

## *Life is Your Best Medicine*



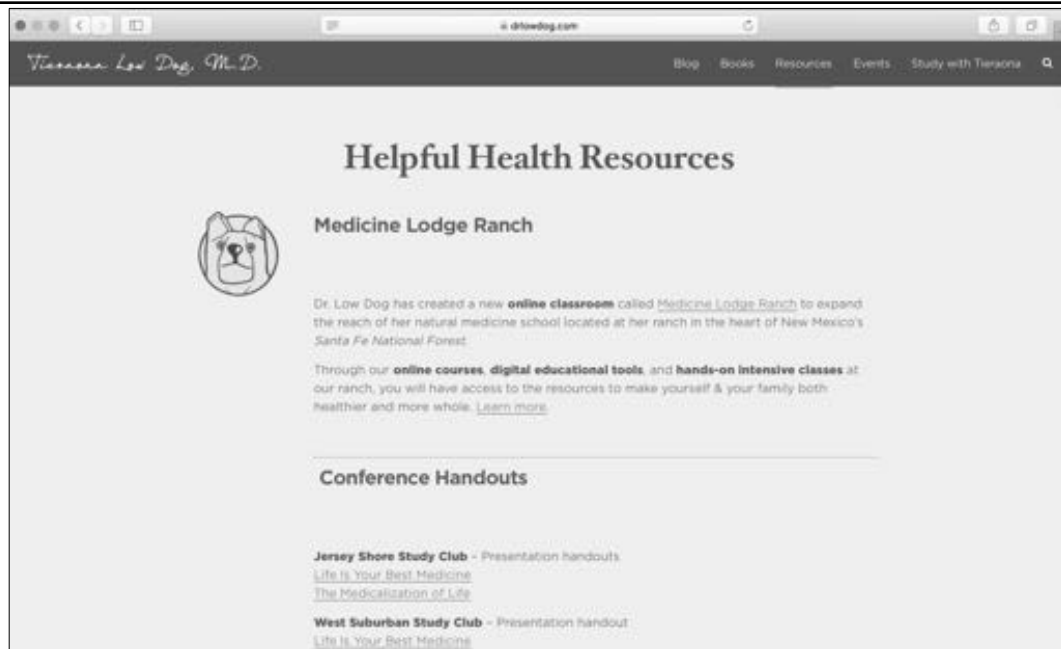
**Tieraona Low Dog, M.D.**

Chair: US Pharmacopeia Dietary Supplements  
Admissions Joint Standard Setting Sub-  
Committee

Author of National Geographic's "*Fortify Your Life*" "*Healthy At Home*" and "*Life Is Your Best Medicine*"

*Tieraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



*Tieraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

[illegible]

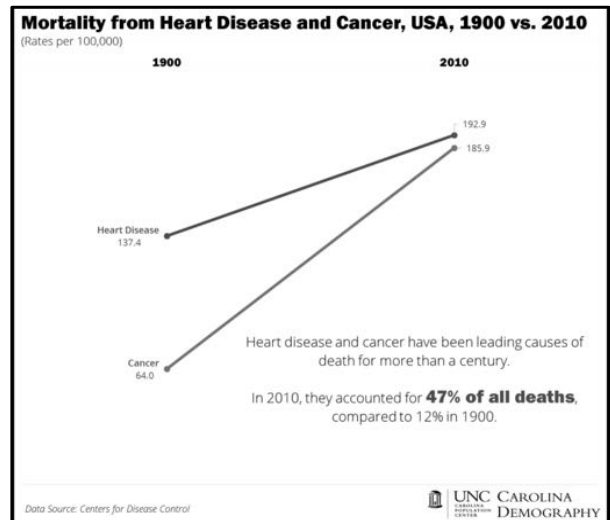
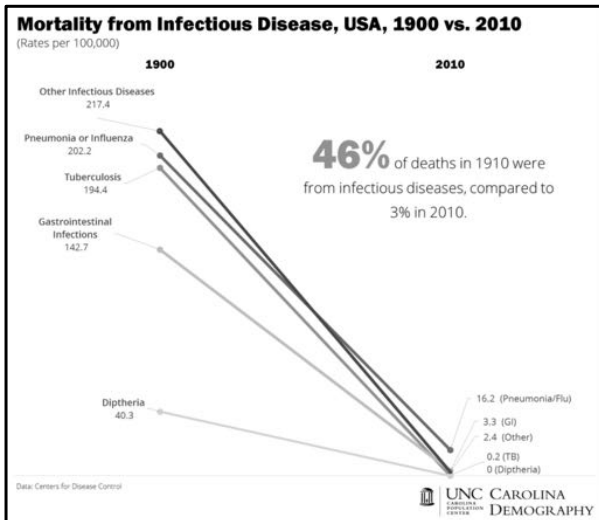
Disease	Baseline 20 <sup>th</sup> Century Annual Morbidity	Year Vaccine Developed	1998 Provisional Morbidity	% Decrease
Smallpox	48,164	1798	0	100%
Diphtheria	175,885	1923	1	100%
Pertussis	147,271	1926	6279	95.7%
Tetanus	1,314	1927	34	97.4%
Poliomyelitis	16,316	1955	0	100%
Measles	503,282	1963	89	100%
Mumps	152,209	1967	606	99.6%
Rubella	47,745	1969	345	99.4%
Haemophilus influenza B	20,000	1985	54	99.7%

<https://www.cdc.gov/mmwr/preview/mmwrhtml/00056803.htm#00003753.htm>

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## The Times They Are A-Changing



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## More Money, Shorter Lives, Poorer Health

Each year, nearly 900,000 Americans die prematurely from the five leading causes of death.

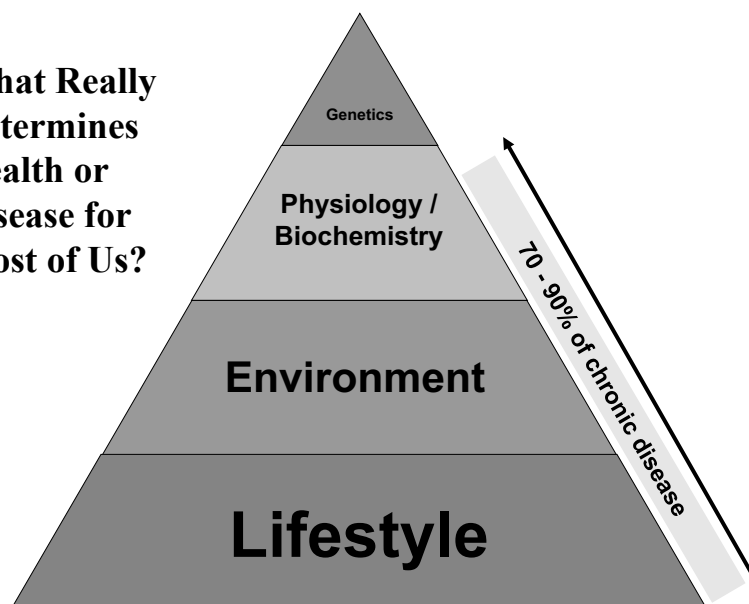
*“Many of these risks are avoidable by making changes in personal behaviors.”*

May 1, 2014 Centers for Disease Control

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

**What Really  
Determines  
Health or  
Disease for  
Most of Us?**



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Modern Biomedicine

- Acute care is what drove medicine in the 20<sup>th</sup> century.
- Infectious disease and injuries dominated the landscape.
- Inevitably, this reinforced the view that being healthy meant not being sick.
- If you don't feel good, we look for a physical cause for your symptoms.
- We assume most everyone will present the same way and can be treated the same way. Works well for appendicitis, collapsed lung, acute myocardial infarction but is woefully inadequate for the prevention and management of chronic disease.
- And it doesn't even begin to address the concept of *health promotion*, a process of enabling people to increase control over, and to improve, their own state of health.

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## If the American public embraced a healthier lifestyle:

- *healthy nutrition*
- *balance of exercise and rest*
- *limited or no exposure to toxic chemicals*
- *no smoking, no or moderate alcohol consumption*
- *stress management*
- *social integration*

93% of diabetes, 81% of heart attacks, 50% of strokes, and 36% of all cancers could be prevented.

Ford, et al *Arch Intern Med.* 2009; 169(15):1355-62.

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## INVEST WISELY



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Food is Foundational: Let's Start Here



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Nutritional Guidance



- Despite overwhelming evidence that relatively small dietary changes can significantly improve health, clinicians seldom discuss nutrition with their patients
- Poor nutritional intake and nutrition-related health conditions, such as cardiovascular disease (CVD), diabetes, obesity, hypertension, and many cancers, are highly prevalent in the United States, yet only 12% of office visits include counseling about diet.

Kahan S, et al. Nutrition Counseling in Clinical Practice: How Clinicians Can Do Better. *JAMA*. 2017;318(12):1101-1102.

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

*“A medical doctor uninterested in nutrition, in agriculture, in the wholesomeness of mind and spirit is as absurd as a farmer who is uninterested in health.”*

*Wendell Berry, The Unsettling of America*

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

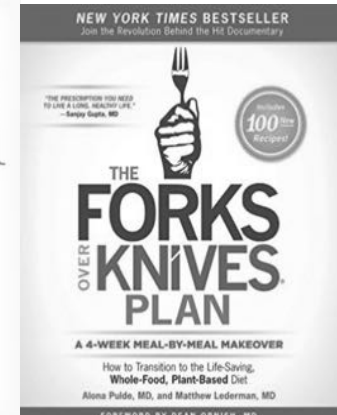
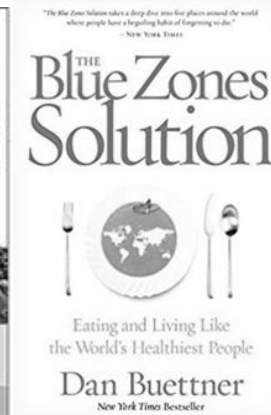
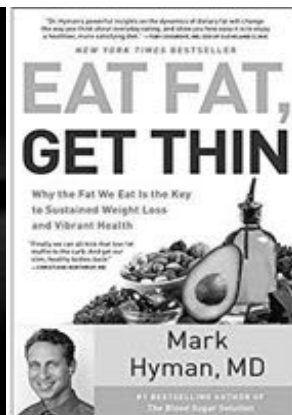
## The Questions are Endless



- Should my 4 year old eat fish? What kind? Should I give him cod liver oil? Will eliminating milk help eczema? What kind of probiotics should we use? Is organic produce really better? What is BPA? Should vegetarians take a multivitamin? How can I lose weight? How can I tell if something is “whole grain?” What about paleo? Do you think coconut oil is better than olive oil? What about GMO?

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

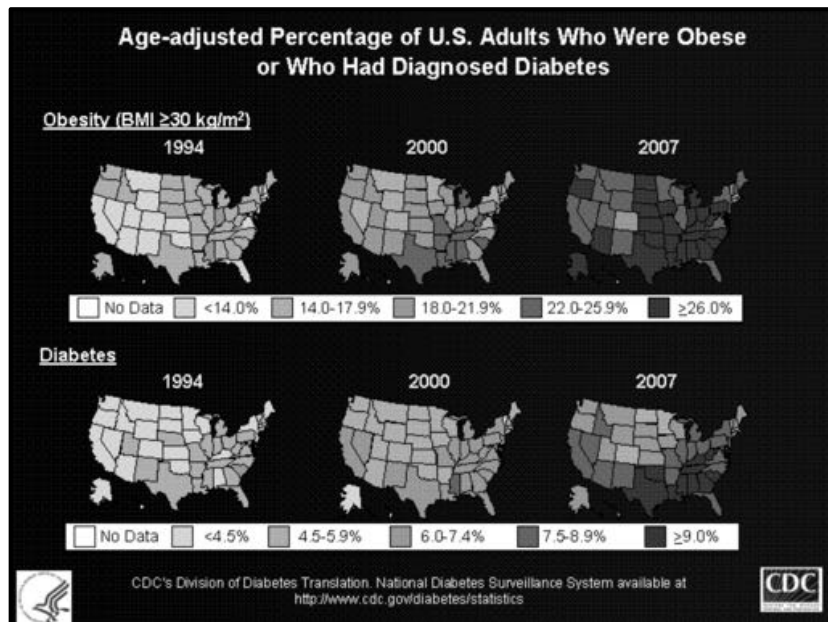


Is it any wonder that people are confused?

*Vicraona Low Dog, M.D.*

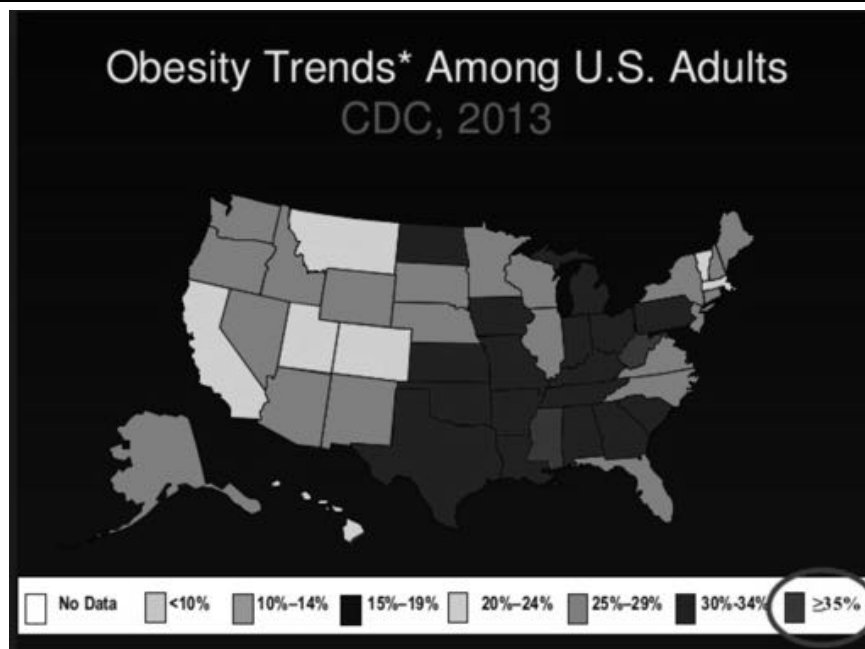
Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.





*Vicraona Low Dog, M.D.*

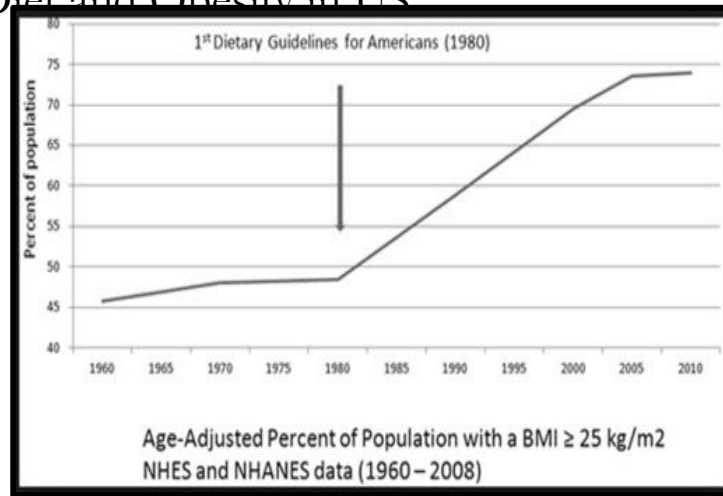
Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Diet and Obesity in US



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



CDC results show that <18% of adults consumed the recommended amount of fruit and <14% consumed the recommended amount of vegetables.

[www.cdc.gov/mmwr/preview/mmwrhtml/mm6426a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6426a1.htm) Accessed December 20, 2016

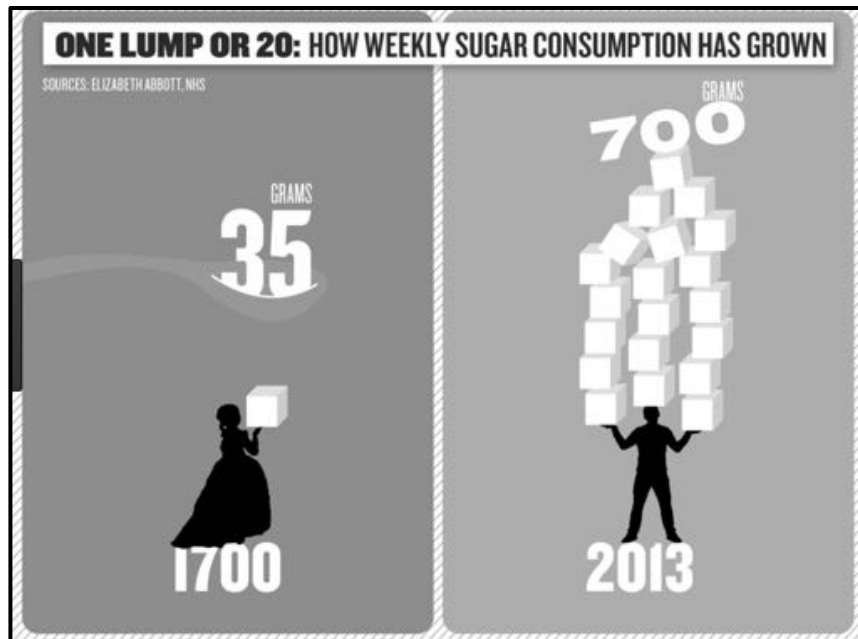
*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

November 2016

## Sugar Industry and Coronary Heart Disease Research

### A Historical Analysis of Internal Industry Documents

Cristin E. Kearns, DDS, MBA<sup>1,2</sup>; Laura A. Schmidt, PhD, MSW, MPH<sup>1,3,4</sup>; Stanton A. Glantz, PhD<sup>1,5,6,7,8</sup>

&gt; Author Affiliations

JAMA Intern Med. 2016;176(11):1680-1685. doi:10.1001/jamainternmed.2016.5394

 Editorial  
Comment

 Related  
Articles

 Author  
Interview

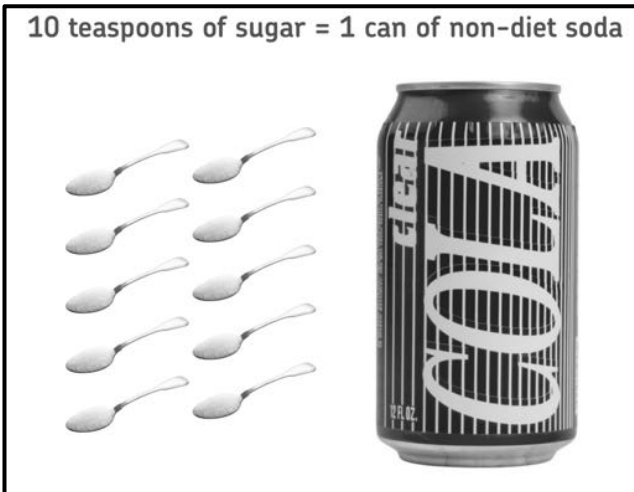
#### Abstract

Early warning signals of the coronary heart disease (CHD) risk of sugar (sucrose) emerged in the 1950s. We examined Sugar Research Foundation (SRF) internal documents, historical reports, and statements relevant to early debates about the dietary causes of CHD and assembled findings chronologically into a narrative case study. The SRF sponsored its first CHD research project in 1965, a literature review published in the *New England Journal of Medicine*, which singled out fat and cholesterol as the dietary causes of CHD and downplayed evidence that sucrose consumption was also a risk factor. The SRF set the review's objective, contributed articles for inclusion, and received drafts. The SRF's funding and role was not disclosed. Together with other recent analyses of sugar industry documents, our findings suggest the industry sponsored a research program in the 1960s and 1970s that successfully cast doubt about the hazards of sucrose while promoting fat as the dietary culprit in CHD. Policy-

*Vicraona Low Dog, M.D.*

 Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

10 teaspoons of sugar = 1 can of non-diet soda



This equals 32  
pounds of  
sugar per year  
simply from  
one can of  
soda per day

*Vicraona Low Dog, M.D.*

 Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Health Benefits of Low Glycemic Load Diet

- Glycemic load: helps predict blood glucose response to more typical serving size of a specific carbohydrate food
- Numerous studies in both adults and teens have found that low glycemic load diets are associated with:
  - Better weight control
  - Improvement in blood sugar
  - Reduction in triglycerides
  - Improved ovulation in obese women with infertility
  - Lower risk of depression
  - Lower risk of heart disease, particularly in women

*Victoria Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Glycemic Load and Mood

- 82 healthy weight and healthy overweight or obese, adults enrolled in randomized, crossover controlled feeding study.
- Compared to a low GL diet, consumption of **high GL diet** resulted in:
  - 38% higher score for **depressive symptoms** ( $P = 0.002$ )
  - 55% higher score for **total mood disorder** ( $P = 0.05$ )
  - 26% higher score for **fatigue/inertia** ( $P = 0.04$ ), compared to low GL diet.



Breymeyer KL, et al. *Appetite* 2016; Dec 1;107:253-259.

*Victoria Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## What Affects the Glycemic Load of Foods?

- Amount of processing (more processing increases surface area)
- Many “fat-free” foods are high GL and contribute to obesity
- High fiber content (decreases GL)
- Fat content and protein slow stomach emptying and lower GL



*Viciana Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

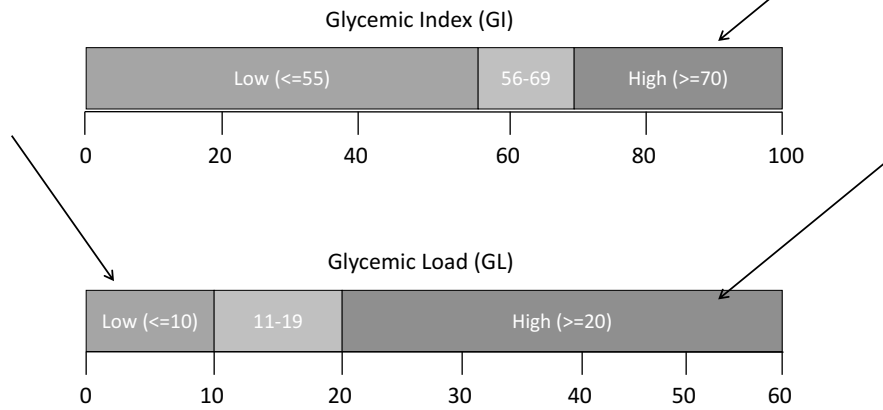
## Glycemic Index and Load

- **Glycemic Index:** ranks carbohydrates based upon the impact of 50 grams of carbohydrate food on blood glucose response.
- **Glycemic Load:** predicts blood glucose response to more typical serving size of a specific carbohydrate food.

*Viciana Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

### Glycemic Index & Glycemic Load Rating Chart



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

Which One Would You Choose?

#### Banana

Glycemic Index = 52

Available Carbs = 24 grams

Glycemic Load = 12.5

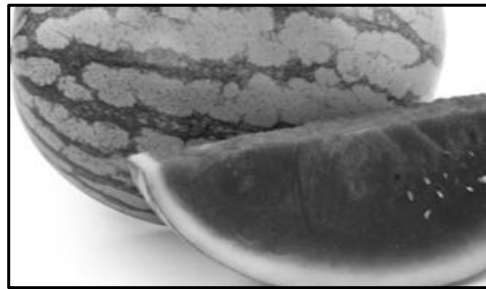


#### Watermelon

Glycemic Index = 72

Available Carbs = 10 grams

Glycemic Load = 4



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Glycemic Load

### Individual Food Portion

Low	0-10
Moderate	11-19
High	20+

### Whole Day

Low	< 80
Moderate	80-120
High	>120

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

Food	Serving Size	Glycemic Load
Asparagus	½ cup	2
Broccoli	1 cup	4
Green beans	1 cup	3
Tomato	1 medium	2
Subway sandwich Turkey breast	6 inch	17
Butter pecan ice cream	5.5 ounces (small)	22
Vanilla ice cream cone	4.5 ounces (small)	19
Potato chips, fat free	1 bag (8 ounces)	49
Tortilla chips, white corn	3.5 ounces	38
Eggo oat waffles	1 serving	13
Maple syrup	4 Tbsp	39
Egg, hard boiled	1	2
Apple juice	8 ounce	6

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



Food	Serving Size	Glycemic Load
Spaghetti	1 cup	38
Brown rice	1 cup	23
White rice	1 cup	33
White bread	1 slice	10
Whole grain bread	1 slice	5
Bagel, cinnamon raisin	1 3.5 inch	24
Pumpernickel bread	1 slice	6
Macaroni and cheese	1 cup prepared	31
Chocolate doughnut	1 doughnut (80 g)	25
Glazed doughnut	1 doughnut (80 g)	12
Kellogg's Frosted Flakes	$\frac{3}{4}$ cup	20
Kellogg's Special K	1 cup	14
Post Bran Flakes	$\frac{3}{4}$ cup	12
Post Raisin Bran	1 cup	25

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Pictures of Low/High GI Meals & Snacks



GI = 60    GL = 48



GI = 42    GL = 31

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Pictures of Low/High GI Meals & Snacks



GI = 80    GL = 32

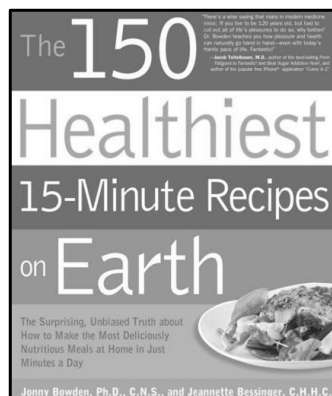
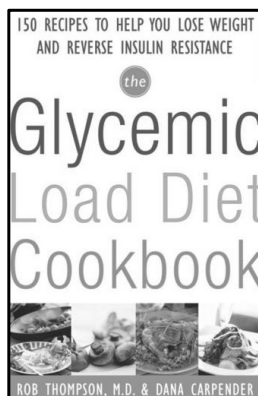


GI = 61    GL = 12

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Some Resources



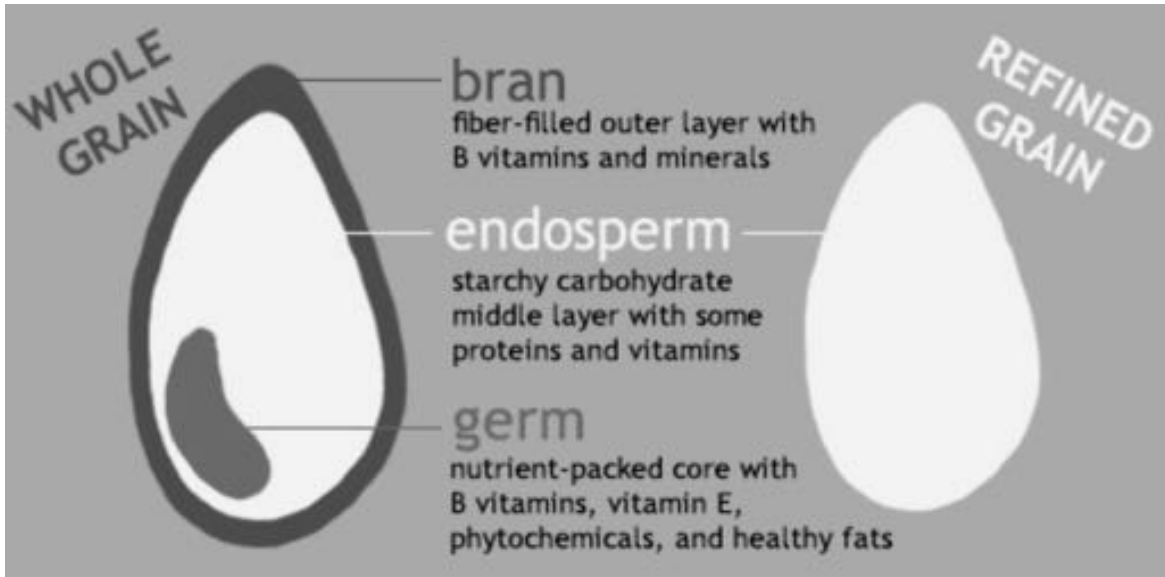
App \$3.99

Low GI Diet Tracker



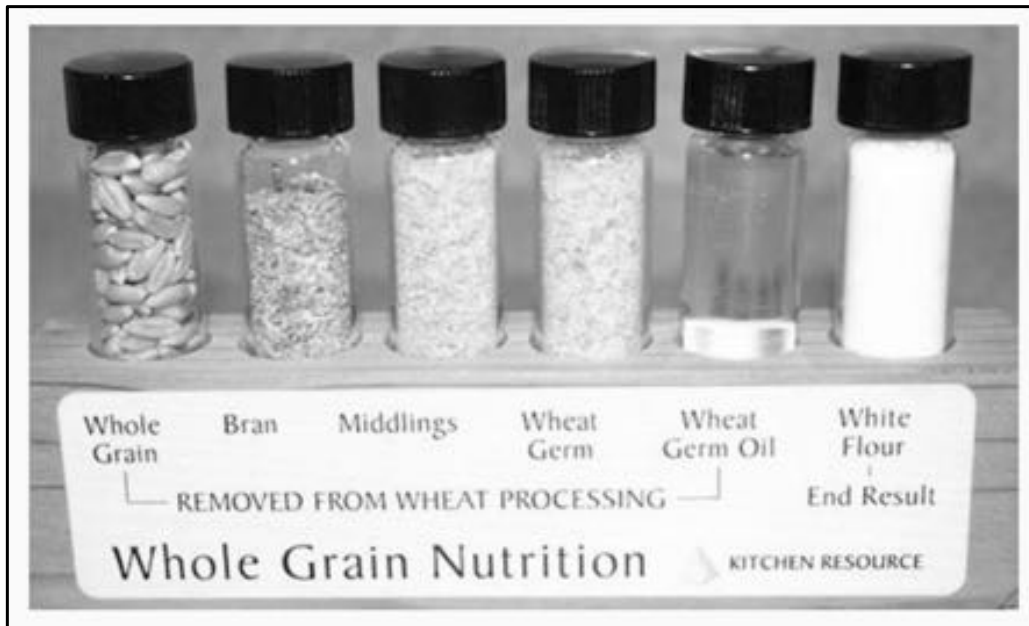
*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Tips on Whole Grains

- 100% Whole Wheat (first ingredient!)
- Oats (skip the instant)
- Brown Rice (white has bran/germ removed, LOW in nutrients)
- Whole Rye (four times the fiber of whole wheat, most nutritious)
- Whole Grain Barley (not pearled: bran and germ have been removed)
- Buckwheat (loaded in magnesium, gluten-free)
- Quinoa (not a grain, it's a seed loaded in protein and omega 3)
- Whole Wheat Couscous (delicious and high in fiber)
- Corn (organic, non-GMO – increases healthy gut flora)

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Gluten

- Some people have an autoimmune condition known as celiac disease, where their immune system interacts negatively with gluten, a storage protein in cereal grains. The **ONLY** treatment is complete avoidance of gluten.
  - Celiac symptom checklist: ([celiac.org/celiac-disease/resources/checklist/](http://celiac.org/celiac-disease/resources/checklist/))
- Other individuals may be allergic to wheat, not all grains, just wheat. Symptoms can include GI (indigestion, cramps, diarrhea, nausea), respiratory (stuffy/runny nose) and/or skin (hives or rash). Necessary to **AVOID** wheat.
- And still others appear to have a gluten sensitivity, where “symptoms” improve when they eliminate gluten from their diet. This is less clear.....

*Viciana Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

7-DAY GLUTEN-FREE MEAL PLAN				
2.4K				
<div> <div>DAY 1</div> <div>DAY 2</div> <div>DAY 3</div> <div>DAY 4</div> <div>DAY 5</div> </div>				
<div> <div>Breakfast</div> <div>Spinach and Oven-Roasted Tomato Omelet (2)</div> <div>Berries and Hot Cereal (5)</div> <div>Pamela's Simply Delicious Waffles (2)</div> <div>Gluten-Free Bagels (12)</div> <div>Breakfast Sausage Egg Muffins (12)</div> </div>				
<div> <div>Snack #1</div> <div>Crackers Snack (4)</div> <div>Hardboiled Eggs (5)</div> <div>Dried Apricots &amp; Almonds (1)</div> <div>Tropical Yogurt Parfait (4)</div> <div>Peanut Butter &amp; Apple Slices (1)</div> </div>				
<div> <div>Lunch</div> <div>Turkey Chili (8)</div> <div>Tacos or Taco Salad (4)</div> <div>Falafel (32)</div> <div>Caprese Panini (1)</div> <div>Tuna Salad (2)</div> </div>				
<div> <div>Snack #2</div> <div>Power Smoothie (2)</div> <div>Peanut Butter &amp; Banana (4)</div> <div>GF Cereal (4)</div> <div>Nachos (12)</div> <div>Popcorn &amp; String Cheese (1)</div> </div>				
<div> <div>Dinner</div> <div>Lasagna Style Pasta Bake (4)</div> <div>Balsamic Glazed Chicken with Mushrooms (4)</div> <div>Steak with Yams and Zucchini (6)</div> <div>Glazed Salmon (4)</div> <div>Pork Loin with Garlic and Rosemary (10)</div> </div>				

[www.celiac.org](http://www.celiac.org)

Lots of info. Recipes provided for 7 day meal plan.

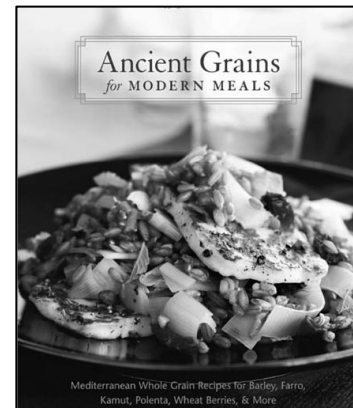
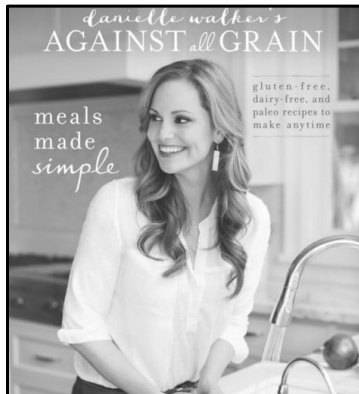
Get an app!

**The Gluten-Free Scanner** (free, more than 500,000 products)

*Viciana Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## Some of My Favorite Cookbooks



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## FAT



- Most concentrated source of energy, more than twice carbohydrates or proteins.
- Acts as messengers in reactions that help control growth, immune function, reproduction and basic metabolism.
- Help absorb fat soluble vitamins (A, D, E, K).
- Certain fats, like *linoleic acid* and *alpha linolenic acid* (ALA), are “essential” because our bodies cannot produce them, we must get in diet.
- Makes foods taste flavorful and help us feel full.

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## SATURATED FAT

- Meat, dairy products, eggs
- Coconut and palm oil
- Solid at room temperature
- Increases LDL and HDL

## UNSATURATED FAT

- Vegetable oils
- Liquid at room temperature
- Increases HDL, lowers LDL
- Includes monounsaturated
  - Olive oil, avocados, peanuts, almonds
- Polyunsaturated
  - Omega 3
    - EPA/DHA: fish/shellfish
    - ALA: flax, walnut, soy, canola
  - Omega 6
    - Corn oil, safflower oil, sunflower oil

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Saturated Fat Debate

- Three large meta analyses (21 studies, 12 studies, and 76 studies) have all failed to show any significant evidence that saturated fat increases the risk for heart disease.
- It also has failed to find any significant evidence that increasing polyunsaturated fats and decreasing saturated fats lowers your heart risk.
- Consume a variety of fats in diet.



Siri-Tarino, *Amer J Clin Nutr* 2010; 91 (3): 535–46.  
Schwingshacki L, et al. *BMJ Open* 2014; 4(4):e004487.  
Chowdhury R, et al. *Ann Intern Med* 2014; 160(6):398–406.

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



Burke/Triolo Productions—Getty Images

DIET/NUTRITION

## The Case Against Low-fat Milk Is Stronger Than Ever

Alice Park  
Apr 04, 2016



For more, visit *TIME* Health.



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



## Full or Low Fat Dairy?

- Full fat dairy products MAY help reduce weight gain and protect against type 2 diabetes. Fat slows absorption of milk sugar, causing slower rise in blood sugar, and lower/slower release of insulin. Fatty acids in dairy may also be protective against diabetes. No evidence that full fat dairy increases risk of heart disease.
- Full fat dairy recommended for women trying to get pregnant as it reduces anovulatory infertility.
- Full fat dairy improves acne, low fat dairy aggravates it.
- Full fat dairy lower in lactose, better tolerated by lactose intolerant individuals.

Chavarro JE, et al. *Hum Reprod* 2007; 22(5):1340-7.

Alexander DD, et al. *Br J Nutr* 2016; 115(4):737-50

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Dairy Products



- Lactase produced by intestinal cells allows lactose to be digested/absorbed. Enzyme activity is highest after birth.
- 30% of global population produces enough lactase to digest/absorb lactose in adult life (\*Scandinavian/northern Europeans).
- The vast majority, lactase declines to 5-10% of what was produced in infancy.
- When more lactose is consumed than can be digested, bloating, gas and diarrhea occur.
- Protein:
  - 1 ounce cheese ~ 8grams
  - 8 ounces yogurt ~ 11grams
  - 8 ounces milk ~ 8grams

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Protein



- From the Greek word *protos*, “first.”
- Build new cells, maintain tissues (e.g., muscles, inner bone, hair, nails), create enzymes, make hemoglobin, lipoproteins to transport cholesterol; present in membrane of every living cell.
- Sources include meat, poultry, seafood, eggs, soy products, nuts, nut butters, beans, peas, and seeds. You need ~8 grams protein per 20 pounds body weight for adults.
  - Choose seafood two times weekly (low in mercury, high in omega 3s, sustainable)
  - Include beans and peas often in your diet, as a side or main dish
  - Avoid processed red meats, include modest amounts of other meats

*Viciana Low Dog, M.D.*

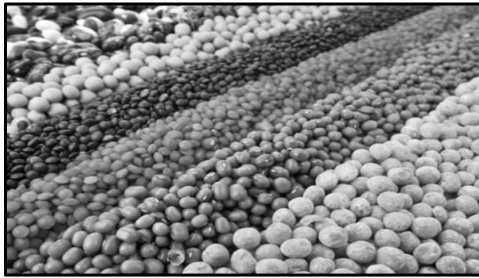
Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

Food	Portion Size	Protein (g) (approximate)
Meat, fish, or poultry	75g (2 ½ oz) / 125 mL (½ cup)	21
Firm tofu	150g / 175 mL (¾ cup)	21
Egg, chicken	2 large	13
Cheese	50 g (1 ½ oz)	12
Fortified soy beverage	250 mL (1 cup)	6-8.5
Cooked dried beans, peas, or lentils	175 mL (¾ cup)	12
Cow's milk	250 mL (1 cup)	9
Yogurt	175 mL (¾ cup)	8
Peanut butter or other nut spread	30 mL (2 Tbsp)	8
Nuts or seeds	60 mL (¼ cup)	7
Bread	1 slice (35g)	3
Cereals, cold	30 g	3
Cereals, hot	175 mL (¾ cup)	3
Pasta or rice	125 mL (½ cup)	3
Vegetables	125 mL (½ cup) or 250 mL (1 cup) lettuce	2
Fruit	1 fruit or 125 mL (½ cup)	1

*Viciana Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Legumes Are Awesome!



- Soak larger dried legumes (kidney, chickpeas, black & red beans) for 4-24 hours in cold water before cooking. Change water 1-2 times to reduce gas.
- Use 3 cups water per cup of legumes in cooking.
- Use ladle to occasionally remove foam on top when cooking legumes
- Rinse canned beans before use to remove sodium
- Lentils are quick and easy to prepare - rinse till clear and remove any small stones/grit.
- Prepare large bag of lentils and then freeze half for future use.
- Add vinegar, salt, etc. at end of cooking time.

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## Soy Milk

- Highest in protein of dairy alternatives
- A good source of B-vitamins and soy has been shown to be heart healthy.
- It is also the least processed of most commercially available dairy alternatives.
- High in phytic acid, however, which can impair absorption of nutrients such as calcium, iron and zinc. (Fermented soy: no phytic acid: miso, tempeh)
- Purchase organic, non-GMO soy and look for unsweetened products to avoid high sugar.
- 1 cup soy milk ~ 8grams protein



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## Almond Milk

- 1 cup raw almonds (soaked overnight)
- 2-4 cups water
- 1 Medjool date
- 1/8 tsp vanilla extract
- Soak the almonds in bowl of water for 12-24 hours. Longer the soak, the creamier your milk.
- Strain almonds. Put almonds in blender, add water (less makes it creamier), and blend for 2 minutes. Strain through muslin cloth or nut milk bag. You can stop here OR
- Put strained milk into blender and add date and vanilla. Blend well. Refrigerate for up to 3 days.
- Only 90 calories per 8 ounces
- No saturated fats or cholesterol
- 25% of the daily value for vitamin D and almost half of the vitamin E and also provides some magnesium, zinc, calcium and other minerals.
- Lovely nutty flavor
- *Very little protein* (1 gram per cup)
- Easy to make at home (you can save your almond meal by drying it in oven on very low heat for 3 hours. Freeze and use.)

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## Red Meat and Cancer



- Poultry and fish have neutral or beneficial effects regarding cancer/health.
- The American Institute for Cancer Research has made the following recommendations regarding red meats (**beef, lamb, pork**) based upon the data that links them to an increased risk of colon cancer:
  - **Limit red meats to < 18 ounces per week.**
  - **Avoid processed red meats.**

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## Grass-Fed/Pasture-Raised or Grain Fed



- Ethical and humane treatment of farm animals is an important consideration.
- There are many reasons to support organic and grass fed/finished animals.
- Grass fed fat higher in conjugated linoleic acid (CLA), stearic acid, vitamins A and E, as well as antioxidants.
- Organic pastured dairy and meats are up to ~50% higher in omega 3 fatty acids
- Organic meat and dairy: animals given organic feed and no growth hormones or antibiotics.

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Personalized Diets

- Personalized diets based on an individual's genome to optimize the success of dietary intervention and reduce genetic cardiovascular disease (CVD) risk, (or to prevent/treat cancer is one of the challenges most frequently discussed in the scientific community.
- It may not be that long until we are able to better recommend what dietary pattern is best for a given individual.

Corella D, et al. Utilizing nutritional genomics to tailor diets for the prevention of cardiovascular disease: a guide for upcoming studies and implementations. *Expert Rev Mol Diagn* 2017 May;17(5):495-513.

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

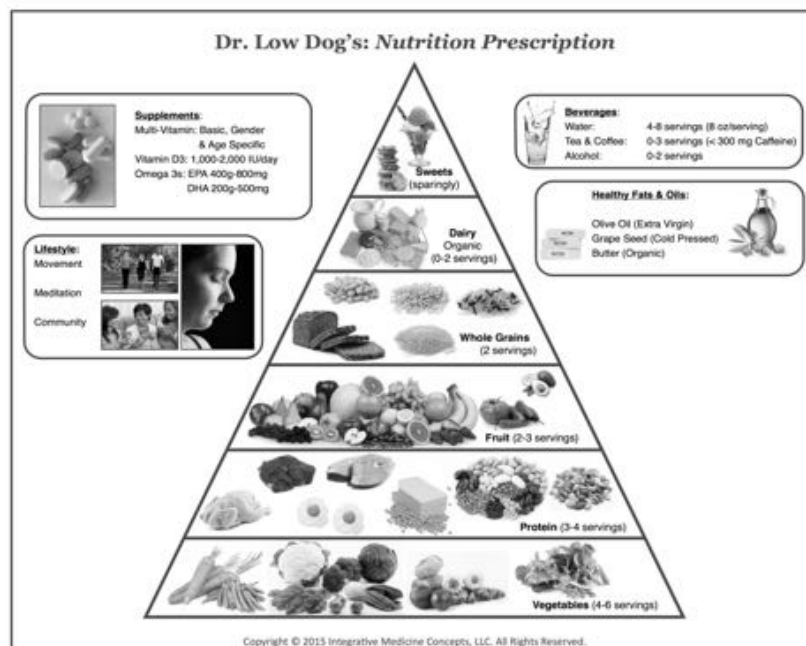
## Example: Breast Cancer and Low Carb Diet

- The Women's Healthy Eating and Living (WHEL) trial found that carbohydrate restriction was associated with a striking five-fold reduction in breast cancer recurrence in 50% of subjects, specifically those whose tumors expressed the IGF-1 receptor.
- Women who did not have this same tumor type did not see benefit.
- Unfortunately, IGF-1 testing of tumors is not yet a routine clinical practice.

Edmond JA, et al. *Cancer Epidemiol, Biomarkers Prev* 2014; DOI: 10.1158/1055-9965

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## State of Our Nutrition

- 90 million Americans are vitamin D deficient using Endocrine Society guidelines of <20 ng/mL
- 30 million are deficient in vitamin B6
- 18 million people have B12 deficiency
- 16 million have vitamin C deficiency
- 13% of Latinas, 16% of African American, and 6% of white women (ages 12-49) are iron deficient
- Women 25-39 borderline iodine insufficiency
- 50% Americans don't meet RDI for magnesium

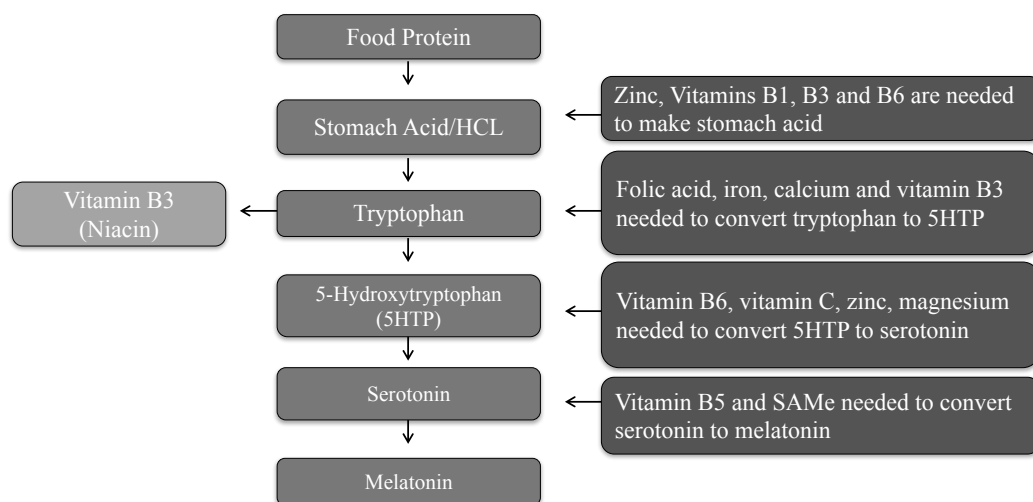


CDC: 2<sup>nd</sup> National Report on the Biochemical Indicators of Diet and Nutrition in the U.S. population

*Viciana Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## Serotonin and Melatonin Pathways



*Viciana Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## B-Vitamins

- The B-vitamins are important for the metabolism of carbohydrates, fats and proteins and play a vital role in the **production of fuel and energy for the body. They are critical for healthy mood.**
- There are eight B-vitamins that partner together, which is why you almost always want to take them together in balanced amounts.



*Viciana Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## Two Prominent Vitamin B Deficiencies

- 30 million** Americans are **deficient** in **vitamin B6** (PLP < 20nmol/L)
  - NSAIDs and oral contraceptives** interfere with B6 metabolism.
  - Deficiency: depression, decreased attention, energy and sleep.
  - Likely need 4-6 mg of B6 (DV is 1.5 mg per day)
- 18 million** Americans **deficient** in **vitamin B12**.
  - Key for healthy **neurologic function**
  - Risk for deficiency: taking metformin, inadequate intake, poor absorption, increasing age

*CDC 2<sup>nd</sup> National Report on Biochemical Indicators of Diet and Nutrition in the U.S. Population*

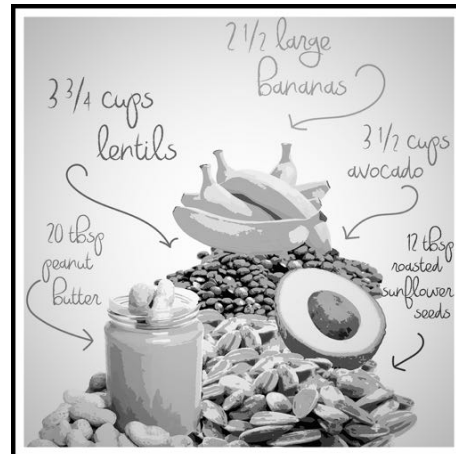
*Viciana Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.



## To Get 1.5 mg B6 in Food

- 2.5 bananas
- 12 Tbsp. roasted sunflower seeds
- 8 ounces chicken breast
- 8 ounces sockeye salmon
- 3.5 cups raw diced avocado
- 3 cups sweet potatoes
- 15 cups of milk **OR**
- 20 Tbsp. peanut butter



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

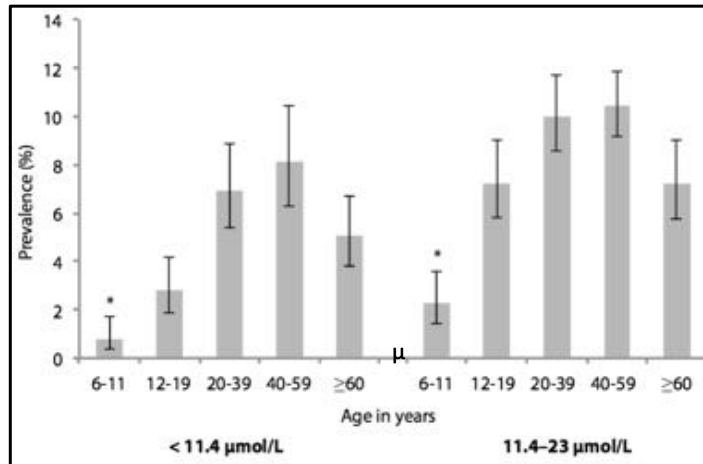
## Vitamin C

- Potent antioxidant, activates folate, needed to convert tryptophan to serotonin, cofactor in synthesis of carnitine, thyroxine, norepinephrine, dopamine and immune cells
- Vitamin C levels decline rapidly during emotional and physical strain, and illness.
- CDC found roughly 16 million Americans have very low levels of serum vitamin C.



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



**Figure H.1.f.** Prevalence estimates of vitamin C deficiency (serum concentrations less than 11.4 µmol/L) and low vitamin C concentrations (11.4-23 µmol/L) in the U.S. population aged 6 years and older by age group, National Health & Nutrition Examination Survey, 2003-2006.

Error bars represent 95% of confidence intervals. \*Prevalence in children is significantly lower than prevalence in persons 20 years and older ( $p < 0.05$ ).

*Viciana Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Menstruation, Pregnancy and Iron

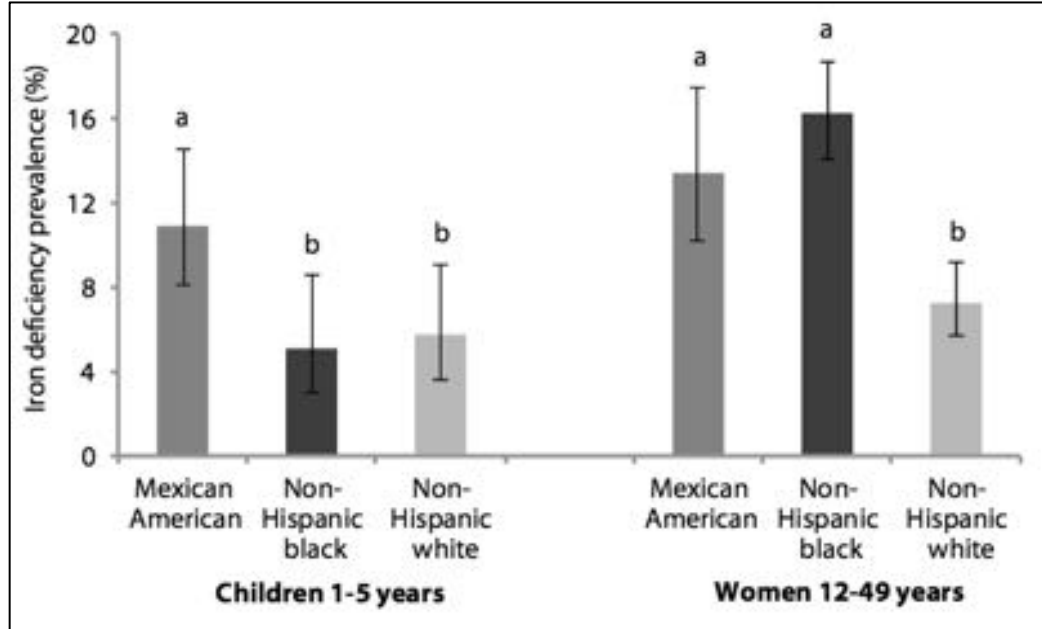
- Low iron levels *are the most common cause of anemia* in adolescent girls and can be very detrimental to **mood and cognition**, as well as **physical well-being**.
- Heavy menstrual bleeding is a significant risk for iron deficiency and is often overlooked.
- If a pregnant woman does not get enough iron, her baby is at higher risk for being *born prematurely with a low birth weight, lower IQ and poorer neurocognitive development*.
- **Most women with regular menstruation or who are pregnant – consider multi with iron.**



Blitzer J, et al. *Gynecol Endocrinol* 2014;30(8):542-8.  
Nelson AL, et al. *Am J Obstet Gynecol* 2015; 213(1):97.e1-6.  
Cooper M, et al. *Health Rep* 2012;23(4):41-8.

*Viciana Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concept, LLC. All Rights Reserved.

## To Get 18mg of Iron in Food

- 4 cups of raisins
- 3-5 cups instant oatmeal
- 3 cups Special K cereal\*\*
- 3 cups cooked lentils
- 2.2 cups canned white beans
- 10 ounce beef liver
- 45 ounce chicken breasts
- 15 cups broccoli **OR**
- 3 cups cooked spinach



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concept, LLC. All Rights Reserved.

## Take Home Message

I believe that given the current state of our nutrition, the decline in nutrients in our soil, and the overwhelming stress that most of us live under - taking a **basic multivitamin** can be a vitally important tool for helping to maintain our **emotional, mental and physical wellbeing**.

*Vicraona Low Dog, M.D.*


Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

[www.ewg.org/foodnews/](http://www.ewg.org/foodnews/)



HOME READ THE REPORT DIRTY DOZEN CLEAN FIFTEEN FAQ ABOUT PRESS [GET THE BAG TAG](#)


## GET THE GUIDE!

Enter your email address to get a downloadable version of the guide to your computer, tablet or smartphone. You'll receive EWG's exclusive email updates, action alerts and promotions to support our work and environmental tips. You can opt-out any time.

Your Email

Your ZIP Code  [GET THE GUIDE](#)

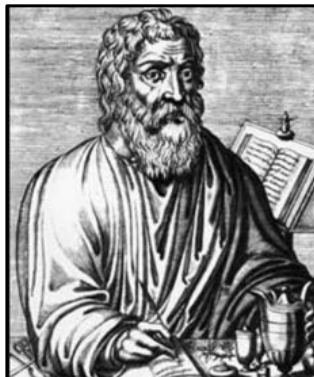
A small amount of sweet corn, peaches and summer squash sold in the United States is produced from GMO seedstock. Buy organic varieties of these crops if you want to avoid GMO produce.



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

*Eating alone will not keep a man well.  
He must also take exercise.*

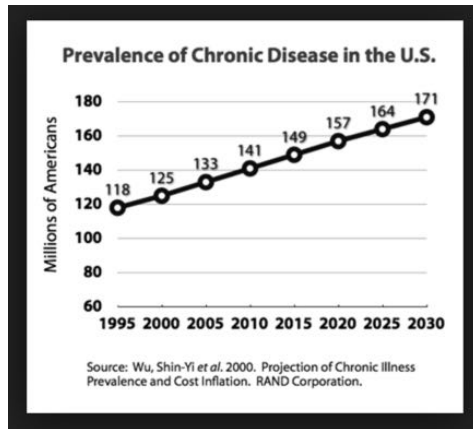


*Hippocrates*

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Consequence of Inactivity



- Higher risk for heart disease, type 2 diabetes, certain cancers, Alzheimer's disease and increase lower back pain, depression and anxiety.
- Half of baby boomers in the US report having NO exercise.
- 80 million Americans over the age of 6 years of age are entirely inactive

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Movement: *Sound Body = Sound Mind*

- Known since ancient times, **exercise and physical activity** are keys to a long and **healthy life**.
- Movement **increases blood flow** to the brain, promoting growth of new blood vessels. It stimulates the **release of endorphins** that diminish pain, as well as **compounds that elevate mood and reduce tension**.
- Regular exercise **increases energy levels and eases fatigue**. *20 minutes three times per week of moderate exercise can improve energy levels in just four weeks!*
- **Fatigue, low energy, pain and depressed mood all impact our emotional wellbeing. Make movement a habit!**

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



- **Meta-analysis: 92 studies** for effect of physical activity on **depression; 306 studies** on **anxiety** concluded:

*physical activity reduces the risk of and improves symptoms of depression and anxiety*

Rebar AL, et al. *Health Psychol Rev* 2015; Mar 5:1-78.

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



- Use a fitness tracker – assess your baseline (normal activity 3 days) and see where you can improve.
- Use an app, join a class, grab a friend
- Make it a habit. Just *do* it.
- Do something you enjoy
- Focus on the *immediate* benefits you will feel once you start exercising regularly

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

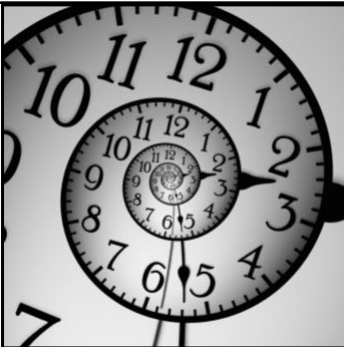
## The Need for Sleep

- Sleep is a biological requirement for human life
- Much of **sleep quality** is due to our **behaviors**, both **genetically driven** (we like to lay down to sleep, we prefer to sleep at night) and **environmentally driven** (working late at night, excessive caffeine or alcohol consumption).
- Sleep is an **abrupt shutdown of our perceptual interaction with our environment**. Perception (sight, taste, sound) dramatically diminishes but brain highly active.



*Victoria Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



## The Biological Clock

- Most important regulator of the sleep wake cycle is our biological clock.
- Responsible for 24 hour fluctuations in hormone secretion, body temperature and other bodily functions.
  - Deepest sleep around 2 AM
  - Lowest body temp around 4:30 AM
  - High alertness 10 AM
  - Highest blood pressure ~6:30 PM
  - Highest body temperature ~ 7 PM
  - Melatonin secretion starts ~8-9 PM

*Victoria Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



## Sleep Stages

- **Stage 1:** Lasts a few minutes, the first stage of sleep is **light and easy to wake** from. Muscle twitching common.
- **Stage 2:** Light sleep, ~20 minutes brain waves begin to slow, blood pressure and body temperature decrease.
- **Stages 3 and 4:** Move into deeper sleep that's harder to wake from. This is when **body repairs itself and boosts immune function**. Also known as "delta" sleep.
- **Rapid eye movement (REM):** Final stage in sleep cycle, brain becomes more **active and dreams occur**. Brain is **processing information and storing long-term memories**. Heart rate and breathing increases. Gets longer and longer through the night - can last up to one hour.
- REM suppressors: **alcohol, nicotine, blood pressure and anti-depressant meds**

*This cycle repeats ~90 minutes. As sleep progresses, REM cycles increase in length.*

*Viciana Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## Lack of Sleep



- Tremendous amount of research shows that **chronic sleep problems** can lead to **weight gain, obesity, diabetes** (33% increased risk type 2 diabetes) and **heart disease**.
- According to CDC shows that **1 in 3 Americans do not get sufficient sleep**.
- Studies show as our time asleep declines, it impairs **working memory, processing speed and executive function**. **Caffeine** can *temporarily* counteract all but executive function.
- Women report more sleep disruption than men (pregnancy, childrearing, menopause), though men have more sleep apnea.

Shan Z, et al. *Diabetes Care* 2015;38(3):529-37.

*Viciana Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## Consolidated vs Segmented Sleep

- Roger Ekirch of Virginia Tech published seminal paper, revealing strong historical evidence that humans used to **sleep in two distinct periods**.
- *At Day's Close: Night in Times Past* has more than 500 references to a segmented sleeping pattern - in diaries, court records, medical books and literature.
- It was well described that a **first sleep** began about **two hours after dusk**, followed by **waking period of one or two hours** and then a **second sleep**.
- For many reasons, by the 1920s, the idea of a first and **second sleep disappeared** from our social lives.



*Viciana Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## Pain, Mood and More



- 50-80% of people with **chronic pain have sleep disturbances**. Pain can interfere with sleep and sleep disturbance can exacerbate pain.
- Depression and anxiety are higher in people with chronic pain and are also strongly correlated with self-reporting of insufficient sleep. A vicious forward feeding circle.
- Lack of exposure to sunlight and the use of bright lights at night increases the likelihood of disordered circadian clock.
- As **we age, we have more disturbed and lighter sleep**. **Melatonin secretion declines** with age, which may also impact sleep in older adults.

Cheatle MD, et al. Assessing and Managing Sleep Disturbance in Patients with Chronic Pain. *Sleep Medicine Clinics*, 2016;11(4): 531-541

*Viciana Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## Days Can Make For Better Nights!

- Wake at same time everyday and make your bed! Exercise early.
- Start morning with **exposure to sunlight** or consider using a dawn simulating device that slowly increases intensity of light for 30 minutes before awakening.
- Landmark study in 1989 found that when participants with seasonal affective disorder were exposed to either **simulated sunrise** or **both simulated sunset and sunrise for several days** that their depression either resolved or was greatly reduced. The circadian **rise and fall of melatonin** production occurred earlier with sunrise simulation or with sunset plus sunrise simulation.
- Melatonin (3 mg) for those who have a hard time falling asleep (e.g. teenagers!)
- Pricey – Philips Wake-Up Light with Colored Sunrise Simulation is top rated.

Terman M, Schlager D, Fairhurst S, et al. Dawn and dusk simulation as a therapeutic intervention. *Biol Psychiatry*. 1989;25:966-970.

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## The Bedroom

- **No alarm clocks with display lights.** Make sure there is **no blue light** emitting from the television or computers, or consider **amber blue blocking glasses**. Work **WITH** your body's normal production of melatonin, not against it.
- Turn down your thermostat to **65-68 F**. Wear socks to bed if feet get cold.
- Use **black out** blinds or curtains to eliminate external light.
- **Replace mattress every 10 years and pillows every 2 years.**
- Have **pets** sleep in their own beds.
- Make it a **sanctuary**. Nice bed linens, peaceful, a lamp and good book by the bed.
- **Journaling** can help if your mind is often preoccupied at night with "to do" lists. Gratitude journaling can also be a great way to ease into sleep.

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Sleep Cycle



- Sleep Cycle sits under your pillow and gathers data to wake you up when you'll feel the least groggy. Easy-to-read graphs show your sleep patterns. Free.

## Deep Sleep



- Deep Sleep provides step-by-step instructions to guide you into state of deep relaxation. Andrew Johnson is awesome and his CDs are truly amazing. \$2.99

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## Cognitive Behavioral Therapy

- CBT has emerged as a recommended ***first-line therapy for insomnia***. Digital CBT has been shown to be effective for **improving sleep, as well as mental health and well-being**.
- CBT-I typically consists of:
  - Psychoeducation about sleep and insomnia
  - Stimulus control
  - Sleep restriction
  - Sleep hygiene
  - Relaxation training
  - Cognitive therapy



Luik AI, et al. Digital cognitive behavioral therapy for insomnia: a state of the science review. *Curr Sleep Med Rep* 2017; 3(2): 48–56

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## Melatonin

- In 2005, the FDA approved ramelteon, a melatonin receptor agonist, for the treatment of sleep-onset insomnia. Both melatonin and ramelteon have been shown efficacious for **reducing sleep latency**, especially in those who have delayed sleep phases (**sleep and wake times shifted later**).
- Exposure to early morning and afternoon light important for maintaining circadian rhythm, as is limiting “blue light” at night.
- Melatonin can be taken (3 mg) 2 hours before desired bedtime for 6-8 week trial to see if sleep improves. Safety data up to 12 months good.

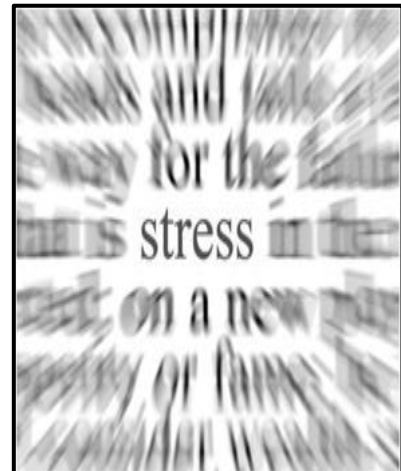
Cheatle MD, et al. Assessing and Managing Sleep Disturbance in Patients with Chronic Pain. *Sleep Medicine Clinics*, 2016;11(4): 531-541

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

- High cortisol levels are linked to high blood pressure, high cholesterol, high blood sugar, insulin resistance, insomnia, weight gain, headaches, mood swings, depression, and increased risk of infections.

***Scientists believe prolonged elevation of stress hormones may shorten our lifespan by 15 years.***



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Mindfulness Meditation

- Meditation excellent for reducing **stress perception and pain intensity, while elevating mood.**
- **Quiets** the stream of thoughts that rage in our mind.
- Long-time meditators have greater activation of areas responsible for sustaining attention, processing empathy, integrating emotion and cognition.
- Review of **47 trials** found that meditation **improves:**
  - **Anxiety**
  - **Depression**
  - **Pain**



Goyal M, et al. *JAMA Intern Med* 2014; 174(3):357-68

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



- Meditation interventions are being increasingly implemented among youth in school, community, and clinic based settings
- Review of **16 studies** found that meditation can be an effective intervention for **psychosocial and behavioral** problems among children and adolescents.

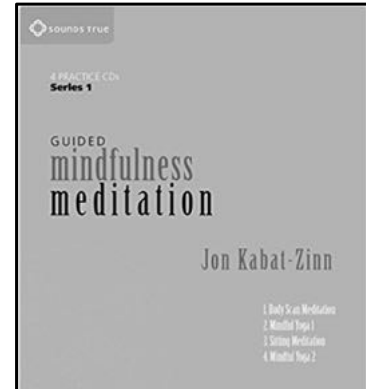
Black DS, et al. *Pediatrics* 2009; 124(3):e532-41

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## ***Guided Mindfulness Meditation: A Complete Guided Mindfulness Meditation Program from Jon Kabat-Zinn***

- Four-part home training course, simply one of the best ways to learn about mindfulness meditation.
- Great choice for those who are anxious, living with chronic pain, stress is off the charts, or interested in learning how to meditate without spiritual overtones found in other teachings.
- Pairs nicely with his book *Full Catastrophe Living*.
- Meditation program one of the most researched in the world. Audio CDs on Amazon for ~\$18.00



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## **Meditation Resources**

- Obviously a local class is the very best option. But there are books, CDS and yes, there are apps.....
- ***Insight Timer*** - ~4,000 guided meditations from more than 1,000 teachers (self-compassion, nature, stress, podcasts and more). More than 750 meditation music tracks. Free.
- ***Headspace*** – very good for beginners with 10 minute meditations. Free.
- ***The Mindfulness App*** – nice 5 days guided mediation program to get you started. Can be personalized and integrated into other health apps. Free.
- ***Aura*** – multiple teachers, from 3-10 minute daily meditations. Customizable. #1 new app on Apple in 2017. \$29 for 6 months.

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC. All Rights Reserved.

## Guided Imagery: *Imagine Yourself.....*

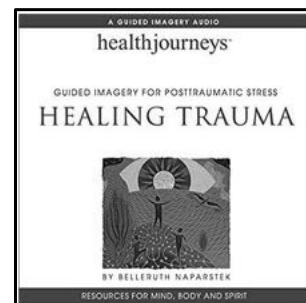
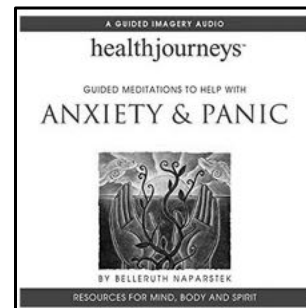
- An immersive, deeply relaxing intervention that uses calming words, soothing music and positive images to structure a healing experience.
- Like meditation, it **focuses attention** and **calms the mind**, working on those parts of the brain where the emotional self dwells.
- Imagery has been shown to **reduce stress, anxiety, and depression**; help with **sleep**; **lower blood pressure**, and help with **posttraumatic stress**.
- I have found guided imagery a fabulous tool for myself, kids and patients. Very helpful for those with ADHD, anxiety, depression, pain, insomnia.

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

## Belleruth Naparstek

- Love, love, love her. Something for everyone.
- She has Guided Imagery Meditations for:
  - Anxiety and Panic
  - Anger and Forgiveness
  - Depression
  - Healing Trauma
  - Ease Grief
  - Relieving Stress
  - Undergoing Surgery
  - Chemotherapy and Radiation



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



## Loneliness, Social Isolation & Your Health



- Nurture your healthy relationships!
- 148 studies on the effects of social isolation on health found it is:
  - As bad as **smoking 15 cigarettes** a day.
  - As dangerous as being an **alcoholic**.
  - As harmful as **never exercising**.
  - Twice as **dangerous as obesity**.

Cacioppo JT, et al. *Ann NY Acad Sci* 2011; 1231:17-22

Holt-Lunstad J, et al. *PLoS Med* 2010; 7:e1000316

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



NATIONAL  
GEOGRAPHIC

Photograph by Derek Dammann, My Shot

© COPYRIGHT UNDER COPYRIGHT. ALL RIGHTS RESERVED.

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

*Vicraona Low Dog, M.D.*

Listen.  
Are you  
breathing  
just a little  
and calling  
it a life?

~ Mary Oliver

*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.

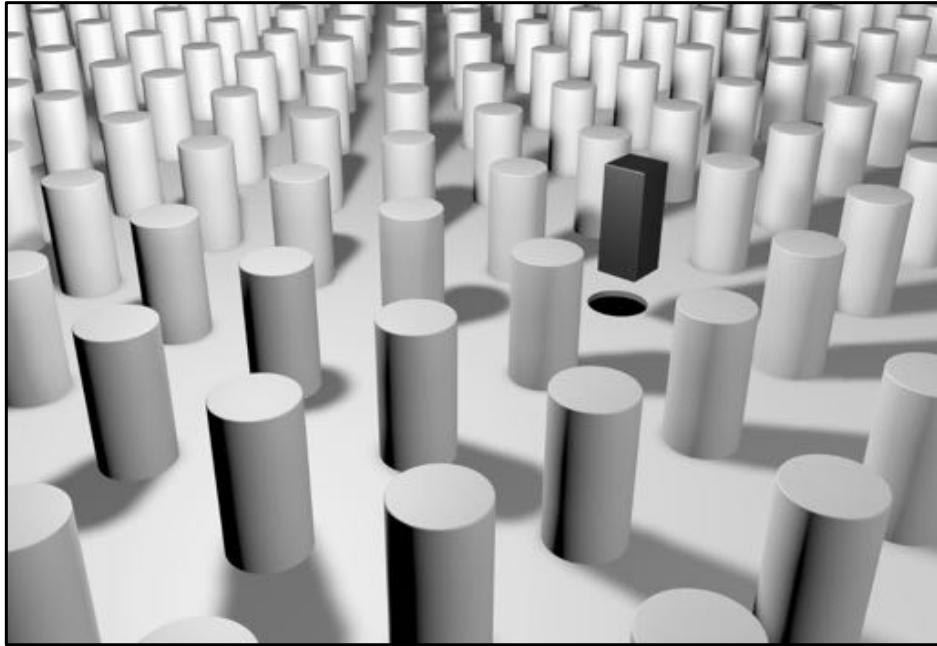
*"But until a person can say  
deeply and honestly, 'I am  
what I am today because of  
the choices I made yesterday,'  
that person cannot say, 'I  
choose otherwise.'"*

*Stephen Covey*



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



*The privilege of a lifetime is being who you are.*  
*Joseph Campbell*



*Vicraona Low Dog, M.D.*

Copyright © Integrative Medicine Concepts, LLC.  
All Rights Reserved.



*Be patient with yourself. Self-growth is tender; it's holy ground.*  
*There's no greater investment.*  
*Stephen Covey*