41:51 AM
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Im allergic to melatonin to pill form. It was the most horrible experience in my life, my cells were screaming death at me. I was groggy all after waking up and couldn't function at all such that I had to call in sick. That was the first and last time I ever tried melatonin. Exercise & vitamin D seem to regulate my circadian rhythm.

Reply | Mark as Spam | Posted On 7/31/2022 9:23:25 AM
Like | Dislike

Guillermmo
Joined On 4/17/2015 8:47:48 AM
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As Dr. Mercola puts it, mitochondrial melatonin production is one of the reasons regular sun exposure is so crucial. Vitamin D is a prohormone that belongs to the category of the group of fat-soluble vitamins; more is obtained from sun exposure and less through food. Although vitamin D has traditionally been shown to be involved in calcium homeostasis and bone health, recent studies have found a positive association between vitamin D and sleep. In particular, human clinical studies indicate that low vitamin D levels correlate with poor sleep quality and duration.

The mechanism by which this association is explained is still unclear. However, vitamin D receptors have been found in brain regions involved in sleep regulation, and vitamin D appears to be involved in the regulation of the sleep-wake cycle. The current review summarizes the available evidence regarding the association between vitamin D and sleep, focusing on preclinical and clinical studies. www.sciencedirect.com/science/article/abs/pii/S1389945715300014 (2016) www.sciencedirect.com/science/article/abs/pii/S0306987715001504 (2015)

Mark as Spam | Posted On 7/31/2022 5:37:12 AM
Like | Dislike

Guillermmo
Joined On 4/17/2015 8:47:48 AM
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As Dr. Mercola reports, if he's looking for some natural sleep support, he may have heard of 5-HTP. His body produces 5-HTP. The function of the chemical 5-HTP in the brain and central nervous system is to promote the production of the neurotransmitter serotonin, therefore it can help improve mood and sleep. 5-HTP has been used therapeutically to treat insomnia, which may be because it helps improve melatonin levels. Because 5-HTP produces serotonin and this can be converted to melatonin, this supplement is used for insomnia and works by increasing the body's production of melatonin. It was found that the combination of 5-HTP with GABA could decrease the time to fall asleep from an average of 32.3 minutes to 19.1 minutes in 18 patients with sleep disorders, as well as increase the time and improve the quality of sleep. articulos.mercola.com/sites/articulos/archivo/2021/11/06/3e-benefits...

Mark as Spam | Posted On 7/31/2022 5:37:41 AM
Like | Dislike

wannabeaknowitall
Joined On 4/4/2008 10:41:51 AM
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Thank you Gui. At one time I was going to start taking 5-HTP but my therapist said it would give me more energy rather than put me to sleep. With the information you provided it's enough to convince me that it does work. I'll start taking it and if I don't fall sleep fast enough then I'll get the gaba.

Mark as Spam | Posted On 7/31/2022 6:56:54 AM
Like | Dislike

chrisphillips
Joined On 6/21/2010 9:26:38 AM
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I had a bad experience too but I was taking too much...if you want to try again, and I am so glad I did, try .25 mg...you will have to cut pills for whole. I worked my way up to 1 mg. but .25 was not so problem and did help!

Mark as Spam | Posted On 7/31/2022 7:32:32 AM
Like | Dislike

wannabeaknowitall
Joined On 4/4/2008 10:41:51 AM
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ChrisPhillips I was thinking the same as you suggested but I'm afraid of even .25mg I think I slept almost 20 hrs straight and not feeling well not me being able to tell what time of day it was or even what day after waking up makes me think twice. I remember feeling nauseous too which is why I ended up calling in sick. What was your reaction to taking that much? What kind of dreams did you take? I was thinking it was the brand but maybe not.

Mark as Spam | Posted On 7/31/2022 8:18:57 AM
Like | Dislike

davidle
Joined On 6/7/2011 7:38:57 AM
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3 billion years old? This is questionable. Who can measure time that far back?

Reply | Mark as Spam | Posted On 7/31/2022 8:21:55 AM
Like | Dislike

kfa6931
Joined On 6/25/2021 8:12:57 AM
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Some of this is hard for me to understand.

Reply | Mark as Spam | Posted On 7/31/2022 7:47:44 AM
Like | Dislike

bwu8527
Joined On 7/18/2021 11:45:16 AM
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I do hope that one day when discussing seed oils in these articles an actual list of seed oils and the foods which contain them is listed. Sigh.

Reply | Mark as Spam | Posted On 7/31/2022 5:57:18 AM
Like | Dislike

chrisphillips
Joined On 6/21/2010 9:26:38 AM
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Just stick to coconut oil or avocado oil or ghee...read labels...never eat out!

Mark as Spam | Posted On 7/31/2022 7:08:13 AM

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