

Almond

Although we do not tend to eat much dairy at our house, with the exception of cheese, we do consume most of the other calcium-rich foods regularly. It is very disturbing when I look at the food charts about the RDAs which are minimal. I realize that many of these foods have become very expensive or are in short supply. That means we have a whole generation of children on nutrient-deficient diets. The outcome of these dietary deficiency will extend down thru several generations and not just affect these individuals physically, but also mentally.

The importance of diet is reflected historically. The British troops sent to the colonies (America) were of the same stock as the American settlers. However, the settlers ate from the land that was rich in fish and game meat. Crops were grown in mineral-rich virgin soil by settlers moving ever father westward. For those who could afford a cow, there were plenty of dairy products, but there were usually plenty of eggs. Some of the most nutritious foods were harvested from the wild.

As a result, the American soldiers were generally larger than their British counterparts, which, in some cases, proved to be intimidating. This was not only the case in Amerca, but a change has also been commonly noted in other countries after war or a prolonged famine when abundant harvests resumed. The covid era has disrupted the lives of many people, in many ways, that will be experienced for many generations to come-- health wise, socially, politically and economically.

Posted On 04/30/2024

stoneharbor

You make a great point about how our children are already addicted to a nutrient-deficient diet. I could say yes: That's part of the pharmacological/medical grand plan. They just ignore nutritional education and delight in caring for all the nutrient deficiencies that crop up now, even by the time people are 20 years old.

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Almond

stoneharbor and all... We constantly observe this. How many young people we hire cannot last until noon their first day on the job. They do not have the stamina for heavy physical labor and cannot keep up with the older men who have worked hard all their lives. The boss of one of my nephews told him he was the first young hire in 5 years who lasted on the job. We occasionally hire contract labor. It is Mexicans and American farm boys who are used to working hard. The first red flag for us in hiring is if an applicant brags about being a h.s. athlete--it is a different sort of muscles and stamina when doing physical labor, on the run and carrying heavy loads all day long.

Sad to say that there are still many jobs where I can outwork the young men. We also notice the work ethic. Difficult to get city people to show up for work on time or even show up. They think working hours are a suggestion--if they feel like it. Have had to fire 2 employees this last year because of that. I admit that most of the country people we hire work hard and are very conscientious. Many young city people have an entirely different thought process. They expect emotional fulfillment on the job, not just a paycheck. We observe the lack of paternal influence and upbringing among many... lacking basic knowledge, skills and socialization.

They overvalue their worth and many are unwilling to follow directions or learn. This bodes ill for our country. Esp. if we see increasing health problems and early dementia among young people who chose job over job loss. Most of those in working ages or college educated are jabbed. The nation is losing productivity and know how as large numbers of experienced senior employees leave the work force. We esp. see this among farmers who have held on long past retirement age or forced into retirement due to disabilities. Senior surgeons and engineers. A shortage of truckers due to older truckers retiring. Good reasons for military recruit/renlistment shortages.

Posted On 04/30/2024

Almond

-continued- stoneharbour and all... I think back to my youth. I took any job I could get--as many as I could schedule. I did not think in terms of 8 hour days. No job was too hard or dirty. We worked whenever there was the OPPORTUNITY to do so. In many cases, no benefits and no minimum wage. Times were hard. We needed to earn money. One of the worst things you could say about a person was that they were lazy.

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Guillermou

A myriad of studies published over the last century suggest that, in general, taller people have higher incomes, better education, and tend to live longer. In essence, the studies argue that there is a relationship between greater height and access to good nutrition and hygiene, which, in turn, reduces the possibility of developing certain respiratory and cardiac diseases and promotes longevity. Other research, as shown below, also indicates that they tend to be more dominant and optimistic. However, some experts point out the opposite.

Thus, a trial published in The Lancet in 2011 revealed that the relative risk of suffering from cancer increases by 16% for every 10 cm above 1.53 meters. If you are taller than average, you are less likely to become diabetic or suffer a heart attack, according to different studies. Researchers attribute this to the fact that taller people have higher levels of the protein IGF, a molecule that increases insulin sensitivity and activates fat metabolism. The drawback is that, at the same time, it seems to promote cell growth, which also increases the risk of suffering from cancer, especially of the prostate, breast and colon.

The length of your legs may be related to your chances of getting type 2 diabetes. Based on five years of data from more than 6,000 adults, scientists believe that tall people may be less likely to get it. It's not clear why they are related, but one idea is that short stature is a sign of poor nutrition or other metabolic problems before birth or during childhood.

Posted On 04/30/2024

Guillermou

Researchers can't explain why, but studies show that the shorter a person is, the less likely they are to have a blood clot in a vein. During the second half of the 20th century, people who lived the longest included the Japanese, Hong Kong Chinese, and Greeks, all of whom were shorter and heavier than Northern Europeans and North Americans. East Indians, Chinese, Japanese, and Hispanics in California were found to have lower all-cause and coronary heart disease mortality rates, as shown in the table. 7 Heights obtained from other sources are shown for each ethnic group and indicate that shorter ethnic groups had lower mortality rates.

Compared with northern Europeans, shorter southern Europeans had substantially lower mortality rates from coronary heart disease and all causes. Greeks and Italians in Australia live about 4 years longer than the taller host population, and shorter Turkish immigrants in Germany have an age-adjusted death rate from coronary heart disease that is half that of indigenous Germans. Taller. If you want to walk among giants, take a walk in the Netherlands. According to a study by Imperial College London, the average male height in this country is 1.82 meters. According to research carried out in the United States, multiple pregnancies predominate among taller pregnant women.

Experts attribute this to the fact that in them there is a greater presence of a growth factor that increases ovarian follicular stimulation and egg production, which, in turn, favors the conception of twins. www.webmd.com/.../slideshow-height-affects-health .--
www.ncbi.nlm.nih.gov/.../PMC1071721 .-- www.vinmec.com/en/news/health-news/how-does-height-affect-your-health/ .--- news.cuanschutz.edu/news-stories/tall-height-impacts-risk-of-multiple-.. .---
time.com/.../is-being-tall-bad-for-your-health .---

Posted On 04/30/2024

It is gratifying to see it expressed health is not found at the extremes with finding balance the best goal. Yet as a person though who has gone through extreme imbalances over the decades, with the employment environment in rural areas like here. Sources for income have been extreme rollercoaster rides. While the ability to garden was a very helpful firewall to hang on until being able to start over, none the less, until stabilized, things at times were very lean - bare bone. Having been through such things, I'm just wondering if it would be helpful to have categories where we have the information of what are basics to hold on for those situations? Maybe a mid-range to shoot for to finally make it to, if possible, ones' best needs to be found and maintained?

As the "Side Effect's" of the C-19 by all appearances as bad as they are so far, seem very much just the tip of the iceberg. Many could find themselves in extreme conditions no matter how well prepared we are. It is my hope Ashley's, Strong Sista's efforts are picked up in rural areas like here so as we provide our most essential basic needs for ourselves, yet, if possible, help provide surplus to contribute to Ashley's, Doc's efforts to extend quality foundational foods while their network may well fill the gaps where individual areas or regions can't.

Posted On 04/30/2024

Guillermou

Yes Just, above all balance and good food. Calcium and phosphorus metabolism are interconnected with effects on parathyroid hormone (PTH), 1,25-dihydroxyvitamin D (1,25(OH)2D), serum and urinary calcium and phosphorus concentrations, including absorption intestinal, urinary excretion and skeletal actions. Many studies have shown that increased phosphorus (P) intake can have negative effects on the skeleton, while calcium (Ca) intake can have a protective effect. As there may be an optimal balance between nutrients in relation to bone health, interest has focused on the dietary Ca:P ratio. Research data in both animals and humans indicate that a low Ca:P ratio has a negative impact on the skeleton, but there is also evidence to suggest that if P intake is high, it may have negative health effects.

High dietary phosphorus has been implicated in several processes related to accelerated aging: for example, increased risk of fractures, cancer proliferation, cardiac and skeletal muscle dysfunction, and vascular calcification. Currently, dietary phosphorus is estimated to exceed the RDA by 1.5 to 2 times, which is of particular concern for people with cardiovascular disease. Both high and low dietary phosphorus can cause adverse health effects and impair longevity, and it may be important to consider implementing phosphorus analysis as a routine measurement in clinical practice.

link.springer.com/.../978-1-4939-6566-3_10 (2017).-- www.mdpi.com/.../3001 (2020).--

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Guillermou

These documents list the calcium and phosphorus content of a 1-cup serving of each food. Proper bone health and development depends not only on adequate amounts of calcium, but also on an adequate ratio of calcium and phosphorus. Feeding a variety of foods helps minimize nutrient imbalances or deficiencies. In general, leafy green vegetables are the best food for most herbivorous animals. Items from the "Ideal Ratio" list can be fed generously, along with items from the "High Ratio" list (preferred foods are IN BOLD). Items from the "Moderate Ratio" list can be used. Minimize items on the "Poor Ca/P Ratio" list, especially items in the bottom half of that list; These are foods very poor in calcium.---- irp-cdn.multiscreensite.com/cc78ef9e/files/uploaded/Vegies-Ca-P-conten.. A GOOD CA:P RATIO IS IMPORTANT FOR THE HEALTH OF ALL ANIMALS CHARTS:----- 1)Vegetable Chart -- vitamin C, calcium, phosphorus, Ca:P ratio -- PRINT 2)Fruit Chart -- vitamin C, calcium, phosphorus, Ca:P ratio -- PRINT 3)Vitamin C -- high/low ordered list -- PRINT 4)Calcium -- high/low ordered list -- PRINT 5)Calcium:Phosphorus Ratios -- high/low ordered list -- PRINT 6)Oxalic Acid -- both alphabetic and high/low ordered lists of select vegetables -- PRINT 7)Calcium/Phosphorus Ratio EXCEL Calculator -- enter weight in grams and generate a calcium:phosphorus ratio for a day's worth of foods www.guinealynx.info/diet_ratio.html

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Guillermou

Among osteoporosis patients, up to 30% to 60% of female and male subjects are actually affected by a secondary cause of bone fragility. Elevated cortisol levels interfere with osteoblast formation and dramatically decrease bone formation, resulting in reduced bone density. Glucocorticoids (GC) are used as medications that reduce pain and inflammation and have proven useful in rheumatological/traumatological, allergic/immune, respiratory, oncological and endocrine diseases. Among the adverse effects are: fluid retention with the appearance of edema, alteration of the proper functioning of the adrenal glands such as a deficit in adrenal function when the administration of glucocorticoids is suppressed, or due to excess doses that lead to a Hypercortisolism also leads to an increased risk of cardiovascular diseases, skin lesions, high blood pressure, hypercholesterolemia, hypertriglyceridemia, osteoporosis/fractures, obesity and hyperglycemia/diabetes, among others.

Glucocorticoids (GCs) reduce bone mineral density by increasing the activity of osteoclasts and decreasing the activity of osteoblasts and osteocytes. Calcium metabolism and parathyroid hormone activity are less important than initially thought.

GCs inhibit the synthesis of osteoprotegerin and interferon-beta, both inhibitors of osteoclastogenesis. In general, exposure to supraphysiological levels of GC results in strong suppression of bone formation and anabolic function of osteoblasts in both humans and rodents.

www.sciencedirect.com/science/article/abs/pii/S8756328201004227 (2001).----

www.jci.org/.../28084 (2007).-----

www.sciencedirect.com/science/article/abs/pii/S1521694222000523 (2022).----

www.frontiersin.org/.../full (2022).---- www.mdpi.com/.../8558 (2023).----

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Guillermou

Factors that affect calcium absorption In addition to the two canonical calcium-tropic hormones, namely parathyroid hormone and 1,25-dihydroxyvitamin, there are other endocrine and paracrine factors, such as prolactin, estrogen and insulin-like growth factor, which are known to directly stimulate intestinal calcium absorption. There are certain factors that can affect its absorption, causing it to be reduced, among them are: ---1) Age: the efficiency of calcium absorption decreases with age, so calcium requirements increase in people over 70 years of age. ---2) Oxalates (oxalic acid) and phytates (phytic acid): are components that are found, in the case of oxalates in vegetables such as spinach and in the case of phytates in cereals, legumes or nuts.

Both are capable of forming insoluble complexes with minerals such as calcium, reducing their absorption and bioavailability. ---3) The calcium/phosphorus ratio: a ratio greater than 1.5 in the diet determines greater renal calcium elimination. In milk this ratio is between 1 and 1.51. ---4) Insoluble fiber: despite its multiple benefits, it seems to affect the bioavailability of minerals such as calcium, reducing it. ---5) Excess fat also negatively affects the absorption of this mineral. ---6) Excessive consumption of caffeine and alcohol can also affect the decrease in calcium absorption.

However, the effects of caffeine on its absorption are not noticeable at doses lower than 400 mg/day, and are compensated with the adequate intake of milk or dairy derivatives¹. ---7) Stress: Stress can have a negative effect on the production of HCl in the stomach and on the body's normal digestive behavior and therefore can have a negative effect on calcium absorption. ---8) Caffeine, drugs such as anticoagulants, cortisone and thyroxine reduce the absorption of calcium in the body. ---9) Lack of exercise and vitamin D deficiency cause decreased calcium absorption.

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Guillermou

On the contrary, certain factors can help increase calcium absorption, such as:1) Vitamin D: this vitamin, present in some foods and produced by the body when exposing the skin to the sun, increases the absorption of this mineral. Accompany K2. Exercise along with the intake of vitamin D helps the absorption of calcium, thus strengthening bones. ----2) Parathyroid hormone: increases calcium transport across the membrane of intestinal cells. ----3) Acidic environment: Hydrochloric acid secreted in the stomach during the digestion process is necessary for the absorption of calcium in the duodenum. Calcium supplements can be taken with magnesium before bed or between meals due to the acidic environment needed in the stomach to assimilate calcium.

Always consult a doctor before starting a new supplement regimen. ----4) Milk Lactose: favors absorption in infants. The intestinal microbial flora acts on lactose to form acid, which causes a reduction in pH, making calcium more soluble. ----5) Amino acids: Supplemental calcium is often chelated or combined with protein molecules called amino acids, to help the body absorb them during digestion. Lysine and arginine increase calcium absorption. ---6) The acidic pH, as occurs in yogurt, causes calcium and phosphorus to pass into the soluble phase, which can favor their absorption.

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Guillermou

---7) Prebiotics also have repercussions on the absorption of certain minerals, thus favoring an increase in the availability of calcium. These effects seem to be a result of the type of carbohydrate, the degree of fermentation caused by the intestinal microbiota and the dose ingested. ---8) Casein (major protein in milk) has the ability to promote intestinal absorption of calcium. This is because in the gastrointestinal tract casein is digested, forming compounds capable of binding calcium that increase its absorption through the intestine¹. ---9) Lactose, in addition to providing energy for the body, facilitates the intestinal absorption of calcium¹.

Milk is an excellent source of calcium not only because of the amount contained, but also because its nutrient composition favors its absorption. Thus, of the calcium provided by milk, more than 85% is available for absorption.---10) Vitamin C, for its part, can also increase the absorption of this mineral.-- www.lybrate.com/topic/factors-affecting-calcium-absorption-024e/c90f1b.. .---- www.ncbi.nlm.nih.gov/.../PMC3989396 .---- jps.biomedcentral.com/.../s12576-019-00688-3 .--- academic.oup.com/.../6118465 .--- www.academia.edu/.../Tratado_de_Nutricion_Tomo2 .--- ods.od.nih.gov/.../Calcium-DatosEnEspañol .-- www.ucm.es/data/cont/docs/458-2017-12-02-cap-10-minerales-2017.pdf

Posted On 04/30/2024

stoneharbor

Thanks for your. Pondering and your vital questions Just. And thanks for your links that provide some answers Gui. I like your link that showed the comparisons of phosphorus/calcium by particular foods. Quickly. I could see how some foods that are relatively high in both nutrients but yet not in balance themselves can be eaten with other foods that are also high in minerals, but out of balance in the opposite nutrient. So I saw that one of my common evening meals often consists of a cooked green like kale (or collards), together with a sweet potato. The 2 foods are out of balance individually but together they give a lot of nutrition and a fairly even balance of calcium and phosphorus.

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Guillermou

Thanks stoneharbor. Also: Vitamin D has a number of cofactors, without which you won't get all of the potential benefits that vitamin D has to offer. The most important cofactors for vitamin D are: Magnesium, Vitamin K2, Zinc, Boron and Vitamin A. Zinc and Vitamin K2 work in conjunction with Vitamin D to strengthen your bones, support immune health, and protect against cardiovascular disease. Zinc can also aid in the cellular activities of vitamin D. Boron is a trace mineral, which means that its presence in your body is only necessary in small amounts, but it is necessary for your health.

It helps in the use of minerals that are key to vitamin D function, such as calcium and magnesium, to keep your bones healthy, supports brain function, and affects hormone levels in your body. Vitamin A and Vitamin D work in a delicate balance to carry out the functions prescribed by the genetic code. Irwin G. Spiesman published a human trial in the Archives of Otolaryngology, a journal published by the American Medical Association, massive doses of vitamins A and D in preventing the common cold. Spiesman treated 54 people who suffered from frequent colds (five to seven colds per winter) with massive doses of vitamin A alone, vitamin D alone, or vitamins A and D together.

Spiesman found that vitamins A and D are most effective together and are most effective against reducing colds when fed together:---- drcarolyndeanlive.com/2017/08/07/vitamin-d-and-magnesium-supplementati.. ----www.purenootropics.net/cofactors-for-vitamin-d www.pforym.com/understanding-balance-vitamin-d-cofactors www.holisticcharlotte.com/dont-overlook-the-necessity-of-vitamin-d-cof.. -----vitamindwiki.com/Low+cost+cofactors+for+vitamin+D -- www.ncbi.nlm.nih.gov/.../-----

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Guillermou

Boron favors the absorption of calcium and magnesium. It also balances hormonal levels, as it promotes the proper functioning of estrogen and testosterone, among other health benefits.

Researcher FH Nielsen, from the Department of Agriculture of the United States government, states in his book Update on human health effects of boron (2014, Journal of Trace Elements in Medicine and Biology) that boron "beneficially affects bone growth and central nervous system function, relieves arthritic symptoms, facilitates hormonal action, and is associated with a reduced risk for some types of cancer." Boron produces the digestive enzymes necessary to assimilate calcium, magnesium and phosphorus, in addition to stimulating the production and use of vitamin D, hence its protective role in the bone system, which is why it is especially indicated in the prevention and treatment of ailments such as osteoarthritis or osteoporosis.

Regarding its hormonal role, boron promotes women's fertility and bone density. A hormone whose production is greatly affected during menopause, so maintaining good levels of boron intake can be important in this phase of the female life cycle. Furthermore, foods with a good supply of boron stimulate the production of testosterone, which is why it is highly recommended by physiotherapists to increase muscle mass and promote recovery after physical effort.

Boron is also related to brain function, which slows down and even learning problems or poor cognitive development can occur when there is a lack of this mineral. Finally, this mineral contributes to the protection of cell membranes and stimulates the immune system. Studies in middle-aged men and women have shown that boron is capable of inducing an increase in serum levels of 25(OH) vitamin D.

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Guillermou

Furthermore, several authors have observed that boron introduced into the diet can cause an increase in plasma concentrations of 17- estradiol and/or testosterone. the function of ribose-containing molecules, such as S-adenosylmethionine, diadenosine phosphate, NAD + and its metabolite ADP cyclic ribose, could be modified by boron; These biochemical entities are involved, in addition to cardiovascular health and neurological functions, also in the formation and maintenance of bone, to which boron appears to provide beneficial effects. PIVOTAL ROLE OF BORON SUPPLEMENTATION ON BONE HEALTH: A NARRATIVE REVIEW www.sciencedirect.com/.../S0946672X20301425 .-----
Dietary calcium and magnesium are important for bones, perhaps not independently.

The Ca:Mg intake ratio appeared to be most protective within a range of 2.2 to 3.2, suggesting that a balance of these nutrients may be considered in osteoporosis recommendations.

www.sciencedirect.com/science/article/abs/pii/S0022316623376028 (2023).-----
THE ROLE OF POTASSIUM IN ACID-BASE BALANCE AND BONE CUSHIONING.----- Potassium plays a critical role in maintaining acid-base balance in the body. It acts as an alkaline buffer by neutralizing excess acid produced during metabolic processes. This acid-base balance is closely related to bone health.

Recent studies have highlighted the following key points: 1) Acidosis and bone resorption: acidosis, characterized by high acidity of the blood, has been associated with increased bone resorption. The body releases calcium from the bones to neutralize excess acid, which could lead to reduced bone density 2) Alkaline effect of potassium: Foods rich in potassium, such as fruits and vegetables, have an alkalizing effect on the body. Alkaline diets have been linked to a lower risk of osteoporosis. A diet rich in potassium from fruits and vegetables was associated with higher bone mineral density (BMD) in older adults [.

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Guillermou

Influence of potassium on bone turnover markers.----- Potassium has been shown to influence bone turnover markers, providing insight into its direct impact on bone remodeling. Serum alkaline phosphatase (ALP): Elevated levels of serum ALP are associated with increased bone formation. It was reported that higher potassium intake was positively associated with lower serum levels of ALP, suggesting a potential role in regulating bone formation. Markers of bone resorption: The alkaline properties of potassium can also affect markers of bone resorption. Increased consumption of fruits and vegetables, rich in potassium, was associated with lower urinary excretion of bone resorption markers.

Interaction with Calcium and Vitamin D in Bone.----- Remodeling Calcium Absorption: Adequate potassium levels can improve calcium absorption in the intestines. Potassium supplementation improved calcium retention, potentially promoting bone health. Vitamin D Activation: Potassium may also play a role in the metabolism of vitamin D. Research suggests that potassium may influence the conversion of vitamin D to its active form, which is essential for calcium absorption and bone remodeling. The article is very complete- www.thieme-connect.com/products/ejournals/html/10.1055/a-2254-8533

Posted On 04/30/2024

hoplitex

"Having been through such things, I'm just wondering if it would be helpful to have categories where we have the information of what are basics to hold on for those situations?" ----- Great question! I'll bet answers might differ by region and include foraging? There are a lot of nutritious wild plants which people have forgotten about.

Posted On 05/01/2024

juststeve

hoplitex, yes, right now the leeks - wild garlic is almost close to flowering and being done, and so are the cow slips - a wild green growing in the marshy, creeks and streams. While most are looking out at the lawn wondering whether to mow, there can be edible but considered weeds. There more than one account of those most civilized starving to death while surrounded by abundance.

Posted On 05/01/2024

Dordee

Country folk could grow their own healthy food, also had better work ethic, did. does not sit around, crying, waiting for others to do it for them. That should give us a better chance! Also helps if you did not take the job!

Posted On 05/06/2024

BeatriceW

This is a very important article for me. I am mostly on a Carnivore diet and over the last few months I had started to get placque just as Dr M describes. Of course I had no idea why. I usually have one yogurt per day but recently started to want more and so typically consume three now. Following this change the placque has stopped forming again. I didn't realise it was calcium being taken from my bones and at almost 70, that's the last thing I need. Huge thanks to Dr M for this post.

Posted On 04/30/2024

Guillermou

Hi BeatriceW, Bone marrow mesenchymal stromal cells play a fundamental role in bone homeostasis. As precursors of osteoblasts, MSCs are directly involved in bone formation. During aging, they suffer stem exhaustion and dysfunction as they differentiate more easily into fat cells. Furthermore, the chronic low-grade inflammation state of aging (inflammaging), a phenomenon that occurs due to the accumulation of senescent cells with a SASP phenotype, is also associated with osteoporosis. Furthermore, estrogen deficiency due to menopause causes increased bone turnover, with an imbalance between bone resorption and bone formation.

In general, especially in women, a decrease in bone formation and fat accumulation in the marrow causes osteoporosis, with an increased risk of fractures that may be associated with significant morbidity and mortality. During aging, bone marrow mesenchymal stromal cells (MSCs), precursors of osteoblasts, undergo cellular senescence, lose their osteogenic potential and acquire a pro-inflammatory secretory phenotype. These dysfunctions cause bone loss and lead to osteoporosis. Prevention and intervention at an early stage of bone loss are important, and naturally active compounds could represent a valid help in addition to diet.

Here we report that the combination of two pro-osteogenic factors, namely, orthosilicic acid (OA) and vitamin K2 (VK2), and three other anti-inflammatory compounds, namely, curcumin (CUR), polydatin (PD) and quercetin would be effective in promoting osteogenesis of MSCs, including replicative senescent cells (sMSCs), and inhibit their pro-inflammatory phenotype in vitro. The results showed that when used at non-cytotoxic doses, the association of OA and VK2 promoted the differentiation of MSCs into osteoblasts, even when cultured without other pro-differentiating factors;

www.mdpi.com/.../8820 (2023)

Posted On 04/30/2024

stoneharbor

For me the simple rule is "eat your veggies." And that means those foods you get out of your garden. It doesn't mean grains, although those are technically in a vegetarian diet. To me, this simple rule, also means eat those veggies predominantly, and keep your meat and cereal intake low. Of course another part of my healthy diet is to never eat any processed or junk foods and that takes away the phosphorus overload, almost by itself. I certainly don't want to have to measure food percentages of these minerals, even for 1 day in order to determine what my balance is. I think most people following Doctor Mercola's guidelines thru the years, and eating the veggies, and keeping cereal & meat intake reasonable already have a good plan.

And Doctor Mercola in the past, has written several times about how you can keep your calcium from being deposited in the wrong places just by getting enough magnesium, vitamin d and vitamin k. I know from my personal experience that Supplementing with magnesium, vitamin D and vitamin K will very rapidly. remove that plaque from the lower front teeth. Those vitamins and minerals are also important for health besides, getting sufficient calcium.

Posted On 04/30/2024

Guillermou

Good advice stoneharbor. Compared to people who do not have osteoporosis, those with osteoporosis have a higher incidence of depression. People with depression are more likely to also have osteoporosis (OR: 1.60). In subgroup analysis, there was a higher relative probability of osteoporosis in men (OR: 2.47), people between 50 and 65 years old have a higher risk (OR: 2.16), high BMI (OR: 1.67), taking prednisone or cortisone (OR: 2.92). Therefore, doctors should pay attention to middle-aged osteoporosis and elderly people with depression. www.researchsquare.com/.../v1 (2023) If you want to reduce cortisol levels and improve bone health, here are some simple lifestyle changes that go a long way: -----1) Get about eight hours of sleep per night.

Prevent chronic stress by setting healthy boundaries, employing time management techniques, and maintaining a work-life balance. ----2) Engage in stress management techniques such as deep breathing, meditation, and guided imagery. ----3) Optimize levels of vitamin D. K2, K1 and magnesium. ----4) Engage in regular exercise. Cardiovascular exercise will help you control stress and depression, maintain heart health; Weight training helps build healthy bones.

Posted On 04/30/2024

Earthmother777

I have to disagree; I too, follow his rec's and have been diligently supplementing with the aforementioned for decades but still have that lower teeth plaque issue. I am going to add a small amount of calcium supplementation and see if that helps.

Posted On 04/30/2024

stoneharbor

I don't disagree with you at all Earthmother! I think the point you are making is that clearly EITHER low calcium, OR low MG, D & K may cause Calcium deposits both on teeth and inside the cardiovascular system. So people may find complete remission from the plaque problem with one or the other solution, but some people may need both: more Ca and more Mg + vitamins. Most important is that the tooth plaque is the warning sign that it is also occurring in soft tissue sites like veins, which means it not getting into bones.

Posted On 04/30/2024

Guillermou

Lead attaches to blood proteins that carry it to different tissues. Lead is stored in the blood, various organs and bones. The hematologic, renal, hepatic, and reproductive systems are often affected by lead exposure. Lead is stored in bones and can remain there for years. Reports found that lead had some complex effects. On the other hand, other studies showed that occupational exposure to lead could lead to decreased bone mineral density and increased prevalence of lumbar vertebral fractures. A recent clinical study also demonstrated in male patients that lead levels are related with osteoporosis.

Chronic lead exposure, mainly through two different mechanisms, can alter the function of bone tissues. First of all, lead has a direct effect on bone tissue. Several experimental and clinical studies demonstrated that lead exposure was related to reduced bone mass, inhibition of chondrocytes, osteoblasts, osteoclast function, cellular toxicity, and apoptosis in mesenchymal stem cells. Secondly, the indirect effects of lead exposure cause distortions in bone tissues. The indirect effects are likely to contain various endocrine disorders.

These cause a worsening of bone mineral density. Additionally, lead exposure can cause decreased vitamin D activation and decreased calcium absorption in the gastrointestinal system. Lead exposure is partially related to the bone mineral density of the lumbar vertebrae. Lead exposure is associated with high bone resorption in addition to any etiological factors.

www.tandfonline.com/.../13685538.2013.836482 (2015) pubs.aip.org/aip/acp/article-abstract/2108/1/020025/748554/Effect-of-c.. (2019)

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Guillermou

The relationship between exposure to heavy metals and the risk of osteopenia or osteoporosis has biological plausibility, but remains inconclusive; therefore, we conducted a systematic review and meta-analysis to evaluate the associations between exposure to heavy metals (i.e., cadmium, lead, and mercury) and the risk of osteopenia or osteoporosis. The MEDLINE, Embase, Scopus, and Web of Science databases were searched through November 2019 to identify studies evaluating the relationship between exposure to cadmium, lead, and mercury and the risk of osteopenia or osteoporosis in adults.

Fourteen eligible studies were included. Effect sizes expressed as pooled odds ratios (OR) and 95% confidence intervals (CI) were estimated using weighted random effects models. Exposure to cadmium (OR = 1.35) and lead (OR = 1.15;) was associated with an increased risk of osteopenia or osteoporosis. Subgroup analyzes showed that cadmium exposure increased the risk of osteopenia or osteoporosis in older people (> 65 years; OR = 1.43) compared to younger people (18-65 years; OR = 1.24; adults In addition, lead exposure increased the risk in men (OR = 1.55) unlike women.

Unlike urinary levels, blood cadmium levels (OR = 1.26) and in the diet. (OR = 1.46) were associated with an increased risk of osteopenia or osteoporosis. Exposure to cadmium and lead may be associated with an increased risk of osteopenia or osteoporosis, although high heterogeneity was detected. link.springer.com/.../s00198-020-05429-6 (2020)

Posted On 04/30/2024

stoneharbor

Thanks, Gui. Very important also!

Posted On 05/01/2024

Dordee

Never thought about it, but since upping my C, D, K and Zinc to boost my immune system, I have very little plaque on my teeth.

Posted On 05/06/2024

Olitor

Hi RJN777, here's how I make my eggshell powder. I first remove the inner membrane of the egg (which I consume to benefit from elastin and other forms of collagen) then I clean the eggshell with water. Dry it in the oven at 100 degrees celcius for 10 minutes, which also kills any microbes. I coarsely grind the shell and then grind it very finely with an electric coffee grinder. With a little effort, you get a very fine powder. Good luck! Translated with DeepL.com (free version)

Posted On 05/01/2024

fam08372

Haven't read all the other comments yet, so sorry if this is a repeat of info. I went to a alternative health practitioner for a painful thyroid about 18 months ago. (I was eating carnivore diet in attempt to correct some horrible post-covid lab numbers.) She correctly identified the problem as parathyroid, but made a critical error. My calcium to phosphorous ratio in my blood / hair samples looked like hypercalcemia (sp?), so she recommended that I up phosphorous intake (while on carnivore!). Then I read an article by Tom Brimeyer at Forefront Health (another company based on Dr. Peat's protocols) warning that high calcium in labs can actually represent a LOW calcium situation that has triggered the parathyroid to pull it from the body to put it in the blood, resulting in high levels in the blood.

More calcium, not more phosphorous is the key. I supplemented calcium (and vitamin K), stopped eating carnivore and my thyroid settled down and feels normal again. I narrowly averted a disaster of medical care. As a side note, I had been a long term low-carb person and the dentist always commented on the 'tarter' / calcium behind my lower front teeth. It all makes sense now. I am excited to see you are starting Mercola Health Clinics. I have been wanting Forefront Health to do this, but I'm sure it takes a lot of resources.

I would love for all the physicians who lost jobs because of the jab to be re-educated and swell the ranks of TRUE health care clinics. I currently do not have a face-to-face practitioner. Please be sure to include people who are knowledgeable about parasites and proper detox of such. Also people who can detect nano-tech and syn-bio problems and know how to remove! An example to reiterate that allopathic medicine is a giant algorithm kiosk of pharma-driven directives, our local Wal-Mart just added a 'health care clinic' to the store -- what could possibly go wrong!?!?!? Aargh. Similar to Amazon providing the service.

Posted On 04/30/2024

grulla

One of the reasons I like cabbage so much is because it's a leafy green source of calcium without any oxalates.

Posted On 04/30/2024

bpm4539

And good for gut health too. I read that cabbage juice works better than mainstream drugs for stomach ulcers. And it's also on the ESG clean 15 list.

Posted On 04/30/2024

Dordee

Thanks for thst info, love cabbage!

Posted On 05/06/2024

josephunger

Finally, someone who understands Ca/Phosphorous and not simply the Calcium/Magnesium.

Posted On 04/30/2024

LadyLifeGrows

Interesting and useful article. Now I know why I often crave dairy after eating meat. It does not go into quality of dairy. I have read that absorption of dairy calcium depends on an enzyme that is destroyed by pasteurization--destruction of that enzyme is the measure of complete pasteurization. It appears that we do get calcium anyway. But CAFO cows are much less healthy, shorter-lived, and associated with nutrition experts saying things like "Milk is the perfect food--if you're a calf." It is so hard to find quality dairy, but it does matter.

Posted On 04/30/2024

Earthmother777

That's easy: drink RAW organic milk (or at least, "standard" (non-pasturized) milk; raw cheese, organic butter and organic free-range eggs. Of course, also organic FULL-FAT yogurt.

Posted On 04/30/2024

HilltopJPJ

Stoneharbor, of course everyone is different so sometimes the rules aren't hard and fast. Myself, I'm actually eating more red meat than I would typically have. I've been doing Chinese medicine for over five years now (having almost entirely abandoned western), I'm yin deficient either by constitution or years of doing it wrong or environmental exposure (I was a printer for 40+ years - petrochemicals) red meat, even better: bone broth, and mushrooms are a couple of ways that I am bringing my qi into balance. My overall health is now better than almost any other time in my life (62) other than the fact that my frame has been used hard and the aches and pains that sometimes come with my daily routine. That is what the daily sauna is for!

Posted On 04/30/2024

HilltopJPJ

This was interesting, other than milk I consume a pretty fair amount of dairy; cheese, butter, cream, sour cream etc. Some in my family seem to be lactose intolerant and insist I am too, but I suffer no ill effects that I can see. I had always heard though that dairy was not an ideal source for calcium, because supposedly the calcium in dairy is too coarse to be easily assimilated in our bodies. Side note: I have near perfect dental health at 62, the few cavities I do have were mainly from years of nighttime/sleeping teeth grinding which I finally got a mouth guard for. Isn't it amazing that the more we learn the more we realize that a broad diet of moderation seems to be ideal? Who'd think it?!

Posted On 04/30/2024

Dordee

Yes, I am 84, have not been to a dentist now for over 6 years. Only problems I had was from grinding, clamping teeth so tight. TMP, had some back teeth removed. I still clamp my teeth when concentrating on things, have to stop, relax my jaws. By the time I die, I will know it all! Drs say will make it at least another 10 years.

Posted On 05/06/2024

zileyram77

I have an over active parathyroid gland (primary parahyperthyroidism), with blood calcium levels that are too high now for 5 years- to the point my teeth are disintegrating and my lower back in constant pain from bone loss. The conventional medical solution for this is to get your parathyroid gland removed, which I will do as a last resort if I must. But I find this article interesting, because it actually addresses the parathyroid hormone. I did have plaque build up at my last dentist apt., and in the last year, stopped all dairy and gluten consumption due to severe eczema. Before stopping dairy, I was consuming up to seven servings/day because we get raw milk and it is so delicious. But now, I think I will slowly add back in a serving of dairy to see if it helps.

Posted On 04/30/2024

grulla

"... with blood calcium levels that are too high now for 5 years- to the point my teeth are disintegrating and my lower back in constant pain from bone loss." It sounds as though you should research, explore, and investigate the use of Vit K2, MK7 (or maybe MK4 ?), especially if you use Vit D3.

www.lifeextension.com/magazine/2021/2/vitamin-k-builds-new-bone

Posted On 04/30/2024

fam08372

Please see my post. Been there.

Posted On 04/30/2024

jennifery

Do a nutritional hair analysis. Calcium in blood can show high as the body is stealing from the bones, teeth etc. Blood only shows what is circulating. Many times, high blood counts are actually low whole-body counts.

Posted On 04/30/2024

josephunger

I have had a few patients improve their parathyroids with Thyrotrophin PMG and/or Vitamin F.

Posted On 05/04/2024

Olitor

I can't eat dairy, but I make myself some eggshell powder and have a bowl of bone broth every day, which I simmer for at least 10 hours. I think I've got what it takes.

Posted On 04/30/2024

Dr. Mercola

Outstanding health choices. Nice refinement would be to create the bone broth with a pressure cooker like the Instant Pot. Will create far superior bone broth, less expensively in a fraction of the time. Cook for four hours if organic bones, two hours if not.

Posted On 04/30/2024

rjn777

How does one make egg shell powder and how is it consumed? Thanks in advance!

Posted On 04/30/2024

SusanSlattery

I started eating a lot of yogurt in the past year, plus with my lunch of Brussels sprouts every day, I eat a little dish of 50g of sliced PARMESAN. Parmesan kicks the calcium pants off of every other thing I eat. That little dish of parmesan has more calcium than 350g of YOGURT. I just did a quick calculation and my ratio of Ca:P is 1.4.

Posted On 05/02/2024

galegalek

I am or was, probably still am lactose intolerant, however I have kefir grains that I ferment 2% on a daily basis so that I have enough Dairy. I started out with just a little sip here and there that took me through a full month and then I added every month after that quarter of a cup of dairy each day I now have no worries also I don't ferment ultra pasteurized I think the name of the milk I get is Kalona from Natural Grocers, it is not ultra pasteurized it is slow slow and low. This has been a lifesaver because I too started out with dark circles under my eyes and then my stomach would blow up like Buddha belly and I was so uncomfortable more ways than one.

Posted On 05/01/2024

GoldCoaster

Dr Saladino thought he could never tolerate dairy because it made his eczema flare up. After interviewing Sally Norton the oxalate expert, she suggested he try very small amounts and increase gradually. He did this and it worked. No eczema. His main dairy source is raw goat kefir. Goat is A2.

Posted On 05/01/2024

barnatt123

Yay! I LOVE dairy. You don't have to tell me twice to eat more. Dr Mercola - what do you suggest is the best option for milk considering these are the two healthiest options available to me: organic ultra-pasteurized 100% grassfed whole milk from the store OR local raw milk from mainly grassfed cows that receive non-organic grains during milking time? Thank you!

Posted On 04/30/2024

bpm4539

You did not ask me, but my answer would be a big fat NO to pasteurized. If I had the only one option of pasteurized, I would quit milk.

Posted On 04/30/2024

GoldCoaster

Yes, definitely no to pasteurization. All probiotics, and enzymes for digesting the proteins are destroyed, plus vitamins. If the local raw is from Jersey cows (mostly A2), that would be a bonus. When it isn't available during calving, A2 would be a decent choice, compared to A1 pasteurized.

Posted On 05/01/2024

Dordee

I would say local raw milk. get to know the farmer, go to the farm and see his/her cows. My milk lady knows her cows by name, stays with them at birthing especially if she thinks there will be a problem. Sadly, she is getting old, health department starting to give her problems, like she does not have a license to make butter! I can make it by shaking a mason jar of cream, why does she need a license? Her cows are Swiss brown, A2 milk, graze in pastures unless weather is bad, then get local grown hay. Looking for a new milk source when she finally gives up.

Posted On 05/06/2024

Julia Vassilevskaia

If we look at traditional diets (from Eastern Europe in my case), milk products are included in almost every meal in one form or the other. For example, soups and hot porridge were often made with addition of milk, sour cream was added to almost every meal, ...) I was always avoiding milk because I believed that I am allergic to it, which is probably my reaction to the white liquid sold in Canada that is called 'milk'. It is when I tried dry milk from Dr. Mercola, I realized how much I need good quality milk. Yes, there were some difficulty digesting it at first, which is understandable since I was avoiding lactose for so long. But there are strategies one can adopt trying to learn how to digest lactose. I find that chicory root tea consumed before meal containing milk would greatly help with digestion. So is lactase enzyme helps with lactose digestion.

Posted On 04/30/2024

Bouncedancer

I believe for a lot of us, maybe most, who are allergic to dairy it is the casein rather than the lactose that's the problem; I know that's the case for me. I think the lactose is a bit of a red herring. I make my own ghee and I don't avoid products that list whey, but that's the extent of my dairy consumption.

Posted On 05/01/2024

JAKMVX

After reading Dr. Mercola's recent article on raw milk I decided to try raw goat milk. I placed an order with a local farm here in north Texas and picked it up. It's slightly sweet and quite delicious. It's going to be my favorite source of calcium, along with all the other nutrients and enzymes it provides. Thank you for the recommendation!

Posted On 04/30/2024

nancy_falster

Thank you, DrM for update on health clinic locations. I'll for sure alert my contacts in Florida and pray you will add one near East Texas, close to our farm. We'd love to send folks who seek real food and real health.

Posted On 04/30/2024

DumberFarmer

The key to calcium absorption is supplementing with boron and silica. They are a trifecta towards achieving all the benefits from calcium and this article is correct and promoting getting your calcium from food as supplementation of calcium will only cause problems Calcium is the Trucker of all minerals and boron and silica will help provide the highway and insured that it is delivered to Where it will be effective Not only will you have a healthy skeleton you will have a healthy circulatory system, healthy joints, and a healthy brain

Posted On 04/30/2024

forbiddenhealing

This post was deleted because it violated [our Terms Of Use](#)

Comment does not pertain to the topic of the article or does not provide value or insight to the discussion.

stoneharbor

Good advice! Who would have thought that water might be an additional source of unwanted calcium. We definitely don't want to overdo Calcium, just bring it into balance. And calcium need changes substantially in adulthood from childhood when bone growth demands much more calcium.

Posted On 04/30/2024

FxRemedies

Where can I learn more about your health coach training? I am a health coach and holistic nutritionist not far from you in Naples, FL and I'm interested in training based on the principals you teach here on your site and using Dr. Ray Peats methods.

Posted On 04/30/2024

nancy_falster

Is there a way to find out where the health clinics DRM is opening are located?

Posted On 04/30/2024

Dr. Mercola

Will be integrated into our current office building in Cape Coral, FL beginning of Sept. Rest most likely end of this year and next year. Those locations not identified.

Posted On 04/30/2024

bpm4539

Great news, though I will not be benefitting due to my location. I hope this will start a new trend of opening clinics by the likes of Dr M. We need to pull away more and more people from the mainstream "medical care".

Posted On 04/30/2024
