

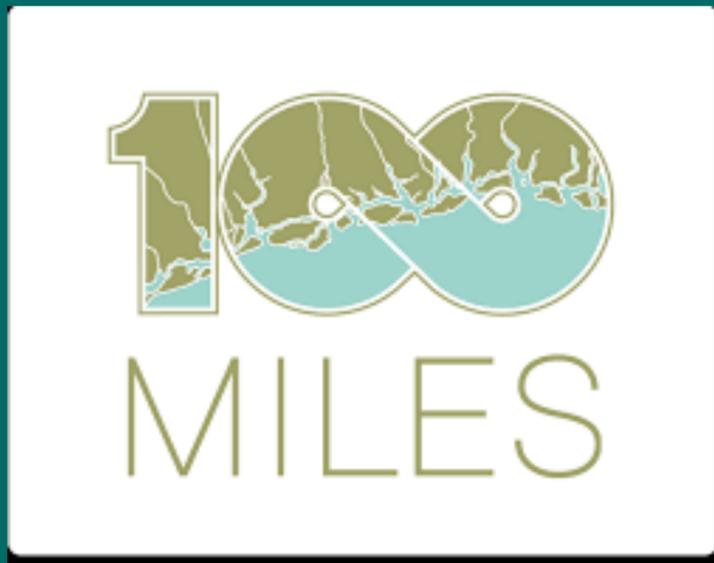
Health Hacks

New things that I discovered in nutrition and lifestyle
in 2022 to use in 2023 !

A talk for the Ford Plantation - January 24th 2023



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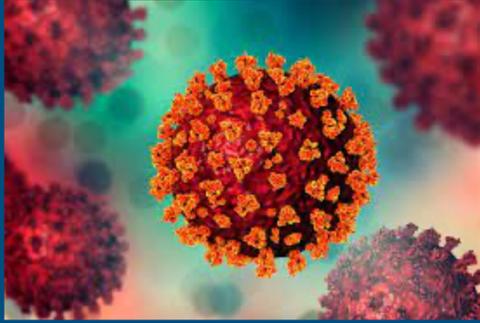
In exchange for a lecture fee - please donate to the 100 miles
A non-profit organization whose goal is to protect the Georgia Coast

www.onehundredmiles.org

Go to this website above and donate !!



Covid Nasal Wash study - Ear Nose and Throat Journal - August 22, 2022 Medical College of Georgia at Augusta



Dilution is the solution

Simple Recipe of 1/2 tsp Salt and 1/2 tsp Baking Soda in 1 cup of boiled water
Rinse the sinus cavity 2x a day



8.5 fold reduction in hospitalizations and no fatalities in a 79 person study
55 years or older with high risk obesity, hypertension

No one died and only 1.3% experienced hospitalization
by comparison 9.47% of patients were hospitalized and 1.5 died
In a group with similar demographics as reported by the CDC

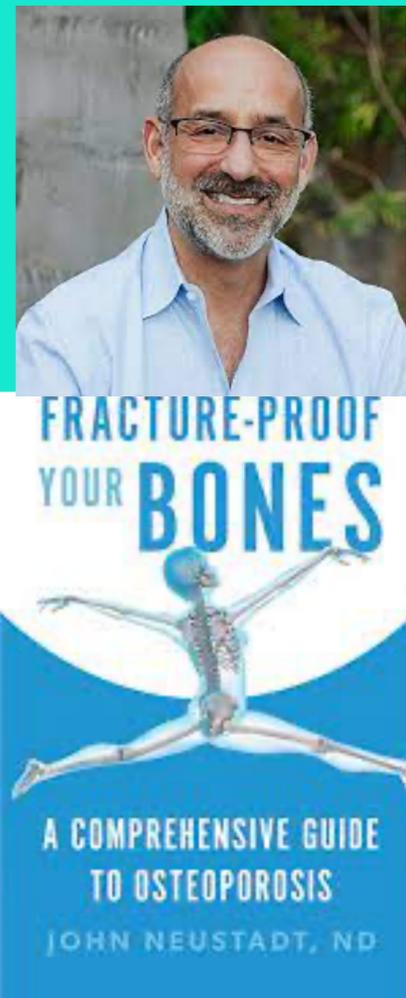
In absolute terms this would have corresponded to
over 1 million fewer older Americans requiring hospital admission



Diluting the viral load in the sinus passages can lessen the severity of the illness

Osteoporosis support - Fracture reduction

High-dose vitamin K2 has been prescribed in Japan for osteoporosis for decades
Human trials show that 45mg of vitamin K2 - **MK4** daily increases bone density and reduces fracture incidence



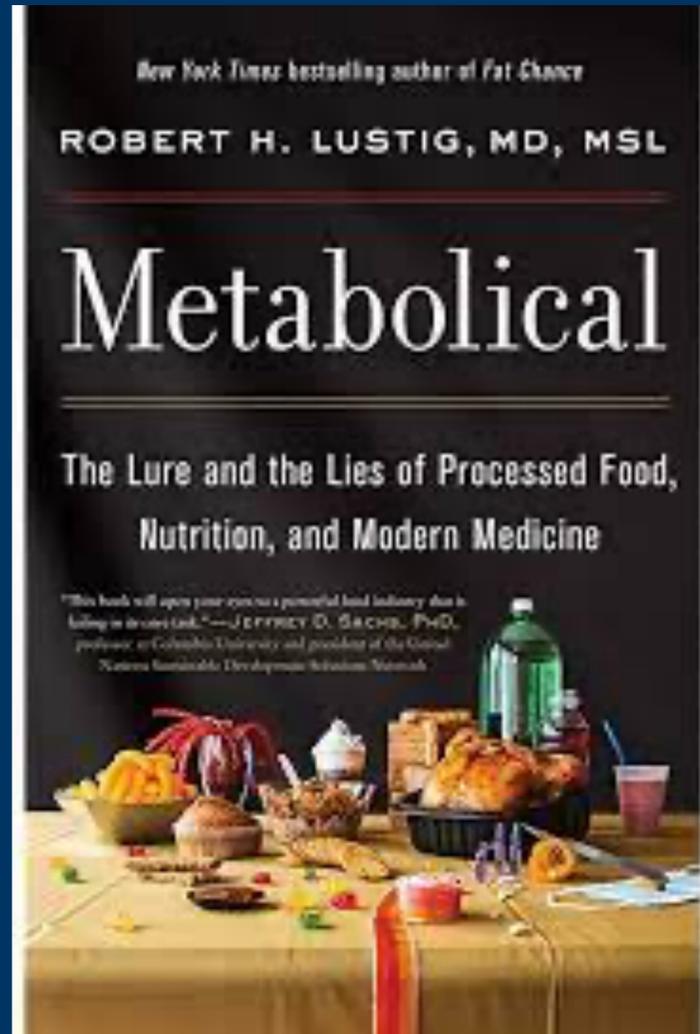
Clinical trials show that 45mg of K2-MK4 helps to:

- Slow bone loss
- Reduce fracture risk
- Build new bone

A study of older osteoporosis patients showed that high dose K2 cuts the number of new vertebral fracture by more than half

John Neustadt ND - Fracture -Proof your Bones

The True Dangers of Sugar



Over 85% of Americans are metabolically unfit

Sugar is 2 molecules in one - 1 glucose and 1 fructose

Dietary fructose is metabolized like fat

Fructose gets stuck in the liver and is a major cause of NAFLD
Non Alcoholic Fatty Liver Disease

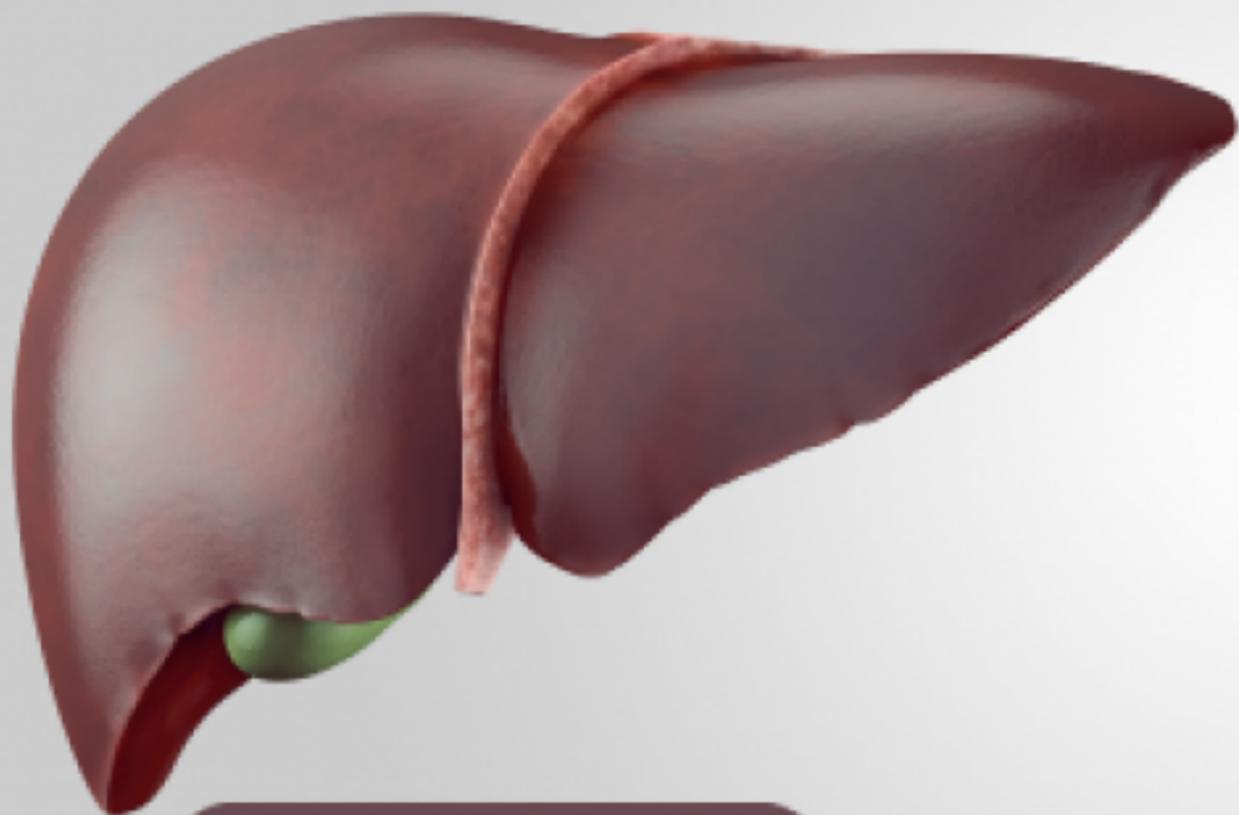
Sugar and alcohol are identical as far as the liver is concerned

Children can get the diseases of alcohol without ever consuming alcohol

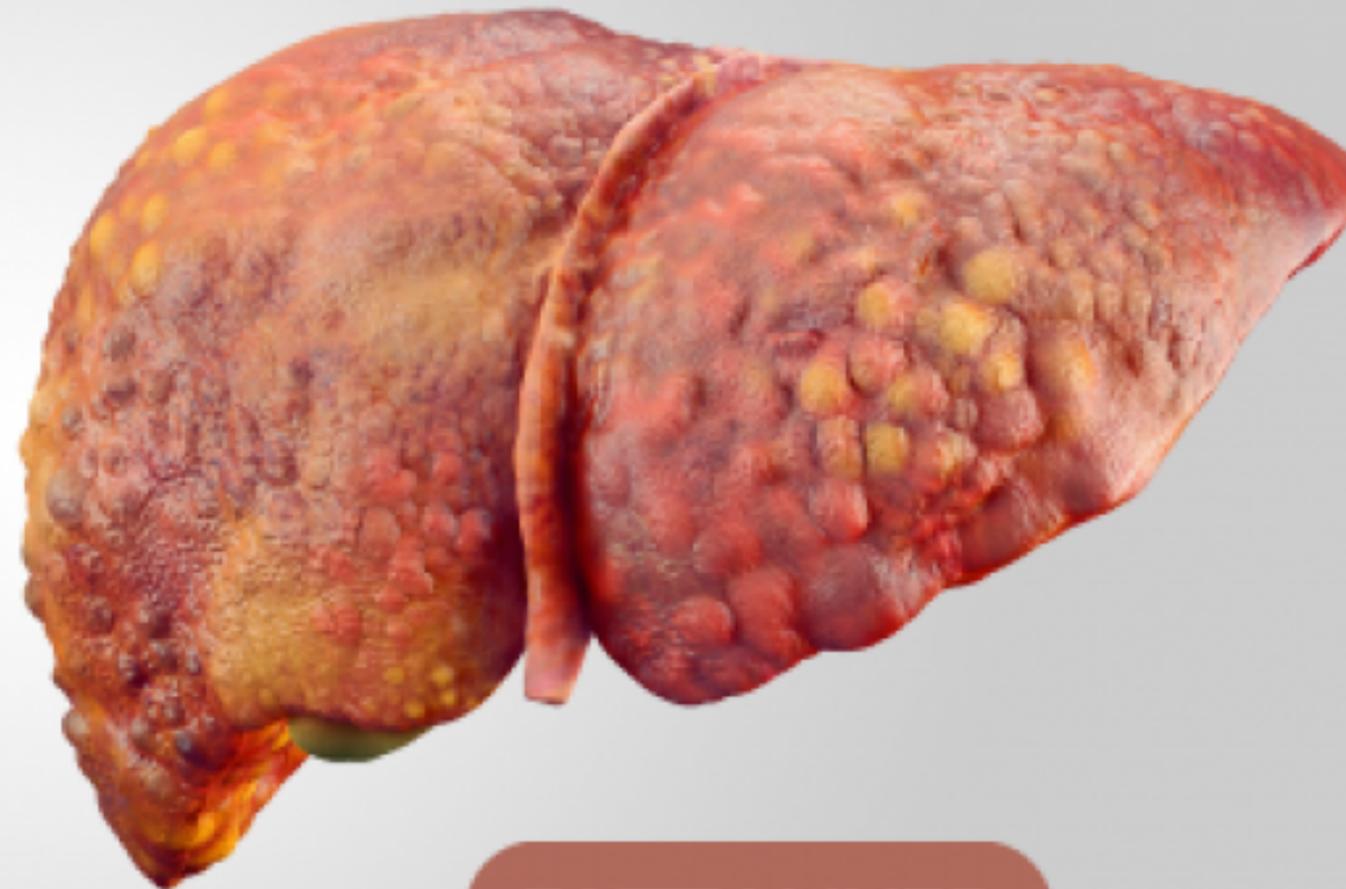
Elevated Insulin is the big issue - as you consume too much fructose
your body begins to chronically produce more and more insulin

Insulin release will cause weight gain

Source - The Doctor's Farmacy - podcast
Episode 624 Nov. 2 2022
Mark Hyman MD interviews Robert Lustig



HEALTHY LIVER



FATTY LIVER

Non-Alcoholic Fatty Liver Disease (NAFLD)



Insulin resistance is the bad guy

Insulin is the sentinel problem in all diseases



Insulin resistance is a major cause of cancer, heart disease, hypertension, Alzheimer's Diabetes and virtually all disease

Chronic Elevated Insulin is the cause of mitochondrial dysfunction

#1 Look at your waist - you have both visceral fat and liver fat

If you are a male and your waist is 40" or more

- it probably means you have insulin resistance and mitochondrial dysfunction

If you are female and your waist is 35" or more it probably means the same thing

Coffee compounds linked to reduced Chronic liver disease risk



Coffee compounds that include caffeine, chlorogenic acid Kahweol and cafestol, may contribute in reducing the risk of developing chronic liver disease, according to UK researchers

Health benefits peaking at 3 to 4 cups a day

In contrast to non-coffee drinkers, coffee drinkers had a 21% reduced risk of chronic liver disease, a 20% reduced risk of chronic or fatty liver disease, and a 49% reduced risk of death from chronic liver disease

Snack on Goji Berries



Protects the vision - Goji Berries are high in Zeaxanthin a type of carotene that Protects the macula of the eye.

Protects the body and skin from UV light and oxidative damage

They help stabilize blood sugar levels and balance insulin and glucose in the blood

The high level of anti-oxidants are cancer protective and supportive to the immune system

Linked to increasing HDL levels in people with type 2 diabetes

Liver protective helps prevent fatty liver disease

Uric Acid

Fructose increases uric acid

Uric acid is a breakdown product of purines. High meat consumption raises it. Sugar especially fructose also increases uric acid

Sugar causes the liver to convert ATP (the energy spark plug of the cells) to ADP

Uric acid inhibits INOS which opens nitric oxide pathway

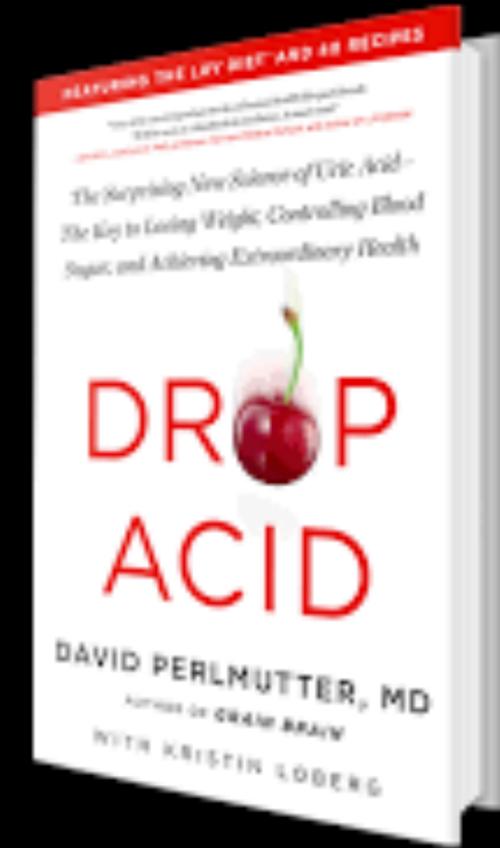
Elevated uric acid contributes to hypertension

This is why sugar is more important in hypertension than salt is.

Sugar restriction causes a bigger drop in blood pressure than salt restriction does.

Insulin causes you to retain sodium - the higher the insulin the higher the blood pressure

Uric Acid drops CPT-1 which is the transporter of Carnitine - fats can't be transported to the Mitochondria to be burned so they get stuck in the cells



David Perlmutter MD
Published Feb 2022

5.5 in your bloodwork is the upper limit for Uric Acid anything over that is a problem

How to lower uric acid:

Cut out all refined sugar from the diet and eliminate high fructose corn syrup
Sodas are basically liquid candy. There are 39 grams in a 12oz Coke or Pepsi
and 46 grams in a 12oz can of Mountain Dew

Tart Cherries, Vitamin C, Quercetin, Coffee, Celery, Lemon Juice
all lower Uric Acid

(Lemon juice also lowers Oxalates found in Spinach, Kale, Beets
It lowers the risk of forming kidney stones.)

Limit the consumption of red meat, shellfish, sardines, and mushrooms
ie.if your uric acid levels are high

Drink more water



Uric acid home test

Bloodwork - What Lab tests you need
According to Robert Lustig MD author of Metabolical

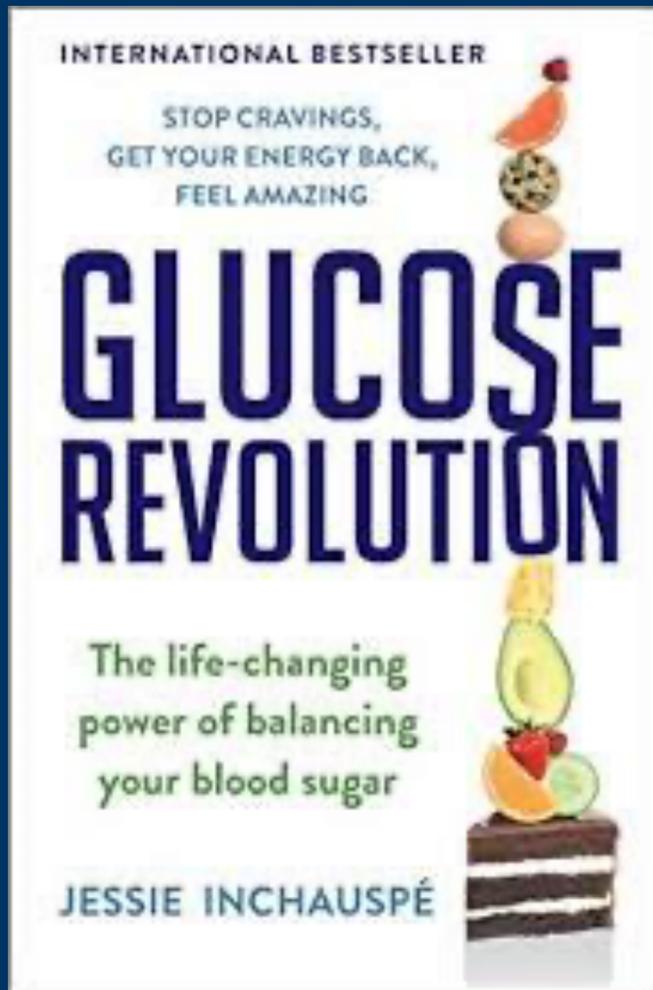
Fasting Insulin - It should be less than 10 if it's above 15 that's a problem

Uric Acid - 5.5 is the upper limit



**ALT - a common liver test done on most bloodwork - the upper limit should be 25
20 for African Americans - *this is a pattern recognition for potential fatty liver issues***

Triglycerides - more important than LDL - The triglyceride HDL ratio is more important than LDL



Glucose Revolution by Jessie Inchauspe

You can have your cake and eat it too diet !!

Eating food with the right sequencing can have major effects on blood sugar spikes

Vinegar can have a major positive effect on blood sugar spikes -
Vinegar blocks alpha amylase temporarily - which turns starch into sugar it also contains Acetic acid that encourages muscles to make more glycogen -
the muscles take up the sugar so there is less glucose in the blood -
1 to 2 tbs in water before meals or use vinegrette salad dressing

Eat carbohydrate foods at the end of the meal not at the start of a meal -
With vinegar - then protein and vegetables - rice or potatoes or bread - last

Clothe your carbs with fat - whole milk is much better than skim or low fat
It blunts the release of milk sugars. Always use full fat dairy

Put olive oil on your potatoes or rice and eat them last

Wait 20 min after a meal to eat a sugary desert

Go for a walk after a big meal to drive the sugars into the muscles



November 18, 2021



Daily Vinegar uptake can reduce depression up to 34%

US scientists have found a link between vinegar ingestion
And improved mental wellbeing in healthy college students.

The main component of vinegar is acetic acid, which has an antioxidant role
In biological systems, such as the brain. In theory, this suggests vinegar may
Improve mental function by providing an exogenous source of acetate
(a metabolite and derivative of acetic acid)

Placebo controlled, randomised, parallel arm study, conducted by a team
At Arizona State University. 25 healthy college students.

Dose used was 2 TBS (Braggs, Liquid Cider Vinegar)
- 2x a day in a cup of water with meals

Data compiled by the team showed several metabolic alterations associated
With apple cider vinegar ingestion and consistent for improved mood, including
Enzymatic dysfunction in the hexosamine pathway.

Scientists also noted an increase in glycine, serine, and threonine metabolism
In the VIN group. Threonine increases glycine in the brain which, along with serine,
Impacts neurological health (brain function), they say

Nitric Oxide Pathway

Is a cell signaling molecule created in the lining of the blood vessels and is a neurotransmitter that tells blood vessels to relax and open up.

It increases blood flow to every tissue and organ in the body - including the brain

It naturally decreases after the age of 40

Nitrates found in certain vegetables when chewed well and mixed with saliva release nitrates which when stomach acid reacts with it to create Nitrite and then to Nitric Oxide

Bacteria in the mouth and **stomach acid** allow this conversion to happen
Mouthwash kills the beneficial bacteria in the mouth - Mouthwash has been linked with hypertension. **Acid blocking drugs** also prevent Nitric Oxide from being created from Nitrates in foods.

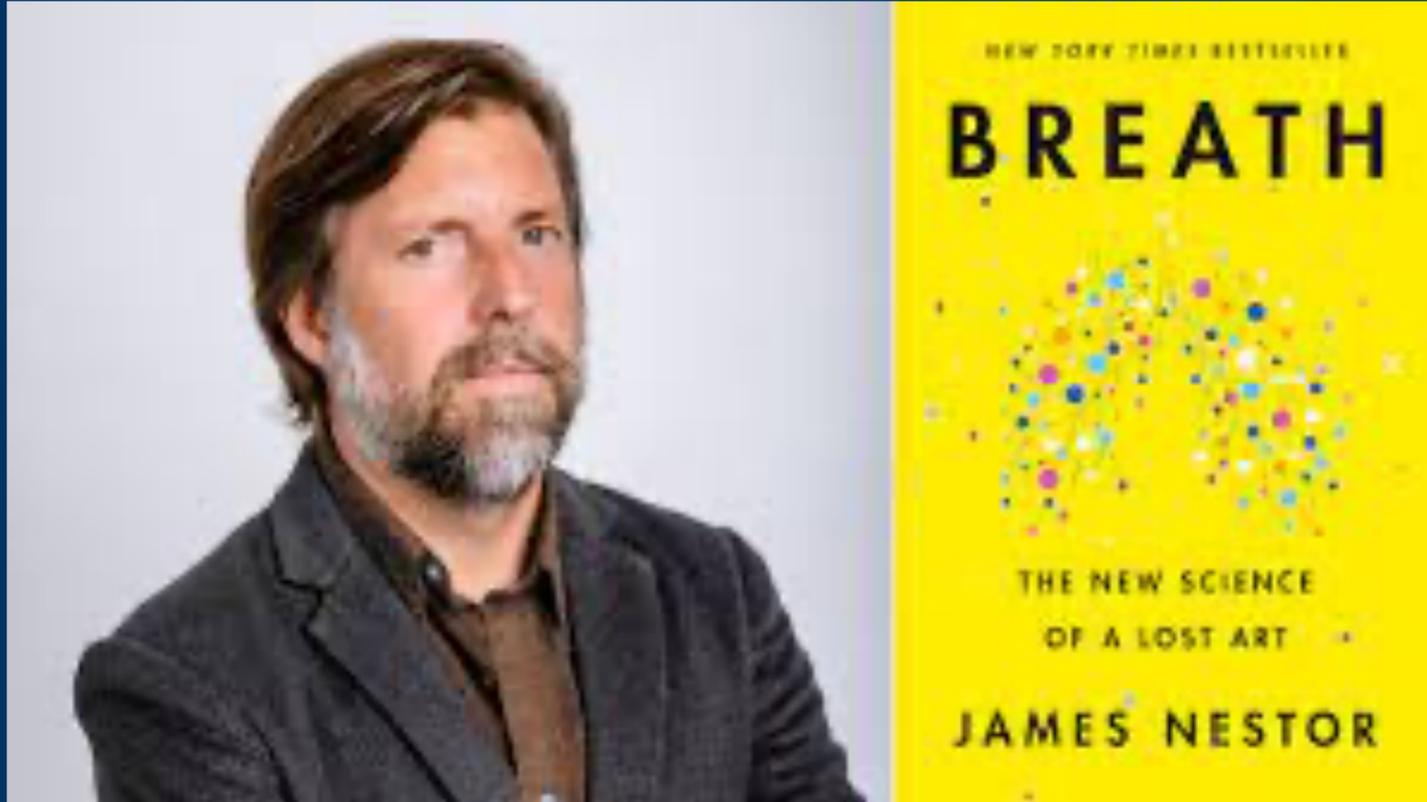


Foods high in Nitrates:

Vegetables such as Green Leafy Vegetables - Spinach, Arugula, Kale, Collards, Beets,



You can purchase Nitric Oxide testing strips



Breathing through the nose induces Nitric Oxide

Mouth Taping during sleep is often recommended to retrain the body to breathe through the nose instead of the mouth

Humming causes a 15x increase in Nitric Oxide



Andrew Weil's 4, 7, 8 Breathing Technique

Go to You Tube or Google it



Switches the CNS from Sympathetic to Parasympathetic - de-stressing you fast !

Zach Bush MD - 4 minute exercise routine

Go to You Tube or Google it



Sitting is the new smoking - this routine you can do as a 4 minute break from your desk or couch
It activates major muscle group and stimulates the release of Nitric Oxide

Switch your Canola oil to Avocado Oil for high heat cooking

Avocado Oil has a fatty acid profile closer to Olive Oil and can be used in Baking and Frying
It has a very neutral taste so it doesn't interfere with flavor.

Fruit Oils are far better than seed oil Omega - 6 for the body.



My favorite oils for the kitchen:

Olive Oil

Avocado Oil

Ghee - high in Butyrate good for the gut

Coconut Oil

NUTRA

ingredients-usa.com

1/12/21 published

Avocados and gut health: Study supports link between Daily avocado consumption and increased gut microbiota diversity

Recent research from the University of Illinois

One Avocado was eaten daily for 12 weeks increased the level of 3 different beneficial bacteria capable of fiber fermentation and metabolites

Past research has shown avocado consumption to positively effect Satiety as well as reduced blood cholesterol

Penn State study showed that eating 1 avocado a day Significantly lowered oxidized LDL cholesterol
Journal of Nutrition - October 29 2019



Near Infra Red Light



Daytime melatonin is produced deep in our tissues from exposure to Orange morning light - best before 9am for 20 min. This establishes our circadian rhythm for the day
It also increases our own anti-oxidant production

Circadian Rhythm

Roger Seheult MD



Bright blue light of the midday sun
Helps with testosterone production
Noon light sets up melatonin cycle for the night

Orange light at sunset also helps our Anti-oxidant production and set the Evening melatonin production for sleep and restoration

Start your day with Coffee on the deck outside in the morning light to set The circadian rhythm for the day - 20min



Keep light as low as possible at night

Blue Light Blocking Glasses for Night Time

Circadian Rhythm - 24 hour cycle

Midnight AM

2 am deepest sleep

4:30 am lowest body temperature

6:45 sharpest rise in blood pressure

7:30 Melatonin secretion stops

8:30 Bowel movement likely

9:00 Highest Testosterone secretion

10:00 High Alertness - Cortisol levels peak

Noon PM

2:30 Best coordination

3:30 Fastest reaction time

5:00 Greatest cardiovascular efficiency and muscle strength

6:30 Highest Blood Pressure

7:00 Highest body temperature

9:00 Melatonin secretion starts

10:30 Bowel movement suppressed

Midnight PM



Optimizing Sleep

What can happen when you don't get enough sleep:

Blood pressure goes up

Cognitive function - synaptic plasticity - **the brain is electric and needs to be recharged like a battery**

For proper memory you need 7 to 8 hours of sleep -

REM sleep consolidates memory from the day before

Poor concentration and attention

Accessing your vocabulary

Weight gain and carbohydrate cravings and sugar cravings

You have to sleep well to lose weight

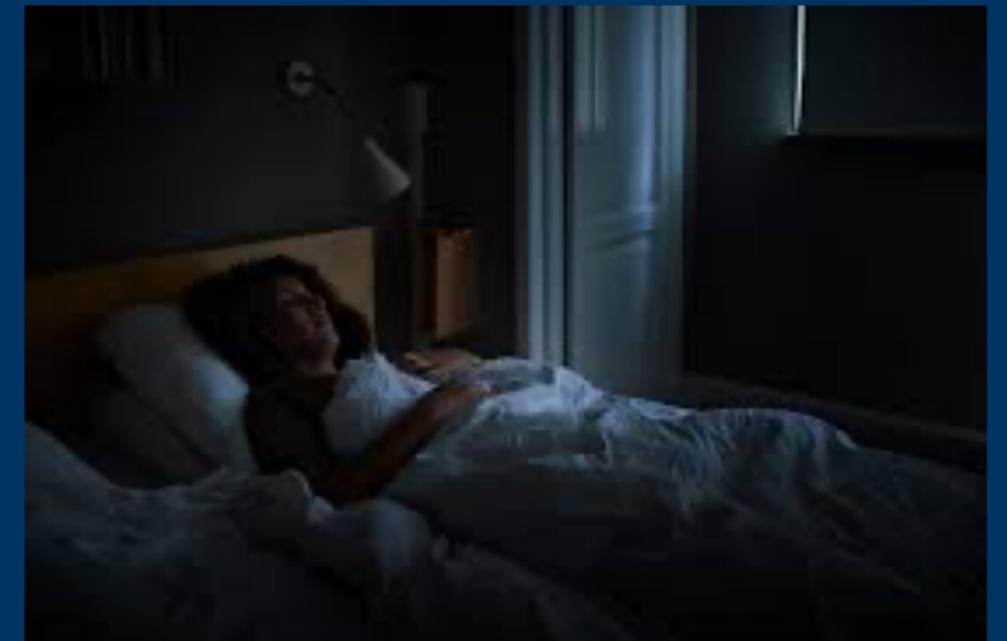




Sleep Hygiene



1. Keep the bedroom temperature around 68 degree's if possible
2. Keep the bedroom completely dark
3. Bedroom clocks should be red light not white or blue
4. Don't consume caffeine after 1pm especially coffee caffeine has a 1/2 life of 6 to 8 hours.
5. Use blue like blockers at night - set your computer and cell phone to night mode
6. Make your heaviest meal at lunch - do not eat 3 hours before sleep
7. A white noise machine can help - you can download an app for your phone
8. Read calming books or listen to calming music before bed.



Nutritional - Botanical Support for Sleep

Sustained Release Melatonin - can support keeping in the deeper states of sleep so you can go between deep sleep - REM sleep and back to deep sleep easily

Glycine - an amino acid that tastes like sugar
It turns off a busy mind - it combines well with herbal tea
Because it tastes sweet - 1/2 to 1 teaspoon
Great also for a busy mind wake up - you can take it in the middle of the night to get back to sleep



Magnesium - great support for relaxing the body and muscles
The malate form works best for muscles - 200mg 1 hour before bed

CBD - full spectrum can be supportive - especially when pain is an issue with sleep quality
Plus CBD brand is one of my favorites



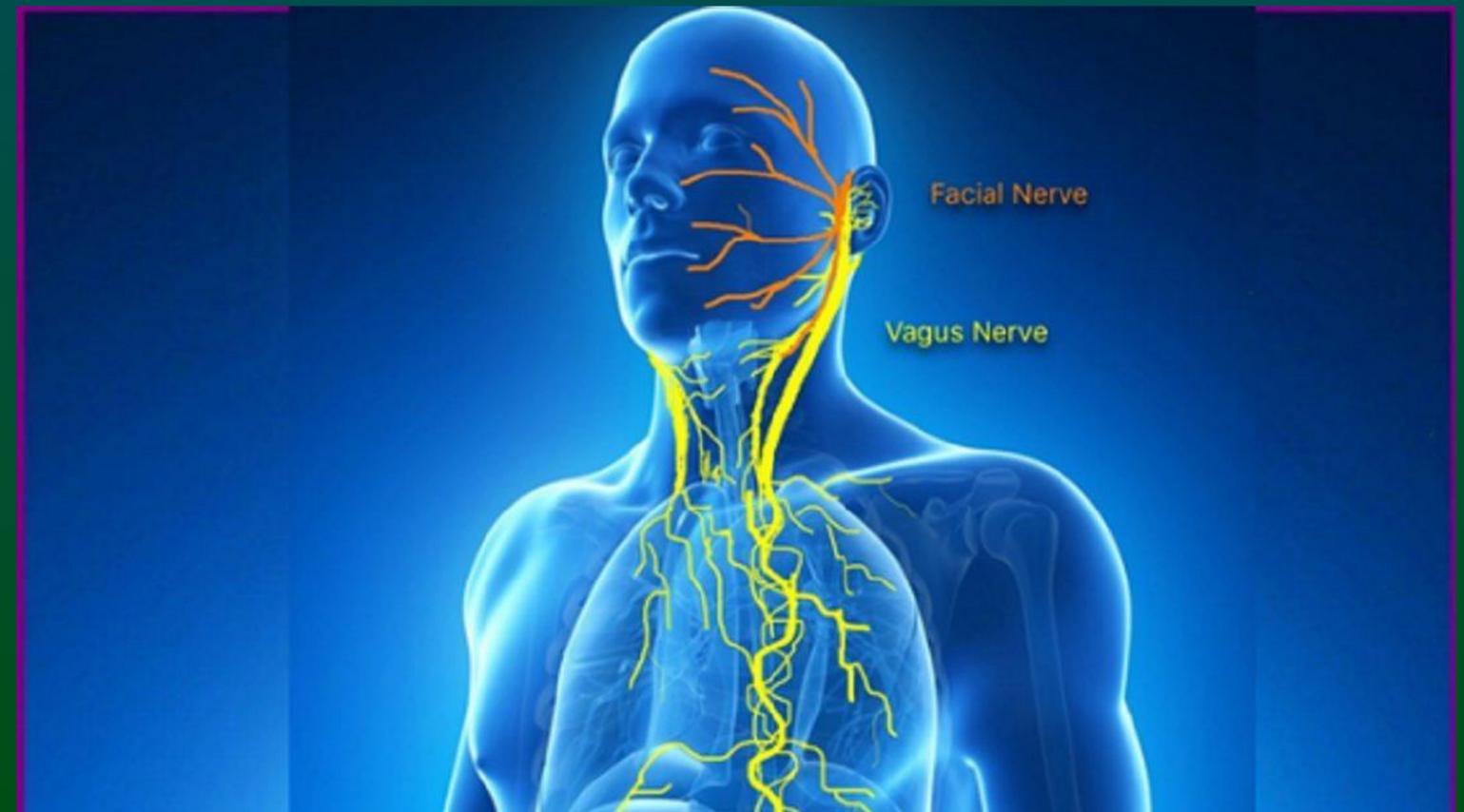
Valerian - small doses work best - some people have an opposite effect
Kava - relaxes the body - helps you fall asleep faster
Passion flower - turns the mind off - great with Glycine
Chamomile - helps you fall asleep faster - great when the body is in pain

My personal favorite



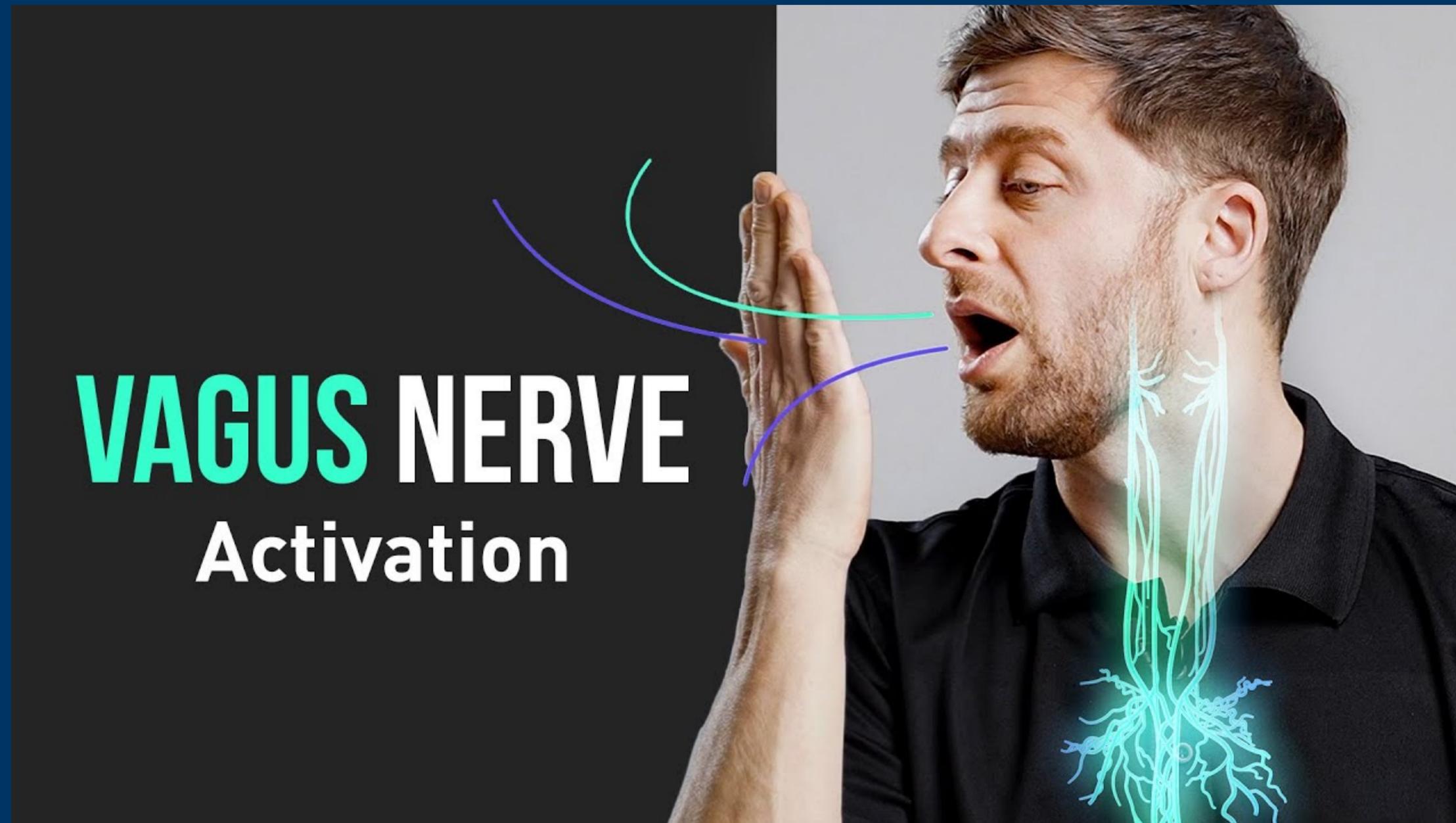
Vagal Nerve and activating the Parasympathetic Nervous System

- Understanding the Vagal Nerve and how to activate the parasympathetic nervous system. **Try gargling 3x to activate the Vagal nerve**
 - Breathing - nose breathing - practicing slow deep breathing and breathing rhythmically to lower cortisol levels - when your exhale is longer than your inhale this activates the parasympathetic system.
 - Right nostril breathing - sympathetic
 - Left nostril breathing - parasympathetic
 - Humming - deep low, vibrate the back of the throat
 - Ear massage
 - Being out in nature - “forest bathing”
 - Establishing a daily meditation practice
 - Turn off the news - www.reasonstobecheerful.world
- Socializing with friends and family
- laughter - comedy



Yoga Body - Breathing exercises for Vagus Nerve activation

Go to - You Tube





Polyphenol Rich Foods

Food is information

Are specific food for your biome
 Anti-inflammatory
 Anti-oxidant
 Cell Protective

Cloves are the #1 richest polyphenol food, Coffee, Tea - Green and Oolong, Cacao - Chocolate, Peppermint and Spearmint, Flax Seed Meal, Rosemary, Sage, Oregano, Olive Oil, Black Elderberry, Blueberry, Black Currant, Capers, Black Olive, Hazel Nut, Pecans, Plums, Basil, Curry Powder, Roasted Soynuts, Strawberry, Raspberry, Ginger, Prune, Shallots, Apple Cider Vinegar, Pomegranate Juice, Cinnamon, Black Bean, Walnut, Organic Oats, Pear, Carrot, Broccoli, Asparagus, Purple Sweet Potato, Blue Potato and many more.....

Table 1 Polyphenol and antioxidant content in the 100 richest foods (mg per 100 g or mg per 100 ml)

From: Identification of the 100 richest dietary sources of polyphenols: an application of the Phenol-Explorer database

Food	Food group	Polyphenols ^a		Polyphenols AE ^a		Antioxidants ^b	
		Content	Rank	Content	Rank	Content	Rank
Cloves	Seasonings	15188	1	15188	1	16047	1
Peppermint, dried	Seasonings	11960	2	7920	2	980	26
Star anise	Seasonings	5460	3	5460	3	1810	16
Cocoa powder	Cocoa products	3448	4	3294	4	1104	24
Mexican oregano, dried	Seasonings	2319	5	2137	5	—	—
Celery seed	Seasonings	2094	6	1007	10	—	—
Black chokeberry	Fruits	1756	7	1432	7	1752	17
Dark chocolate	Cocoa products	1664	8	1618	6	1860	13



Chai Tea is a great example of a polyphenol rich beverage
 Dark Chocolate 72% with Coffee !!!



Dark chocolate may alter gut microbiome, improve mood: RTC

September 24, 2021

Consuming an 85% cocoa dark chocolate significantly altered the diversity of the gut microbiome and improved mood in a randomized controlled trial with healthy young adults

Data published in the *Journal of Nutritional Biochemistry* indicated that 30 grams per day of the dark chocolate for 3 weeks led to significant elevations in levels of a gut microbe called *Blautia obeum*, and levels of this bacterium were positively correlated with improved mood

The new study from Korea suggests that dark chocolate may exert “*prebiotic effects*”, and that the potential benefits for mood and emotional state may be via the gut-brain axis

Another study reports health benefits of morning chocolate - Eating chocolate in the morning may help burn body fat, decrease glucose levels, and improve microbiome health, thank to the flavanol content



Kiwi Fruit one of the best foods for the biome

Eating 3 a day can
Reverse DNA damage



Broccoli compound may boost cognitive function and mood In older adults: RCT



Sulphoraphane, a compound derived from broccoli,
May boost processing speed and mood in healthy older adults
Says a new study from Japan

The potential health benefits of cruciferous vegetables
are linked to the high levels of the plant chemicals glucosinolates.

These are metabolized by the body into isothiocyanates (such as sulforaphane)

When eaten as a raw or lightly-cooked food, an enzyme called myrosinases in the
Broccoli helps to break down the glucosinolates into two valuable compounds -
Sulphoraphane and erucin.

Walnuts show cognitive health promise for at-risk elderly



Turmeric extracts may help with weight loss, inflammatory profiles, & mental health: Study



The role of citrus in brain health: 'Citrus bioactive compounds improve general cognition

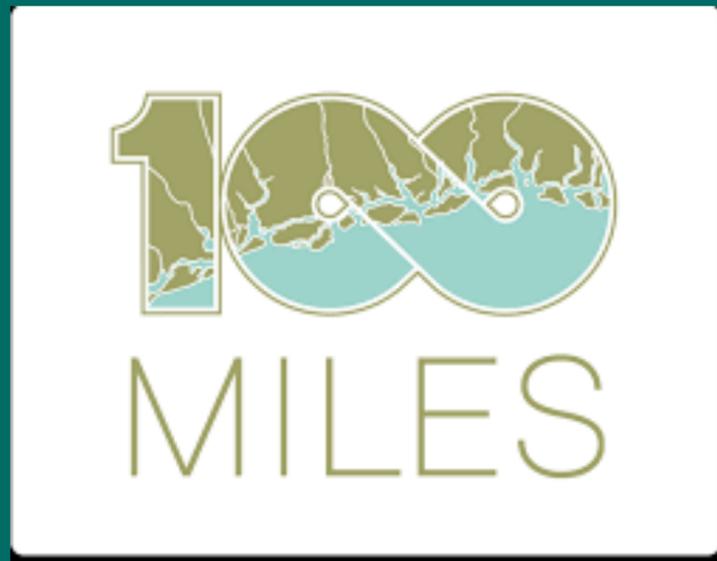
Sunlight exposure helps the diversity of the microbiome



Study: Higher omega-3 levels keeps brains young longer

Polyphenols found in the skin of almonds downregulates Inflammation and oxidative stress from exercise and accelerating recovery





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A non-profit organization whose goal is to protect the Georgia Coast

www.onehundredmiles.org

Go to this website above and donate !!



Thank You for your attending

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More Headlines

Study : Fast fructose consumption overwhelms the gut and leads to fatty liver
Consumption of fructose has increased 100-fold over the last century -
Excessive consumption of sweet drinks are linked to non-alcoholic fatty liver disease,
obesity and diabetes

Cardiovascular benefits of Beet Juice are more pronounced among
Older adults than younger - Nitrate-rich beetroot juice reduced
Diastolic blood pressure - to a greater degree in older adults than younger

Study says omega-3 supplements improve sleep in people with low fish consumption