

The Nine Simple Steps to a MUCH Longer and Healthier Life





Featuring Step Three: "Eat a Diet Tuned to Microbiome Health"

A Presentation for People's Unlimited

- John Asher, CEO



What Describes Your Attitude Towards Life?

- ☐ I want to work hard, play hard and
 - Eat/drink whatever I want
 - Not worry about my health too much (my destiny is set)
- I would like to make enough money to retire, relax and fade into the sunset
- I want to live a long life with robust health, avoiding all major diseases
- I want to live a vibrant, healthy UNLIMITED life



Typical Pushback to Living Towards an Unlimited Life

- Natural Skepticism
- Partner Pushback
- Personal Doctor Ignorance / Hippocratic Oath (Do No Harm)
- Time Demands
- Cost
- Inconvenience
- Pain of Creating New Habits
- Discipline Required
- Lousy Taste of Some Healthy Food
- Cravings (e.g. Sugar)





The Nine Simple Steps Towards Living a Vibrant, Healthy and Unlimited Life

- We are on the threshold of understanding advanced technologies and therapies needed to greatly extend life
- An unlimited life will be possible within the next several decades



Asher Longevity Institute

Asher Longevity Institute "WHY" To Save a Billion Lives

Asher Longevity Institute's Mission

To describe a logical set of implementable steps towards an unlimited life

- By simplifying and summarizing the immense amount of longevity and age-reversal research, analysis, studies and trials
- By translating the cutting edge of longevity science and medical jargon into something that is genuinely understandable and will compel individuals to act



Longevity Funding is Accelerating

- Amazon/Mayo Clinic (\$116M)
 - ✓ To cure death
- Mark Zuckerberg (\$3B)
 - ✓ To cure disease
- Google/Calico (\$1.5B Research Center)
 - ✓ To cure cancer
- In 2017, \$400M invested in longevity startups
 - ✓ \$800M in 2018
 - ✓ Doubling again in 2019



The Principle Cause of Aging



"The loss of capability of tissues and organs to maintain and repair themselves."

- Life Extension Institute

Four Principle Causes of Death

- 1. With age the body loses its ability to clean out dead (senescent) cells
 - Dead proteins agglomerate in the brain
 - An excess of carbohydrates create sugar cross links between dead proteins increasing the level of agglomeration
 - These dead (zombie) cells pump out inflammatory compounds throughout the body





Four Principle Causes of Death (con't)

- 2. Excess signaling in our cells
 - Needed to fuel rapid growth from birth to skeletal maturity (adulthood)
 - It does not turn off and can fuel the rapid growth of cancer cells
 - Medical term is Mammalian Target of Rapamycin (mTor)
 - It is a protein that regulates cell growth



Four Principle Causes of Death (con't)

- 3. Every cell contains a co-enzyme essential for cell function, DNA repair and systemic life sustenance
 - Decreases as we age
 - Almost gone at age 80 (2% left)
 - Medical term is Nicotinamide Adenine Dinucleotide (NAD+)
- 4. Compromised immune system including a non-functioning thymus gland after age 70



Six Significant Contributing Factors to Aging

- 1. Inflammation throughout the body; a natural defense against infection
 - Can get stuck in high gear as we age
- 2. Reduced stem cell activation potential and/or death
- 3. Loss of muscle mass
 - 50 percent of muscle is lost by age 80 without regular strength training
- 4. Mental/emotional/physical stress
- 5. Damage to the energy furnaces in every cell (Mitochondria)
- 6. Shortening of the end caps on chromosomes (Telomeres)

Additional Contributing Behaviors to Premature Death



- Risky behavior of all types
- Not using seat belts when in moving vehicles
- Excessive use of alcohol and illegal drugs
- Smoking
- Obesity
- Unhealthy diet
- Heavy metal, pesticides and contaminate poisoning



The Nine Simple Steps for Living an Unlimited Life

- 1. Get sufficient sleep and deep sleep
- 2. Eat a healthy diet
- 3. Eat a diet tuned for a healthy gut microbiome
- 4. Keep standard biomarkers in the optimum range
- 5. Take appropriate supplements to ward off disease
- 6. Take seven prescription drugs/medications with adjuvant therapies to enhance longevity
- 7. Slow down the four causes of aging with a few supplements, protocols and therapies
- 8. Rejuvenate stem cells
- 9. Utilize the appropriate emerging protocols/therapies that greatly extend life



Step Three: Gut Microbiome Health

- Our gut describes our digestive systems
 - From the esophagus to the anus
- Our gut is full of trillions of bacteria, viruses, fungi and worms
 - Together they are called our microbiome
- 70% of our immune system is in our gut





Step Three: Probiotics and Prebiotics



- Our microbiome contains good and bad bacteria
- Probiotics is the totality of the good bacteria in our gut
- Prebiotics is the food our good probiotics eat
- Probiotic supplements will add good, live bacteria to our microbiome
- Having a majority of good bacteria in our microbiome will greatly increase life span



Step Three: Why Centenarians Live So Long

 Gut bacteria directly influence the health and longevity of every part of our body

Nature 2018

A healthy gut is a big indicator for centenarians

China Study of 1000 people

- The gut microbiome of centenarians is made up of three principle strains of bacteria
 - Most people lose those three with age

Current Biology 2016





Step Three: Our Gut Microbiome Affects All Body Systems

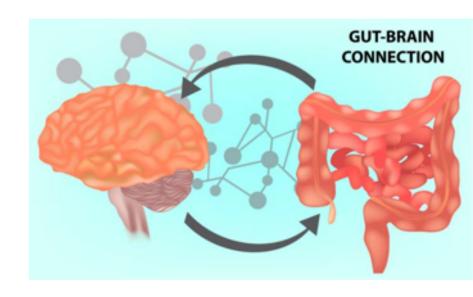


- Digests the foods we eat and manufactures vitamins, minerals, hormones and proteins
- Keeps yeast (candida) in check
- Fights against the overgrowth of harmful bacteria



Step Three: Our Gut Microbiome Influences Our Thoughts and Actions

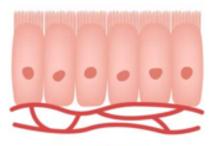
- The Vagus nerve connects the brain to the throat, heart, lungs and gut
 - The gut sends 8 times as many signals to the brain as compared to the opposite pathway
- The gut microbiome influences our thoughts and actions
- It is our second "brain"
- Adds new meaning to the term "gut instinct"



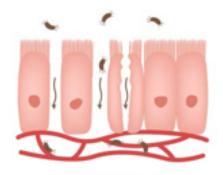


Step Three: Need a Strong Gut Lining

- Protects our gut from outside invaders
- Prevents the bacteria in our gut from getting out to our blood, lymph system and organs
- Once the bacteria pass through the lining, they ignite the immune system causing widespread inflammation
 - can result in "leaky gut" syndrome
- The lining is called our Mucosal Barrier



Normal Tight Junction



Leaky and Inflamed



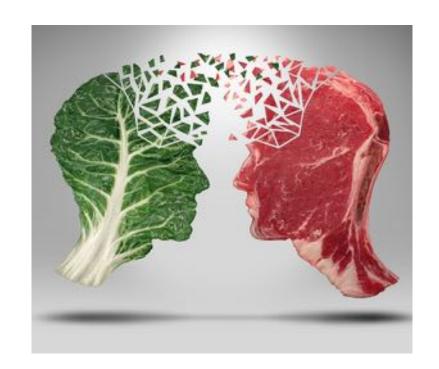
Step Three: Feed Your Good Gut Bacteria the Foods They Love

- They will create compounds that support the energy furnaces in your cells (mitochondria).
- They will prune your good bacteria and all of your cells down to the strongest ones
- They will thicken your protective gut lining to keep your gut bacteria out of the rest of your body



Step Three: Good Gut Bacteria Love a Modified Vegan Diet

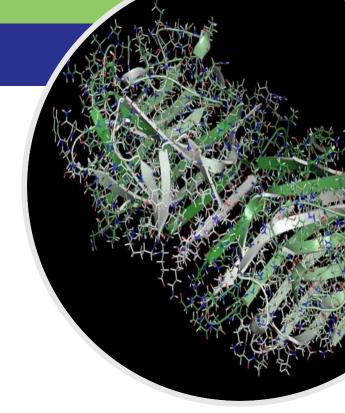
- Bad bacteria love a Western diet
- Good bacteria love mainly a vegan diet without
 - Lectins
 - Dairy products from most Western cows
 - Sugar or sugar substitutes
 - Red Meat
 - High glycemic carbohydrates
 - Manufactured vegetable oils
- When we switch to a way of eating that feeds the "good bacteria," overall health improves within days





Step Three: The Problem with Lectin

- A "sticky" protein that plants produce as a defense against being eaten by insects
- Humans started cultivating grain (high lectin content) only 10,000 years ago
 - Our guts cannot digest lectin well
- Lectins from wheat will break through the gut lining and invade the rest of our body





Step Three: Eat Few Lectins

- Avoid eating all grains
 - or animals, poultry or fish that are fed grains
- All legumes are full of lectin
 - Beans

Lentils

Peas

- Peanuts
- Chickpeas
- Soybeans
- Get rid of the lectin in legumes by:
 - Pressure cooking them, or
 - Buying Eden brand canned beans that have already been pressure cooked





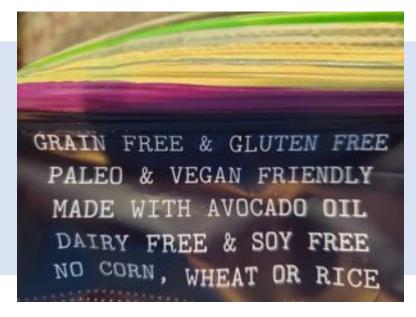
Step Three: Grain Free Products are Available (e.g. chips)





Step Three: Grain Free Products are Available (e.g. chips) (con't)







Step Three: The Problem with Dairy Products from Most Cows

- 2,000 years ago a spontaneous mutation in Northern European cows changed the type of protein in their milk from Casein A2 to Casein A1
- Casein A1 causes an attack in our immune system
 - It explains why many people are lactose (sugar in milk) intolerant
 - Actually, we are all intolerant of the protein Casein A1; not lactose intolerant
 - Most cows in Switzerland, France and Italy did not suffer this mutation



Step Three: Consume Dairy Products from Other Than Most USA Cows

- Instead, get dairy protein from:
 - The few USA cows without the genetic mutation (<u>www.a2milk.com</u>)
 - Goat and sheep dairy products
 - Buffalo mozzarella cheese
 - Aged French, Italian or Swiss cheese (from cows without the genetic mutation)



Step Three: Consume Dairy Products from Other than Most USA Cows









Step Three: The Dangers of Sugar (It is Addictive)



- Sugar is not a food; it is a food additive
 - Up until 50 years ago it was a simple condiment
- There is no biochemical reaction in any animal cell that requires sugar
- Sugar is addictive for exactly the same reasons and via the same pathway as alcohol



Step Three: The Dangers of Sugars - The Stealth Ingredient

- Study of 4,500 people who drink soft drinks daily
 - 43% higher risk of heart attack
- Unhealthy foods with lots of sugar
 - Low fat salad dressing
 - BBQ/Pasta sauce
 - Whole grain foods
 - Breakfast cereals
 - Store bought fruit juices
 - Soft drinks

- Baked goods
- Candy and cakes
- Molasses, honey and maple syrup
- Ketchup (25% sugar)
- Potatoes, bread, corn, rice and pasta are made of starch
 - Starches are long chains of glucose (sugar)

If you eat potatoes, you might as well be eating candy





Step Three: The Problem with Sugar/Sugar Substitutes



- The bad bacteria in our microbiome thrive on simple sugar
- Sugar and sugar substitutes (except Stevia and Monk fruit) kill good gut bacteria
- Artificial sweeteners also promote weight gain
 - Our brain thinks we are getting sugar
 - When the sugar never arrives, our brain signals to our body to get more sugar
 - Sugar is addictive



Step Three: Eat Very Little Sugar or Sugar Substitutes

- Stick to fruits with low glycemic index (low sugar content) and not too many
- Limit wine consumption to 6oz of red wine only (or one shot of distilled spirits) per day
 - Beer and white wine have too much sugar
- Stick to vegetables with high nutrition and low glycemic index
 - No corn, rice, lentils or nightshade vegetables (tomatoes, peppers and eggplant)





Step Three: Why Animal Meat is Bad for Us



- mTor is the protein that regulates the cell-to-cell communications pathway
- When mTor is scanning the body for energy availability, it looks for certain amino acids
 - Methionine, cysteine and isoleucine
- When it gets them, mTor will promote the fast growth of all cells including cancer cells
- These three dangerous amino acids are prevalent in animal protein
- They are non-existent in most plant based proteins



Step Three: Dangers of Eating Meat

- Eating too much meat is correlated with advanced mortality risk
- Large study of 6,000 people over
 18 years who ate a lot of animal protein
 - Four times higher risk of cancer
 - Five times higher risk of diabetes
 - Twice the risk of dying
- Vegetarians live longer
 - Vegetable protein does not increase risk of aging-related diseases



- The Longevity Paradox



Step Three: Organic Grass-Fed Beef is Available







Step Three: Is a "Beyond Burger" Good for You?





Step Three: Is a "Beyond Burger" Good for You?

- An Ultra Processed Food
 - According to NOVA food classification system
 - 40 ingredients including
 - Titanium dioxide (whitening agent used in paint)
 - Potato starch (candy)
 - Methylcellulose (bulking agent used in laxatives)
 - 400% more sodium than lean burger meat
- Protein provided by legumes (peas and beans)
 - Full of lectin
- Contains lots of manufactured oils (canola and sunflower)
 - Full of omega-6 fatty acids
 - Correlated to all major diseases





Step Three: Don't Eat Much Protein from Animals



- Very rarely eaten in the "blue zone" areas, (full of centenarians)
- A meta analysis of Seventh Day Adventists (vegans) shows
 - Longest living ate no animal products
 - Next longest living were vegans who ate only a few dairy products
 - Shortest lifespans were ones who occasionally ate chicken or fish
- Animal protein is not a necessary ingredient for a longer health span
 - Once the Japanese converted to a Western diet, the incidence of Alzheimer's disease increased by 700%

- The Longevity Paradox



Step Three: The Dangers of Pesticides

- The pesticide Roundup contains an antibiotic
- 93% of humans test positive for it
 - They are eating crops that have been sprayed with Roundup,
 - Or eating animals who have eaten this food
- Antibiotics kill our gut bacteria (good and bad)
- The antibiotic in Roundup is called Glyphosate
- Stick to organic food (no pesticides)

Step Three: The Dangers of Antibiotics Fed to Farm Animals



- Broad spectrum antibiotics and hormones are administered to all commercially raised animals in shocking quantities
 - To help them grow faster, larger and fatter
 - To prevent premature death of these valuable animals from any bacterial diseases
 - These antibiotics wreak havoc with our microbiome



Step Three: Eating Fish/Shellfish, Poultry and Meat



- Eat a max of 4 oz a day of fish/shellfish or poultry
- Fish/Shellfish
 - Wild caught only as farm raised are fed grain
- Poultry
 - Pasture raised (no grain)
 - Without antibiotics and hormone free
- Meat
 - Eat only 4 oz a week
 - Grass fed, without antibiotics and hormone free
- These foods can typically be found at Costco, Whole Foods, Trader Joe's and/or other organic grocers



Step Three: Wild-Caught Fish/Shellfish is Available





Step Three: Eat These Organic Compounds

- Organic compounds produced by good bacteria in our gut are called polyamines
- They decline continuously with age
- They play an important role in killing off weak, dead and abnormal cells and strengthening normal cells
- Examples of foods rich in polyamines:
 - Shell fish
 - Fermented foods
 - Aged cheeses
 - Matcha green Tea

- Cruciferous vegetables
- Leafy greens
- Mushrooms
- Nuts (walnuts, pistachios, macadamia and marcona almonds)

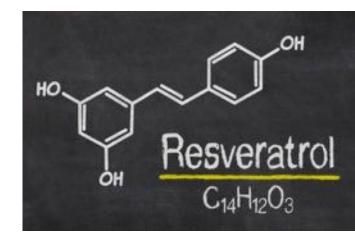




Step Three: Eat Compounds That Nourish Good Gut Bacteria

- Some compounds nourish good gut bacteria and stimulate the elimination of dead cells
 - Plants develop them to resist insects and prevent sunburn
 - They are called polyphenols
- Epidemiological studies show they offer protection against all major diseases
- The most powerful polyphenol is Resveratrol
 - It stimulates removal of dead/damaged cells through a different pathway than polyamines

- The Longevity Paradox





Step Three: Eat These Foods That Contain Polyphenols



- Grapes and berries
- Walnuts, pistachios, chestnuts
- Green tea
- Broccoli
- Extra dark chocolate
- Apple, pears, cherries
- Coffee/tea/red wine
- Spices and herbs
- Olive oil
- Seeds: flaxseed (ground only) celery seeds, poppy seeds



Step Three: Consume Olive Oil Every Day (a Super Food)

- High in Omega-3
- High level of polyphenols
 - The good gut bacteria converts it into anti-inflammatory compounds
- Kick-starts the cellular recycling program to get rid of dead or damaged cells
- Protects your brain from the dead/damaged cells that don't get washed out at night
 - Results in growth of new neurons (brain cells)





Step Three: Eat Walnuts (a Super Food) Everyday

- High in Omega-3
- Combats cognitive decline, heart disease and cancer
- Increases the creation of new brain cells
- Lowers total cholesterol, LDL cholesterol and triglycerides
- Reduces the incidence of breast, prostate and kidney cancers and Alzheimer's





Step Three: Food That Our Good Gut Bacteria Love to Eat

Prebiotics

FRUIT

- Raspberries
- Apples
- Mangos
- Papaya
- Avocado
- Cranberries

VEGETABLES

- Asparagus/Okra
- Jerusalem Artichokes
- Flaxseed (Ground)
- Shallots/Leeks
- Seaweed/Leafy Green
 Vegetables
- Yams/Parsnips
- Sweet Potatoes
- Mushrooms



Step Three: Summary – What Foods Not to Feed Your Gut Microbiome



- Lectin (grains/processed foods)
- Dairy from most USA cows
- Sugar and most sugar substitutes
- High glycemic fruits and vegetables (high sugar content)
- Poultry and red meat fed grains, antibiotics and/or hormones
- Fish/shellfish farm raised (fed grains)
- Industrial oils



Step Three: A New Way of Eating is Urgently Needed for a Healthy Gut Microbiome

Results from eating a Western diet:

- 40% of US adults are obese
 - Live an average of 13 years less than expected (JAMA)
 - 20 "healthy" years are lost
- Another 32% are overweight
- 10% have Type II diabetes
 - Typically lose 10 years of life expectancy (diabetes UK)
- 46% have high blood pressure
 - 27% higher overall mortality from all causes (SPRINT clinical trial)





Step Three: Summary - What to Eat for a Healthy Gut Microbiome

- Protein from nuts, mushrooms and vegetables
- Vegetables and fruit with a low glycemic index (low sugar content)
- Dairy from sources other than most USA cows
- Fish/shellfish in limited amounts (wild caught)
- Poultry in limited amounts (pasture raised and with no antibiotics or hormones)
- Organic food (no pesticides)
- Red wine (6 oz max per day)
- Very little red meat (grass fed with no antibiotics or hormones)
- Natural oils (olive, avocado, palm, coconut)





Step Three: A Healthy Gut Microbiome Tuned Diet Day (Example #1)



Breakfast

- A closed fistful (3) of walnuts and macadamia nuts
- A cup of mixed berries

Lunch

- A "smoothie" (use a blender) consisting of:
 - √ 8 different leafy green vegetables
 - ✓ A half avocado
 - ✓ A half green banana (low sugar)
 - √ 6 oz goat yogurt
 - ✓ A teaspoon each of hemp hearts and flax seed (ground)
 - ✓ Sauerkraut
 - √ Olive Oil (2 tablespoons)
 - ✓ Hemp, coconut or almond milk (unsweetened) (as the liquid)
 - ✓ Spices (oregano, ginger, turmeric, garlic, rosemary, parsley, basil and thyme)

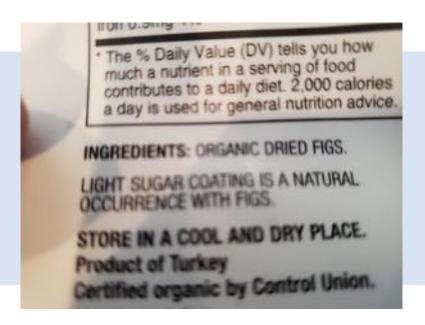
Dinner

- 4 oz of fish, poultry or red meat (once a week) cooked with low heat
- Steamed or roasted vegetables and mushrooms with olive oil
- 2 Figs (fresh or dried)



Step Three: A Healthy Dessert with No Added Sugar







Step Three: A Healthy Gut Microbiome Tuned Diet Day (Example #2)



Breakfast

- Two eggs cooked in olive oil/low heat
- Cup of fruit (orange/apple/tart cherries)

Lunch

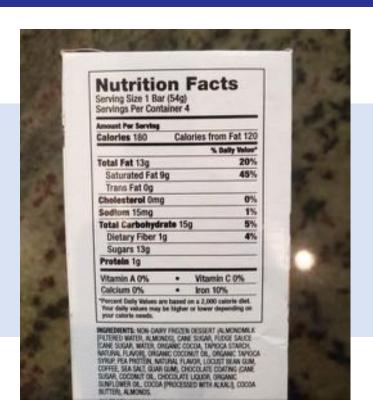
- Large salad with mushrooms, multiple leafy greens and other low glycemic vegetables
- Olive oil and vinegar dressing

Dinner

- 4 oz of fish, poultry or red meat (once a week) cooked with low heat
- Steamed broccoli, cauliflower and fennel
- Almond milk or coconut milk ice cream bar



Step Three: Another Healthy Dessert







Strategy for a Healthier Gut Microbiome (Just Take One Step a Month)

Eat less processed foods



- Consume less sugar and most sugar substitutes
- Eat red meat only once a week only grass fed with no antibiotics or hormones



- Eat fish/shellfish daily only wild caught with no antibiotics or hormones
- Eat poultry infrequently only pasture raised with no antibiotics or hormones



Increase consumption of protein from nuts, mushrooms and leafy green vegetables



Strategy for a Healthier Gut Microbiome (Just Take One Step a Month)

Buy mainly organic no pesticides



- Cut out all grains and legumes (unless pressure cooked)
- Eat high glycemic fruits and vegetables infrequently



- Substitute goat/sheep products for cow products milk, cheese, yogurt
- use only natural oils (olive, Do not use/eat industrial (manufactured) oils avocado, palm, coconut)



Shift drinking habits only one glass of red wine per day



Recent Longevity Studies by Prestigious Research Organizations in Peer Reviewed Periodicals

- > "Healthy human life span may increase by 20 years."
 - Journal of the American Medical Assn (JAMA) 9/17/2018
- > "Senolytics have the potential to transform geriatric medicine."
 - The American Geriatrics Society (2017)
- ➤ "Aging is beginning to look more and more like a disease and a treatable one at that."
 - Studies at Mayo clinic and Scripps Research Institute LA Times 7/10/18
- "The largest overall longevity increase has been found using a combination of Rapamycin and Metformin."
 - Life Extension Institute (2018)



Synergistic Application of Technologies to Longevity

- Big data
- Machine learning
- Al
- Nanotechnology

- Biotechnology
- Genetics
- Internet based researcher collaboration & learning

A Mega Revolutionary Technology Tidal Wave for Longevity

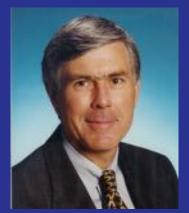


Asher Longevity Institute Founders











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Chief Revenue Officer John Edwards



Principle References

The Blue Zones

Dan Buettner

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Centuries old secrets to a healthy life

James DiNicolantonio, M.D. Jason Fung, M.D.

