LONGEVITY BLUEPRINT

Look better Feel better Live longer

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- This is a how -to guide which will add years to your life and life to your years.
- This blueprint will reveal ten simple steps to longevity that you can begin using today in your daily life.
- These steps work, are highly effective and backed by science and evidence based studies.
- Most people simply do not adopt these habits into their lives, which is why most people suffer from chronic disease, obesity and poor health.
- If you actually follow the steps and execute, you will look better, feel better and live longer.

So let's get started!

Eat mainly whole foods

- Most (~80%) of your diet should consist of whole, minimally processed foods-ideally one ingredient foods.
- Consuming mostly whole foods will decrease your incidence of disease while at the same time reducing your body weight (fat).
- The more nutrient dense whole food you eat, the more you'll feel full and less likely to crave ultra processed foods high in "empty calories" such as packaged foods, pastries, sodas, fast food, chips, etc.
- Eating this way will also naturally decrease the amount of refined sugar, flour and vegetable oil in your diet as these are found in high amounts in ultra- processed foods.
- Most Americans are eating far too many ultraprocessed foods (70% of their calories) which is directly contributing to the rise in obesity and chronic disease.
- If you eat animal products, choose organic, grass fed, pasture raised options.

Prioritize protein, fiber and essential fats

- The macronutrients and the ratio of macros that you consume each day in your diet matter for overall health, weight control and body composition.
- The three primary macronutrients are protein, carbohydrates and fats.
- Protein: aim to eat about 1 gram of protein per pound of ideal body weight. Start each day and end each day with at least 30 grams of protein. May need to supplement with protein powder to reach daily goal.
- Carbs: aim for at least 30 grams of fiber per day. This will make you feel full, aid in digestion and reduce cravings for refined carbs/sugars. Fiber is key to feed your microbiome (gut bacteria) which promotes good health.
- Fats: aim for 2-3 grams per day of omega-3 fatty acids (ideally in the form of EPA and DHA)
- By increasing your omega-3 fat intake, you'll improve your brain and heart health as well as optimize your metabolic health (prevent diabetes).
 - Supplement as needed if your diet is low in fatty fish.
- A reasonable starting point for your macros could be: 40% Carbs, 30% Protein, 30% fats

For example, a 2000 calorie diet could consist of: 800 cals Carbs, 600 cals Protein, 600 cals Fat

Build Muscle

- The more muscle mass you have, the longer you will live.
- The most efficient form of exercise to burn fat is weight training (not cardio).
- Muscle helps improve your metabolism and mobility as you age which lowers your risk of all chronic disease and incidence of injury from falls.
- Regardless of age, resistance training 3-4 times per week is ideal for optimal muscle health (along with adequate protein intake)
- Each major muscle group (chest, back, legs) should be targeted at least twice per week.
- The concept of progressive overload is key for muscle growth, which means adding weight or reps or sets gradually over time will increase muscle size.
- For muscle hypertrophy (growth) the repetition range is typically between 5-15 reps per set.
- You can use body weight exercises, bands, dumbbells, barbells or machines.
- Get a DEXA scan to evaluate your body composition (body fat %, muscle mass and bone density)

Daily Movement

- The more steps you take each day, the longer you will live- get at least 5000 steps/day.
- The more steps per day, the better- up until about 10,000. This reduces the incidence of all causes of death.
- Intensity matters, do most of your cardio in zone 2, which is about 70% of your maximal heart rate; 150 minutes per week (2.5 hours).
- Walking is a great way to get started, you don't necessarily need to use a treadmill or elliptical machine.
- You may also do shorter walks/sessions (10 min) spread out multiple times throughout the day.
- The steady state cardio sessions should be performed in addition to your daily steps.
- For endurance, consider high intensity interval training (HIIT) sessions 1-2X/ week for 10-20 minutes each.
- Steady state aerobic exercise has great benefits for the heart, lungs and brain- but is not very effective for fat loss.

Optimize Sleep

- The more sleep you get, the longer you will live.
- 7.5-8 hrs per night is ideal for good health (very few people can thrive on six hours or less).
- Being asleep by 10 pm or 11 pm is ideal as most deep sleep occurs between 10 pm and 2 am (this is when brain detox, muscle growth and fat loss occurs)
- Going to bed and waking up at the same time (even on weekends) is the most important way to ensure high quality, consistent sleep.
- Avoid eating, exercising and screen time too close to bedtime. This includes caffeine and alcohol which disrupt sleep quality. Establish a relaxing bedtime routine such as reading, stretching or meditating.
- Make your bedroom a sanctuary for good sleep (remove the TV ideally). A dark, quiet, cool environment will promote deep sleep.
- If you must use screens (phone/tablet/TV) try
 wearing yellow tinted glasses to block the harmful
 blue light which is known to interfere with sleep.
- Avoid prescription sleeping pills, instead opt for natural sleep remedies like magnesium, melatonin, herbal teas, myoinositol and glycine if needed.

Diagnostic Testing

- You need to be proactive about your health, testing early and often is key to longevity.
- Having bloodwork done once a year is not ideal for optimal health and disease prevention.
- The #1 cause of death in the US and in the world is heart disease, #2 is cancer.
- Advanced cardiovascular lab work includes ApoB, Cardio IQ lipid panel, Omega-3 Index.
- Advanced cardiovascular imaging includes Coronary Artery Calcium scan & CT Angiogram.
- Advanced cancer lab work such as Galleri blood test to screen for over 50 types of cancer.
- Advanced cancer imaging such as a full body MRI to detect cancers at an early stage.
- About 9 out of 10 Americans suffer from metabolic disease (pre-diabetes/insulin resistance) so check Hemoglobin A1C and fasting insulin level to assess blood glucose & metabolic health.

Importance of social connection, purpose & stress reduction

- People who have a purpose live longer.
- Optimistic people live 15% longer than pessimistic people (having a *positive* mindset matters).
- Loneliness increases your risk of premature death by 50%.
- Reducing your stress level can reduce your risk of chronic disease and early death.
- Chronic stress causes inflammation which leads to obesity, heart disease, type 2 diabetes & dementia.
- Regular meditation can reduce your risk of death by 30%.
- People living in the "Blue Zones" tend to live much longer due to their natural daily movement, whole food based diet & sense of purpose/community.
- Who you surround yourself with and what media you consume matters (what you put into your mind is as important as what you put into your body).

Supplements and Hydration

- Supplements may act as an insurance policy for your diet, but are not meant to replace whole foods.
- You should undergo nutritional blood tests to detect any deficiencies and replace accordingly.
- Supplements most people can benefit from include: magnesium, omega-3, vitamin D, multivitamin, creatine, green powder, collagen.
- More data is needed to determine if certain prescription drugs such as rapamycin and metformin are safely indicated for longevity.
- Adequate hydration is crucial for optimal health, aim for drinking about half your body weight in ounces per day. Ex. 160 lb person should drink 80 oz per day, which is 2.4 L of fluid.
- Ideal beverages include filtered water, hydrogen water, green tea and coffee (without sweetener)
- If drinking primarily plain water, consider adding *electrolytes* as this will improve hydration.
- Drinking at least 8 oz of water prior to each meal helps with weight loss and aids digestion.

Embrace Hormesis

- Hormesis concept: "what doesn't kill you makes you stronger"
- Brief, minor stressors are actually good for your body and create positive adaptations (heat, cold, exercise, fasting)
- Enduring mild adversity helps to slow aging by activating longevity genes.
- Hot saunas can increase lifespan by 15%.
- Regular sauna use ~20 minutes (4-5X/wk) reduces heart disease, stroke and dementia.
- Cold therapy (cryotherapy/cold plunge) lowers inflammation & improves immune system
 1-4 mins/several times per week
- Contrast therapy involves alternating between extreme heat and cold; even finishing your shower with 30-60 sec of cold water has benefits (improves circulation, enhances lymphatic detox)
- Fasting reduces inflammation, stimulates fat burning, activates longevity pathways & reduces risk of chronic disease. Aim for 12-16 hrs of fasting daily.

Sunlight/Circadian Rhythm

- Your body's internal clock is designed to have light during the day and darkness at night.
- Direct sunlight exposure upon awakening will help to increase cortisol and decrease melatonin, which prepares you for the day. Aim for 15 min of sunlight within 30 minutes of waking up.
- The more sunlight you get during the day, the easier it will be to fall asleep at night.
- It's natural to have more blue light (overhead light)
 during the day and red light (low/ground level) in the
 evening.
- Most people struggle with sleep because they are getting too much unnatural/indoor blue light at night.
- Time spent outdoor in nature helps enhance your immune system, especially right after you awaken.
- The practice of "grounding" or "earthing" which involves having your bare feet exposed to the ground (grass/soil/sand) helps decrease inflammation and benefits immune health. Do this for a few minutes each day for optimal well being.

- Hopefully you learn a few tips from this guide which you can incorporate into your daily life.
- The key to success is making small, incremental changes which become daily habits over timeconsistency is what matters.
- But you must take action in order to see results, just knowing what to do isn't enough.
- The quality of your life (healthspan) and the length of your life (lifespan) are directly under your controlgenetics plays only a very small part.
- What you do each day (diet, exercise, sleep, etc.) will determine how long you live and how well you live.
- To ensure success, start tracking things, since we know that what gets measured gets improved (weight, cholesterol, sleep, calories/protein, steps, etc.)
- You will begin to see and feel the difference in your body within weeks if you are consistent - don't expect results overnight, be patient.
- If you would like to learn more or need assistance with creating a customized longevity blueprint of your own, visit:

About the author:



William Bruno, MD is a board certified plastic surgeon practicing in Beverly Hills and West Hollywood, California since 2004. He is a member of the American Society of Plastic Surgeons and the American Society for Aesthetic Plastic Surgery. He is also a member of the American Academy for Anti- Aging Medicine.

Dr.Bruno made significant lifestyle changes to improve his health after discovering he had coronary artery disease on a calcium scan several years ago.

He continues to counsel and educate patients on the importance of lifestyle modifications as the foundation of good health, with less reliance on pharmaceutical interventions.

For more information visit: www.WellnessAndLongevity.Health