

Excellent report that makes us consider a diet that avoids the promotion of endotoxins related to metabolic diseases, including cardiovascular, neurodegenerative diseases and cancer. Excessive intake of fructose and linoleic acid in the normal human diet is related to a global increase in metabolic disorders. Chronic endotoxemia commonly occurs in obesity and is an important factor inducing systemic inflammation leading to metabolic syndrome. Healthy dietary choices, such as consumption of fish, fresh vegetables, and fruits and berries, may be associated with positive health outcomes.

by reducing systemic endotoxemia. Vitamin D restriction and/or a high-fat diet increases the risk of metabolic endotoxemia. Phytochemicals reduce endotoxins. Specific components of the Western diet, such as PUFAS, monosaccharides, processed fats, gluten, alcohol and additives, can affect the tight junctions between enterocytes, leading to increased permeability and the movement of endotoxins into the bloodstream. blood. These endotoxins include lipopolysaccharides derived from gram-negative bacteria. In particular, a high-fructose diet can increase intestinal permeability and circulatory endotoxins by changing intestinal barrier function and microbial composition.

Excess fructose causes inflammation and de novo lipogenesis. Lipogenesis leads to hepatic steatosis, thus causing abdominal adiposity and insulin resistance. Serum endotoxin levels are elevated in patients with liver cirrhosis, diabetes, cardiovascular diseases, chronic infections and aging, amyotrophic lateral sclerosis, and Alzheimer's disease. The highest levels of plasma endotoxin are found in patients with sepsis, around 500 pg/ml.

Endotoxin levels in blood plasma are normally low, but rise during infections, intestinal inflammation, gum disease, and neurodegenerative diseases. Leaky gut causes the release of bacterial metabolites and endotoxins, such as lipopolysaccharide, into the circulation, causing bacterial infections, oxidative stress. Diet rich in polyunsaturated fats, exposure to alcohol or chronic allergens, and dysbiosis are highly related to development and/or progression. of several systemic metabolic and autoimmune diseases, neurodegenerative disease, cardiovascular disease, inflammatory bowel disease, cancer and the development of metastases.

Increases in blood endotoxin levels were associated with increases in C-reactive protein concentrations and increases in intestinal permeability markers such as zonulite. Probiotics help modify the intestinal microbiota, promote the growth of beneficial bacteria and are an alternative source of SCFAs and reduce LPS expression, intestinal inflammation and tumor size in CRC. Among them, Akkermansia muciniphila has the ability to reduce the expression of LPS, improving metabolic endotoxemia.

www.mdpi.com/.../267 (2023).-- www.sciencedirect.com/.../S002231662304525X (2023).- www.mdpi.com/.../3706 (2023).- www.cghjournal.org/.../S1542-3565 (22)01110-7/fulltext (2023).- www.mdpi.com/.../267 (2023).- www.sciencedirect.com/.../S002231662304525X (2023) www.mdpi.com/.../3706 (2023).- www.sciencedirect.com/.../S2405844023061042 (2023).- link.springer.com/.../s11739-023-03374-w (2024).-- onlinelibrary.wiley.com/.../eci.14224 (2024).-- www.cell.com/trends/endocrinology-metabolism/abstract/S1043-2760 (24)00087-0 (2024).-- ejhm.journals.ekb.eg/article_349082.html (2024).--

juststeve

Gui, toxins coming in, toxin forming inside us from it all. All of it blocking the necessary, needed nourishment, real health builders. Dis-ease over the last six decades or more is constant, steady straight line up. Coming off of a onetime best health in the world. We pay the most and get the least in healthy, positive terms back. My hope is Ashley's, the Strong Sista's & Doc's vision and efforts are put into motion in as many Local, Diffused operations as possible too and working in this framework. Each Local area, region should have a focus on filling their own basic foundational needs. Those needs most often seen or reported on in Legacy Media after the complete meltdowns from natural disasters. Filling Local needs with any surplus contributing to those areas where certain needs just can't be met.

Strongly agree, Just, toxins that cause major health problems including exposure to glyphosate and glyphosate-based herbicides have the potential to negatively influence neurodevelopment and behavior across generations indirectly through the gut-brain axis. -microbiome. Glyphosate can kill commensal members of the microbiome resulting in reductions in key microbial metabolites acting through the gut-brain-microbiome axis, including indoles, L-glutamate, and SCFAs. Glyphosate-resistant microbes in the gut have the potential to increase the production of pro-inflammatory cytokines and reactive oxygen species that may result in increased HPA activation, resulting in increased production of glucocorticoids that have implications for neurodevelopment.

Furthermore, maternal transfer of the gut microbiome can affect immune and neurological development from generation to generation. www.frontiersin.org/.../full (2022) Also this study reported that glyphosate exposure, at doses similar to the US ADI, can alter the composition of the gut microbiota and modulate the neuro-immune-endocrine system, resulting in a pro-inflammatory environment.

Microbial alterations were characterized by the loss of beneficial bacteria (Lactobacillus and Bifidobacterium) and a reduction in SCFA-producing microbial gene pathways. Furthermore, these microbial alterations were accompanied by an increase in inflammatory markers, including an increase in lipocalin-2, CD4 + IL17A + gut-resident immune cells, and an increase in fecal pH. www.sciencedirect.com/.../\$1382668923000911 (2023)

The anti-inflammatory activities of catechin-rich green tea extract (GTE) in obese rodents protect against metabolic endotoxemia by decreasing intestinal permeability and absorption of gut-derived endotoxins. GTE would reduce endotoxemia by decreasing intestinal permeability and intestinal and systemic inflammation in people with metabolic syndrome (MetS) compared to healthy people. These findings demonstrate that catechin-rich GTE is effective in decreasing circulating endotoxins and improving the glycemic control in healthy adults and in people with metabolic syndrome, probably by reducing intestinal inflammation and small intestinal permeability, but without affecting systemic inflammation.

www.sciencedirect.com/.../S0271531724000204 (2024).------ To promote milk production, ruminant animals, such as dairy cows, are fed especially with concentrates that contain a high content of cereals and starch. However, this type of feeding regimen could induce a condition of subacute rumen acidosis. These circumstances cause the lysis of gram-negative bacteria accompanied by the release of endotoxins in the intestine. Intestinal endotoxin could move to the mammary gland, so this condition negatively affects the safety of milk.

www.sciencedirect.com/science/article/abs/pii/S0041010124002319 (2024).--- Colon bacteria contribute a large amount of LPS that could promote colon cancer metastasis. In this study, the effect of LPS on cell viability and the expression of 55 genes at mRNA levels in human colon cancer cells was analyzed. Specify that LPS affects the expression of a series of genes important in inflammatory responses and cancer development. These data suggest that LPS has profound effects on gene expression in human colon cancer cells. link.springer.com/.../s13104-023-06506-9 (2023).----

In addition to serving as a cellular energy generator, mitochondria have complex stress response mechanisms. A limited amount of mitochondrial stress activates a hormetic effect that could lead to beneficial results at the cellular, tissue or organ level, mainly affecting metabolic homeostasis and immune function. Various types of stress signals have been proposed to trigger this protective mechanism, but the increase in mitochondrial ROS has been the most prominent. Environmental, dietary and pharmacological factors on aging. Additionally, circadian rhythms have been shown to play a critical role as a regulator of various biological processes, while increased mitochondrial respiration has been linked to improved lifespan.

Furthermore, the accumulation of senescent cells and telomere shortening have been identified as important contributors to reduced longevity. Modulation of the molecular mechanisms that drive aging progression is frequently achieved with small molecules such as rapamycin, resveratrol, metformin, and fisetin. All of these compounds are of natural origin and are described as having antiaging and/or longevity-prolonging effects. In this sense, plants are valuable sources of chemically diverse molecules with possible beneficial effects on health and life expectancy.

The identification of new plant secondary metabolites that extend longevity, together with the evaluation of their molecular targets, opens horizons for innovative approaches that could lead to the development of nutritional supplements or functional foods that extend longevity. Additionally, advances in biological therapies, such as gut microbiota transplantation, stem cell transplantation, gene editing therapy, and immunotherapy, have been developed as promising options to address agerelated diseases and improve life expectancy.

In TABLE 1 natural compounds of plant origin that promote life extension by increasing one or more characteristics of aging.— Conclusive evidence indicates that NAD+ levels decrease with age, contributing to a series of reactions that result in the inactivation of sirtuins and genome instability. Interventions that raise NAD+ levels, including administration of NAD precursors such as nicotinamide riboside (NR), nicotinamide mononucleotide potentiate NAD. Additionally, CD38 inhibitors including quercetin, luteolin, apigenin, and GSK 897-78c, have been associated with restoration of NAD+ levels, along with synthetic SIRT6 activators such as MDL-800 and UBCS039, and molecules that activate nicotinamide phosphoribosyltransferase.

. Furthermore, signaling pathways involved in aging and longevity can be modulated by natural compounds found in foods or derived from medicinal plants. Among all the hallmarks of aging presented in this article, some stand out as promising targets for natural compounds. These include genomic instability, mitochondrial dysfunction, dysregulated nutrient sensing, cellular senescence, compromised (macro)autophagy, microbiome disruption, and chronic inflammation.

For example, naturally occurring bioactive molecules such as rapamycin, resveratrol, sulforaphane, and fisetin have gained significant scientific interest and have been shown to have a positive impact on life expectancy and overall health by modulating more of one of the characteristics of aging. Senolytics, including hybrid combinations such as dasatinib and quercetin, have the potential to modulate senescent cells, thereby reducing age-related inflammation.

onlinelibrary.wiley.com/.../fft2.350 (2024).--

stoneharbor

A fifth key contributor to insufficient mitochandrial energy production Is merely continual eating. If one is snacking all the time they are preventing their mitochondria from repairing and multiplying. The mitochondria get old and inadequate to produce energy, no matter what food you are eating. If you don't have enough mitochondria, it doesn't matter how good the food is or how the food is balanced, you are going to lack sufficient energy to live well. You need to read about mitochondrial "uncoupling", the very natural process that takes place as part of your circadian rhythm.

The only thing you need to do is: NOT EAT. Yes, give Your mitochondria a chance to uncouple from the production of ATP, and begin the daily process of regeneration that all your other cells tend to do every night under control of the parasympathetic nervous system. Packing your intestines with more food right up until the time you fall into bed is not the way to accomplish this. It's much better to cease eating three or four hours before bedtime so that you get at least twelve hours without new food introduction into your intestines.

Posted On 05/12/2024

stoneharbor

There is more on uncoupling here www.ncbi.nlm.nih.gov/.../PMC6721602 Uncoupling (time restricted feeding) for treatment of all metabolic diseases: www.ncbi.nlm.nih.gov/.../PMC8085597 Uncoupling for cancer prevention: www.nature.com/.../ncomms9137 While there are hundreds of articles out there, the easy thing to remember is that you only have do a bit of fasting overnight to gain all the advantages, and again have plenty of mitochondria. Food quality and selection of course is important. But trying to depend on the food alone to give you energy is like putting high octane gasoline into a car's fuel tank and yet having only a two horsepower engine to propel the vehicle. Power does not come just from the quality of the fuel. It comes from the horsepower of the engine.

Interesting aspects about mitochondrial uncoupling. Mammals have two types of adipose tissue: white and brown. The function of the first, with few mitochondria, is to store energy in the form of fats. The second, with a large number of mitochondria, is to generate heat. Mitochondrial uncoupling not only affects mitochondrial respiration, but can also activate or hinder multiple cellular mechanisms, including massive and specific forms of autophagy, regulation of ROS production, protein secretion, physical exercise capacity, and adipose tissue biology (Figure 1).

Research on mitochondrial uncoupling proteins (UCP) has been historically linked to the study of energy balance in the organism. Body weight is the result of the balance between metabolic energy input (diet) and energy expenditure. From a physiological point of view, there are several components that determine energy expenditure in mammals: physical exercise, basal metabolic rate, the thermic effect of food and adaptive thermogenesis. In humans, several studies have established that a reduction in adaptive thermogenesis is one of the alterations in energy homeostasis that lead to obesity.

Mitochondrial uncoupling can be defined as a dissociation between the generation of mitochondrial membrane potential and its use for mitochondria-dependent ATP synthesis... In all of this the production of reactive oxygen species, the secretion of proteins, death cellular, physical exercise, metabolic adaptations in adipose tissue and cell signaling. Mitochondrial uncoupling could be used to treat several human diseases, such as obesity, cardiovascular diseases or neurological disorders.

Physical exercise stimulates the secretion of peptides or hormones by skeletal muscle cells, specifically myokines. One of the most important myokines is irisin. The main and well-described function of irisin is to induce WAT browning and, therefore, UCP-1-dependent mitochondrial uncoupling. Physical exercise appears to globally stimulate mitochondrial uncoupling, leading to remodeling of skeletal muscle cell physiology. beige and brown adipocytes are located in separate deposits. Browning is induced by many physiological or experimental conditions, including cold exposure, physical exercise, or exposure to capsaicin, resveratrol, berberine, quercetin, thiazolidinediones, prostaglandin E2, betalapachone, retinoic acid, and cytokines (IL-4, IL-6).

, (para)thyroid hormone T3, GLP-1, leptin, melatonin (Figure 4). Sestrins are a family of stress-inducible proteins involved in the negative regulation of the AMPK/TORC1 axis and in the detoxification of ROS by restoring the activity of oxidized peroxiredoxins. During obesity, excessive accumulation of triglycerides in adipocytes leads to cellular and organelle dysfunction with the interconnection between inflammation, oxidative stress and adipocyte biology having been extensively reviewed.

In addition, the gut microbiota also appears to play a role. an important role as a regulator of browning of WAT- In terms of cellular signaling, the best known effect of mitochondrial uncouplers is probably a drop in ATP/AMP levels, which induces the activation of the AMPK signaling pathway (Figure 1). This effect has been found in multiple models and species, including white adipocytes. The function of the electron transport chain (ETC) is affected, cancer cells depend on reductive carboxylation (RC). Inhibition of RC could be a key mechanism by which mitochondrial uncouplers inhibit tumor growth.

Thyroid hormone (TH) is reportedly crucial in controlling BAT. UCP1 expression has been reported to increase under the influence of T3, which promotes thermogenesis. A high-fat diet has been suggested to cause obesity (HFD) by affecting the upstream proteins of mitogen-activated protein kinase (MAPK), p38, and others. www.mdpi.com/.../795 (2019).--

www.sciencedirect.com/.../S0143416023000489 (2023).-- aacrjournals.org/mcr/article-abstract/21/10/1010/729218/Mitochondrial-.. (2023).--

www.sciencedirect.com/science/article/abs/pii/S0028390823002435 (2023).-www.sciencedirect.com/science/article/abs/pii/S0944711324003313 (2024).-- The transcription
factor Nrf2 promotes survival by enhancing the expression of uncoupling protein 3 under conditions
of oxidative stress.

UCP3 functions as a member of the cellular antioxidant defense system that protects against oxidative stress in vivo. Elevated or decreased NRF2 activity through pharmacological and genetic manipulations of NRF2 activation is associated with many metabolism- or inflammation-related diseases. Emerging evidence shows that NRF2 is at the center of a complex regulatory network and establishes NRF2 as a truly pleiotropic transcription factor.

Here we summarize the complex regulatory network of NRF2 activity and its roles in metabolic reprogramming, unfolded protein response, proteostasis, autophagy, mitochondrial biogenesis, inflammation, and immunity. www.sciencedirect.com/science/article/abs/pii/S0891584913001470 (2013).-- www.mdpi.com/.../4777 (2020).- link.springer.com/.../s0006297922120057 (2023).-- www.degruyter.com/.../html (2024).-- onlinelibrary.wiley.com/.../jsfa.13062 (2024).--

4wellness

Thank you Dr. Mercola for the endless wealth of information. Your generosity is beyond words. It would be really interesting if you grabbed 10 overweight people and gave them a prepped meal plan, and showed everyone the results. Volunteers would line up around the door. Real people that have struggled with weight their whole life. People that are 50# or more overweight, representing the average Joe in America. Another thought is most people have glucose issues, like myself, where a glass of milk or orange juice would throw their blood sugar over 200.

In this "average Joe" scenario how does one go from that to ideal health. Most people in their current state can't process orange juice without issues, nor could they afford low PUFA eggs. Would you consider putting this to a panel of average Joe's and show people that this can work for anyone? Right now we're watching fit people gain ideal health. Which is great. But what about the rest of us? As always, eternally grateful for the wealth of knowledge Dr Mercola. You've probably saved my life. Beyond words grateful.

Posted On 05/12/2024

bowgirl

Showing people how to eat is a great idea. The perception of what are good choices is causing problems. For example I have not had a glass of milk or OJ in decades. Discovered I was lactose intolerant 30 years ago. My whole body was out of whack, struggled with perimenopause and Lyme and other co-infections. My doc and I discovered just how toxic supposedly healthy choices were. Gradually I got well by changing my diet and job so I got out in the sun daily. Eating fruit is so much better than the juice. I learned this when researching feeding how to feed my now 30 something kids. I disbanded my business so I could grow most of the food I eat. I do not have a large lot by any means but we maximize. It helps that our soil is excellent, has been organic since before it was an option... Gets healthy is a working toward. Choose to have some of your diet be healthy and go from there. Now we have to overcome the damage caused by covid and the shots.

NaturalGrown

Great article. I can attest, my metabolism slows down terribly over winter to near hibernation state. My sport activities ceases during the cold. I wondered why my thermometer was showing my temp at 96-97 and bought a traditional mercury type which showed a degree higher than the digital chinese junk. I also consume a high amount of dietary fats, raw whole milk and grass fed beef and eggs are my main staples. So glad it's warm again!

Posted On 05/12/2024

CaraCamp

Hello, I know most on here disdain vegan and vegetarian diets, so I'm wondering if this course would be appropriate for someone who is a strict vegetarian? I followmy diet for reasons of ethics, as well as that the idea of eating flesh nauseates me. I do not think I could bring myself to eat any animals. ALSO, I would like a debate! I just finished Dr. Gundry's Energy Paradox and he is advocating, ideally, one meal a day, which I know is now very much not what Dr. Mercola recommends, though it seems a fair bit of their other dietary advice overlaps (most seed oil avoidance, for example, though he's big on sesame seed oil and thinks organic canola is OK). While Dr. Mercola seems to be saying avoid resistant starches because of endotoxins, Dr. Gundry says resistant starch is great nourishment for "gut buddies." It's very confusing!

Posted On 05/13/2024

pea7228

I am having a really difficult time giving up the idea of intermittent fasting. I read Jason Fung's book on fasting and it made sense to me. I felt good while keeping my eating window to around eight hours a day. Does anyone else struggle with the idea of giving up if? Does anyone have a simple yet convincing argument of why I should stop fast, except for (obviously) overnight?

pamanddave

The best milk substitute please just for a cuppa once daily.

Posted On 05/12/2024

pamanddave

I enjoy 1 cup organic coffee per day so my problem is the milk as not keen on black coffee. Used to have raw milk, now stopped as fine was too heavy if they got caught. Now I make walnut milk. Is that OK? If not what does anyone suggest please!

Posted On 05/12/2024

Dr. Mercola

No. Try butter.

Posted On 05/13/2024

outdoorsyrn

Hi Ashley and Dr Mercola, You say to avoid ALL seeds and nuts in the article. If you sprout your nuts/seeds, which changes their macronutritent makeup and makes them more digestible, can they be included in the "bioenergetic" diet plan?

Dr. Mercola

No, sprouting removes phytates and other anti-nutrients not LA.

Posted On 05/13/2024

SomeMo888

I'm confused about nuts as well, we consume macadamias along with locally grown pistachios and peanuts, all in moderation. Hoping Dr Mercola can do a deep dive article about this nice energy source.

Posted On 05/13/2024

nbk2c22

Kudos to Dr Mercola for pivoting rather dramatically from some of his long standing health guidance, and giving proper credit to Ray Peats work. It must be quite a difficult mea culpa to transition such an enormous business 180 degrees in some key areas.

SusanneC

I believe everything that is stated in this fantastic article, except the notion that sugar is okay in moderation. I'm highly sensitive to sugar, and it and aspartame are clearly toxins. I stopped eating anything with any "added sugar" in the ingredients list, although natural sugars in fruits or other items are okay. That's because even the tiniest ingestion of added sugars or aspartame by me causes my skin to erupt in acne and my teeth to ache such that I'm at risk of needing immediate dental work. But without added sugars or aspartame, where I opt only for natural sugars, such as from fruit or plain Greek yogurt, I get zero acne and zero tooth issues. Added sugar in the "ingredient list" is clearly toxic for me, and I'd argue, for everybody. If we're advocating for added sugar, we're advocating for a toxic, damaging ingredient.

juststeve

So much of Industrial Factory Farming is propped up, supported by subsidizing, laws and regulations, slick marketing, tax breaks, a Medical System to distract the actual sources of discomfort, Dis-ease feeding them. No wonder Americans are stuck in hibernation mode, zombies, surviving held back from thriving. Further insult is Real Biodynamic Farms are harassed with rules, regulations, laws when their operations are not even sources for the offenses supposedly to be kept in check. They are expensive, health disrupting negatives the byproducts of Chemical Farming. The massive true expensive of the Chemical Farming is hidden.

Even when Biodynamic Regenerative Farmers reach the Escape Velocity to leave the Chemical/Oil/High Finance Model behind, they are still stuck with having to check the boxes about things having nothing to do with them. To Invest, Convert to True Biodynamic Regenerative Farming with a focus on health, rather than yields of empty calories, would potentially do more than just eliminate the massive hidden costs of Chemical Farming, Industrial Farming. Eventually it would go a long way improving our health, our country's health, Society's Health. The whole carbon narrative would dry up and blow away as Farm Practices working with nature allow the livestock, farming to do what Creation has always done.

Keep it all in balance. No High-Tech, High Finance, Technocrats farce of creating machines to gulp supposed surplus Cow Farts. The costs of our current treat the symptoms model 'Medicine,' reduce the many kinds of pollution entering the environment, the costs of Medicare, Medicaid. It would reduce the cost of environmental Pollution by working with Nature/Creation instead of a delusional belief of an ability to rule it. Heal the Soil, Heals the People, and Heals Societies.

Very true Just, Big Tech, Big Food and Big Pharma constitute the network of misinformation and corruption at the service of the food and medical system, the FDA, the CDC, moved by the strings of big capital. They are psychopaths who wreak havoc on innocent lives by indifferent, selfish, irresponsible criminal parasites and elected officials who lie to their constituents, trade political favors for campaign contributions, turn a blind eye to the wishes of citizens. electorate, bilk taxpayers out of hard-earned dollars, favor the corporate elite, entrench the military industrial complex, and give little thought to the impact their thoughtless actions and hastily passed legislation could have on defenseless citizens.

This corrupt network is firmly opposed to the very idea of preventing diseases and increasing life expectancy because it thrives on diseases and would lose money and power if fewer people suffered from cancer and diabetes. and heart diseases. The younger people die, in other words, the less the government pays under Medicare and social security programs. For the Pharmaceutical Mafia, if you prevent diseases you are useless because you will not need their medications, surgeries or chemotherapy. To the government, you are useless as soon as you retire and stop paying taxes on your salary.

No television commercial or public service announcement will encourage you to prevent disease and live a long, healthy life. Empower people to take charge of their own health, learn about nutrition and become independent thinkers who can discard the manipulations of Big Pharma Big Food or Big Government, which try to keep you in a state of chronic degenerative disease so that doctors, drug companies and hospitals can extract as much of your money as possible before you die. Vandana Shiva: I think our job, is that an extinction is occurring. They call it the sixth mass extinction. Most people think the sixth mass extinction is about other species.

They don't realize that much of humanity is being pushed to extinction. Independent science, good healthy knowledge. That food is health, as Hippocrates said. Indigenous learning systems, ecological agriculture, small farmers. The corrupt network would like to drive this to extinction because they are afraid of independence and freedom and health. Dr. Joseph Mercola: This is one of my concerns, the book that I will write next year focuses on one of the most fundamental elements to optimize human health, and that is the restriction of a specific omega-6 fat, which is generally considered essential. It's called linoleic acid. The problem is that we industrialized Western cultures have massive excesses.

Five, six, 1000 times, 2000 times higher than what is needed for optimal health. Industrialization began the process of severing humans' ancient connections to their food and the land on which it is grown. "Now, with digitalization," Shiva said, "they would like to do away with it forever." Tech giants, in an effort to boost home digital farming, are working to reduce life to software while advancing digital surveillance systems. At the link Shiva on Bill Gates' book: Bill Gates' new book is 'garbage'. Dr. Mercola's reports. www.globalresearch.ca/boycott-fake-food-role-regenerative-agriculture-.. .---- www.globalresearch.ca/vandana-shiva-new-wave-colonization-carbon-slave.. .----

Posted On 05/12/2024

juststeve

Gui, another great lie - over population. First, when sanitary conditions and solid distribution of necessities are met, people abandon the high birth rate practices they once needed as a hedge for 'retirement.' When their children are more apt to survive, there is less need to produce more so enough survive to protect the parents, family members. The Technocrats beat the drums and bleating, we are helping you live longer, yet current real-world results suggest this is not so. Even if so, one is not likely to have as good a quality of life to possibly be afforded. Across the Globe many nations picked up the notion and populations in many are in free fall. China, Korea, soon the States. With a 1% of very privileged people who have been professing for ages a desire to reduce if not eliminate the riff raff, it certainly has all the appearance this was all well under motion before the C-19 - 'Culling?'

PithHelmut

We really are behind the eight ball with finance which has taken over everything, even things it knows nothing about. It is so prevalent and noxious that it destroys everything in its path. We need to get out of the finance system. The way money is created is the culprit to it all. Starting local currencies is one way to do beat it, bartering or sharing, just use anything but money whenever we can (a proportion can be a local currency and banker's currency) The important thing is we need to get this rolling. It's best if we jot down our transactions (we can do that easily now with digital technology) rather than not record them because we cannot develop a system without it being recorded.

Record just the transaction between two people and no middle person (eg: no bank). It takes only a small amount of administration to set up and the rest of it can be automated. But we must, must, must, get off the banker's money system if we want a pristine world again. There is no other way. This money system if it continues will just wipe out everything natural and healthy. We're almost there now.