

Longevity Lecture - Peter Brodhead CN presenter

notes for the lecture - Jan 7, 2021

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Audio of the lecture available via text or e-mail

Telomeres - preserving and lengthening are a key factor in Longevity

1. **It's the quality of your health** at any age that matters more than the quantity of years you are
2. **Bloodwork - Gathering information** on what your markers are - so you know what you need to focus on
 - A. Vitamin D testing - 25OH test - goal 50ng/dl
 - B. Homocysteine - a marker for inflammation potential and methylation <9
 - C. hsCRP - Highly sensitive C-reactive protein
 - D. Omega 3 Index - how your fatty acid profile is in your red blood cells
 - E. Hemoglobin A1C - a 90 day look at your blood sugar level
 - F. APO - Alzheimers marker - check if your parents had Alzheimers - if you have 2 copies one from each parent you have to double down on prevention.
 - G. Berkley Test or the equivalent for cholesterol - a much more comprehensive look "holigraphic" look. "Light Fluffy" LDL is highly beneficial - Lipoprotein - little a and other markers helps you be more targeted in your approach to cholesterol - LDL that is very low can correspond to a shorter lifespan with neurological problems higher cancer risk.
3. **Exercise** - move the Lymphatic System - helps detox. You want your body to be in an anabolic state ie."building up" not catabolic - breaking down. Whey protein is very supportive for older people to support muscle growth and strength. Free Weights or weight resistance exercise combined with aerobic exercise - interval training is my favorite - depending on your health - it stimulates BDNF - brain derived neurotropic growth factor.
4. **Stress Management** - Meditation can re-wire the brain in a very positive way. Yoga, QiGong have been shown to increase telomeres. Deep rhythmic slow breathing to the pulse lowers cortisol levels. Learn about the Vagal Nerve that governs the heart and digestive system. It moves the central nervous system from Sympathetic (fight or flight) to Parasympathetic (relaxed) - Try gargling 3x in a row and notice how you feel right after you do it - the physical activity turns on the Vagal nerve. "Forest Bathing" walking in nature.
5. Go to the website www.reasonstobecheerful.world David Byrne from the Talking Heads rock band made a website dedicated to good news ! Read this before you venture elsewhere
6. **Sleep** - Develop good sleep hygiene - no computers no blue light complete darkness - set up a bedtime ritual. Low dose melatonin 300mcgs is the amount the pituitary gland puts out normally - Melatonin is an anti-oxidant hormone that helps immunity too. The brain activates the Glymphatic System - the lymphatic system for the brain to detox and clean up the metabolic debris from the previous day. Help your "Garbage Men" do their job.
7. **Earthing** - walk barefoot on the grass before you go to bed to de-static the body. Lean all you can about earthing - you can even buy Earthing Sheets for your bed. Earthing can keep blood platelets from being sticky and lower inflammation in the body and increase anti-oxidants. We are surrounded by electro-magnetic fields with our technology we need to ground it out.
8. **Autophagy - Intermittent Fasting** activates the p.62 protein - which allows the body to clean up trash and bad cells and cellular debris that "clogs" up the system with metabolic waste. It is very simple to do. If you finish eating at 7pm - don't eat again till 9am - exercise between 7 and 9am and you will activate ketosis and burn fat too. It helps immunity, detoxification and healthier brain function and the sirtulin gene. Some people expand it to fasting for 16 hours and eating in an 8 hour window.
9. **Nitric Oxide Pathway NO** - Nitrates in foods such as Beets, Arugula, Swiss chard, Celery are converted to Nitric Oxide with the help of anerobic probiotic bacteria in the mouth. When activated - micro circulation and blood vessels and arteries open up - supporting lower blood pressure and cardiac health. This pathway supports healthy sexual function by increasing blood flow to the reproductive organs. As we age this pathway NO is not as efficient. L-Citrulline is an amino acid found in watermelon and supports nitric oxide production in the blood vessels and arteries.
10. **Activating the ECS - Endocannabinoid System** - CBD and the entourage of other

compounds found in Hemp indirectly supports this system. Also temperature changes in the body such as hot showers followed by cold water. Exercise, Foods such as black pepper and the spices found in Chai Tea - ginger, cloves, cinnamon and extracts from Echinacea. Laughter and hanging around good friends helps support the ECS

11. **Avoiding toxins from food and the environment** - eating organic - follow the EWG - Environmental Working Groups - Dirty Dozen and Clean 15 rule in choosing fruits and vegetables with the lowest pesticide residues. Avoid plastics whenever possible. Saran Wrap - never microwave plastic containers, Don't use plastic cups that have been in the dishwasher - the particles break down. Use and cook with stainless steel or cast iron or ceramic cookware. Throw away non-stick cookware of any kind - even so called "Green" cookware. Avoid cans that have any form of BPA in the lining - there are other forms of BP's too that they use. Use cartons or glass. The plastics are estrogen "mimickers"
12. **Detox** - Glutathione is the tool the liver uses to detoxify with - many foods help glutathione such as cantaloupe, raw tomatoes, avocados - the liver does its regenerative work at night between 11pm and 2am - Milk Thistle extracts support the liver and raise glutathione levels in it. Sauna - detox through the skin is an excellent way to get environmental toxins such as heavy metals and chemicals out of the body. Studies show that there are lower rates of dementia in the people who do the most saunas
13. **Gut Health** - Nurture your biome - include plenty of fermented foods in your diet. Sauerkraut, KimChi, Miso, Yogurt, Kefir, Tempeh, Kombucha. Eat lots of foods with a high fiber content. Fiber is the food for your probiotics. Include resistant starches in your diet - Swiss Museli (raw oats). Beans that have been cooked and chilled such as hummus or cold bean salad. Resistant starches feed your bifido bacteria that live in your colon. Make Ghee ie. Clarified butter to cook with. Ghee is high in Butyric acid which is a food for your large intestine. Your gut bacteria are in the drivers seat - nurture them.
14. **Diet for Longevity** - Eat more mushrooms - mushrooms contain an anti-oxidant called ergothionine that cannot be cooked out of them. Mushrooms block estrogens found in the environment such as plastics (BPA and the group and Phthalates) which are endocrine disruptors. Ergothionine helps the brain and helps the brain make new neurons. Mushroom Barley soup is an incredible immunity food - Barley is high in Beta Glucans also Mushrooms also help the immune system - Beta Glucans - and activate T-Cells and macrophages. Keep sugar out of the diet as much as possible - excess sugar ages you "glycosolation". Eat real authentic food as much as possible. Fat is good for you - as long as it is the right type. Olive Oil, Ghee, Fish Oil, Hemp Seed Oil (one of my favorites) is high in Omega 3's ALA and GLA a highly beneficial Omega 6 Fat. Flax Seed Oil, Avocado and Walnut Oil. Fat helps you absorb carotenes from the diet.
Google *BBC Future - the 100 most nutrient dense foods on the planet - and eat from this list. Nutrient density is what you want to be eating - eat the most colorful foods you can find - berries - deep orange winter squash and sweet potatoes - black rice - Eat dark 70 - 85% Chocolate, Drink Coffee, Drink Green Tea in the afternoon. Spice up your diet with black pepper, turmeric, cayenne, paprika, rosemary all the spices are loaded with phytochemicals that support health.
15. Add **Astragalus powder** into your smoothies or cook soup stocks with it Astragalus lengthens telomeres
- 16 **Supplements to support longevity**
 1. Fish Oils - dose based on Omega 3 Index score
 2. Mitochondrial Enhancement: CoQ10, PQQ, NAD - Nicotinamide Riboside (ask for audios for more info on how they work)
 3. Sirtulin support - Resveratrol, Pterostilbene
 4. Astaxanthin - the super carotenoid
 5. Turmeric (Curcumin), Green Tea - EGCG
 6. Lion's Mane Mushroom - cognitive support
 7. Look at the research on Metformin - a drug used for diabetes has very interesting effects on longevity and cancer inhibition,

Source Naturals has a formula called Telomeron - that combines many of these nutrients into 1 formula