

Life is Your Best Medicine



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Contemplative Medicine

National Geographic's
Life Is Your Best Medicine
Healthy At Home
Fortify Your Life
Guide to Medicinal Herbs

www.DrLowDog.com

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*"When we are born, we are set upon a path
and that path is our medicine road."*

*All the choices we make along the way affect
our thoughts, our relationships, our health,
and the world around us."*

Grandma Jo



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Reflection

What if someone could predict with 90% accuracy how long you will live?

Would you want to know?

How would it affect the way you live?

What if you planned to live to 50, 75, or 100?

Would it change the way you...

- Work and play?
- Manage your money?
- Care for your health?
- Spend time with your family?

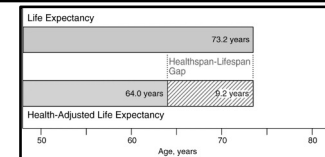


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Lifespan versus Health span



- Human **lifespan** steadily increasing, though slowing, leading to **rise in age-associated diseases**.
- **Healthspan** (time without significant age-related disease burden) is **not increasing at same rate; more life years suffering** from one/more diseases.
- Goal: delay onset of age-associated frailty and disease; **compression of morbidity**.
- **Cardiovascular diseases, cancer, diabetes, and chronic respiratory diseases**, account for **80% of chronic disease-related deaths**

World Health Organization (2019) *World health statistics 2019: monitoring health for the SDGs: sustainable development goals*. Geneva, Switzerland. GRAPH: Garmany A, et al. Longevity leap: mind the healthspan gap. *npj Regenerative Medicine* 2021; 6, 57

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Five Healthy Habits

Five habits may increase life expectancy by 14 years in women and 12 years in men:

- Good diet
- Regular exercise
- Healthy weight
- Not smoking
- Not drinking too much



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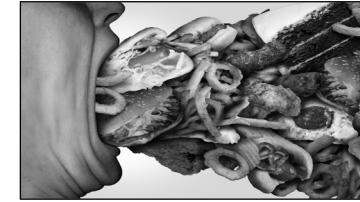
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Diet & Lifestyle

Diseases linked to **unhealthy diets and lifestyle choices**, such as diabetes and cancer, are the leading causes of death in the United States, with high BMI and elevated blood glucose on the rise in all 50 states (tobacco use on the decline).

- **Dietary factors**
- Tobacco consumption
- High blood pressure
- High BMI
- High plasma glucose
- Alcohol and drug use



The US Burden of Disease Collaborators. The State of US Health, 1990-2016 Burden of Diseases, Injuries, and Risk Factors Among US States. *JAMA*. 2018;319(14):1444-1472.

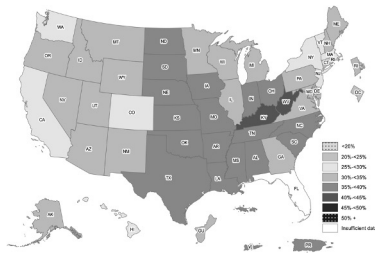
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Obesity—A Growing Problem

- **Globally:** 2.1 billion adults are overweight or obese¹
 - **US:** highest # obese people (122 million)
 - **China:** second highest # obese people (88 million)
 - <1% of children/adolescents (5–19 years) obese in 1975, **124 million** in 2016
- **Unhealthy diets** account for up to **11 million avoidable premature deaths** per year.²



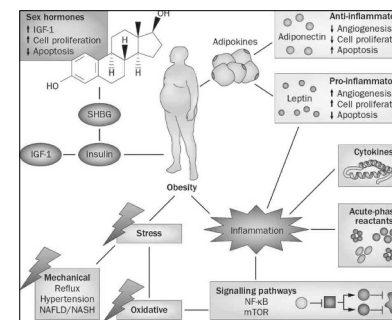
1. World Health Organization Obesity and Overweight. <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>. Accessed December 12, 2022.
2. Willet W, et al. Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems. *Lancet* 2019 February 2; 393, (10170): 447–492.
Map Source: Behavioral Risk Factor Surveillance System <https://www.cdc.gov/obesity/data/prevvalence-maps.html#overview>. Accessed December 12, 2022.

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Inflammaging



Age-related increase in levels of pro-inflammatory markers in blood and tissues is a strong risk factor for multiple diseases such as cardiovascular and chronic kidney disease, type 2 diabetes, cancer, depression, dementia, and sarcopenia.

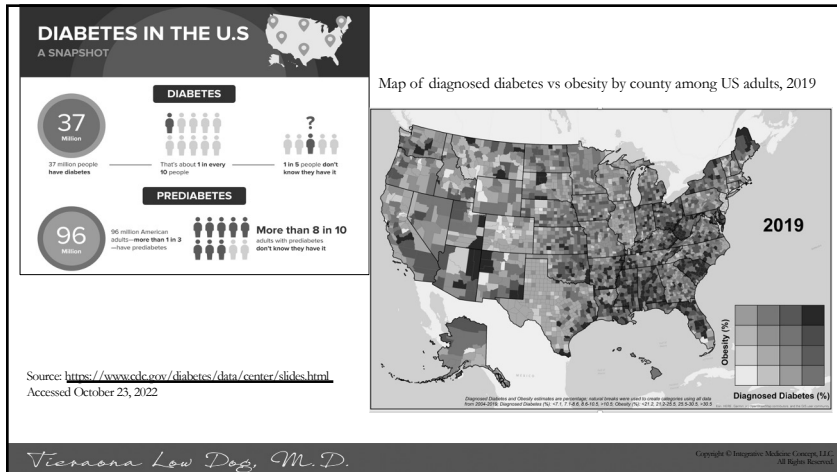
Ferrucci L, et al. *Nat Rev Cardiol* 2018 Sep; 15(9): 505–522.

Image: Frasca D, et al. Aging, Obesity and Inflammatory Age-Related Diseases. *Front Immunol* 2017 Dec 7;8:1745.

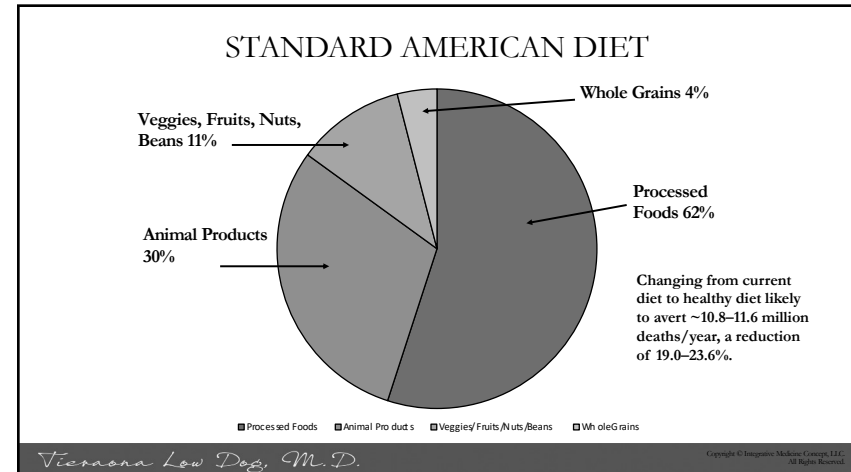
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The Rise of Ultra-Processed Foods

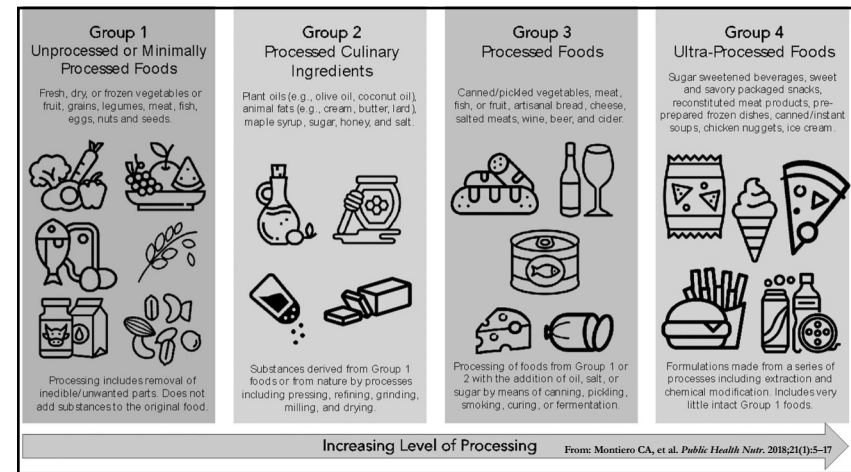
- UPF are "snacks, drinks, ready meals, and many other products created mostly or entirely from substances extracted from foods or derived from food constituents with little if any intact food."¹
- Quick, tasty, and often cheap. Increasingly found in "health" foods.
- UPF from *animals or plants* has been shown to harm the microbiome and drive inflammation.²
- In US, 57% of total calories for adults³ and 67% for children⁴ come from UPF.
- Observational studies show an association between UPF and cancer, heart disease, obesity, and other chronic health problems.

1. Willett W, et al. *Lancet* 2019 February 2; 393 (10170): 447-492.
3. Juul V, et al. *Am J Clin Nutr* 2022; 115(1):211-221.
2. Sroufe B, et al. *Lancet Gastroenterol Hepatol* 2022 Dec; 7(12):1126-1140.
4. Wang L, et al. *J Am J Clin Nutr* 2021; 32(6):519-530.

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AGING, ENVIRONMENTAL HEALTH, FOOD POLICY AND OBESITY Sep. 22 2022

How Does What We Eat Affect Our Healthspan and Longevity? It's a Complex Dynamic System

STUDY FINDINGS EMPHASIZE IMPORTANCE OF TAKING A HOLISTIC APPROACH TO THINKING ABOUT NUTRIENTS

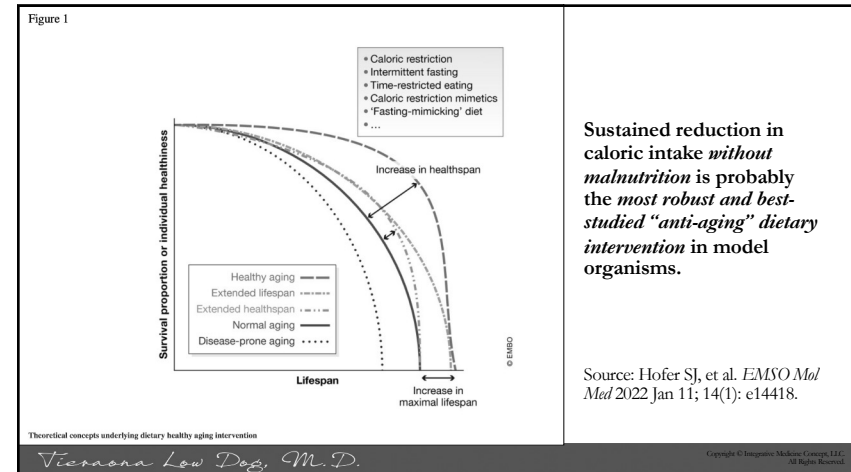
RELATED STORIES

Aging Experts Agree: Seniors Must Get Screened for Frailty

Efforts to Delay Aging are Solid Investment

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Diet and Health

The relationship between diet and health is undisputed: **our bodies reflect what we eat and—just as importantly—what we do not or cannot eat.**

Dietary risks are complex: those associated with ‘**overnutrition**’ and atherogenic diets and those related to **underconsumption of key micronutrients and macronutrients**. **Nutrition impacts almost all health conditions.**

Much of our food policy and public attention is oriented around the effects of **excess sugar, salt, and saturated fats.**

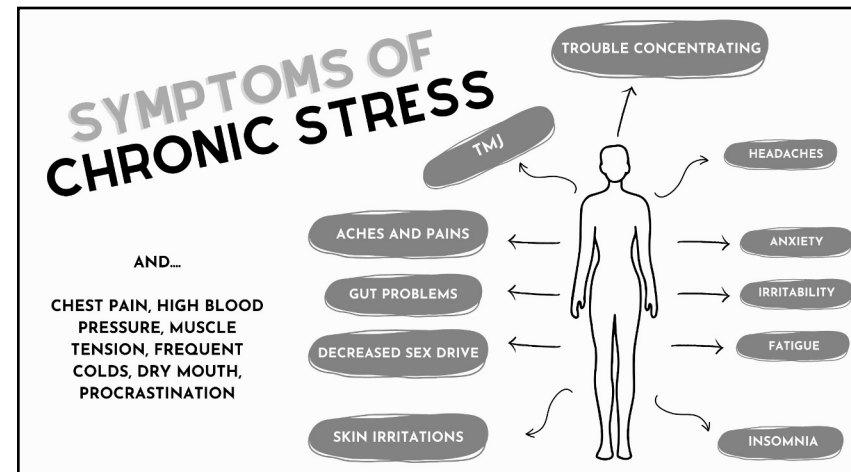
However, the **leading dietary risk factors for mortality are DIETS LOW in whole grains, fruit, nuts, seeds, vegetables, and omega-3 fatty acids.**

Afshin A, et al. Health effects of dietary risks in 195 countries, 1990-2017: a systematic analysis for the global burden of disease study 2017. *Lancet* 2019;393(10184):1958–72. [https://doi.org/10.1016/S0140-6736\(19\)30447-2](https://doi.org/10.1016/S0140-6736(19)30447-2) <http://www.ncbi.nlm.nih.gov/pubmed/30954305>

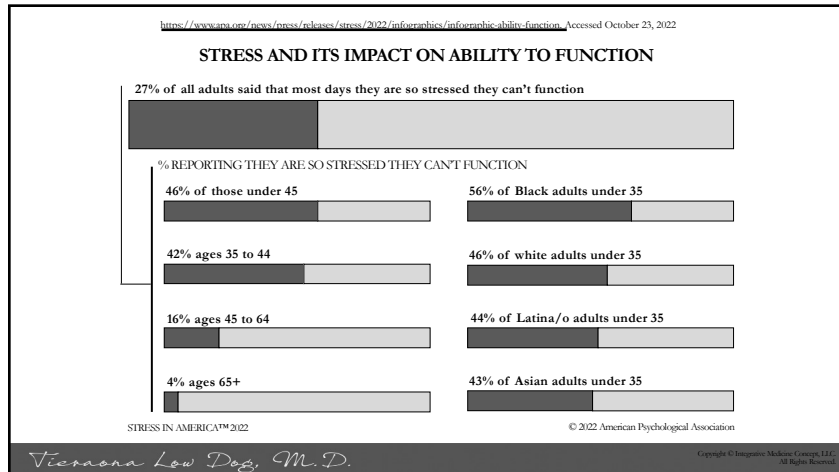
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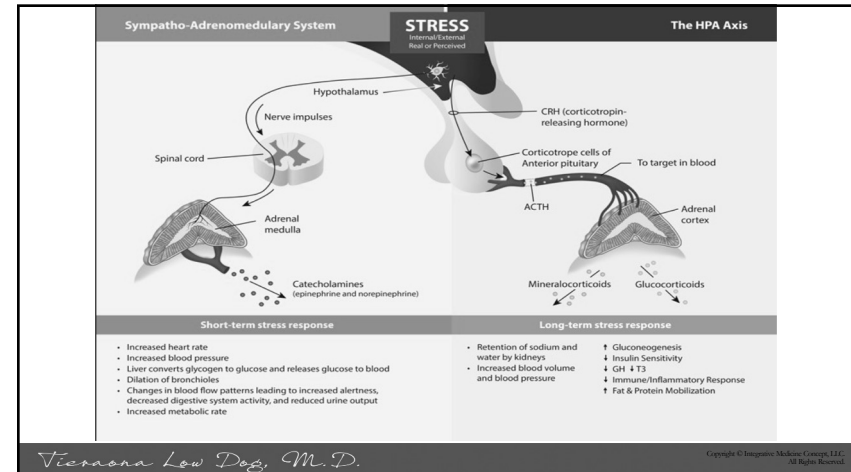
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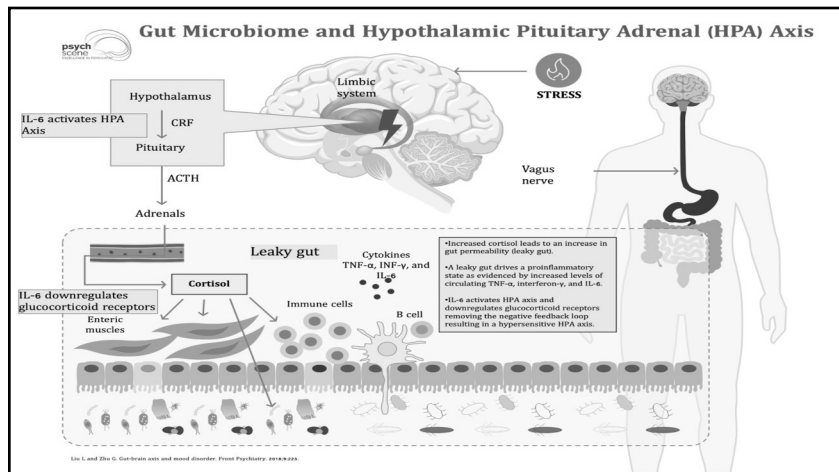
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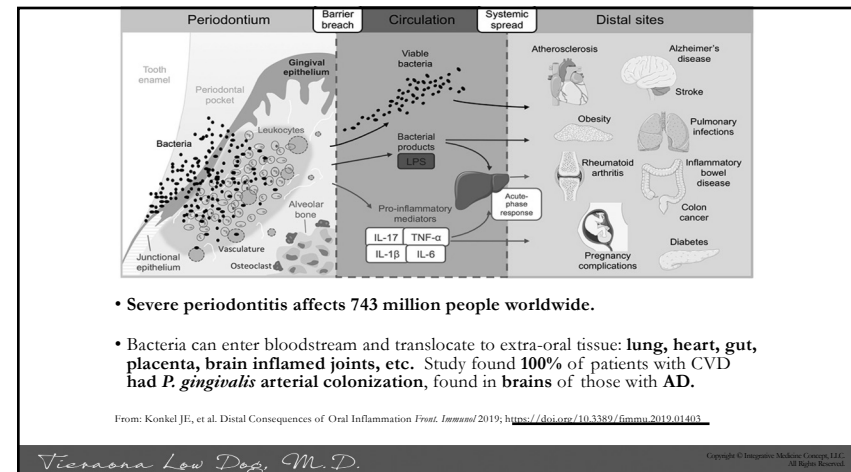
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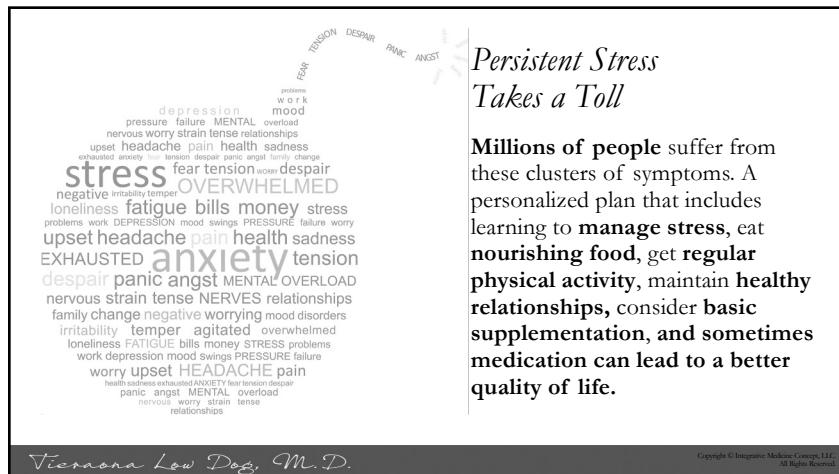
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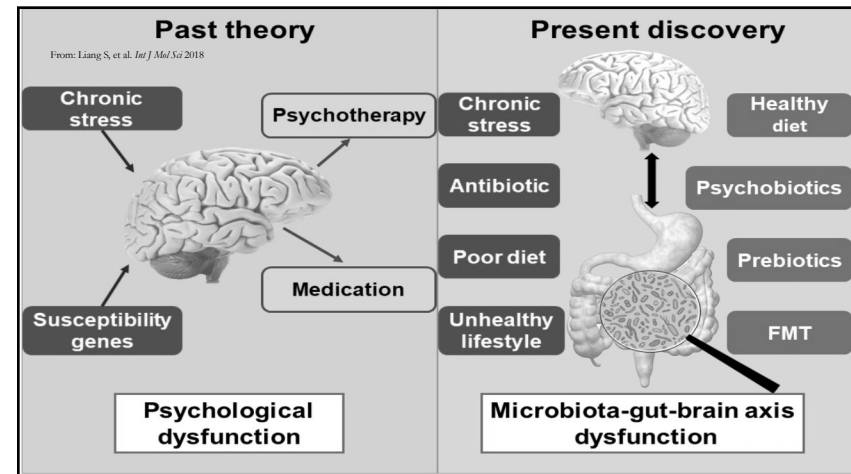
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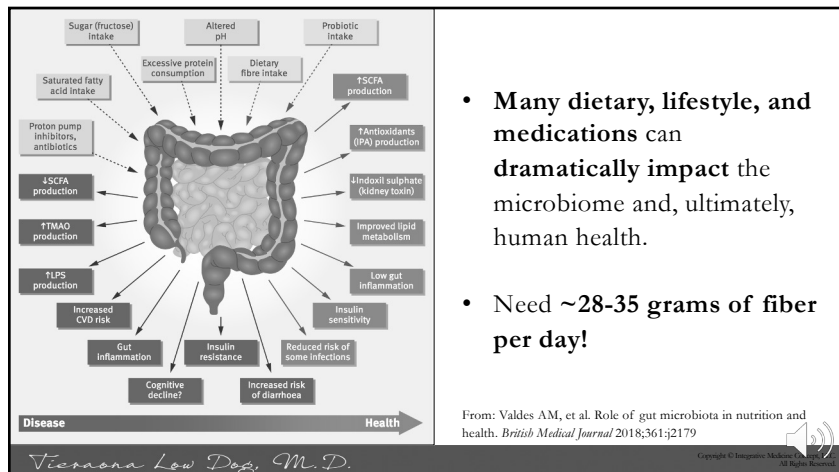
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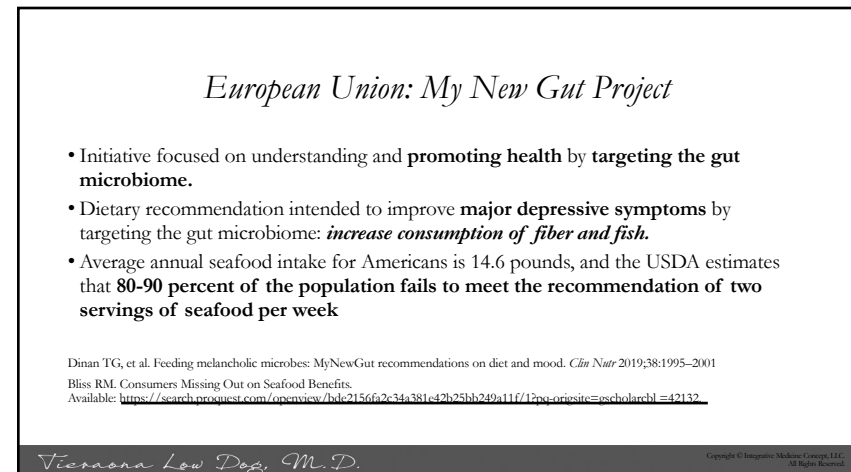
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Eat MORE fiber, Eat LESS sugar



Bibbo S, et al. *Eur Rev Med Pharmacol Sci* 2016; Nov;20(22):4742-4749.
 Weigh CAM, et al. *Expert Rev Gastroenterol Hepatol* 2017 Nov;11(11):1031-1045.
 Young RP, et al. *Am J Respir Cell Mol Biol* 2016;54:161-169.
 Kawanishi, et al. *Adv Nutr* 2012; 3(1): 47-53.

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- Low fiber, high sugar diets *reduce Bifidobacterium* and *degrade barrier function*, key part of *innate immunity*.
- Loss of barrier function increases **inflammation, neuroinflammation, depression, and anxiety.**
- Adequate Intake Fiber:
 • 38 g/d men, 26 g/d women

Fruits	Serving size	Total fiber (grams)*
Raspberries	1 cup	8.0
Pear	1 medium	5.5
Apple, with skin	1 medium	4.5
Banana	1 medium	3.0
Orange	1 medium	3.0
Strawberries	1 cup	3.0

Vegetables	Serving size	Total fiber (grams)*
Green peas, boiled	1 cup	9.0
Broccoli, boiled	1 cup chopped	5.0
Turnip greens, boiled	1 cup	5.0
Brussels sprouts, boiled	1 cup	4.0
Potato, with skin, baked	1 medium	4.0
Sweet corn, boiled	1 cup	3.5
Cauliflower, raw	1 cup chopped	2.0
Carrot, raw	1 medium	1.5

<https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/high-fiber-foods/art-20050948>

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Grains	Serving size	Total fiber (grams)*
Spaghetti, whole-wheat, cooked	1 cup	6.0
Barley, pearled, cooked	1 cup	6.0
Bran flakes	3/4 cup	5.5
Quinoa, cooked	1 cup	5.0
Oat bran muffin	1 medium	5.0
Oatmeal, instant, cooked	1 cup	5.0
Popcorn, air-popped	3 cups	3.5
Brown rice, cooked	1 cup	3.5
Bread, whole-wheat	1 slice	2.0

<https://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/high-fiber-foods/art-20050948>

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Legumes, nuts and seeds	Serving size	Total fiber (grams)*
Split peas, boiled	1 cup	16.0
Lentils, boiled	1 cup	15.5
Black beans, boiled	1 cup	15.0
Baked beans, canned	1 cup	10.0
Chia seeds	1 ounce	10.0
Almonds	1 ounce (23 nuts)	3.5
Pistachios	1 ounce (49 nuts)	3.0
Sunflower kernels	1 ounce	3.0

Probiotics Quiet the Brain

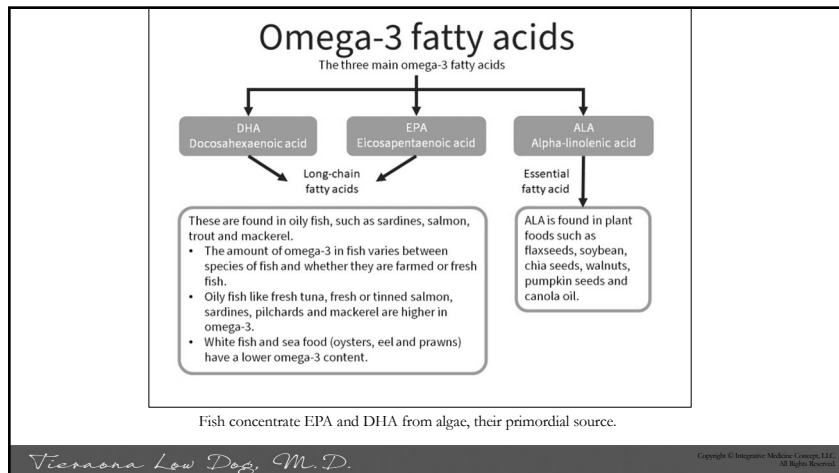
- UCLA study: **women** with no GI or psychiatric problems randomly assigned to one of **three groups for four weeks:**
 - **Fermented** milk (yogurt) with **five strains of probiotics** twice daily
 - **Non-fermented** milk product (control group) twice daily
 - No intervention group
- Researchers did **functional brain MRI before and after** intervention to look for brain changes in response to an emotional attention task.
- **Group consuming fermented milk had calmer brains during emotional task. Other groups** showed opposite trend, **more brain hyperactivity.**
- Look for probiotic blends of *Lactobacillus* and *Bifidobacterium*.

Tillich, K, et al. Consumption of fermented milk product with probiotic modulates brain activity. *Gastroenterology* 2013; 144(7), 1394-1401.e14014.

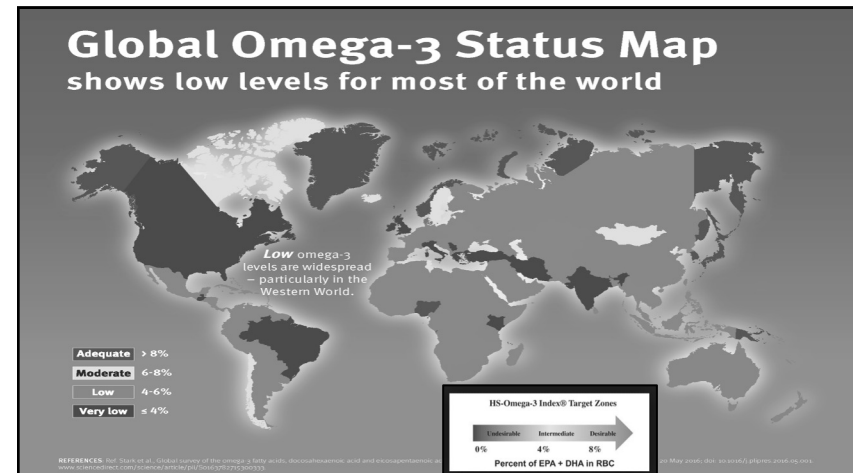
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Greater Longevity with a Higher Omega-3 Index

Postmenopausal women with an Omega-3 Index over 8% were 30% less likely to die than those with an Index under 4% over 15 years.

Recovering from a Heart Attack with Omega-3s: The OMEGA-REMODEL Study

Patients who had recently had a heart attack and were then treated with omega-3 fatty acids for 6 months had healthier hearts if their Omega-3 Index reached 11% compared to those with lower levels.

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The Omega-3 Index and Risk for Fatal CHD

Data from 10 prospective cohort studies including >24,000 subjects showed that an Omega-3 Index of 8% or greater was associated with the lowest risk for fatal CHD.

Total Mortality and the Omega-3 Index: Heart and Soul

People with the highest Omega-3 Index levels lived longer than those with the lowest levels.

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Omega 3 Fatty Acids – Healthy Muscles

- Chronic low-grade inflammation also contributes to the **loss of muscle mass, strength, and functionality**, referred to as sarcopenia, as it affects muscle protein breakdown and synthesis through several signaling pathways.
- Omega-3 fatty acids stimulate muscle protein synthesis in older adults and may be useful for the **prevention and treatment of sarcopenia**.

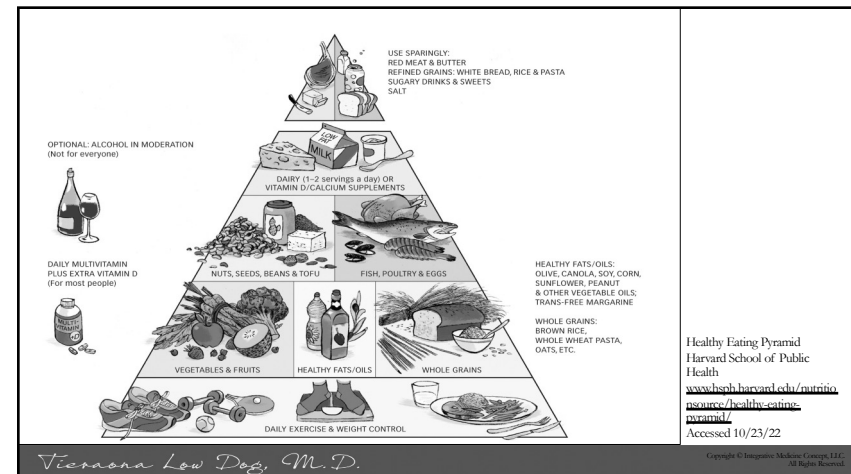


Dalle S, et al. *Front Physiol* 2017; Dec 12;8:1045
Ticinesi A, et al. *Nutrients* 2016; Mar 29;8(4):186

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Beverages

- Your primary beverage of HYDRATION should be **water**.
 - Add fruit, cucumbers, mint leaves
 - Make your own “bubbly”
- **Coffee and tea** are fine (3–4 cups/d). Watch caffeine if *sensitive* to its effects.
- **Herbal tisanes** lovely addition to an afternoon or evening beverage.
 - *Traditional Medicinals* and *Yogi* have many excellent offerings
- **Alcohol**: limit 1 serving/d if you drink



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Real State of Our Nutrition

- **90 million** Americans are **vitamin D** deficient (using the Endocrine Society guidelines $< 20\text{ng/mL}$)
- **30 million** are **deficient in vitamin B6**
- **18 million** people have **B12 deficiency**
- **16 million** have **scurvy** (by serum levels)
- 13% of Latinas and 16% of African American women (ages 12–49) are **iron deficient**
- **Women 25–39** overall have borderline **iodine insufficiency**



CDC: 2nd National Report on the Biochemical Indicators of Diet and Nutrition in the U.S. population

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Table 2. Prevalence of Micronutrient Inadequacies Among Older Adults in the US when Accounting for Intake from Food Only (n=4,905), NHANES 2009–2012 (42)

Micronutrient	Ages 51–70 Years, % < EAR	Ages ≥71 Years, % < EAR
Folate	10.6	17.0
Niacin	1.3	4.0
Riboflavin	2.6	3.4
Thiamin	6.0	8.9
Vitamin A	39.2	37.2
Vitamin B ₆	15.6	22.4
Vitamin B ₁₂	5.2	4.9
Vitamin C	42.1	44.2
Vitamin D	94.6	95.5
Vitamin E	85.0	91.7
Vitamin K*	48.7	62.9
Calcium	51.4	72.9
Copper	4.1	9.6
Iron	<1	<1
Magnesium	51.3	68.6
Phosphorus	<1	2.1
Selenium	<1	2.4
Zinc	17.9	26.1

*% ≤AI

Data: Blumberg JB, et al. Contribution of dietary supplements to nutritional adequacy in various adult age groups. *Nutrients*. 2017;9(12)

Table:
lpi.oregonstate.edu/mic/micronutrient-inadequacies/subpopulations-at-risk#reference42
Accessed October 23, 2022

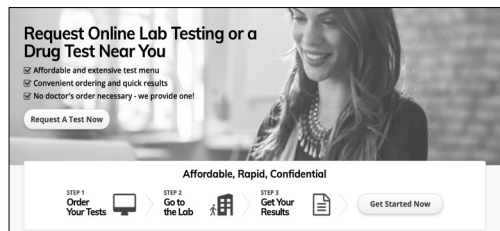
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Where Can You Get Tested?

- Most lab tests are readily available through LabCorp or Quest.
- If you order your own tests, www.requestatest.com, Vibrant America, EveryWell, and SpectraCell are commonly used.



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Speaking of Testing...

- Calculate **your risk of heart disease** using online ACC/AHA calculator.
 - <https://tools.acc.org/ASCVD-Risk-Estimator-Plus/#/calculate/estimate/>
- **Traditional lipid panel:** total cholesterol, LDL-C, HDL-C, triglycerides
- **Particle size:** small LDL particles indicate insulin resistance, metabolic syndrome
- **Lipoprotein (a):** genetic, highly atherogenic increases CV risk
- **Apolipoprotein B/A1:** better predictor of risk than LDL/HDL ratio.
- **Lp-PLA2:** if elevated, indicates arterial inflammation, increased risk MI/stroke
- **Insulin resistance:** predicts risk of type 2 DM, abdominal fat, etc.
- **Hs-CRP:** inflammatory marker that can be associated with increased risk of CVD
- **Aspirin works:** assesses platelet activity, identifies those who'd benefit from aspirin

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Know Your Coronary Calcium Score

For anyone in intermediate-risk group (ages 40–75) whose 10-year risk of heart disease or stroke ranges from 7.5-20% OR

- Heart disease runs in the family
- Is overweight or obese
- Physically inactive
- Having a history of diabetes, high cholesterol, or high blood pressure

What your calcium score means	
SCORE	PLAQUE BURDEN
	No evidence of calcified coronary plaque
1 to 10	Minimal
11 to 100	Mild
101 to 300	Moderate
301 and higher	Severe

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Think About the Thyroid

- Symptoms include **fatigue, weight gain, cold intolerance, dry skin, brittle nails, hair loss, constipation, depression, muscle aches, joint pain, poor concentration, trouble getting pregnant, irregular menses, enlarged thyroid gland**

- In addition, testing should be considered:

- Female
- Over age 60
- Have a family history of thyroid problems
- Have had radiation treatment on the head, neck, or chest
- Have had thyroid surgery
- Pregnant or recently pregnant?

Testing Panel for Thyroid

- Thyroid-stimulating hormone (TSH)
- Free thyroxine (free T4)
- Total thyroxine (total T4)
- Free triiodothyronine (free T3)
- Total triiodothyronine (total T3)
- Anti-thyroperoxidase (anti-TPO) Ab

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To Sleep is to Heal

- Sleep—both quantity and quality—crucial for **brain health**. Correlation between **poor sleep and stroke, cognitive aging, Alzheimer's dementia, Parkinson's disease, and others**.
- **Slow-wave sleep, or deep sleep, decreases with age**. Less deep sleep associated with increase in **beta-amyloid, protein found to accumulate in people with Alzheimer's**.
- **Lack of sleep also linked to type-2 diabetes, heart disease, obesity, and depression**.



Koffel E, et al. *J Gen Intern Med* 2018 Jun; 33(6): 955–962.

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Sleep Hygiene



1. Make your bedroom **dark, quiet, and cool**. Invest in **good mattress and pillows**.
2. Turn off **TV, computers, tablets, and smartphones** 1 hour before bedtime.
3. **Avoid caffeine** after 12:00 PM (e.g., coffee, tea, soda, chocolate).
4. **Limit alcohol** intake and **don't drink** within 2–3 hours of bedtime.
5. **Try not to exercise** within 2 hours of bedtime.
6. Consider a **hot bath** 1–2 hours before bedtime.
7. **Try not to eat right before bed**. A glass of warm milk, bowl of cereal, okay.
8. **Keep same sleep schedule** 7 days a week.
9. Get **sleep evaluation** if sleep disruption and/or daytime fatigue continues.

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Cognitive Behavioral Therapy for Insomnia

- American College of Physicians endorsed what multiple meta-analyses have found: **CBT for insomnia**, or CBT-I, is best treatment for chronic insomnia and should be **first line of treatment**.
- Sleepio, Somfy, Calm, and Sleep School* provide in-person/online.
- There are purely digital programs if therapist not available.
- To find trained sleep specialists:
<https://behavioralsleep.org/index.php/directory/north-america/united-states>



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Essential Oils for Relaxation & Sleep

- Dilute **1–2 drops essential oil in 1 teaspoon carrier oil** (almond, olive, coconut) before using on your skin.
- Put **12 drops essential oil in ½ ounce water and ½ ounce vodka and put in mister**. Mist onto pillowcase/bedding before bed. Mist into room to reduce tension.
- Diffusers** are great way to deliver aromatherapy into your room (love Urpower).
- My favorites for relaxation and sleep are:
 - Lavender
 - Rose
 - Jasmine
 - Ylang-ylang
 - Neroli
 - Chamomile



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Oral Lavender Essential Oil (*Lavendula angustifolia*)

Meta-analysis randomized, double-blind, placebo-controlled trials show **Silexan, essential oil from lavender** licensed in 14 countries worldwide, has **pronounced anxiolytic effect and beneficial effects on sleep**. Adverse events similar to placebo.

Moller HJ, et al. Efficacy of Silexan in subthreshold anxiety: meta-analysis of randomised, placebo-controlled trials. *Eur Arch Psychiatry Clin Neurosci* (2017). <https://doi.org/10.1007/s00406-017-0852-4>



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Exercise & Health

- 80 million** Americans > 6 years are **entirely inactive**.
- Relationship between physical activity and **cardiovascular, metabolic, neurological, immunological and bone health** well-established.
- Reduces the harmful effects of stressors** when performed at moderate intensities.
- Meta-analysis of **398 studies** consistently shows exercise benefits **mood, depression and anxiety**.

Deslandes, et al. *Neuropsychobiology* 2009; 59(4):191-8
Rebar AL, et al. *Health Psychol Rev* 2015; Mar 5:1-78



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Mindfulness

- **Mindfulness** (one) definition: awareness that arises while paying attention to the **present moment** nonjudgmentally.
- Growing evidence suggests mindfulness practice can help us **reduce harmful health behaviors, catalyze healthy behavior change**, and improve physical and mental health **outcomes**.¹



1. Schuman-Olivier Z, et al. *Harvard Review of Psychiatry* 2020; 28(6): 371-94

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Resources for Stress Reduction

- **Calm** - Great app for guided meditation, bedtime stories, breathing exercises. (free to \$60 annual subscription)
- **Insight Timer** - ~4,000 guided meditations >1,000 teachers (self-compassion, nature, stress, podcasts). Music tracks (free to \$5/mo.)
- **Headspace** - Meditation, videos, meditations music. (free basic course, \$12.99 mo., \$95/year)
- **10% Happier** - Performance enhancement. Busy people, stressed lives. (free one-week intro, then \$100 per year)
- **Buddhify** - For more advanced meditator. Can sort by location, activity and/or emotion. (small monthly fee, premium is \$30/yr.)

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Loneliness, Social Isolation, & Your Health

- Poor social relationships associated with **29% increase in risk of heart disease and 32% increased risk of stroke**.
- **148 studies** on the effects of social isolation on health found it is:
 - = to smoking **15 cigarettes a day**
 - As dangerous as **being an alcoholic**
 - As harmful as **never exercising**
 - Twice as dangerous as **being obese**.



- Valtorta NK, et al. Loneliness and social isolation as risk factors for coronary heart disease and stroke: systematic review and meta-analysis of longitudinal observational studies. *Heart*. 2016 Jul 1;102(13):1009-16.
- Cacioppo JT, et al. *Ann NY Acad Sci* 2011; 1231:17-22

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Letting Go...

"Healing may not so much be about getting better, but about letting go, of all the expectations, all of the beliefs, and becoming who you are."

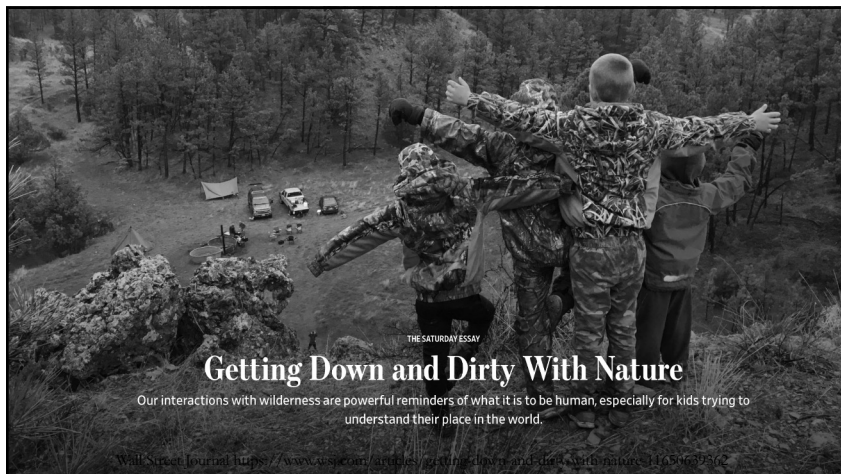
— Rachel Naomi Remen, M.D.



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The World Today

- We strongly emphasize **biological explanation** for depression and anxiety, as evidenced by **extensive use of antidepressants and anxiolytics**.
- Little focus remains on **physiological, nutritional, societal, communal, familial, and spiritual** underpinnings.
- “I take my Effexor and go to a **job I hate** and then home to a house full of **kids** that are **out of control** and a husband that **barely talks to me**. Is my depression better? Yeah, I guess.”
- **Complex world**. We often have unrealistic expectations. **Isolation** is common, **financial** problems, **lack of purpose, meaning**, a sense of **despair**, **hopelessness**—the world has less color and texture.

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Heart Ache

Meta-analysis/systematic **review Journal of the American Heart Association: Psychological factors** (e.g., depression, anxiety, stress, loneliness, hostility, post-traumatic stress disorder) associated with **significantly increased risk of developing coronary artery disease in both women (22%) and men (25%)**.



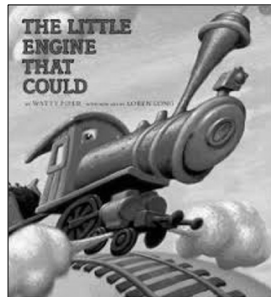
Smaardijk VR, et al. *J Am Heart Assoc* 2019; 8(9):e010859

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What We Think Matters

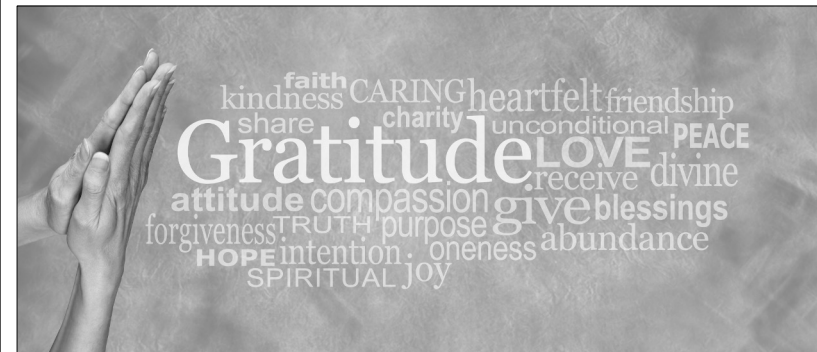


- Is this a challenge or a threat?
- Do I have the resources to handle it?
- Are my thoughts helpful/ dysfunctional?
- What is my self-talk? Where does it come from?
- Is this what *I was taught* or *what I believe*?

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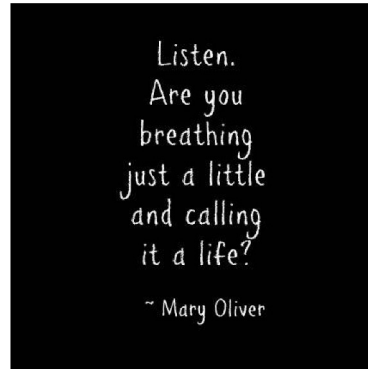
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Meaning & Purpose

- What truly gives a person a sense of *meaning and purpose* in life?
- How does one feel the oneness, find the *holy and sacred* in the mundane?
- “If I only had *one year left to live*, I’d want to _____.”



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Spirituality

- Spirituality may be defined as an **individual's sense of peace, purpose, and connection to others, and beliefs about the meaning of life.**
- Spirituality is one path for cultivating **hope and meaning**, coping with life's challenges, **and in the process of dying.**¹
- Cancer patients with high levels of spiritual well-being reported **better QOL, less depression, less anxiety about death, and lower level of distress**—though they report their spiritual needs are **not recognized, addressed, or supported.**²

1. Lee Y-H. Asia Pac J Oncol Nurs 2019 Apr-Jun; 6(2): 101–103.

2. National Institutes of Health. *Spirituality in Cancer Care (PDQ®): Health Professional Version*. 2017. [Accessed 9/20/22]. Available from: <https://www.cancer.gov/about-cancer/coping/day-to-day/faith-and-spirituality/spirituality-hp-pdq>.

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*It doesn't have to be the blue iris,
it could be weeds in a vacant lot, or a
few small stones;
Just pay attention,
then patch a few words together
and don't try to make them elaborate,
this isn't a contest but the doorway
into thanks,
and a silence in which another voice
may speak.*

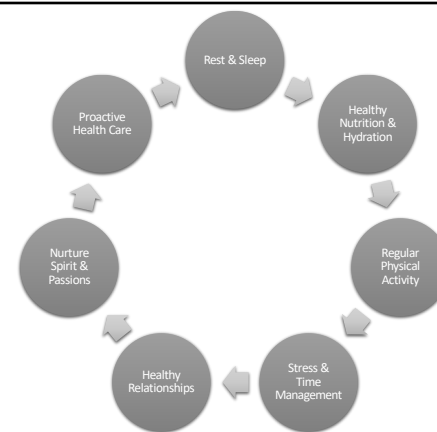


Mary Oliver, *Praying*

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When you look at these different “buckets”...

- Where do you feel you are excelling?
- Where do you feel you are doing okay?
- Where would you like to invest more time or energy?

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1. **Move more.** Whether it's the 7-minute workout, cycling, yoga, or taking long walks—one of surest ways to maintain heart, brain, bone, and muscle health is daily exercise. It's not optional. *Just do it.*
2. **Eat food.** Minimally processed, **low glycemic load**, diverse, and largely **plant**-based diet. Organic, local, and/or humanely raised when possible. Avoid endocrine disruptors. Stay hydrated. Water should be primary beverage for hydration.
3. **Meditate.** Meditation widens the gap between trigger and response, allowing you to feel a greater calm and awareness. It's a **game-changer** for many.
4. **Stay connected.** Social isolation and loneliness is as dangerous as being an alcoholic or being obese. **Invest in your friends and family.**
5. **Consider a multi** to avoid **gaps** in key micronutrients. **Age/gender** appropriate.
6. **Be tech smart.** Technology makes life easier and more complex. Use **blue light-blocking glasses** at night or set blue light on phone, make one day each week **tech-free**, and **limit email in the evening**.
7. **Nurture spirit.** The search for meaning and purpose is a fundamental part of being human. A **richly nourished inner life** is a source of strength during hard times. **Look inward. Honor mystery.**

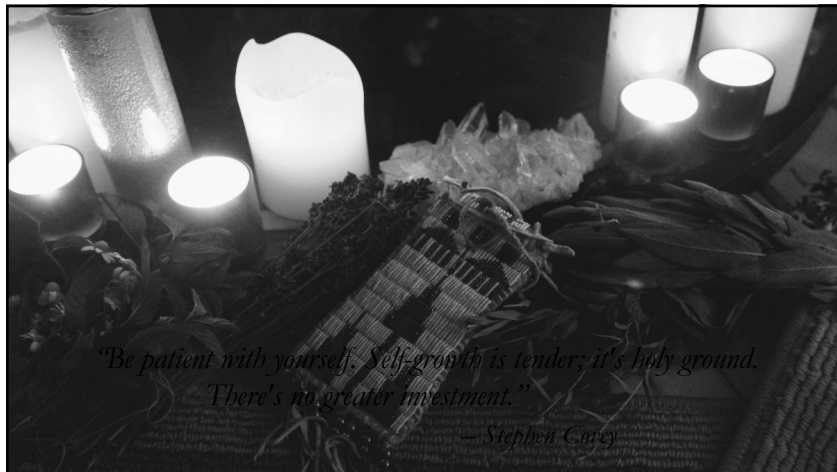
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