MERCOLA
Take Control of Your Health

Guillermou

Linking to the PPARalpha-promoted obesity mechanism, synthetic ligands for PPAR, collectively known as peroxisome proliferators, are a perfect tool to study PPAR function. The most striking effect of administering peroxisome proliferators to rodents is a dramatic enlargement of the liver. Prolonged treatment with peroxisome proliferators causes enlargement and formation of liver tumors, indicating a role for PPAR in hepatocyte proliferation and/or the cell cycle. PPAR has also attracted the attention of almost every medical specialty, including diabetes, gastroenterology, dermatology, oncology, and cardiology. PPAR has also attracted a lot of interest among researchers studying obesity.

PPAR is not only highly expressed in adipose tissue, but also plays a very important role in adipogenesis. www.sciencedirect.com/science/article/abs/pii/S0014299902014310 (2002).--- In vitro and in vivo studies on apigenin, arjunolic acid, astaxanthin, berberine, resveratrol, vaticanol C, hispidulin, ginsenoside Rb3 and genistein showed significant effects on CVD complications by targeting PPAR-. This review provides information on various natural products that may work to prevent CVD by targeting the PPAR-receptor along with their detailed mechanism. link.springer.com/.../s11010-023-04755-7 (2024).---

Posted On 04/27/2024

Guillermou

Several evidences support the use of silymarin, berberine, curcumin, Nigella sativa, Ascophyllum nodosum and Fucus vesiculosus, vitamin E, coenzyme Q10 and Omega-3 are effective against obesity, hepatic steatosis, type 2 Diabetes Mellitus. Patients with diabetes have a prevalence of MAFLD two to three times higher than patients without diabetes. Inadequate fat deposits in the liver cause alterations in energy metabolism and the inflammatory state, generating insulin resistance. Due to this chronic hyperinsulinemia, patients with diabetes tend to accumulate more fat in the liver. In these patients, the severity, morbidity, progression, and liver-related mortality associated with MAFLD are much higher.

There is numerous evidence that highlights the use of therapies such as incretins or the use of inhibitors of Proprotein Convertase Subtilisin/Kexin type 9 (PCSK9) and PPARalpha or other similar therapies that, by helping existing therapies for pathologies such as diabetes, hypertension, insulin resistance, with great progress in the prevention and reduction of cardiometabolic risk. This review provided an overview of current therapeutic strategies that are expected to help in the treatment and prevention of MAFLD. www.frontiersin.org/.../full (2024).--

Posted On 04/27/2024

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juststeve

Being as people in France eat more butter, diary yet are leaner, less heart dis-ease. Yet those things in most of the West have been vilified for well over seventy years & we've been encouraged to use the PUFA potions to substitute. So, a question arises, being as those substances haven't gone away in a sense, they would have been leftover whether consumed by us as food products - where have the gatekeepers of Science been Squirreling these things away? A big enough pile of most anything and they always seem to find a way to use it.

Posted On 04/27/2024

Guillermou

Yes Just, Raw butter from organically raised cows is an excellent food, rich in beneficial nutrients including vitamins, minerals, CLA and healthy fats. 20 percent of the fat in butter consists of medium and short chain fatty acids, with anti-cancer action and are a quick source of energy, not contributing to blood fat levels, protecting against cardiovascular diseases. Butter contains approximately 3 to 4% of the short-chain fatty acid butyrate in the form of tributyrin, which has potent anti-inflammatory effects resulting in protection against colon cancer, inflammatory bowel disorders, and autoimmune disease, nervous system, insulin sensitivity, against obesity, etc.

Butter contains vitamins A and D for the immune system and bones and a good source of iodine for the thyroid gland. It has the Wulzen or “anti-stiffness” factor that protects against joint calcification and arthritis. Contains glycosphingolipid fatty acids that protect against gastrointestinal infections and are anti-fungal. Sources of short-chain fatty acids such as butyrate are, in addition to butter, the fibers of inulin, FOS and GOS, resistant starch, pectin, arabinoxylan and arabinogalactan, which are especially beneficial.

Fructooligosaccharides (FOS) such as bananas, onions, garlic and asparagus and pectin in apples, apricots, carrots, oranges and others. Inulin from artichokes, garlic, leeks, onions and asparagus. Good combination of butter with vegetables. www.westonaprice.org/health-topics/know-your-fats/why-butter-is-better.. .------- TOP 22 SCIENCE-BASED HEALTH BENEFITS OF BUTYRATE AND ITS DERIVATIVES. dailyhealthpost.com/butyrate-benefits (2018)

Posted On 04/27/2024

MoMac46

Guillermou - thank you for you extra explanations much appreciated.

Posted On 04/27/2024

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markrhsyahoo.com

not evolution, but the magnificent design of our Creator.

Posted On 04/27/2024

David.dey

Exactly

Posted On 04/27/2024

KJVgal

That's exactly right, markrhs! God's magnificent design it is.

Posted On 04/27/2024

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gamesaint

Evilution is a lie, not even a good theory, it was only devised by the cabal to deceive people and keep them from the truth...

Posted On 04/28/2024

Olitor

Many thanks Guillermou for taking the trouble to reply. Unfortunately I don't fit into any of these boxes. I don't drink coffee, I don't eat gluten, I don't have any of the illnesses mentioned, I've got enough iron etc.... I carefully avoid dairy products and my attacks disappear. I've already seen a neurologist who told me that there was nothing wrong with the nerves in my legs, but that the problem was cerebral. This would explain my reactions to the glutamine and glycine I used to take on an empty stomach in the evening to boost my growth hormone. Here too, I had to give up because of the seizures. I also have nocturnal epileptic seizures, and it took me a long time to understand that they were linked to the consumption of essential oils with ketones; I think that years of intense stress have cost me my health.

Posted On 04/27/2024

Guillermou

In my answer I also mentioned dairy products. In this link a person discovered that the cause of restless legs is the high percentage of casein in cows. "I eliminated dairy from the glasses and the RLS disappeared!!! I can eat goat and sheep cheese, milk, etc. without problems. "Sometimes I eat cow's diary and bam! RLS is out of control about an hour later! The problem with cow's dairy is that it contains large amounts of a protein called casein. Sheep and goat dairy has very little or none. Why this protein is a problem remains a mystery. Check all food products.

It is added to many packaged and canned food products." In the link there are other comments and aspects of the A1 and A2 variants of cow's milk. healthunlocked.com/.../rls-and-dairy .---- Also: www.godairyfree.org/personal-stories/dairy-free-restless-leg-syndrome-.. Theories regarding the pathogenesis of restless legs syndrome (RLS) include iron deficiency, dopamine dysregulation, and peripheral neuropathy. The increased prevalence of small intestinal bacterial overgrowth (SIBO) in controlled RLS studies and case reports of postinfectious RLS suggest possible roles for inflammation and immunological alterations.

A literature search was conducted for all conditions associated with RLS. These included secondary disorders of RLS and factors that can exacerbate RLS. All of these conditions were reviewed with respect to their potential pathogenesis, including reports of iron deficiency, neuropathy, SIBO, inflammation, and immunological changes. A condition was defined as highly associated if there was a prevalence study that used an appropriate control group. Small case reports were recorded but were not included as definitive RLS-associated conditions.

Posted On 04/27/2024

Guillermou

Fifty-four diseases, syndromes, and conditions have been reported to cause and/or exacerbate RLS. Of these, 38 have been reported to have a higher prevalence than age-matched controls, 9 have been reported of adequate size and are generally accepted as RLS-associated conditions, and 7 have been reported on a case report form. Overall, 42 of the 47 RLS-associated conditions (89%) have also been associated with inflammatory and/or immune changes. Additionally, 43% have been associated with peripheral iron deficiency, 40% with peripheral neuropathy, and 32% with SIBO. Most of the remaining conditions have not yet been studied for these factors.

The fact that 95% of the 38 highly associated RLS conditions are also associated with inflammatory/immune changes suggests the possibility that RLS may be mediated or affected through these mechanisms. A significant association between IBD and the subsequent development of RLS www.sciencedirect.com/science/article/abs/pii/S1087079211000980 (2012).-- giirj.com/.../5597 (2023).-- www.mdpi.com/.../897 (2024).-- 7 TIPS FOR RESTLESS LEGS SYNDROME 1) Food sensitivities have been shown to cause RLS in certain people. 4While any food could be a possible culprit, those documented in scientific studies are: milk, coffee, eggs, aspartame (Nutrasweet), tea, chocolate, citrus fruits , raspberries, strawberries, potatoes, beef and pork.

Keeping a food and symptom diary at your bedside can help you notice possible connections between foods and RLS symptoms. 2) Celiac disease, Crohn's disease, and IBS-D are associated with an increased risk of RLS.5Celiac disease is a serious autoimmune disease caused by gluten, a protein found in wheat, barley, rye and triticale. Twenty-five to 30 percent of people with celiac disease have RLS.

Posted On 04/27/2024

Pete.Smith

Dear Olitor, I think you found the cause of your problems already: Long-term stress, and that excites your brain, so you must lower glutamate, so I would stop taking glutamine, because it raises your glutamate levels, see recent dr Mercola article about it, like MSG and read my comments there. Milk is processed in the factory which cause the release of free glutamate, giving excess glutamate, it promotes a leaky gut, and also release of histamine, so more inflammation, And the excess free glutamate can promote all kind of mental problems as well, lik anxiety, so more stress, epileptic seizures, etc, Stress depletes zinc, which you need to turn glutamate into GABA, Also you need enough magnesium and vitamine D.

Also take pyridoxal 5'-phosphate (P5P) which is the active form of vitamin B6, to turn glutamate into Gaba, some people are worse of with normal B6, so it has to be this active B6 form P5P. You can also see this video I'm Sounding The Alarm!" - Shocking Link Between Your Diet & Rise In Disease | Dr. Katherine Reid Oct 26, 2023 www.youtube.com/watch?v=EHNizmXE0dU&t=793s

Posted On 04/27/2024

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sue2613

Gui you mentioned that citrus fruits are one of the food sensitives that causes RLS. I wonder if citric acid, (created in a lab), in processed foods is similar enough to citrus that it will affect those with RLS? Citric acid is in many processed foods these days. It is not vilified enough yet that it is hidden on the label.

Posted On 04/27/2024

Guillermou

SUE, of course, avoid any additives for restless legs syndrome. A good article_ RELIEF FOR RESTLESS LEG SYNDROME www.tcimedicine.com/.../relief-for-restless-leg-syndrome

Posted On 04/27/2024

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bowgirl

"my squirrels" eat acorns and chestnuts. No wonder they are very tasty.

Posted On 04/27/2024

Guillermou

In Spain we have the magnificent Jabujo Iberian ham because the pigs are fed acorns on the farms in Extremadura. Iberian pigs spend the last months of their lives eating acorns in the pasture, in an idyllic landscape surrounded by mature oak trees. After a curing process of at least 36 months, the meat leaves a fatty trace and the acorn that the pigs have eaten gives the ham a flavor appreciated in all corners of the world. Our country exports hams to practically the entire world, creating a highly recognized product outside our borders and highly demanded by countries such as Germany, France, the United Kingdom and even China or the United States. Two North American companies have decided to import not hams, but Iberian pigs to produce the ham themselves, as published by The Guardian.

Two companies established in Texas, formed by two Spaniards, and another Hispanic American in the state of Georgia, intend to create their own version of ham. www.theguardian.com/world/2020/aug/15/fury-in-spain-at-us-plans-to-pro.. However, there will be notable differences. Contrary to what happens in the Spanish pasture, the pig will not feed on acorns in its last months, but will instead feed on walnuts, peanuts and sunflower seeds. Experts in the production of acorn-fed Iberian ham explain that it will not be the same at all, because the acorns are essential for the meat to be so delicious and give off that characteristic fat.

Posted On 04/27/2024

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e_g5680

Tasty? The squirrels or the nuts?

Posted On 04/28/2024

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brodiebrock12

Any bet's on the WEF and climate alarmist will make trees and nuts a danger to the planet too

Posted On 04/27/2024

Cabochon

Squirreling away our fat storage: this reminds me of an amusing cartoon showing a man having some kind stroke or heart attack while his partner warns “That’ll be climate change, then”. While a high ratio of dietary omega 6 compared with omega 3 is pro inflammatory, it is only one of the factors leading to the modern day epidemic of chronic inflammation, obesity and metabolic syndrome and can’t possibly cover the multi-factorial nature of what ails modern man. It remains true that omega 6 is an essential fat but in the right proportion and undamaged by heat and poor storage. Oxidised fats are everywhere in processed food, fast food, transfats, fake fats such as margarine, in the overuse of light damaged seed oils in plastic bottles.

Compare the restricted nature of today’s S.A.D diet e.g. CAFO burger, fries and coke (damaged fats, grains, plastics and sugars) with what our ancient genetic inheritance demands that we eat: a fresh, unpackaged, unprocessed, diverse range of animal and plant foods as close to their natural state as possible. As for acorns, there might not be any left once our Nut Zero zealots are finished chopping down trees to make way for wind farms. The ancient forest of Germany is the subject of an amusing cartoon showing a new version of Grimm’s fairy tale - Hansel and Gretel NOT getting lost as the forest is now replaced by wind turbines. brusselssignal.eu/2023/12/german-fairy-tale-forest-to-be-felled-for-wi..

Posted On 04/27/2024

Pete.Smith

Thank for doing an article about Brad Marshall. This month I saw a dozen videos from him, with some great information. Very interesting is what he says about Stearic acid and Branch Chain Amino Acids, (BCAA) they are the amino acids Leucine, isoleucine, and valine. We need them, but very Important to keep them low, Marshall explains. Dr Mercola, can do an interview with Brad Marshall about the importance of Stearic Acid and BCCA. In today's article Marshall says: People in France, who eat more butter and dairy fat, are leaner than those in Italy and Spain, where olive oil is favored. Dr. Gundry (plant paradox) talks about the blue zones where people get so old, like Nicoya, Costa Rica.

Why not everywhere in Costa Rica people get that old, but only in Nicoya? What is the difference in their diet? Gundry says the secret is they hold sheeps and goats, so they consume dairy like cheese from the milk. And the same goes for Sardinia, Italy. Not on the whole island of Sardinia, people get so old, only a certain area in the mountains, called Ogliastra. The difference is they hold sheep and goats and eat a lot of dairy products. So is there some secret ingredient in the butter and dairy, even Dr. Gundry doesn't know yet? Yes, there is. And it is very wel researched but it was new to me. The navy holds dolphins and they noticed that captive dolphins can live twice as long than wild dolphins.

When dolphins get older they get also fatty liver disease, diabetes, so metabolic syndrome, just like humans do. Researchers found out It has to do with the diet, if they feed them fish that are high in a saturated fat called pentadecanoic acid (C15:0) than they stay healthy and lived so much longer. Research found the same thing in humans. Where can we find C-15? In butter and dairy and as supplement.. pubmed.ncbi.nlm.nih.gov/37960259 Nutrients. 2023 Oct 30 Georgy Dinkov http://haidut.me/?p=2408 Great video on the C-15 research www.youtube.com/watch?v=I81tlKn_Lb8

Posted On 04/27/2024

Guillermou

Thanks Pete for your interesting contribution. In 2020, Dr. Venn-Watson published a key peer-reviewed paper in Nature's Scientific Reports showing that C15:0 is the first essential fatty acid discovered since omega-3, which was over 90 years ago. Essential fatty acids are nutrients that our body needs to stay healthy, but cannot produce, so we must obtain these nutrients from our diet or supplements. The unexpected discovery of C15:0 (pentadecanoic acid) as essential for maintaining long-term health was made while Dr. Venn-Watson was helping older Navy dolphins. "We found that some dolphins aged at a faster rate than others," shared Dr. Venn-Watson.

"It's exciting that when dolphins were given a diet high in C15:0, they not only improved their metabolic and liver health, but also had evidence of slower aging." These two studies were published in the Proceedings of the National Academy of Sciences and PLOS ONE. Today, more than 70 peer-reviewed studies from prestigious teams around the world have demonstrated the role of C15:0 in supporting long-term human metabolic, cardiac, liver and immune health. Some studies have linked a higher level of C15:0 with longer life.

In fact, pentadecanoic acid is associated with positive health markers such as balanced immunity, heart health, healthy metabolism, and overall cellular health. A recent study showed that people living in high-longevity areas (where more people live longer than the average world population) had higher body levels of C15:0 compared to people living in low-longevity areas. Another large-scale study that followed more than 14,000 people for 14 years showed that those who had more C15:0 in their diet had a lower risk of mortality during the study period.

Posted On 04/27/2024

Guillermou

Unfortunately, as we age, our C15:0 levels decrease and the likelihood of getting enough C15:0 in your diet is quite slim. It is mainly found in full-fat dairy products such as milk and butter. There are different ways that C15:0 can help, and all of them specifically target well-known characteristics of aging:* -------1) Supporting your body at the cellular level. As a tough fatty acid, C15:0 penetrates deep into our cells, strengthening cell membranes to keep them healthy and protect them from damage and fragility. --------2) Increases cell stability and helps prevent premature cell degradation.

In turn, we age less rapidly than if our cells remained unprotected and vulnerable to damage and stressors. ---------3) Protect mitochondrial function. Your mitochondria are responsible for cellular energy. Slow mitochondrial function means decreased cellular energy production and increased cellular stress, two major factors of cellular aging. C15:0 helps support mitochondrial function, so your cells' little power plants can continue to produce the energy they should. --------4) Helping to maintain cellular homeostasis.

Part of cellular aging causes our immune system and metabolism to become unbalanced over time. C15:0 naturally binds to key receptors throughout the body, called PPARs, which help support healthy metabolism and immunity, so your cells stay healthier longer. www.discoverc15.com/resources .---------- fatty15.com/.../what-causes-aging-and-can-it-be-slowed (2023).---------- www.prweb.com/releases/could-a-saturated-fat-be-the-missing-link-in-lo.. (2023).--

Posted On 04/27/2024

Pete.Smith

Thanks Gui, The video I give above is a interview with Dr. Venn-Watson, saying : We were able to show that C-15 is not just an active and beneficial saturated fat, but that it was meeting these rare criteria of being an essential fatty acid, which means what we've talked about a nutrient that our bodies must have or we suffer. So we're able to do those studies to figure out how it works at the cellular level. We've shown C-15, you'll be excited to hear, repairs mitochondrial function. And it does that in part by using this rescue function in the mitochondria, so that even if the first part of energy production in mitochondria is broken, it can skip the line and go to this second stage.

So in that way it's truly rescuing mitochondrial function. C-15 is a sturdy saturated fat, so it has no double bonds, which means it's super resistant to oxidative stress. So it's a hearty fat that goes into our cell membrane and it behaves like a brick in our cell membranes, it literally stabilizes our cell membranes. There's this really cool theory by Anthony J. Hulbert. It's called: The cell membrane pacemaker Theory of Aging (2005) www.sciencedirect.com/science/article/abs/pii/S0022519304005788 It emphasises variation in the fatty acid composition of membranes as an important influence on lipid peroxidation and consequently on the rate of aging and determination of lifespan.

And he showed the sturdier the fats in our cell membranes, the longer as a mammal we live. So it explains how humans and dophins live longer than mice. And so then here we have C-15, this stable saturated fat feeding right into that hypothesis. And then it also activates longevity signals. C-15 activates AMPK, it inhibits mTOR. But if a cow eats corn, it has less C-15 in its milk than if it eats grass. Prof Jeffrey B Schwimmer is shocked that so many children have fatty livers, and he found that C-15 is inversely related to the fat in their livers. pubmed.ncbi.nlm.nih.gov/33399331 (2021)

Posted On 04/27/2024

Pete.Smith

Hi, Heart_jewel, Cow have 1% C-15 in full milk. It is also in butter, yoghurt, but % I do not know. But ofcourse is has to be full fat and also be sure it is from grass-fed animals. In the 2 blue zones I mention it was only goat and sheep milk products. Dr Gundry thinks they are better than cow, because he says: Goat and sheep milk contain 30% of their fats, medium chain triglycerides, MCT oil. And that MCT oil is directly converted into ketones, And ketones are not an important fuel. They're actually an important signaling molecule, that tell your mitochondria to uncouple, to make more of themselves, to protect themselves, to foster mitochondrial health. There's one other factor that was identified recently as a really important milk factor, and that's milk globule fat membrane protein.

Milk fat is enclosed in a protein to make it fat-soluble, and it turns out that this protein is also a superb mitochondrial uncoupler. It's not present in skim milk. It's almost nothing in low fat milk Because cheese is a fermented food, it contains all these incredible compounds (like vit. K2) that actually improve inflammation. And it has these milk globule membrane proteins that actually uncouple mitochondria. Cheese also contains poly amines, which really improve our gut microbiome and also anti-aging compounds in their own aspect. The Dr. Gundry Podcast Mar 16, 2024 about Longevity www.youtube.com/watch?v=ysPVwoduxvM

Posted On 04/27/2024

Guillermou

Interesting PETE, Pentadecanoic acid (C15:0) is an odd-chain saturated fatty acid present at trace levels in dairy fat and ruminant meat, as well as in some types of plants and fish. Large prospective cohort studies in humans have shown that higher blood concentrations of C15:0 are associated with lower risks of developing chronic diseases over time, such as type 2 diabetes, cardiovascular disease, and heart failure. Higher dietary intake and circulating concentrations of C15:0 have also been linked to lower mortality and increased longevity, as well as lower risks of chronic inflammation, gestational diabetes, hypertension, nonalcoholic fatty liver disease, as well as nonalcoholic steatohepatitis.

less severe and chronic disease. obstructive pulmonary disease. These studies built on existing literature on the anticancer and antimicrobial properties of C15:0, as well as being the first to demonstrate the potential of C15:0 to help manage depression and autoimmune diseases. Also another study found that mild weight loss induced by a Mediterranean diet adapted for Asians has multiple beneficial health effects in women with NAFLD. C15:0 supplementation lowers LDL cholesterol and may lead to beneficial changes in the gut microbiome. www.ncbi.nlm.nih.gov/.../PMC9135213 (2022).— journals.plos.org/plosone/article?id=10.1371/journal.pone.0268778 (2022).--- www.sciencedirect.com/.../S0002916523662859 (2024).--

Posted On 04/27/2024

Guillermou

To evaluate the potential of C15:0 to improve processes associated with longevity and health, human cell-based molecular phenotyping assays were used to compare C15:0 with three longevity-enhancing candidates: acarbose, metformin, and rapamycin. C15:0 has the additional benefit over rapamycin and metformin that its associations with health are studied in global meta-analyses of large prospective cohort studies that have been conducted for decades, most of which included healthy patients. individuals; These studies consistently show that people with higher circulating concentrations of C15:0 have a lower risk of aging-related conditions.

Given the voluminous literature supporting it, we propose C15:0 as a natural, effective and safe odd-chain saturated fatty acid, with strong evidence that this essential nutrient supports healthy aging and longevity in humans, with activities based in cells that are as good as, or better than, leading prescription therapies for improving longevity. Given the decline in C15:0 levels throughout the population, it is necessary to evaluate the potential effects of C15:0 nutritional deficiencies on our health and longevity. www.mdpi.com/.../4607 (2024).--

Posted On 04/27/2024

Pete.Smith

Good job Gui, for posting more about C-15, which can have also the name pentadecylic acid wikipedia says: The butterfat in cow milk is its major dietary source, comprising 1.2% of cow milk fat. but also found in some fatty fish (the lantarn fish that dolphins eat to stay heallty) C-15 is also in plants, to find the sources open the link in Wikipedia en.wikipedia.org/.../Pentadecylic_acid El cido pentadecanoico tambin puede encontrarse en la grasa de cordero, meaning. C-15 is in lamb fat. * * * * If you go to https://www.discoverc15.com/ resources/ then you can see all the studies about C-15.

To give some examples about Longevity 3 studies, about cancer 12 studies (it decrease proliferation of cancer cells), about Immune and joint health 10 studies To see the mechanism how it works, and how it reverse the hallmarks of aging. And to see how C-15 lowered drivers of Chronic Disease, like autoimmune disease, and allergies, https://www.discoverc15.com/ mechanism/ And to see a 10 min TEDx talk on the home page https://www.discoverc15.com/ where you can find more info. * * * * C-15 produced Active Metabolites. Our bodies use C15:0 and crnitine to make a metabolite called pentadecanoylcarnitine (or PDC) PDC is sold as supplement, which has been shown to: # Activate CB1 and CB2 receptors that regulate mood, sleep, inflammation, and pain.

Activate 5-HT1A and 5-HT1B receptors that help to lower stress. # Inhibit H1 and H2 histamine receptors, which helps to treat allergy symptoms. See study in Scientific Reports: PDC is a newly discovered endocannabinoid with pleiotropic activities relevant to supporting physical and mental health. pubmed.ncbi.nlm.nih.gov/35999445 (2022).

Posted On 04/27/2024

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meehan2661

Thanks Pete and GUI for the links. After reading here for over a decade I realize the more I learn, I really just scratched the surface. Diagnosed with AMD dry at age 52 so I have been supplementing omega 3 at targeted levels. Thru this article and your links it appears c15 provides way more benefits than omega 3. Last weeks articles brought me back reading Weston Price again. Recently I discovered I have APOE genotype 3/4 gene in which I have to be careful with too much butter. Wow these articles do stimulate the mind.

Posted On 04/27/2024

Pete.Smith

Thanks meehan2661 for your kind comment. Yes, there are also different types of fats in the butter that can be harmful. In my country more and more cows are fed also with like palm oil (also corn, soybean) which changes the fat for the worse, so only take grass- fed butter, which has also more omega-3. Another way is to take C-15 as a supplement.

Posted On 04/27/2024

Guillermou

Pete very comprehensive article titled “EFFECT OF ODD-CHAIN SATURATED FATTY ACIDS PENTADECANOIC (C15: 0) AND HEPTADECANOIC (C17: 0) ON HUMAN HEALTH: LITERATURE REVIEW Consider that heptadecanoic acid (C17:0) also has important health benefits. Consider also the endogenous synthesis of pentadecanoic acid (C15:0) and heptadecanoic acid (C17:0). Odd-chain saturated fatty acids, more specifically pentadecanoic acid (C15:0) and heptadecanoic acid (C17:0). It has been found that higher circulating concentrations of C15:0 and C17:0 are associated with a lower risk of presenting various diseases, and a higher dietary intake of these is associated with lower mortality. Interest in C15:0 and C17:0 grew as cohort studies and case-control studies found an inverse association between the concentration of both acids with the risk of cardiovascular disease and type 2 diabetes.

Ruminants They synthesize C15:0 and C17:0 by microbial fermentation of the rumen, these fatty acids are absorbed by the animal and pass from the rumen to the mammary gland, thus passing into the milk produced by the ruminant, which is why both fatty acids are biomarkers accepted for dairy fat intake, their concentrations in human plasma and red blood cells increase with increased dairy fat intake. Both fatty acids are also found in smaller quantities in fish, beef and some algae, and it has also been identified that they can be generated endogenously in humans.

Posted On 04/27/2024

Guillermou

Given the characteristics and positive health effects of C15:0 and C17:0, interest arises in investigating and collecting the available information about them. In the European Prospective Study on Cancer and Nutrition (EPIC) and the Norfolk Prospective Study, concentrations of some odd-chain saturated fatty acids were associated with a decreased risk of coronary heart disease. Similarly, the EPIC-InterAct study showed this same association, but in relation to type 2 diabetes. The resulting amount of odd-chain fatty acids in milk fat ranges between 1.5% and 2.5%.

The ratio of C15:0 to C17:0 is approximately 2:1 in ruminant milk fat, so dairy fat intake has been positively correlated with an increase in plasma odd saturated fatty acids and is used As biomarkers of dairy and milk fat intake in observational studies, levels of these fatty acids increase or decrease significantly in response to even moderate changes in dairy fat consumption. Also, odd-chain saturated acids can be found in other foods, such as beef, fish and some algae, however these foods correlate very weakly in plasma compared to dairy fat. In the literature it is described that odd chain fatty acids can be produced endogenously, since it has been reported that the concentrations of C15:0 and C17:0 in plasma and in the membrane of red blood cells of vegans, vegetarians and omnivores are comparable, in addition C17:0 is present in a higher concentration than C15:0 in human plasma, contrary to the concentration of both fatty acids in dairy fat where there is a greater proportion of C15:0 which suggests that there must be other important sources of these odd-chain fatty acids in addition to dairy fat.

Posted On 04/27/2024

Guillermou

The final result reported by this author was that the subjects who consumed inulin significantly increased the levels of C15:0 and C17:0, the same occurred in the in vitro study with liver cells where propionate significantly increased the levels of both odd chain fatty acids, indicating a positive correlation. Finally, the authors postulated the following mechanism underlying this relationship: A high intake of dietary fiber increases the intestinal formation of short-chain fatty acids (acetate, propionate, and butyrate).

Although butyrate is primarily used as an energy substrate in colonocytes, acetate and propionate enter the blood circulation through the portal vein. After reaching the liver, propionate is converted to propionyl-CoA, propionyl-CoA would compete with acetyl-CoA in the fatty acid synthase reaction. Because propionylCoA consists of 3 carbon atoms, repeated condensation with malonyl-CoA (C2) (key enzyme in fatty acid biosynthesis) would lead to elevated synthesis of odd-chain fatty acids.

It is worth mentioning that other studies also report positive and significant associations between fiber intake and the concentration of odd chain fatty acids. Table 5. Studies evaluating associations between pentadecanoic acid (C15:0) and heptadecanoic acid (C17:0) with cardiovascular and coronary disease. Table 6. Other health effects of pentadecanoic (C15:0) and heptadecanoic (C17:0) acids. The article in Spanish is very complete.
repository.javeriana.edu.co/bitstream/handle/10554/52061/Trabajo%20de%..

Posted On 04/27/2024

Olitor

Many thanks to Pete Smith and Guillermou. I'm going to keep a food and symptom diary, it sounds like a great idea, I hadn't thought of oranges yet.... The glutamate trail is also promising and logical. I tried a few days ago to consume a wonderful organic raw milk from Jersey cows and the punishment was very swift. There's still the mystery of glycine taken in the evening, because if I take it in the morning half an hour before breakfast everything's fine. This discussion has been very profitable for me, thank you again.

Posted On 04/27/2024

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ell2918

I also believe that God is our creator, but the few scientific things that my complete right brain has allowed me to comprehend have come from a spectrum of scientists and researchers - Bible literalists to flaming atheists (flaming with a hint of amusement :). To say that Dr. Mercola has provided a wealth of information to his followers is such an understatement. Since I don't know him personally, I can't say he is or isn't a believer, but the 0.0001% of of knowledge my poor brain has gleaned from his articles has proven invaluable.

Posted On 04/27/2024

Almond

I am not a squirrel.

Posted On 04/27/2024

Jersey_Prophet

You're not a squirrel? No one claims you are! But apparently you missed this sentence: "All mammals evolved from a common ancestor. We have the same enzyme systems that control energy balance in and out and even though we live in different environments and we have different preferred foods, our metabolisms all essentially work the same way," Marshall says." "You're not a horse" either, but Ivermectin works against influenza. The FDA has been forced to retract that mocking claim bad-mouthing IVM to cover for its shilling for Big Pharma - a major donor to this supposedly regulartory body.

Posted On 04/27/2024

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grulla

Why not hunt the squirrels for the meat and pelts, and leave the acorns for free ranging pigs that will eventually be eaten as well. www.startpage.com/do/dsearch?q=preparing+squirrel+meat+&cat=web&am..

Posted On 04/27/2024

Almond

grulla... I must have some amazingly well-behaved squirrels. We have both, some wild nut trees and volunteer nut trees nearby, but not enough to feed all of them. They do not damage my garden. It is rabbits that need to be stacked in the freezer like cordwood for the stew pot. Today, I am going to also put some fish out for the stray cats to keep them checking their "trapline" in my garden for rodents. Likewise, they seem to be more interested in 'le lapin' than digging in my garden.

Posted On 04/27/2024

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e_g5680

Almond, just reapplied to “bowgirl” wondering it it was “her” squirrels or the nuts that were tasty. Nice with a laugh every now and then.

Posted On 04/28/2024

Almond

I must admit that I have a soft spot for squirrels, even though they can be good eating. I have a tree outside my desk window and can see into the branches. The squirrels are curious. They will often perch on a branch, and look in the window to watch me at work.

Posted On 04/28/2024

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nat3939

Scientist have recently discovered that Whitetail Deer's blood kills the bacteria that is responsible for Lyme disease. Scientist have not yet figured what causes this to happen. I was thinking maybe it is because of the acorns they also eat as the squirrels, turkeys, and other critters. They should test the squirrels too, to see if there is a relationship with acorns. I think if they find that acorns are the reason, they will not report it, until they find a drug and can make a vaccine out of it. Sad to think this way, but the medical world, and big Pharma has brought this lack of trust among themselves.

Posted On 04/30/2024

nat3939

con't, deer blood and Lyme; The results of the study may one day lead to new strategies and approaches for Lyme disease prevention and treatment, said lead author Patrick Pearson, a Ph.D. student in NEWVEC, whose upcoming doctoral examination focuses in part on this research. “In these experiments we determined that white-tailed deer serum kills the Lyme bacterium. The next important question will be to understand exactly how deer blood kills Lyme bacteria,” Pearson commented. The research is one project of NEWVEC, which was funded by the CDC last year with a $10 million award to prevent and reduce tick and mosquito-borne diseases in New England.

The Lyme disease bacterium is passed to juvenile blacklegged (Ixodes scapularis) deer ticks from mice the arthropods feed on. The infected ticks then pass the bacterium on to humans when they feed on people. “We are the accidental host,” Rich said. “The ticks that bite us are actually looking for a deer because that’s where they breed. Without the deer, you don’t have ticks. But if you had only deer, you wouldn’t have any Lyme.” To carry out their experiment, the researchers obtained blood serum from a semi-captive white-tailed deer herd at Auburn University in Alabama. The deer were believed to have no exposure to ticks and the bacteria that causes Lyme disease.

The researchers then grew the Lyme disease germ in test tubes and added the deer serum. “Whatever it is in the deer that’s killing the germ is part of the innate immune system, a part of the immune system that precedes antibodies,” Rich explained. Pearson added: “The Lyme bacterium has proteins on its surface that protect it from the human innate immune system. Deer blood is somehow different such that Lyme bacteria are apparently unable to protect themselves from the innate immune system of white-tailed deer.” The next research step is to determine the precise mechanisms in deer blood that kill the bacteria.

Posted On 04/30/2024

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nat3939

con't, deer blood and Lyme disease; “We’d like to determine if it’s something we can induce in humans,” Rich said. “Or maybe we could use this somehow to our advantage to reduce the incidence of Lyme disease in the wild.”

Posted On 04/30/2024

Whatitis

The conjecture about an evolutionary relationship between squirrels and nut trees makes evolution even more statistically impossible than ever. This concept about squirrels and their nut diets could have been presented without the fantastic evolution claims. Further, you don't know that squirrels always ate nuts.

Posted On 04/28/2024

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linames1

Let's try posting my comment again, since it did not make it the first time. I am unable to take Mr. Marshall's research seriously due to heavy evolutionary references and audacious statements such as, 'That is the equation that the oak trees decided to use' and 'I believe that the trees evolved to use mammals to move their seeds around for them'

Posted On 04/28/2024

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nat3939

Many mammals like acorns such as squirrels, but also turkey and deer. You might be interested to know that scientist have studied deer blood and found that the deer's blood will kill the Lyme bacteria. Can this be from eating acorns? The study does not indicate this to be so, and this thought is of my own thinking. It appears that the scientist who have researched this phenomenon have yet to figure out why Whitetail Deer's blood can destroy the Lyme bacteria. As I already stated, can it be from the acorn diet. If so, then maybe a study of squirrels may find that they have the same ability as the Whitetail deer.

I mention Whitetail deer since that is the deer that was used in the study. Here is a copy of the report; Dave Carr From: nat.trail@yahoo.com To: Dave Carr Tue, Apr 2 at 6:15 PM MAR 31, 2023 Researchers at the University of Massachusetts' New England Center of Excellence in Vector-Borne Diseases (NEWVEC) have completed research that offers a promising lead in the fight against Lyme disease. The study, published recently in the journal Vector-borne and Zoonotic Diseases, demonstrates that the blood of the white-tailed deer kills the corkscrew-shaped bacterium that causes Lyme disease, a potentially debilitating illness.

“Deer are vitally important to the survival of deer ticks, but they are not involved with transmitting the Lyme bacteria, Borrelia burgdorferi,” explained senior author Stephen Rich, professor of microbiology. “We’ve known for some time that ticks taken from white-tailed deer are not infected, and we speculated that something about the deer prevented those ticks from becoming infected. But until publication of our paper, no one had done the experiment to show that deer blood specifically the serum component of white-tailed deer blood kills Lyme.” con't

Posted On 04/27/2024

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rferdman

Interestingly a book I read 15 years ago Stephan Farris' "Forecast" mentioned how scarce food periods had led humans to eat acorns over periods of hundreds of years and I surmise this led to many of the same storage of fats, seed dissemination. After all mammals descended from the same chipmunk sized mammal hundreds of millions of years ago.

Posted On 04/27/2024

Karterlin

A practical question: As a 73 year old ,115 lb., woman, exercising 5 days a week, sometimes 6, and having followed the high good fat and low carb diet until the big change recentlly I had been watching the linoleic acid and trying to limit that. I am not a squirrel or a dolphin. I started eating whole ripe organic fruit, and even have begun a potato , which I had not eaten for a few years. I eat no grains. I usually had a salad for lunch with pure olive oil and red vinegar dressing. Now I wonder if red vinegar should be eliminated due to linoleic acid. If so, what kind of dressings can be safely used? Nothing from the grocery store in the salad dressings aisle has ever looked safe. I don't eat anything with processed sugar. (learning to navigate this new information in real life)

Posted On 04/27/2024