

A guide to Dynamic Ageing & other ideas for embracing your personal Badassery

In this guide you will find a review of the concepts covered in the Dynamic Ageing lecture series along with supporting materials to help apply techniques, habits and tools to optimize ageing, health and performance.

METABOLISM & INFLAMMATION

The bottom-line biologically for good health and dynamic ageing is to have a robust and healthy metabolism.

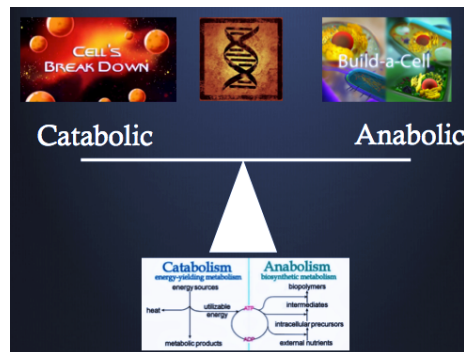
me·tab·o·lism

The chemical processes that occur within a living organism in order to maintain life.

3-Main Parts of Metabolism

- The conversion of food/fuel to energy to run cellular processes.
- The conversion of food/fuel to building blocks for proteins, lipids, nucleic acids, and some carbohydrates.
- The elimination of nitrogenous waste-ammonia, urea, uric acid, and creatinine-all produced from protein metabolism.

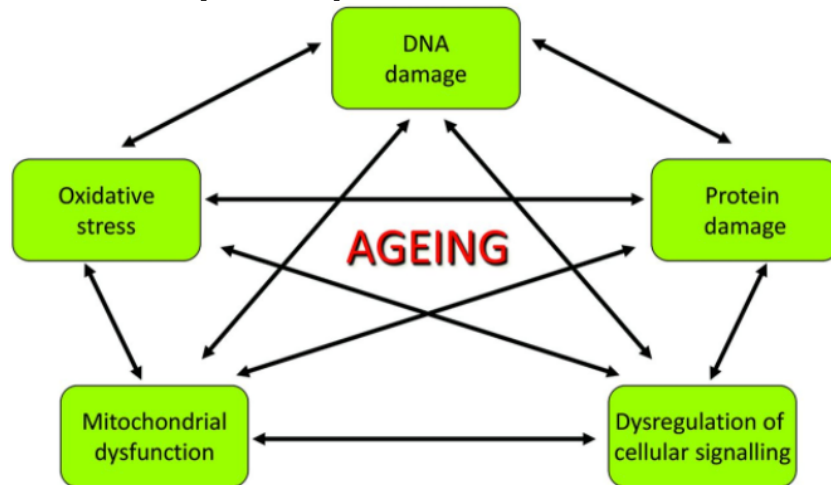
An Equilibrium known as Homeostasis must be maintained biologically between building up (anabolic) and tearing down (catabolic) to realize good health (Both are part of metabolism).



The interesting and tricky part is that a key byproduct of a robust metabolism is oxidative stress & inflammation.

Aging is the byproduct of what the body must do biochemically to keep us alive. It is the accumulation of cellular & molecular damage that cannot be repaired (for now).

Dr. Aubrey de Grey – SENS Research Foundation



The focus of the remainder of this document is to explore ways to help support the body's natural propensity to seek homeostasis. While there are new medical and pharmacological interventions available to help slow the cellular ageing process, the focus here is to explore techniques that can be applied right now with very little financial investment and no particularly special tools. The good news is that these tools and techniques extremely effective in the quest for Dynamic Ageing.

Time

Lifestyle

Chronological Age vs. Biological Age

CHRONOLOGICAL AGE

The actual age of a person. The age that is listed in your passport.

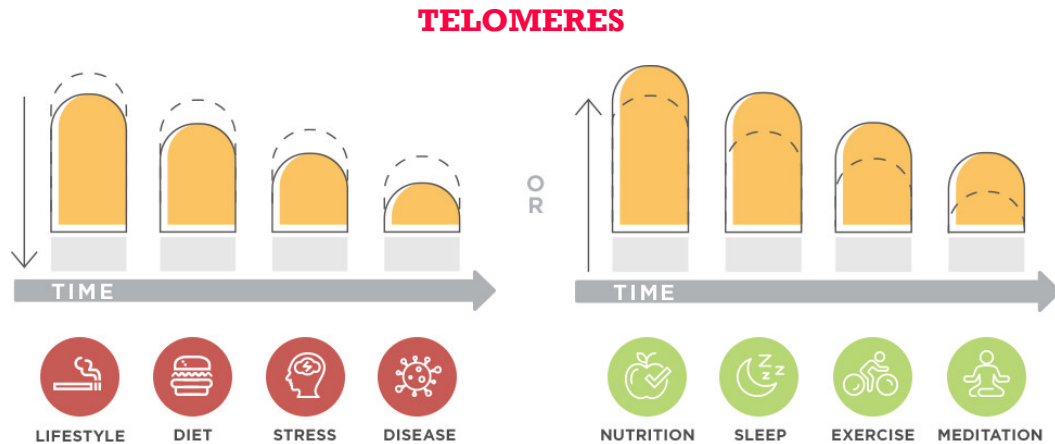
BIOLOGICAL AGE

It is the age of our cells. It tells our real age depending on how the ageing process has affected us.

Regardless of how many birthdays you've had-it is possible to Live Younger!

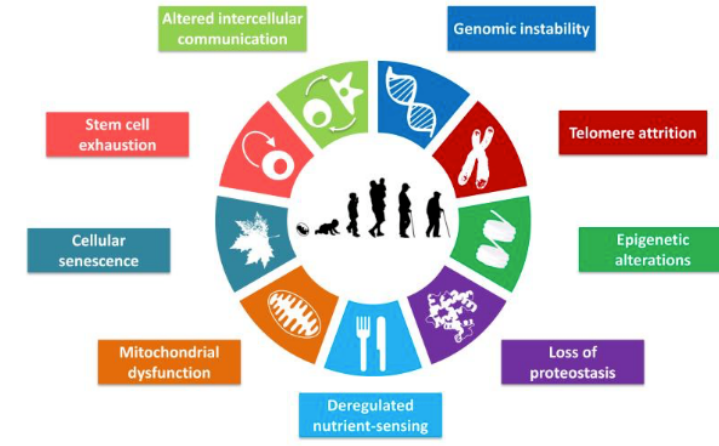
Cellular Ageing – Getting a Baseline

Cellular ageing can actually be measured with current genetic testing. The Nobel Prize in Medicine 2009 was awarded to Dr. Elizabeth Blackburn for the discovery of Telomeres – a way to measure cellular ageing on a genetic level. The great news is that it has been observed that we can slow and in some cases actually reverse genetic ageing. Telomeres are how this can be done – measurement that is. Slowing and reversing cellular aging can be done with lifestyle. As cells age they show shortening telomeres. Lifestyle can either accelerate the shortening or protect the cells and therefore slow and even reverse the shortening.



Physical Age can be measured through a variety of ways.

- A **good** way to measure is using a “body age” tool. These tools compare your lifestyle habits and biometrics to see how you compare to others your same age and gender. An easy, free and surprisingly accurate test is available from the Norwegian University of Science & Technology. They offer a free online test known as World Fitness Age. Use this link to find out your fitness age.
 - <https://www.worldfitnesslevel.org>
- The most accurate way, and the **best** current way to get your biological age is to have your actual telomeres measured through a genetic test. It is very accurate and accessible. A genetic testing company, www.teloyears.com, can provide you with your biological age for around \$100.



Lifestyle Makes All The Difference

Exercise:

Exercise is medicine and a very important part of a strong metabolism. For great health and dynamic ageing ideally exercise is either very easy or very hard.



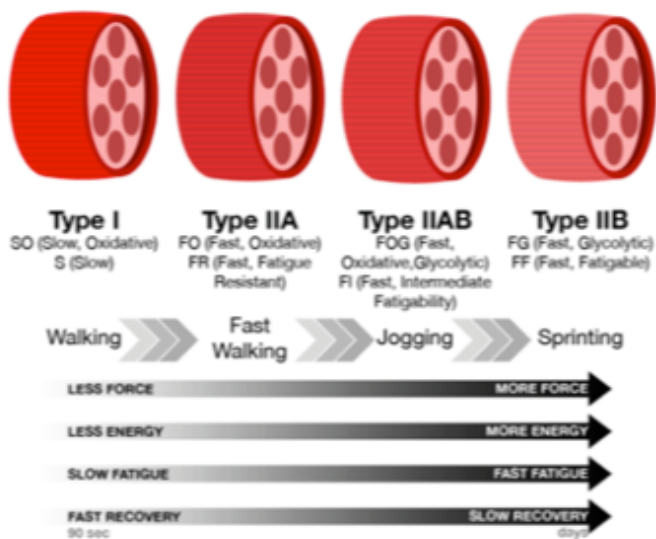
In research done by Blue Zones, an organization dedicated to studying healthy ageing, one of the four common behaviors of those humans that live long, functional and productive lives is that they move constantly. They exemplify the opposite of a sedentary life. This is not specifically exercise but movement, they walk or cycle to the store, they garden, they play with their children & grandchildren-basically their lives are filled with low level physical activity built into their way of living. This is the foundation of a healthy active life. Strive to do more of this.

The top of the exercise pyramid is capped with Intensity. Intensity being a strong physical challenge to your biology. Essentially making your body believe that you almost died-so you better get stronger! Since we no longer have to run away from saber tooth tigers or fight physically for survival we have to use forms of exercise that are challenging and make us feel physically uncomfortable. Most adults have forgotten what it feels like to feel physically

challenged to this level and if we happen to experience this level of discomfort it often is unpleasant and enough to say “I’m done with that!”

But if you want to experience Dynamic Ageing it is absolutely essential to “light-up” your muscles at least twice a week to benefit from the equally intense positive adaptation to the intense challenge of exercise. The good news is that it doesn’t take too much or too long to get these benefits. There has been an explosion in what is commonly referred to as HIIT (High Intensity Interval Training) training or Interval Training. This is mixing very short bursts of intense physical activity with short periods of recovery. The best part about this type of exercise is that “intensity” is relative to our current fitness level. For example, walking briskly for someone that has not exercised in ten years will feel very intense and be sufficient stress to gain health benefits. While a regular exerciser may have to sprint to get the same effect. The goal here is to stimulate your “fight or flight” muscles.

Metabolic Tune - Up



Muscle Fiber Types

Slow-Twitch (Type 1)

Fast-Twitch (Type 2)



Included with this document are several guides on how to add some intensity to your training routine. There is a 4-week challenge along with several interval-based ways of incorporating intensity properly. By using the principle of “minimum-effective-dose” you can maximize your benefits in the least amount of time. Healthy metabolism is directly linked to healthy muscle tissue & mitochondria.

Beyond Super Foods – Eating Your Way to the Fountain of Youth



EAT REAL FOOD **This is rule #1**

The food that we eat and the effort it takes to digest it are two very important aspects of Dynamic Ageing.

The qualities of the foods we eat are the raw building blocks used in metabolism to make new cells, cell walls, proteins, hormones and much more. Quality of fats, proteins, minerals, vitamins etc. matters.

Also, digestion of these nutrients is one of the biggest generators of metabolic waste, oxidative stress and inflammation. Foods that are irritating, processed, genetically modified and loaded with additives and pesticides will impact your gut health and cell quality, along with inflammation levels.

The body needs 9 Essential Amino Acids and 40 Micronutrients for vibrant health. These are found in real un/low processed foods. Of the four things Blue Zones identified as common patterns shared by long living and functional people, eating a variety of wild plants and legumes was key. Essential refer to the fact that the body does not produced theses nutrients so they must be ingested.

Link to a guide of the 40 essential micronutrients (I show the full link so you can copy & paste):
<https://alivebynature.com/essential-micronutrients-how-we-can-lead-longer-healthier-lives-by-avoiding-micronutrient-deficiencies/>

Guide to food sources of 9 essential amino acids:
<https://alivebynature.com/essential-micronutrients-how-we-can-lead-longer-healthier-lives-by-avoiding-micronutrient-deficiencies/>

With that said, let's focus on some super foods that can compliment and support Dynamic Ageing. These foods have antioxidant and anti-inflammatory properties, they often are also rich in nutrients that we need for great health.

ORGAN MEAT

- **Cardiovascular Health** – CoQ10. Super nutrient, Energy Production, Brain Health. 4 x found in muscle meat. Super cost effective.
- **Joint Health** – Amino Acids, Collagen. 40% more in organ meat compared to grass-fed beef. Essential for healthy connective tissue.
- **Robust Immune System** – Vitamin D-2, D-2. High concentration of very bio-available form. Fat-soluble.
- **Energy** – Vitamin B-12. High Concentrations of very bio-available B vitamins.
- **Pain & Inflammation** – Omega 3 fatty acids, EPA & DHA.
- **Radiant Skin & Eyes** – Vitamin A. Very bio-available, less steps to use than other sources of vitamin A.
- **Healthy Moms & Babies** – Folate. B vitamin for development-nervous system.

Sources include liver, heart, pancreas and other “parts” not typical for the American table. We have lost the pallet for these truly super foods. Here are some ways to skillfully incorporate into your diet.

- Try cod liver oil, or other liver capsules. Easy to ingest.
- Freeze liver then grate it into burgers, soups and other meals. An easy way to incorporate.
- Try sausages that incorporate organ meats-often available at supermarkets that butchers.

Omega-3 & 6 Fatty Acids

Ideal Human Ratio via Diet = 1:1 (3 to 6)

Average American Ratio = 10-25(omega6)/1 (Omega 3)

Increase Omega 3 Fatty Acids in diet:

- **Eat fatty fish**
- **Supplement with Omega-3**
- **Eat Walnuts**
- **Eat more medium chain triglycerides (coconut, butter, flax)**

Omega-3 fatty acids are anti-inflammatory and used in the production of healthy cell walls.

When the ratios are off we start to make poor quality cells and cell walls that lead to damaged metabolism and systemic inflammation.

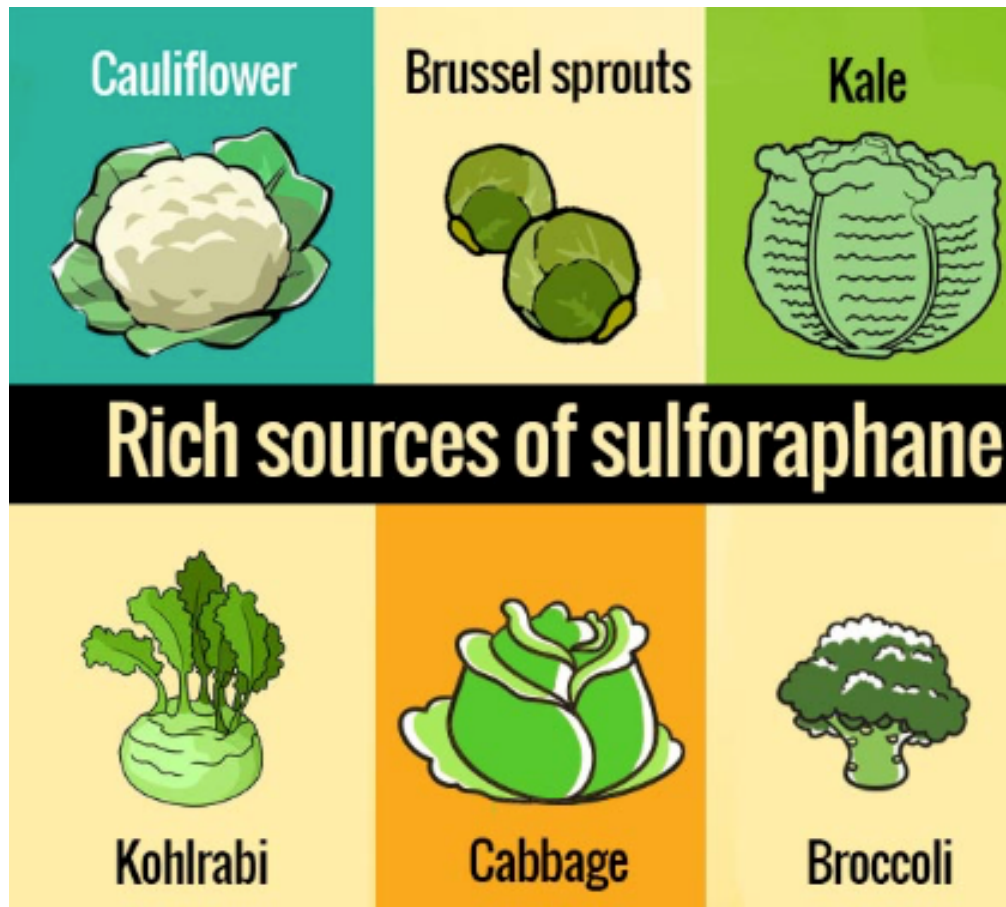
Also very important is to reduce the ingestion of crummy Omega-6 fatty acids, found in processed foods and restaurants.

Avoid:

- **Processed grains**
- **Industrial processed oils such as canola, corn, vegetable, safflower oil and other processed oils.**
- **Trans fats: margarine and other butter substitutes**

Sulforaphane

Powerful anti-oxidant



The richest source is found in broccoli sprouts. Available in some specialty and health-food store. Easy to grow at home.

Link to counter-top sprouting garden:

https://www.amazon.com/Deluxe-Kitchen-Sprouter-VICTORIO-VKP1200/dp/B01AJJOJD0/ref=asc_df_B01AJJOJD0/?tag=hyprod-20&linkCode=df0&hvadid=193139379506&hvpos=1o3&hvnetw=g&hvrand=516423230244279134&hvpone=&hvptwo=&hvqmt=&hvdev=c&hvdvcmdl=&hvlocint=&hvlocphy=9030452&hvtargid=pla-343938143444&psc=1

Sulforaphane linked to:

- Reduce risk of cancers by 50%
- Protects against DNA damage
- Helps regulate blood sugar (reduce insulin variability)
- Improves metabolism, fat metabolism, reduce belly-fat by 20%
- May improve social interaction in Autism (protective of neurons)

Dark Chocolate – 70% +



Super Nutritious – Loaded with minerals +: zinc, magnesium, selenium, copper, potassium, fiber

Antioxidants – More polyphenols & flavanols than blueberries

Lower Blood Pressure – Flavanols stimulate Nitrous Oxide (vasodilator)

Protects HDL/LDL from oxidation – Oxidized cholesterol is a known driver of heart disease

Reduce Risk of Heart Disease by up to 50%

Improved Brain Function – High levels of caffeine and theobromine (stimulants), improved blood flow to brain

Coffee



3-4 cups/day Reduce Risk of:

Cardiovascular disease (including heart attack, heart failure, and stroke)

Type 2 diabetes

Parkinson's disease

Uterine and liver cancer

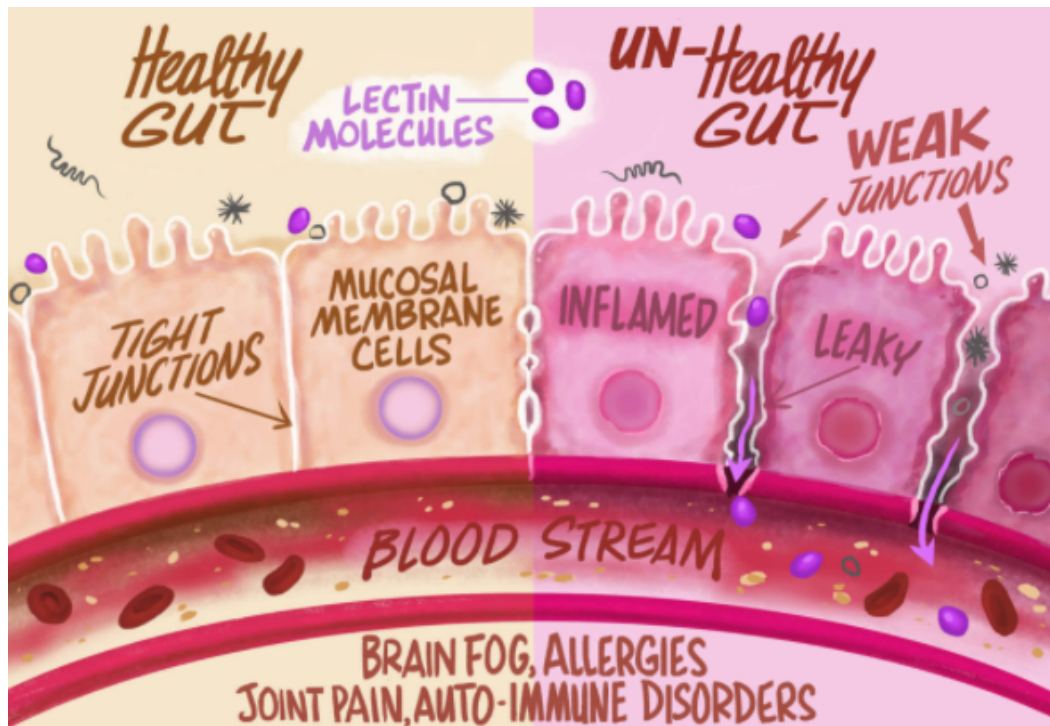
Cirrhosis

Gout

Linked with longer life span (Harvard)

Anti-Inflammatory

GUT HEALTH & HEALTHY PLANTS



A healthy gut is essential for Dynamic Ageing. The gut is a where foods are broken down so they can pass into the blood stream and get utilized. The gut is also where we produce over 80% of serotonin-a hormone essential to mood and health. The gut is also critical for healthy immune function.

Food quality is very important for good gut health. Foods that are allergens and irritants can lead to Leaky Gut (illustrated above) and Leaky Brain. This conditions cause massive amounts of systemic inflammation that are now linked to a variety of disease from cancer, auto-immune disease, poor digestion, mal-absorption of nutrients and degenerative brain and neurological conditions, depression, anxiety to name a few.

Potential irritants and foods to avoid:

- Processed foods
- Food additives-dyes & coloring, preservatives
- Excess sugar
- Artificial sweeteners
- Gluten (Harvard researchers have observed some form of irritation in all patients tested)
- Excess alcohol
- “Healthy” foods that are improperly prepared (Lectins & acids that protect plants and legumes-see below how to address this)
- Industrial oils (they stay in the body for long periods of time and get incorporated structurally in cells)
- GMO foods
- Refined grains

Gut Healing Foods:

- Fermented foods-pickles, kimchee, low sugar yogurt/kefir, sauerkraut
- Kambucha, apple cider vinegar and other fermented drinks
- Green tea
- Bone broth
- Miso
- Jerusalem Artichoke
- Steamed non-starchy vegetables
- Ginger, turmeric, dandelion tea, peppermint
- Omega-3 rich foods (fish, shell fish, healthy grass fed meats, pastured eggs, hemp seeds, chia seeds, walnuts, flaxseed)

The Plant Paradox

As mentioned above, a common trait among long living, healthy and productive humans is plenty of wild plants and legumes in their diet. Plants are loaded with the essential micronutrients that we need for good health and metabolism...but plants like mammals have defense mechanism to help protect them from being eaten. These look like Lectins & certain chemicals that actually protect the nutrients we seek. This is where food preparation comes in. Many raw veggies and improperly prepared legumes will actually be passed in the human body before we can actually use the nutrients. If you eat raw Kale for example you will pass 95% of the nutrients due to the lectins that protect them. These compounds are also very irritating to the intestinal walls (see Leaky gut).



The answer is pretty simple and has been practiced by cultures for all of human history.

When prepping high lectin greens for example it is important to lightly cook them through steaming, blanching, roasting and even rubbing citrus juice on the leaves. This will actually disrupt the protective mechanism and make the nutrients bio-available (useable in the body).

For beans and legumes soaking and sprouting them will disrupted the protective mechanism and allow the nutrients to become useable and not be an irritants to the intestinal lining.

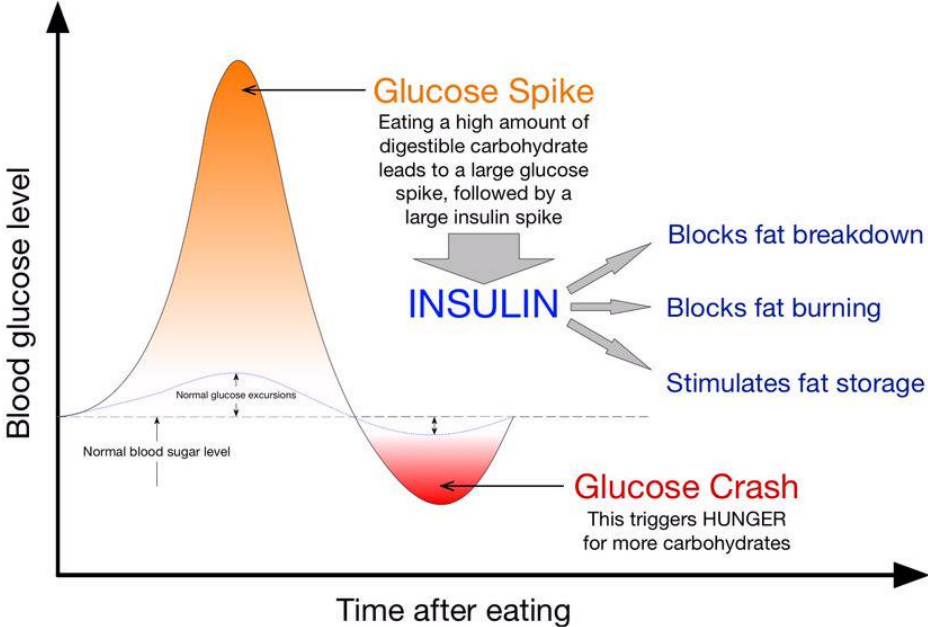
*Note: Many of the vitamins in plants are fat-soluble (D & A for example). These micronutrients need to be consumed with fat so they will be utilized properly in the body. Butter, olive oil, avocado oil are all great pairings with veggies.

LOW-LECTIN FOODS			
Grains & Animal Foods	Legumes	Nut, Seeds & Oils	Fruits & Vegetables
 <p>GRAINS & GRAIN PRODUCTS Amaranth Wild Rice</p> <p>GRASS-FED ANIMAL FOODS Grass-Fed Dairy Grass-Fed Meat</p> <p>WILD-CAUGHT SEAFOOD</p> <p>POULTRY Chicken (Pastured) Egg Yolk (Omega-rich) Ostrich Turkey (Kosher) Water Fowl</p>	 <p>THERE ARE NO LOW-LECTIN LEGUMES</p> <p>The hard lectin in legumes is impervious to soaking, sprouting and cooking.</p>	 <p>NUT, SEEDS & OILS</p> <p>Nuts Coconut / Chestnut Macadamia Pecans / Pistachios / Walnuts</p> <p>Seeds Flax Hemp Pumpkin Chia</p> <p>Oils Coconut / Olive / Sesame Avocado Macadamia Nut Red Palm Rice Bran Walnut</p>	 <p>FRUITS & VEGETABLES</p> <p>Limit these Fruits Apples Blueberries / Cherries Citrus Kiwi Nectarines / Peaches Pomegranates Raspberries / Strawberries</p> <p>Unlimited Other Fruits Unlimited Vegetables</p> <p>Sweeteners Monk Fruit (NutraSweet) Jerusalem Artichoke Syrup Stevia / Xylitol / Erythritol Yacon</p>
HIGH-LECTIN FOODS			
Grains & Animal Foods	Legumes	Nut, Seeds & Oils	Fruits & Vegetables
 <p>GRAINS & GRAIN PRODUCTS Barley / Bulgur Buckwheat / Millet / Quinoa Kamut / Rye / Spelt / Wheat Oats Rice, Brown & White</p> <p>GRAIN-FED ANIMAL FOODS Milk / Kefir / Sour Cream Frozen Yogurt / Ice Cream Cheese / Cottage Cheese Fish / Poultry / Meat</p>	 <p>LEGUMES Legumes Beans Cacao Beans Chickpeas Kidney Beans Lentils Mung Peas Peanuts Soy</p>	 <p>NUT, SEEDS & OILS</p> <p>Nuts Almonds Cashews / Pine Nuts Hazelnuts</p> <p>Seeds Sunflower Sesame</p> <p>Oils Canola / Corn Cottonseed / Grapeseed Peanut Safflower Sunflower</p>	 <p>FRUITS & VEGETABLES</p> <p>Melons (Any Kind)</p> <p>Fruits & Nightshades Corn Cucumbers Eggplant Peppers Pumpkin Squash (Any Kind) / Zucchini Tomatoes</p> <p>Sweeteners Agave Artificial Sweeteners Sugar Sucralose</p>

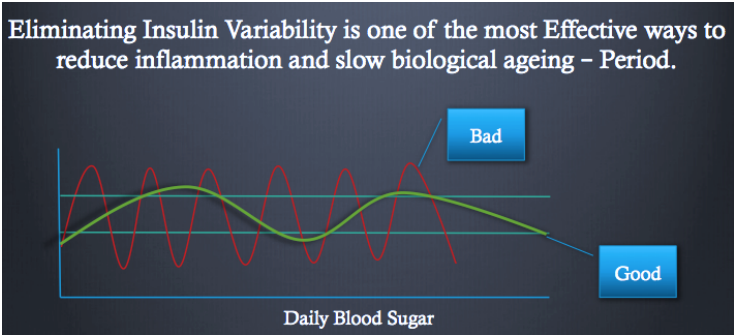


Insulin Variability – A Primary Cause of Accelerated Ageing and Disease

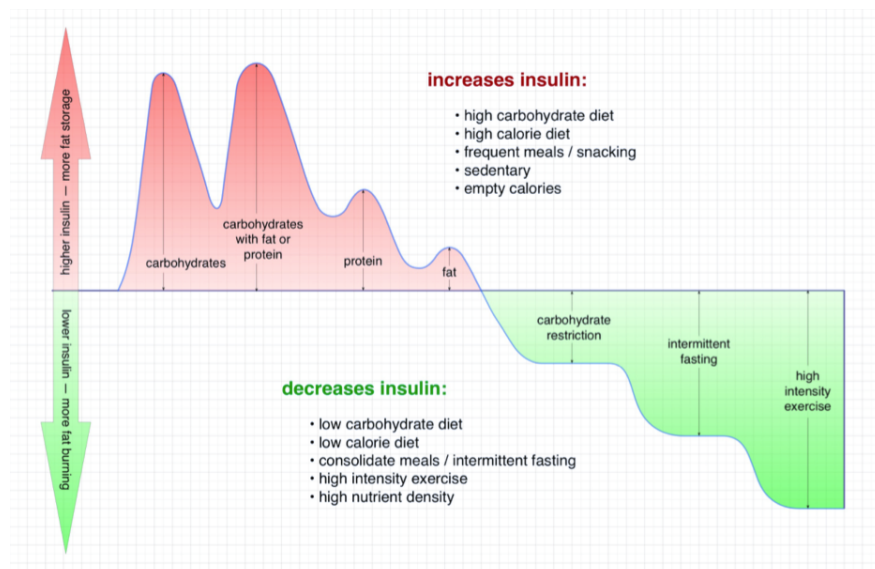
Eating non-fibrous (digestible) carbohydrates traps you in a remorseless cycle of glucose dependence and hunger



As mentioned before that digestion is one of the biggest drivers of inflammation and oxidative stress. One of the biggest components of digestion is the regulation of energy in the blood stream and cells. When we eat food the body uses insulin (energy regulating hormone) to help deliver energy to individual cells and regulate any excess blood sugar so it will not cause damage (why insulin is also known as the Fat Storage hormone). Ideally based on the foods we eat, and how much/often we eat we will need very little additional insulin to properly regulate our energy in the body. However the modern Standard American Diet that is heavily carbohydrate based, and the constant snacking culture (food is always available) has lead to a common state of constantly yo-yoing blood sugar for most people. The CDC estimates that 50% of the US population has Metabolic Disease or Type 2 Diabetes, other researchers (St. Josephs University-Chicago) estimate that 80%+ of the US population has these conditions.



Step One is to eat a diet low in added sugars and refined carbohydrates.



The second strategy is something called Intermittent Fasting. This is a way of eating where you eat all your daily food in a window of 8-12 hours. By doing this the body “for “signals” less often, and the body also depletes stored energy in the form of glycogen. Both of these things have been clinically shown to improve insulin sensitivity (the opposite of diabetes), and increase fat metabolism (reducing & balancing body fat stores).

There is also a form of fasting that is known as the Fasting Mimicking Diet (FMD). This is the only diet that has ever been awarded a US-patent. Created by Dr. Valter Longo, USC Longevity Institute. This diet consists of a very low calorie; mostly plants and nuts based diet for 5 days. It achieves the same type of results as the Intermittent Fasting diet with potentially additional healing benefits.

Super low calorie diet for 5 days

- 1100 kcal day 1, 700 kcal days 2-5
- Plant based
 - 10% Protein, 60% fat, 30% carb - day 1
 - 9% Protein, 44% fat, 47% carb – day 2-5
 - Carbs from plants, no grains
 - Fats from nuts, olive oil, coconut

Reduce Calories but maintain some nutrients

Below is a guide to how to Intermittently Fast. Many experts suggest starting with fasting 2 out of 7 days a week and then working your way up to as many days as you like. The current research shows that just two days a week of IF yields most of the health benefits associated with the fasting state. Included with this document are two resources for starting Intermittent Fasting and an example menu for the FMD diet.

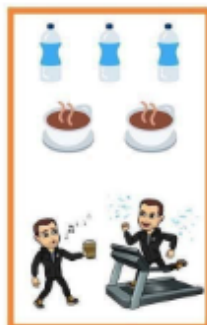
INTERMITTENT FASTING 101

@MAXWEBERFIT

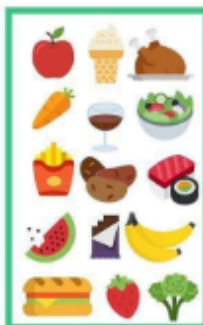
BEFORE 12PM

12PM - 8PM

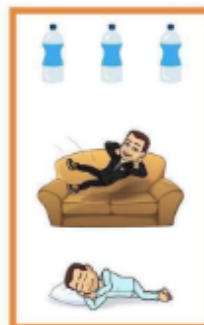
AFTER 8PM



FASTING WINDOW

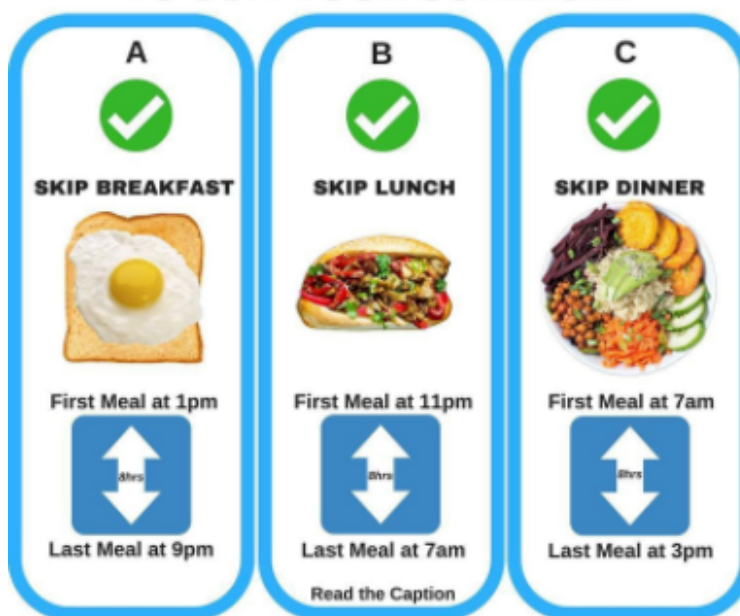


EATING WINDOW!



FASTING WINDOW

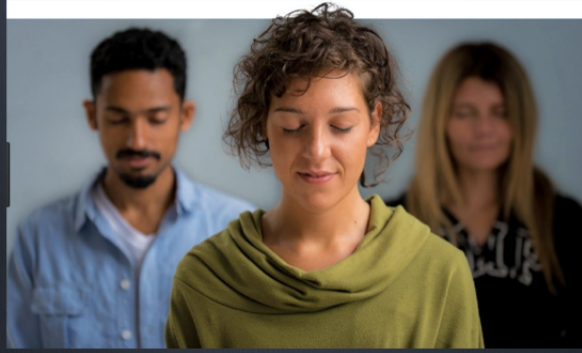
INTERMITTENT FASTING TO SUIT YOUR SCHEDULE



Key Concept-Cellular Repair & Cleaning only happens when we are not signaling insulin & sleeping via a mechanism known as Autophagy.



REDUCE STRESS



Getting a handle on your relationship with stress may be one of the most important things we can do to experience Dynamic Ageing and better quality of life. I believe that everyone will benefit with some form of awareness practice or mindfulness practice. These types of practice are mentioned in all of the world literatures from every culture that has ever existed. And now modern science has proven just how powerful it is for our health and happiness. The great news is all forms have been shown to work with similar effect—the key is to find what works for you and make it a part of your life. Accompanying this document is a Beginners Guide to Mindfulness. This is one option—I highly encourage you to explore this form of practice and find something that you connect with...Prayer, meditation, contemplation—they all work.

SOCIAL NETWORK & RELATIONSHIPS



Cultivating a community and an attitude of gratitude is also a common condition for a long and productive life according to Blue Zones, and a large number of research studies. In the lectures I mentioned the Rosetto Effect and the Grant Study as evidence of this. On the last pages of this document are a number of links that you can use to explore these ideas in

greater depth including a great Ted Talk by the current director of the Grant Study. Below I have also provided a great series of exercise that you can use to ramp up your optimism and happiness form the research of Sean Achor a positive psychology researcher from Harvard (also a great Ted Talk by him in the links).

Happiness Research Exercises

The following exercises were show through extensive research to shift our perspective and improve happiness and performance. This is the full set.

- **Creating Lasting Positive Change in 21 Days**
 - **3 Gratitude's**
 - Three things that you are thankful for.
 - Teaches you to focus & look for the positive first.
 - **Journaling** – one positive experience in last 24 hours
 - Allows your brain to relive a positive experience-reinforce a positive attitude.
 - Reduces doctors visits by 50%.
 - **Exercise**
 - Works better than antidepressants
 - Releases “happy” chemicals-improves mood
 - Primes the brain to learn new patterns
 - **Meditation -simplify**
 - Protects against “cultural ADHD”
 - Improves immune function
 - Increases GAMA waves in the brain
 - Rewires brain-increases insight and the “Aha sensation” of wonder.
 - **Random Acts of Kindness**
 - Send 1 positive email message to your social network.
 - Invest in your “community”

A revised set of exercises was offered as being very effective and maybe a little less intensive with the greatest benefits – Minimum Effective Dose. I highly suggest trying these exercises, if you were only going to do one, the sending people you know a random email sharing that appreciate them and why you appreciate them was shown to by far be the most impactful-the WHY part is key and seems to make a significant difference in the psychological and emotional benefits.

For 21 Days

- **Write down 3 things I am thankful for**
- **Commit one random act of kindness by reaching out in a positive way to someone in my social sphere-spend 2-minutes each morning composing and sending an email/text sharing why you value someone.**

POT Talk

As it relates to health



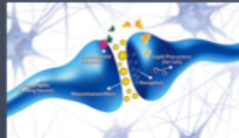
A Brief History

- Evidence of use in Neolithic Era – ritual/medicine, rope & fabric China & Japan (indigenous to Central & South Asia) 12,000 years ago.
- 5,000 years Chinese Emperor Shennong wrote about the medicinal qualities – relief from gout, malaria, rheumatism, and absent-mindedness.
- East Indians were observed to be using it recreationally around 2,000 years ago, along with many other cultures in Asia & the Middle East.
- 500 A.D. first record of Europeans using cannabis. Origins of hashish related to religious beliefs that forbade alcohol use-wide spread of use in Persia & North Africa. 12th Century (800 years).
- Spanish brought cannabis to the New World in 1545.
- English brought cannabis to James Town 1611– commercial crop. rope, fabric & paper.
- George Washington & Thomas Jefferson grew it. Declaration of Independence & First American Flag made from cannabis fiber.
- Between 1850-1942 marijuana listed in the US Pharmacopeia - rheumatism, nausea & labor pains.
- During this time cotton surpassed marijuana as the major cash crop – gin mill.
- 1910 Mexican Revolution – immigrants brought recreational use. Political shift based on anti-immigration used this as a leverage point.
- 1913 California first state to make MJ illegal.
- Roaring 20's recreational use hit an all time high – widely used by musicians and entertainers. (Charlie Chaplin Louis Armstrong). Tea Pad Clubs...
- Racism was a big driver of anti-marijuana sentiment, interracial relationships.
- 1936 Refer Madness – funded by a church group, claimed it would lead to murder, rape and madness.
- Cannabis was criminalized starting in the 1800's in India by the British then other British colonies. This continued globally through the 1900's. The International Opium Convention to the 1937 Tax Act shut down the legal importation and local production of cannabis & hemp.
- In the 1950's in spite of the legal status there was a cultural revolution, seen as a counter culture status through the 1970's (Hippies, artists, protestors & The Beatles).
- 1970 The Controlled Substance Act US Government makes MJ a Schedule 1 drug. Possession & use has serious legal consequence.
- War on Drugs, Exploding Prison Population, and minorities impacted, the explosion of drug cartels.

- During the 1990's MJ comes back into fashion. More on this...
- 1996 California first state to legalize medical MJ. Alaska, Oregon, Washington, Main all follow...
- 2012 Washington & Colorado become first states to legalize recreational use.

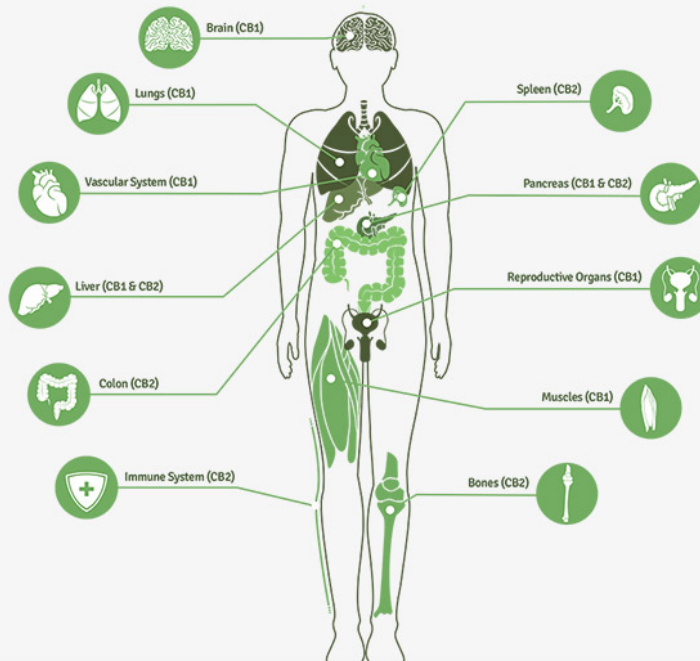
In addition to this material in the resources there are links to great talks by doctors and researchers that support the use of medicinal and even recreational cannabis use.

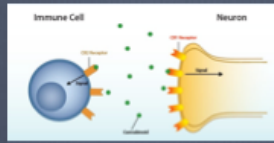
KEY SCIENTIFIC MOMENTS



- 1964 – THC is isolated and identified by Raphael Mechoulam – Hebrew University
- 1990 & 1993 – CB1 and CB2 receptors discovered-site where THC/CBD works. More of these receptors than any other receptors.
- 1994 – Lumis Hanus discovers the first Endocannabinoid – ANANDIMIDE aka the Bliss Molecule.

THE BODY'S ENDOCANNABINOID SYSTEM





Cannabinoid receptors are involved in:

- Motor Coordination
- Memory Processing
- Pleasure
- Control of Appetite
- Pain Modulation
- Neuroprotection
- Fertility
- Immune Function, White Blood Cells
- Sleep
- And much more



On Use

Talk to your doctor

Get help with type and dosing from an “expert” based on your health needs

There are side effects - Impairment, dependency, un-known,

FDA says very low risk with CBD

The effects are very individual

Effects are different depending on form of ingestion

May be a great alternative to traditional pharmacological interventions

Additional Resources

<p><u>Markers for Inflammation</u></p> <ul style="list-style-type: none"> • CRP • Homocysteine • Hba1C 	<p><u>World Fitness Age</u></p> <ul style="list-style-type: none"> • Norwegian University of Science & Technology • https://www.worldfitnesslevel.org/#/
<p><u>Telomere Length Testing</u></p> <ul style="list-style-type: none"> • TELO YEARS - \$99 	
<p><u>Sleep Quality</u></p> <ul style="list-style-type: none"> • OURA Ring • FitBit • Apps?Devices 	<p><u>HRV Measurement</u></p> <ul style="list-style-type: none"> • Elite HRV • OURA Ring • Apps/Devices

Meditation & Happiness

Sean Achor

https://www.ted.com/talks/shawn_achor_the_happy_secret_to_better_work?language=en

Grant Study

https://www.ted.com/talks/robert_waldinger_what_makes_a_good_life_lessons_from_the_longest_study_on_happiness?language=en

Mindfulness & Shame

<https://www.youtube.com/watch?v=IeblJdB2-Vo&vl=en>

Why Mindfulness is a Super Power

<https://www.youtube.com/watch?v=w6T02g5hnT4>

Intermittent Fasting

Dr. Rhonda Patrick & Joe Rogan

<https://www.youtube.com/watch?v=m6KClPkotxM>

More Doc's

<https://www.youtube.com/watch?v=-R-eqJDO2nU>

Cannabis

<https://www.youtube.com/watch?v=xtphZeJvGhk>

<https://www.youtube.com/watch?v=7gdLh9cCdck>

CBD

<https://www.youtube.com/watch?v=3bZb10ZxpBk>

Great Dr's story on care & cannabis Ted Talk

<https://www.youtube.com/watch?v=0ygtX2nyexo>