

Guillermou

Mitochondrial dysfunction is caused by poor nutrition. highly processed and contaminated food with pesticides, a load of sugars and additives, vaccines, fluoridated and contaminated water, stress, etc., Mitochondria are especially abundant in the organs and tissues of the body with higher energy requirements. Supplements and lifestyle changes can improve mitochondrial health by increasing the availability of proteins needed for ATP production (activation of AMPK, PGC-1 α , NAD⁺, SIRT1. They also act as antioxidants, helping mitochondria to reduce oxidative stress and other important functions, including: signaling, differentiation, programmed cell death and control of cell growth. Additional support for mitochondrial function includes acetyl-L-carnitine, nicotinamide, Q10, pyrroloquinoline quinone, vitamin C, choline, NADH, -lipoic acid, -ketoglutaric acid, resveratrol, N-acetylcysteine, magnesium, and a multivitamin and quality ore. In the following link more references:

33 NATURAL WAYS TO IMPROVE MITOCHONDRIAL FUNCTION selfhacked.com/blog/natural-ways-to-improve-mitochondrial-function/ (2022). onlinelibrary.wiley.com/.../full (2017)
www.annualreviews.org/doi/abs/10.1146/annurev-pharmtox-010716-104908 (2018)
link.springer.com/.../10.1007%2F978-3-319-73344-9 (2018) Niacinamide is the precursor of NAD⁺ and therefore supplementation is claimed to increase levels of this molecule and improve mitochondrial function. Niacinamide can improve the mitochondrial quality of cells by causing dysfunctional mitochondria to fragment (autophagy). This effect was observed in human cells, resulting in reduced levels of mitochondria but maintaining normal mitochondria function.
pubmed.ncbi.nlm.nih.gov/19473119 (2018)

Posted On 06/22/2023

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Individual metabolic processes to produce NAD may be different based on age, disease, and genetics. The "raw materials" or "building blocks" (metabolic precursors) that the body needs to produce (synthesis) NAD⁺: 1.- Nicotinamide riboside (NR) 2.- Tryptophan (L-Trp) 3.- Nicotinic acid 4.- Nicotinamide 5.- Nicotinamide mononucleotide (NMN) Supplementation with NAD⁺ precursors involved in "recovery pathways" (such as nicotinamide riboside and NMN) is relatively more effective in increasing cellular NAD⁺ levels compared to those involved in the "de novo" pathway. www.ncbi.nlm.nih.gov/.../PMC4112140 (2014) pubmed.ncbi.nlm.nih.gov/19286518 (2009) NAD acts as a cofactor in several oxidation-reduction (redox) reactions and is a substrate for several non-redox enzymes.

NAD is critical to a variety of cellular processes, including energy metabolism, cell signaling, and epigenetics. NAD homeostasis appears to be of paramount importance for health and longevity, and its dysregulation is associated with multiple diseases. NAD metabolism is dynamic and is maintained by synthesis and degradation. Dysregulation of CD38 causes changes in NAD homeostasis and contributes to the pathophysiology of multiple conditions.

In fact, in animal models, the development of infectious diseases, autoimmune disorders, fibrosis, metabolic diseases, and age-associated diseases, including cancer, heart disease, and neurodegeneration, are associated with altered CD38 enzymatic activity.

pubmed.ncbi.nlm.nih.gov/35138178 (2022) Nicotinamide adenine dinucleotide (NAD⁺) increases mitochondrial energy and its deficiency is an essential factor in chronic diseases and aging. Avoiding DNA damage, and oxidative stress, by modulating enzymes such as sirtuins, glyceraldehyde-3-phosphate dehydrogenase, and AP endonuclease. www.liebertpub.com/.../ars.2017.7445 (2018)

Posted On 06/22/2023

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Patients with short telomeres often experience bone marrow failure. we investigated the effect of NAD supplementation with the NAD precursor, nicotinamide riboside (NR), on the characteristics of the period of health disrupted by telomere impairment. NR improved body weight loss and improved telomere integrity and systemic inflammation induced by telomere dysfunction. In addition, NR alleviated villous atrophy and inflammation in the small intestine. link.springer.com/.../s11357-023-00752-2 (2023) Quercetin and apigenin increase NAD⁺ levels through inhibition of the multifunctional protein CD38 that is present in mitochondria.

CD38 levels increase in tissues with age and correlate with decreased NAD

www.timelesslifemag.com/index.php/2016/06/29/quercetin-apigenin-may-sl.. (2016) Scientific evidence suggests that dietary polyphenols such as resveratrol, epigallocatechin-3-gallate (EGCG), and curcumin increase sirtuin activity and enhance NAD. www.ncbi.nlm.nih.gov/.../PMC2896035 Nrf2 diet, covers electromagnetic fields and favors mitochondrial function, promotes powerful antioxidants such as NAD, quinone oxidoreductase and glutathione S-transferases, and many others.

www.selfhacked.com/blog/about-nrf2-and-natural-ways-to-increase-it/ (2018)

www.mygenefood.com/activating-nrf2-pathway-nutrition-need-know/ (2018) NRPT is a combination of nicotinamide riboside and (NAD⁺), found in milk, and pterostilbene, a polyphenol found in blueberries, was administered to a population of 120 healthy adults between the ages of 60 and 80. The concentration of NAD⁺ increased by approximately 40% in the group and approximately 90% after 4 weeks. www.nature.com/.../s41514-017-0016-9 (2017)

Posted On 06/22/2023

juststeve

Gui, finally getting to my second cup of coffee, but it is actually my best cup of coffee! ;) All I can add is when using Niacinamide 3 times a day at the 50 mg Doc recommends, along with Glycine three times a day, with Doc's NAC w/milk thistle, methylene blue & methylene folate once a day, a slow but consistent gain of energy to function can be seen. As you know the past five years have been a challenge and to address my issues came last in line. The demands required left me very run down. This line of repair along with Doc's H2 product works wonders for me. Just sayn'

Posted On 06/22/2023

Guillermou

Just, very good medicine for an intelligent person like you who knows how to fight the disease. DNA damage and loss of the central metabolite NAD may contribute to both aging and COPD, and could be a target for interventions. An important event in aging is the loss of nicotinamide adenine dinucleotide (NAD⁺), a loss that may be important in promoting the proinflammatory environment that occurs with aging and therefore possibly COPD. In fact, NAD⁺ is emerging as a central metabolic molecule involved in multiple age-related pathways, including inflammation and metabolic control. Recently, the age-associated loss of NAD⁺ was shown to be due to M1 polarization of macrophages, suggesting that NAD⁺ is required for macrophage activation, an event that is involved in the pulmonary inflammatory response.

In humans, the therapeutic potential of increasing NAD⁺ levels through supplementation with one of its more bioavailable precursors has attracted attention. In this double-blind, placebo-controlled trial, we treated stable COPD patients with the NAD precursor nicotinamide riboside (NR) for 6 weeks and followed up 12 weeks later. NAD levels were lower in COPD patients compared with controls with healthy lungs and correlated with lung function. NR significantly increased NAD levels, reduced lung inflammation, and cellular senescence in vivo and in vitro. Our findings suggest that NR could be a viable treatment option for COPD patients. papers.ssrn.com/.../papers.cfm (2023)

Posted On 06/22/2023

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NR has been shown to return aged tissues to a younger state, possibly by increasing the sirtuin family of enzymes, known to play important roles in nearly all cellular functions. COPD patients have reduced airway sirtuin levels probably due to oxidative stress. Because sirtuins are NAD⁺ dependent, NR supplementation could serve as a treatment option for COPD patients through sirtuin activation. In addition, NAD⁺ replacement may facilitate greater overall resilience in older patients, considering the antiaging effects of nicotinamide riboside, allowing these patients to better cope with infections.

The chosen dose is 2 g per day orally. This dose has been shown to be safe and tolerated. The dose will be divided in two with the ingestion of 1 g in the morning and 1 g at night. NR is a natural vitamin B3 analog produced by yeast and found in many food products in low concentration. Many organisms, including humans, cannot produce NR, but instead have developed methods to convert it to the central redox modulator NAD⁺. Nicotinamide Riboside can return aged tissues to a younger state even after short-term treatment.

This vitamin B3 analog occurs naturally, is easily absorbed through oral administration, and has been tested in human trials with few side effects. Since this is a natural compound found widely in nature, no subjects have yet developed allergic responses to the molecule, and repeated doses of up to 2 g orally per day have demonstrated an acceptable safety profile. No treatment-emergent adverse events have been reported for NR to date. www.centerwatch.com/clinical-trials/listings/279828/inflammation-in-co.. (2023)

Posted On 06/22/2023

Guillermou

Nicotinamide mononucleotide (NMN) is a bioactive molecule found naturally in life forms. NMN is a direct precursor of the important molecule nicotinamide adenine dinucleotide (NAD⁺), an essential coenzyme required for enormous cellular functions in most forms of life. Nicotinamide mononucleotide (NMN) enters the interior of the mammalian cell in the form of nicotinamide riboside, followed by its subsequent conversion to NMN and NAD⁺. This particular molecule has demonstrated several beneficial pharmacological activities in preclinical studies, suggesting its potential therapeutic use. The pharmacological activities of NMN include its role in cellular biochemical functions, cardioprotection, diabetes, Alzheimer's disease, and complications associated with obesity.

The recent revolutionary discovery of the antiaging activities of this chemical fraction has added a valuable essence in research. NMN has also shown potential to be used as a therapeutic agent for the treatment of diabetes. Insulin resistance is the hallmark of type 2 diabetes that occurs due to oxidative stress, increased inflammatory response, impaired lipid metabolism, all of which can be ameliorated by NAD⁺. The diet high in processed fats and aging contribute to the predisposition of this particular type of diabetes, one of the common mechanisms being the reduction of NAD⁺.

Aging influences the decrease in the level of NAD⁺ in the pancreas, white adipose tissue, skeletal muscle and liver to a greater extent compared to the younger population. This NAD⁺ acts as a safeguard against various physiological disorders. NAD⁺ restores glutathione S-transferase, a protective agent against oxidative stress from lipid peroxidation products. In addition, the expression of interleukin 1 (IL-1) and calcium-binding protein, the two targets of the immune and inflammatory mediator nuclear factor kappa B (NF- κ B), are downregulated by NAD⁺.

Posted On 06/22/2023

Guillermou

There is an interconnection between the pathology of obesity and diabetes. Obesity exerts negative health effects through the alteration of biochemical pathways that cause mitochondrial dysfunction. Decreased ATP production through changes in the NAD⁺ and NADH level by dysfunctional muscle and liver mitochondria leads to insulin resistance and type 2 diabetes. NAD⁺ helps to replenish the cellular energy level by stimulating the mitochondria to generate ATP. As mentioned above, SIRT1 uses NAD⁺ as a cofactor to enhance mitochondrial biogenesis that is hampered by obesity. In a recent study, NMN was administered to obese mice www.mdpi.com/.../34 (2019) This study evaluated the potential hepatoprotective antiobesogenic effects of combination therapy with L-carnitine and nicotinamide riboside (NR), which may enhance fatty acid transfer across the inner mitochondrial membrane and increase nicotinamide adenine nucleotide (NAD⁺) levels.

), which are required for β -oxidation and the TCA cycle, respectively. L-carnitine (LC) plays an important role in oxidative metabolism, as it is required for the transfer of long-chain fatty acids (FA) from the cytosol to the mitochondrial matrix, where β -oxidation occurs. These fatty acids must be activated as acyl-CoA and transformed into acylcarnitines that can enter the mitochondrial matrix, in exchange for free carnitine, where they are reconverted to acyl-CoA and can be used for β -oxidation.

Carnitine is also required for the transport of the end products of peroxisomal β -oxidation, short- and medium-chain acyl-CoA. A decrease in carnitine levels has been associated with insulin resistance and diet-induced obesity and has been suggested to be a consequence of long-term lipid overload, energy metabolism dysfunction, and incomplete fat oxidation. . In contrast, LC supplementation in obese rats was shown to restore carnitine levels and improve metabolic function.

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NR and COMBI reduced hepatic adducts of 4-hydroxynonenal. Analysis of upstream regulatory genes demonstrated that COMBI reversed the detrimental effects of HFD on hepatic metabolic pathways and associated regulators. Combined treatment with LC and NR exerts protective effects on metabolic pathways and constitutes a new approach to attenuate obesity induced by HFD and NAFLD. www.mdpi.com/.../4359 (2019) This study focuses on the therapeutic roles of NMN treatment in various ocular diseases with recent advances. It was found that NMN treatment could be available for the prevention and protection of various experimental ocular diseases, as NMN treatment modulated ocular inflammation, oxidative stress, and complex metabolic dysregulation in mouse models for ocular diseases such as ischemic retinopathy.

, corneal defect, glaucoma, and age-related macular degeneration. link.springer.com/.../s00417-023-06118-w (2023) To delay or prevent optic nerve damage in glaucoma, two forms of vitamin B3, nicotinamide (NAM) and nicotinamide riboside (NR) are emerging as viable adjunctive therapies. These compounds are precursors of nicotinamide adenine dinucleotide (NAD). NAD is essential for proper cell function and is involved in various metabolic activities, including protection against reactive oxygen species, contributing to the performance of various enzymes, and maintenance of mitochondrial function.

Due to its beneficial effects and evidence of reduced NAD bioavailability with aging, researchers are looking for ways to replenish the cellular NAD pool through administration of its precursors in the belief that it will reduce vulnerability to cell death. retinal ganglion cells to external stressors. journals.sagepub.com/.../11206721231161101 (2023)

Posted On 06/22/2023

Guillermou

Viral infections are known to cause cellular NAD⁺ depletion. In fact, reduced levels of nicotinamide mononucleotide (NMN), a precursor to NAD⁺, have been detected in the blood of COVID-19 patients. In addition, upregulations of the polymerase (PARP) genes and the NAD biosynthetic gene were observed in individuals infected with SARS-CoV-2. PARPs play a key role in the antiviral immune response. Induction of PARP which are known to use NAD⁺ as a cosubstrate to catalyze mono-ADP ribosylation further decreased cellular NAD⁺ content. Furthermore, the upregulation of NAMPT, the rate-limiting enzyme of the recovery pathway, can be seen as a compensatory mechanism in response to increased demand for NAD⁺.

Enhancing the intracellular NAD⁺ pool using precursors such as NR has been shown to block PARP-sensitive hepatitis virus replication, supporting the idea that restoring NAD⁺ homeostasis may mitigate the severity of COVID-19. NR is clinically studied in patients with COVID-19. In one trial, metabolic status was investigated using a combination of NR and other metabolic cofactors, including N-acetylcysteine, L-carnitine tartrate, and serine in conjunction with hydroxychloroquine treatment. The group treated with metabolic cofactors demonstrated a significantly shorter recovery time with improved metabolic profiles.

In another trial, NR's dietary supplement, Niagen, is being evaluated to improve recovery in patients with Long-COVID. In addition to serving as a NAD⁺ booster, NR is also anticipated to be a direct inhibitor of viral enzymes. The SARS-CoV-2 RNA-dependent RNA polymerase regulates viral genome replication and gene transcription and has been suggested as a potential therapeutic target for COVID-19. A recent docking study, along with target prediction, toxicity prediction, and ADME prediction, also hypothesized the clinical efficacy of NR in combating COVID-19.

www.mdpi.com/.../3889 (2022)

Posted On 06/22/2023

Robert from Alberta Canada

Coincidentally was already right in the middle of "enjoying" my bi-weekly 500 mg (previously only 250 mg) B3 flush when this article and your supplementary comments and relevant info popped up. Now after reading more cutting back to just the 250 mg of Nicotinic Acid (Niacin) again. Thanks Dr. Joe/Gui et al... yur health info polymath(s). Wonder how many here just like reading about the B3 benefits but just don't "enjoy" the flush. Eugenics works... and it's OK. Cheers.

Posted On 06/23/2023

pipblanc

Gui, Excellent comments as ever.

Posted On 06/22/2023

pipblanc

B3 is also very useful for something unmentioned in this article: Alcoholism and addiction. The book *The Vitamin Cure* by Abram Hoffer and Andrew Saul outlines the protocol of B3 and Vitamin C to "cure" alcoholism. Bill W, the founder of AA, found until he took B3, on Hoffer's recommendation, he could not shake off his "dry drunk" depression. After taking it, he improved to the extent that he recommended it to other members. The sad thing is that the International Governing Body of AA refuted this evidence, thereby denying a more bearable passage to and life in sobriety. I have taken B3 in therapeutic amounts and along with Vitamin D/K2, Zinc, and NAC found it very useful. It is also useful for depression. It is in all likelihood not a vitamin as such, like D3, but that is another story!

Posted On 06/21/2023

Guillermou

A treatment, pipblac, of great interest. It is estimated that in the world there are 237 million men and 46 million women who suffer from alcohol use disorders. The highest prevalence among men and women is registered in the European Region (14.8% and 3.5%) and the Region of the Americas (11.5% and 5.1%). It is estimated that more than 140,000 people (approximately 97,000 men and 43,000 women) die from alcohol-related causes annually, making alcohol the fourth-leading preventable cause of death in the United States behind tobacco, poor diet and physical inactivity, and illegal drugs. Excessive alcohol consumption reduces the body's ability to synthesize nicotinamide adenine dinucleotide, or NAD+.

NAD+ is a necessary coenzyme for energy production and hundreds of other metabolic reactions. NAD+ is so critical, in fact, that it is found in every cell in the human body. Alcohol abuse decreases the body's synthesis of NAD+ cofactors, wreaking havoc on our physical and mental health. Vitamin B 3 is actually a collective term that refers to the NAD+ precursors niacin (or nicotinic acid), niacinamide (or nicotinamide), and nicotinamide riboside. The body can also make NAD+ from the essential amino acid tryptophan, which is found in whole milk, tuna, turkey, chicken, and other foods.

The late John P. Cleary, MD, explained that strong cravings for substances like alcohol are likely to be experienced when our NAD+ receptor sites are empty. This is because alcohol drives the formation of the chemical compound acetaldehyde, which then interacts with dopamine to produce morphine-like compounds that temporarily calm cravings and withdrawal symptoms. However, when the NAD+ receptor sites become vacant again, withdrawal symptoms and cravings for alcohol precipitate and lead us back to the bottle.

Posted On 06/22/2023

Guillermou

It is possible to break the cycle of addiction and withdrawal by switching from alcohol to niacin . If given in high enough doses, between 500 and 3,000 mg per day, niacin can occupy those hungry NAD+ receptor sites and decrease cravings for alcohol, alleviate withdrawal symptoms, and calm the compulsion to drink. Drs. Abram Hoffer and Humphry Osmond treated thousands of alcoholics in Saskatchewan, Canada, in the 1950s and 1960s and reported excellent results with niacin therapy. They found that vitamin B 3 could not only alleviate alcohol cravings, but also decrease delirium tremens, a highly unpleasant and potentially fatal form of alcohol withdrawal that includes tremors, hallucinations, sweating, and seizures.

For the treatment of delirium tremens, * Hoffer and Osmond used a protocol of 3,000 mg (3 grams) of niacin three times a day for one day (the first day of the delirium tremens), plus 3,000 mg (3 grams) of vitamin C. three times a day. allergyresearchgroup.blog/niacin-for-alcoholism (2020).----
wisevoter.com/.../alcoholism-by-country (2023).----alcohol.org/.../global-drinking-demographics (2023).----www.niaaa.nih.gov/alcohols-effects-health/alcohol-topics/alcohol-facts.. (2023).--

Posted On 06/22/2023

juststeve

Pip, I once worked with an alcoholic. He after being on a vacation trip shared a conversation he had with a nurse who recommended B vitamins as a hangover cure. He shared while it worked like a charm, he found he couldn't stand to drink booze. Unfortunately, he chose the booze over health, and sobriety.

Posted On 06/22/2023

grulla

Somewhat the same here. I've been taking one or two Vit B3s 50mgs LIFESTYLE dosages for over 10 years now, and will instead stick with Dr Abram Hoffer's recommendations, who BTW, was supported by Dr. Linus Pauling. And that feedback flush lets me know that the B3 niacin is working.

www.vitaminrush.com/83405/dr-abram-hoffer-vitamin-b3-niacin-for-mental..

www.kalvitamins.com/.../niacin-50mg

Posted On 06/22/2023

jil6890

When in my forties (I am now 78) I read an article about taking niacinamide (500mg three times a day) for osteoarthritis in the knees. I drove to Florida from Michigan every year. Every few hours I would stop for a break but had an awful time getting my legs to work. My knees were very painful. I started on the 1500mg/day of niacinamide and my relief was complete after a few weeks. To this day I am one of the few people in my circle of friends and family who has not had knee replacement or any other knee surgeries. This is far more than is recommended, but my legs still work just fine so I'll choose mobility over other negative repercussions.

Posted On 06/22/2023

Guillermou

Good medicine. This study indicates that niacinamide may have a role in the treatment of osteoarthritis. Niacinamide improved the overall impact of osteoarthritis, improved joint flexibility, reduced inflammation, and allowed reduction of standard anti-inflammatory drugs compared to placebo pubmed.ncbi.nlm.nih.gov/8841834

Posted On 06/22/2023

ana5819

This is very interesting. Back in the early 70's, my mother was diagnosed with rheumatoid arthritis by two different doctors. They prescribed her all kinds of medications and warned her that in a few years her fingers would be deformed. My mother did not want to take all the medications because of the side effects. My father, who was not a doctor, decided to investigate and research on his own. This was well before the internet so he was reading all kinds of medical literature he could get his hands on. Ultimately, my mother started taking niacinamide and her symptoms disappeared. They never returned. She died in 2016 of other causes.

Posted On 06/22/2023

axkershaw

Corn, a major constituent of the modern American diet (MAD appropriately) sequesters B-3. This loss leads to much low level pellagra that affects joints. Taking B-3 helps counteract that effect. Eliminating all sources of corn products also helps.

Posted On 06/22/2023

Dordee

I chose stem cell replacement for my knees in 2018. Walking with a cane. After the cells were taken from my hips, injected into my knees, I walked out carrying my cane, not using it. Will have to try Niacinamide to keep them in good shape. I am 82, still driving, and today, repping all y ginger, turmeric etc. that i had on my deck. Juvenile coons came up and unpotted everything, strung dirt all over the deck. It is dry, river little more than a creek now and mother has sent them packing, no longer provides food for them so they are looking for an easy meal. Problem is they never eat anything, just dig it up. This can get to old boes real fast. Now i have to carry in all those 16" pots so they do not do it all over again tonight. Stupid, they don't seem to learn that there is nothing there to eat.

Posted On 06/22/2023

pth888

Guillermo, your post on 6/22/2023 8:40:58 AM is very interesting – “Viral infections are known to cause cellular NAD+ depletion. ” You don’t give any references but one can find enough by searching for “viral infection NAD+” – a number of studies show up. Zheng-Schultz-Sinclair Apr 2022 seems to be widely cited: www.ncbi.nlm.nih.gov/.../PMC8831132 I find Charles Brenner’s comment “Viral infection as an NAD+ battlefield” very interesting: www.nature.com/.../s42255-021-00507-3 A huge debate is currently raging about the nature of the this “viral infection”. There is a very outspoken group of doctors (Dr. Cowan-Kauffman-Bailey-Scoglio-Massey etc.) who claim that viruses don’t exist!

Another group is blaming venoms attached to the spike protein. (Dr. Ardis-Braun-Ealy etc.) Brenner seems to be implying that these viral infections are caused by a 30-kb sequence of RNA code: “Since early 2020, the roughly 30-kb SARS-CoV-2 RNA genome has rewritten the rules for human life. Causing perhaps 250 million infections and 5 million deaths¹,” This would imply that the SARS/Covid “viral” infection is software code, not a real virus! You seem to be well versed in science - so what is your take on all this? Are viruses real and have they been isolated? Or are they an inserted piece of “viral DNA”, with huge implications for what these infections are all about ???

Posted On 06/22/2023

pipblanc

I used NAD+ and NAC in addition to D3/Zinc etc for Covid. It has alleviated my Long Covid but I have to maintain the does. Also it appears that NAD+ has a meliorative effect on DNA ie. a good reset which is why some people report such great addiction recovery outcomes.

Posted On 06/23/2023

lilmissy

What is a good scale to purchase to weigh out how much powder to take?

Posted On 06/22/2023

juststeve

Measuring spoons found on Amazon...yeah, I know, Amazon. Look up measuring spoons with 1/64 th of a teaspoon. How is this for Old Timey. 1/64 th of a teaspoon is a drop, 1/32 tsp is a smidgen, 1/16th is a pinch, 1/8th is a dash & 1/4th is a tad. Really old timey, Grandma used to do it with her fingers!

Posted On 06/22/2023

uneamie

This is ONE 1/64 th measuring spoon. www.amazon.com/Teaspoon-Measuring-Individual-Stainless-Cooking/dp/B0B5..

Posted On 06/22/2023

uneamie

This is a multiple set of small measuring spoons and included the 1/64 th one. www.amazon.com/MUYIYOOH-Stainless-Measuring-Cooking-Teaspoon/dp/B09DX6..

Posted On 06/22/2023

Lil' Owl

If using the measuring spoons/powder is inconvenient or challenging, Source Naturals makes a low-dose (100 mg) niacinamide tablet that easily breaks in half. I have been using this for years, though have never tested how well the tablets actually dissolve. I have never seen any pass through my stools, even in specks, so guessing I am assimilating them okay.

Posted On 06/23/2023

DiaTrig

I'm a bit lost...If NMN can be converted directly to NAD+, then why not just use NMN? The article states that the reason it is better to use NAM is that NAMPT is the rate limiting enzyme for NAD+...but based on the diagram, it is the rate limiter for NMN, which is presumably why it is the limiter for NAD+...so again, why not just take NMN...?

Posted On 06/22/2023

nurseali

It would be really nice to have a link to the powder form so that I can be sure I am purchasing the right product. Thank you so much. This is great information!

Posted On 06/22/2023

ms.libby

purebulk.com likely to carry it.

Posted On 06/22/2023

PhotoGirl4.0

Hartsogirl in this thread mentioned Lifegivingstore.com. I bought 50 grams in powder form from them today and they include a 80ml scoop. Dr Mercola mentions 50ml so I will just dump a wee bit out when I measure with this scoop. Price was \$20 plus modest shipping. The website is inspired by Ray Peat as it has helped this family with their health. Family owned site and I prefer that to Amazon.

Posted On 06/22/2023

tswearin2

I don't know if anyone will see this before the article disappears into the vault, but how can I take Niacinamide with GOUT? I'd love to experience all the benefits Niacinamide has to offer but I don't want to increase my problems with gout and the pain that goes along with it. Does anyone have any information on this topic - how to take niacin/niacinamide WITHOUT increasing the risk of gout or precipitating an attack. Please email me at tswearin at yahoo dot com because this will be gone so I won't be able to check back. I can't find the answer to this question. Dr. Mercola? Gui? Anyone? Thanks so much!

Posted On 06/23/2023

Sherryld

I am so glad I read this article and all the comments. I am going to try the niacinamide for my osteoarthritis. I am 56 and I don't want to experience the discomfort of this for the rest of my life and I refuse to take any meds or pain killers. I have been taking b12 for approx 8 months and have noticed a huge improvement with the spider veins on my legs. They started appearing about 15 years ago and each year they got progressively worse. Some of them have almost disappeared and the others have improved tremendously. I noticed as we are now into summer and wearing shorts (and of course shaving my legs more often) the only thing I could think would be improving them would be the b12.

I use Natural Factors vitamins here in Canada which is a good quality non GMO product. I have also been taking the vitamin E for years in the form that Dr Mercola recommends. Aspirin I just can't take due to stomach sensitivity from them. I noticed a comment from someone about depression from niacinamide. When I first started on COq10 I experienced some anxiousness and difficulty sleeping but that did subside. I also take various other vitamins mentioned in some of the comments. I am going to get started on niacinamide right away. Thanks Dr Mercola & everyone!

Posted On 06/22/2023

PhotoGirl4.0

Thanks Hartosgirl. I ordered my niacinamide from LifeGivingStore.com today. Their whole website store gives credit to Ray Peat for curing their family's ills. Is a great site as each supplement they sell, they provide informative quotes from Ray Peat on the benefit. On another note, I recently started taking Glycine and have seen improvement in sleep, hair and nails to name a few. Probably more going on inside, but can't see it! I have been deep diving into Ray Peat after Dr Mercola's admission to being wrong about low carb. Gonna give it a try!

Posted On 06/22/2023

dfarrich

I see where this aids if curing alcohol addiction. After I had the jabs and then COVID with 8-days and nights of horrible coughing and earning myself a hernia and, upon recovery, anything with consumable alcohol in it, now smells like vomit. Try and drink that. I went from being a very, high functioning, heavy user to "now can't stand it" in 14-days. I'm saying that COVID may have somehow saved my health? Talk about a twist...

Posted On 06/22/2023

PhotoGirl4.0

Is this because you used the niacinamide? What contributed to your not liking booze anymore? Just because you got Covid? Just curious as to the specifics.

Posted On 06/22/2023

pipblanc

Could you clarify what treatment protocol you were using? Were you using NAD+ or B3? Or any other B Vitamins. It is clear from my own experience that NAD+ and NAC help clear the viral load and also the liver thereby allowing the body to detox the viral metabolites.

Posted On 06/23/2023

dfarrich

At least this is good news.

Posted On 06/22/2023

Barbara Charis

Interesting article....got out my calculator to see how much niacinamide I should be using. I have been using about 100 mg daily for decades. It isnt easy keeping weight off..Eternal vigilance is the price of liberty ...from fat. It is imperative to keep it in check by writing in a daily Food Journal. Some months back, when I hit 125 pounds, I pulled on the reins and said, "Whoa!" I am only 5'3" and honed in on what I was eating. Since, I became more conscious I took off 11 pounds...without any exercise. I'm into exercise, but had hurt my leg and couldn't. I've used an entire B Complex supplement in high amounts for years...and I know these vitamins are not only good for the body - they are excellent for the brain.

Posted On 06/22/2023

ms.libby

I take niacinamide daily for arthritic thumbs and for basal cell skin cancer "inhibition" - well known for both issues. As long as taken religiously, the awful thumb arthritis stays at a low ebb.

Posted On 06/22/2023

pipblanc

"Religiously" being the operative word!

Posted On 06/23/2023

billstri

Dr Mercola's B-complex only has 10mg Niacin and does not indicate if it is Niacin or Niacinamide as most supplements don't tell you which as most say Niacin but are really Niacinamide. Taken three times per day, that would only be 30mg total, not the 50mg, three times per day that Dr Mercola is recommending. Would be nice to have a B-Complex supplement that you can take 3 times per day with the modern day recommendations of B-vitamins. High doses of B-complex vitamins causes bright yellow urine until the excess is flushed out in a few hours.

Posted On 06/22/2023

Sherryld

<https://www.twc.health/>

Posted On 06/23/2023

Wind

Good Lord. Where in the world do you buy all these?

Posted On 06/22/2023

billstri

You can go to Amazon.com and search for "niacinamide powder" and find plenty of cheap choices. Then have to find a 1/64 teaspoon spoon to measure it with. It would be nice if Dr Mercola or some other supplement company would dilute it in Silica and put it in capsule form. I been taking 500mg capsule once every day for a couple of months and now see from this article that is too much. I experienced no weight loss no drop in body fat. But I am not an obese mouse. For the last few months, I also been taking a list of different very expensive supplements from Dr Mercola that claim to help you loose body fat and that has not helped either. I also have cut calories and doubled the amount of exercise and still no significant loss of body fat.

Posted On 06/22/2023

Cegiel

Dr Mercola previously addressed some of the benefits of low dose niacinamide in his 7-7-2022 commentary "Low-Dose Niacinamide Has Striking Antiobesity Effects", which explained that the powder can be measured with a set of tiny spoons available at Amazon.com: www.amazon.com/.../B00KH9PSNI

Posted On 06/22/2023

Guillermou

Yes, obesity poses a global health challenge and is a major risk factor for diabetes mellitus, cardiovascular disease, hypertension, stroke, and certain types of cancer. Although the effects of nicotinamide (NAM) on liver metabolism and disease are well documented, its effects on adipose tissue have yet to be characterized. NAM supplementation was found to significantly reduce fat mass and improve glucose tolerance in obese mice. Proteomic analysis revealed that NAM supplementation upregulated mitochondrial proteins while quantitative polymerase chain reaction showed that PPAR and PGC1 were upregulated in adipose tissues, suggesting that NAM increased mitochondrial biogenesis in the adipose tissue.

In fact, NAM treatment increased proteins related to mitochondrial functions, including oxidative phosphorylation, fatty acid oxidation, and the TCA cycle. We found that NAM also increased amino acids to enhance glutathione synthesis to maintain homeostasis. Taken together, our results demonstrated that NAM reprogrammed cellular metabolism, improved adipose mitochondrial functions to ameliorate symptoms associated with obesity.

www.sciencedirect.com/.../S0955286322001279 (2022)

Posted On 06/22/2023

avi5395

Wait, am I imagining things. I could have sworn that in the last 2-3 months, I have read an article from him stating that Niacin was a better form of B3 than Niacinamide . I think it had something to do with the Niacin Flush. Please help me out with correcting this assumption.

Posted On 06/22/2023

uneamie

www.healthline.com/nutrition/niacin-flush#What-is-niacin-flush?

Posted On 06/22/2023

pipblanc

Hoffer states explicitly that the flush is required

Posted On 06/23/2023
