MWSHS Student Newsletter

Spring 2025

MWSHS Alumna Profile

Jessica Armes

Jessica Armes graduated from the Western-Herbalism module of the Master-Herbalist Program in 2024. When we asked her what prompted her to become a student, she said that it was "for many reasons," and then elaborated as follows: "I chose this curriculum because it was in book form vs. online videos. I loved that it was self-paced as well. Because I live in Iowa, another reason I chose this program was because MWSHS is situated in a neighboring state and offers hands-on workshops throughout the year. Lastly, I chose this program because of my conversation with Director Matthew Alfs; he was so patient and helpful when I called to inquire about the program."

Asked what she appreciated most about the program, Jessica summarized: "I loved the extensive information on the body systems and how it hits on common ailments in every one of those systems and then lists which herbs work best for that particular ailment. I also found the information on nutrition and supplements very helpful—I had always thought that supplements were a scam until I delved into this program. The textbook *300 Herbs* is phenomenal and I refer to it on a regular basis; I have many books on herbs and it is one of my top go-to's. I truly appreciated learning about the holistic approach of incorporating the nutritional aspect, iridology, pulse, and tongue, as well as learning how to ask detailed questions, and the herb contraindications. Then, because the program is self-paced, it is very doable for busy lives."

We wondered which methods Jessica found most helpful when studying her lessons. Her answer did not surprise us, as we have heard the same response from so many of our fine students: "Because there is a lot of information to sift through and to study, I found that reading the questions before beginning the lesson was most helpful. I would also try to identify key words in the questions. Studying one section at a time and then reading through the questions to see if I could find any answers to the questions was also a strategy I used."

Would Jessica recommend the program to others? She expressed herself this way: "To those considering studying with MWSHS, I can say that this program will give you the confidence to choose herbs that are best suited for yourself and for others." *(Continued in column 2)*

Recent Graduate

We offer congratulations to the following recent graduate of the Western-Herbalism module.

Hollie Hayes

We look forward to hearing more about this graduate as she continues to apply what she has learned in her life.

MWSHS Profile of Jessica Armes, continued

Not by any means new to herbal medicine, however, Jessica chronicled her background in the field for us: "I have been working with herbs for about 20 years. I have had an online Etsy shop called Wonder Weeds since 2011. I started creating all-natural, organic, body-care products before it was cool. As my children have grown, I have started asking myself what else I want to be when *I* grow up! I have always had a love for natural healing and truly enjoy digging deep to find the root cause. 'COVID' prompted me to want to really learn about herbal medicine. Since achieving my certificate in Western Herbalism through MWSHS, I have added a few medicinal teas and other products to my Etsy shop. I have also done a few herbal consults for friends and acquaintances. I really enjoy coming up with herbal remedies that could be used instead of pharmaceutical medications."

As to her long-range goals, Jessica outlined them as follows: "I would love to be a clinical herbalist! I am currently working on becoming a Master Herbalist through MWSHS. As of late, I am also enjoying crafting herbal teas and building my apothecary. I now work with over 80 different herbs. I also want to become more proficient in foraging and in growing medicinal herbs."

Asked if she had anything else she wanted to say to our student readership, Jessica joyfully exclaimed: "Aren't herbs *amazing*?! The more I have learned about them, the more in awe I am. Lastly, buy *lots* of herb books and drink herbal tea frequently. It will make your heart happy!"

Inside This Issue

WORKSHOP CREDIT OPTIONS

Except where noted, all of the below-listed events qualify as Workshop credits toward the Master-Herbalist program. Each hour of *verified* attendance (e.g., per instructor-completed workshop-credit slips as supplied by MWSHS) counts toward an equivalent hour of Workshop Category #3 credits (up to the student limit of 20 hours), unless another category is specified or unless one attends a particular workshop at one of these events that is *strictly* in one of these other categories.

"Where Do I Find Qualifying Workshops in My Local Area?"

Aside from the *MWSHS Student Newsletter*, which lists resources from around the country of which we become aware, you can check holistic newspapers that are available in many larger cities. In these areas, as well as in less populated communities, you might check local, independently-owned health food stores and food co-ops, which may have bulletin boards or knowledgeable staff who may be aware of local teachers of holistic-assessment skills, herbal-medicine-making, or who may lead wild-plant walks. (Local nature centers, plant nurseries, greenhouses, horticultural clubs, and native-plant-appreciation societies may know of local wild-plant-walk instructors as well.) Finally, check the phone book for local naturopaths, herbalists, acupuncturists, and other holistic-health professionals who may be willing to mentor you on some of these skills or allow you to "shadow" them as they see clients.

Workshops, Conferences, Lectures, & Events in Herbal Studies Across North America

MWSHS' first **Holistic Assessment-Skills Workshop** of the year is scheduled for *Sun. Apr. 27th,* 2025, 1:30 -5:30 PM, and will take place in **New Brighton, MN.** Details and registration on our website, under the tab "Events/Lesson Questions" (accessible from a computer, but not from a phone) with the general student password (case sensitive) or you can mail us a check for $45, enclosing a slip with your name and cell-phone number. (MWSHS, P O Box 120096, New Brighton MN 55112) or call in your registration to us on a Mon-Wed early afternoon at 651-484-0487.

Deep South Herbal Conference. "Return to the Roots of Natural Health."*May 2nd – 4th, 2025.* **Menton, AL**, on Lookout Mountain. For more info, see the website at https://www.deepsouthconference.com

Medicines from the Earth Herb Symposium, *May 16th – 19th, 2025*. Blue Ridge Assembly in **Black Mountain, NC.** For more info, see the website at https://www.botanicalmedicine.org/2024-herbal-conferences/. Herb school students can receive $120 off of registration fee with discount code EduME25.

MWSHS' "Herbal Therapeutics" Workshop will **t**entatively be scheduled in early June. Watch for further details in the April/May *Interim Student Newsletter*.

Foraging Montana with Thomas Elpel, *June 21st – 22nd, 2025*, **Dillon, Montana.** For more info or to register: https://www.greenuniversity.com/Class_Schedule/index.html

Botany and Foraging Intensive , Co-led by Thomas Elpel and Sydnee Galstaun, plus special guest instructors, **Oregon – Washington,** *June 29th - July 12th, 2025*. For more info or to register: https://www.greenuniversity.com/Class_Schedule/index.html

Firefly Gathering. *July 8th – 13th*, 2025. **Green Mountain, NC.** For more info, see the website at www.fireflygathering.org

International Herb Symposium. *Sept 12th – 15th, 2025* , in **Cincinnati, OH.** For more info, see the website at www.internationalherbsymposium.com

BotanicWise (MidAtlantic Women's Herbal Conference) . *Sept. 25th - 27th, 2025*, in Kempton Community Center**, Kempton, PA**. For more info, see the website at www.botanicwise.com, under "Events."

From Primitive Diets to the Standard American Diet: A Chronicle of Devastating Consequences

by Matthew Alfs, MH, RH(AHG)

The material in this article is derived from my curriculum for the Holistic Nutrition series that I taught at Normandale College, where I was an instructor for 21 years. I thought that MWSHS students might find it to be a nice companion piece to the Nutrition lessons in Workbook One of the Western-Herbalism module. So, here goes….

The Standard American Diet (S.A.D.) vs. Primitive Diets Is…

- High in Processed foods
- High in Grains
- High in Omega-6 Fats & Low in Omega-3 Fats
- High in Dairy products
- Low in Fiber
- Low in Fruits and Vegetables
- Low in Protein

A large variety of studies reveal that this diet results in devastating health consequences, including numerous debilitating conditions. Listed below is a sampling:

- Standard American Diet unfavorably alters **Gut Microflora.**
  An Enlightening Study:
  Segata, N. Gut Microbiome: Westernization and the Disappearance of Intestinal Diversity. Curr Biol. 2015 Jul 20;25(14):R611-3. doi: 10.1016/j.cub.2015.05.040.

- Standard American Diet alters **Potassium-to-Sodium and Base-to-Chloride Ratios**, increasing net systemic acid load.
  Two Interesting Studies:
  Frassetto L[1], Morris RC Jr, Sellmeyer DE, Todd K, Sebastian A. Diet, evolution and aging--the pathophysiologic effects of the post-agricultural inversion of the potassium-to-sodium and base-to-chloride ratios in the human diet. *Eur J Nutr.* 2001 Oct;40(5):200-13.
  Sebastian, A. et al. 2002. Estimation of the net acid load of the diet of ancestral preagricultural Homo sapiens and their hominid ancestors *Am J Clin Nutr* 76(6):1308-16.

- Low **Fiber** content of S.A.D. results in constipation and diseases of autointoxication (including estrogen-based cancers, chronic skin conditions, and some neurological diseases such as Parkinson's). (Numerous studies & clinical observations)

- High Intake of "**Frankenfoods**" such as partially hydrogenated oils (trans fats), high-fructose corn syrup, artificial sweeteners, processed meats, and homogenized milk leads to cardiovascular disease & cancer.

  Here, one interesting study, published in *Circulation: Heart Failure* in 2014, found a 38% greater risk of heart failure in men who ate processed meats daily, contrasted with absolutely *no increase* in those who ate unprocessed red meat such as beef, pork, or minced meat. (Weiss EP. "Heart failure risk: effects of red meat, processed red meat, (and enhanced red meat?)." *Circ Heart Fail*. 2014 Jul;7(4):549-51)

A landmark study on the dangers of the **homogenization of milk** is the book *The XO Factor,* by Kurt Osler MD and Donald J. Ross, Ph.D.

The beloved exercise instructor Jack LaLanne, who lived till his late 90s, famously said about food choices: "If man made it, don't eat it." He also loved to repeat his own nutrition teacher's maxim: "The only good thing about a donut is the hole in the middle!" He reminded us all that "the food you eat today is walking and talking tomorrow."

- Low intake of **Fruits and Vegetables** in the S.A.D. and thus of their rich phytochemical content (incl. antioxidant potential) beckons cancer and accelerated aging, because phytochemicals such as flavonoids, carotenoids, lignans, and polyphenols reduce free radicals that lead to cancer and accelerated aging. (Many studies.)

Yet, How Did This Diet Originate and Who Is Responsible For It?

Research Reveals that Greed and Corruption Are Largely Responsible:

The migration of the majority of the Western population to cities from rural climates created a need to make food more easily accessible and ready-to-eat for urbanites, who were removed from growing their own food and from hunting and foraging on their own land or in other rural settings. It also decreased the amount of vitamin D achieved from sunlight, as urban workers tended to work primarily indoors.

Opportunists took advantage of this migration from the country to The Big City to process food in such a way as to reduce its nutrient density—including the content of omega-3 fatty acids that can quickly lead to spoilage—and its fiber and to add chemical preservatives to extend its shelf life, as well as to "sugar it up" to make it more appealing. (Wheat, as one example, was progressively bred for higher yields and industrial processing compatibility—and, in the process, greatly altered to contain protein structures that made it harder and harder to digest). All of these techniques allowed these food processors to sell more and more of such Frankenfoods, thus enriching their pockets. Furthermore, tobacco companies, discouraged by falling sales by the dawn of the 1980s, realized that they could recoup their losses by getting in the act: Phillip Morris bought General Foods Corporation in 1985, Kraft Foods in 1988, and Nabisco in 2000.

Unfortunately, the close ties between government and industry meant that government tended to promote these unhealthful processed foods. Let's take a trip through time and look at government advice from the 1950s up till the present day. As we do, note the increased emphasis upon grains, the biggest seller in American agriculture, and the failure to discouraged processed grains and other foods.

U.S.D.A "Basic Four" Food Groups 1956-1992

1 - Vegetables and fruits

2 - Milk or sometimes substitutes such as cheese, ice cream, and ice milk

3 - Meat: Includes fish, eggs, dry peas, dry beans, and peanut butter.

4 - Cereals and breads: Whole grain and enriched breads were especially recommended: Includes cereals, breads, macaroni, noodles, spaghetti, and rice.

1992 U.S.D.A. Food Pyramid

(Arranged from tip of pyramid to its base, as follows)

Fats, Oils, and Sweets	"Use sparingly"
Meat, Fish, Beans, Eggs, Nuts	2-3 servings a day
Dairy products	2-3 servings a day
Fruit	2-4 servings a day
Veggies	3-5 servings a day
Grains	6-11 servings a day

For devastating critiques of this original food pyramid, see the books:

***Death by Food Pyramid*, by Denise Minger**

***Food Politics*, by Marion Nestle**

2005 U.S.D.A. MyPyramid

USDA MyPlate program 2011 to Date.

Important Note: Neither USDA nor WHO guidelines have typically emphasized which foods ***not*** **t**o eat (e.g., highly processed foods, sugar, partially hydrogenated oils, artificial additives, etc.) In North America, only the Canadian guidelines have somewhat stressed this.

In 2015, the U. S. Dept. of Health & Human Services, in conjunction with the U. S. Dept of Agriculture, released the 8th iteration of the *Dietary Guidelines for Americans*.

- Stated goal was to help Americans reduce not only obesity (as in their 2010 edition), but also type-2 diabetes, hypertension, and heart disease
- Strong focus on grains ('at least half being whole grains'—*in other words, half can be processed grains*—"white flour"), low-fat dairy products and/or fortified soy beverages.
- Crusade against saturated fat from earlier editions continued: 'Consume less than 10% of calories per day from saturated fats.' Eat 'lean meats' only.
- Called for a reduction, but *not* an elimination, of added sugars and sugar-sweetened beverages. (Only from 2018 would the Government require that packaged foods note the addition of any added sugars.)

However, the scientific report issued that same year (2015) by the *Dietary Guidelines Advisory Committee* revealed that *40-50% of adults* did not get enough **vitamins A, C, D, E, calcium,** and **magnesium.**

Other nutrients underconsumed by smaller percentages of the population were identified as **zinc, vitamin B6, folate, iron, thiamine, copper, phosphorous, selenium, vitamin B12, niacin,** and **riboflavin.**

Moreover, data obtained from the *Centers for Disease Control* at that time revealed that….

23 million Americans had a **vitamin-D** deficiency
(and nearly 67 million had a vitamin- D insufficiency)

30 million Americans were deficient in **vitamin B6**

18 million Americans were deficient in **vitamin B12**

15.9 million Americans had a **vitamin C** deficiency.

In December of 2020, the U.S. Department of Agriculture and U.S. Department of Health and Human Services released the 9th edition of the *Dietary Guidelines for Americans, 2020-2025.* (See DietaryGuidelines.gov.)

Here are some highlights, showing progress in some areas but stuck-in-the-mud advice in other areas.

- Crusade against saturated fat continued, saying that less than 10% of the diet should come from saturated fat. In order to reduce saturated-fat content in cooking oils, it advised: "Cooking with oils higher in polyunsaturated and monounsaturated fat (e.g., canola, corn, olive, peanut, safflower, soybean, and sunflower) instead of butter can also reduce intakes of saturated fat." It failed to warn that cooking with polyunsaturated oils generates dangerous free radicals that can damage one's arteries!

- The report—finally!—advised against added sugars and cited the fact that they have been required to be noted on food labels since 2018 and that these should be noted when purchasing foods. However, it stated: "Added sugars are of particular concern for adults because exceeding limits contributes to excess calorie intake." That is *not* the only or even the main reason why added sugars are problematic, although the report leaves one to conclude that.

- Pregnant or lactating women who are following a vegan diet were encouraged to talk to their healthcare practitioner about supplementing with B12, choline, zinc, iodine, and omega-3 fatty acids. (Note: Individual studies have indeed found these five nutrients to be commonly deficient in vegan diets.)

- For the first time, it was noted that older adults may require vitamin B12 supplements, owing to poor absorption from food

- Regarding Vitamin D, it noted: "However, some individuals may have difficulty procuring sufficient vitamin D from sunlight exposure or consuming enough vitamin D from foods and beverages, so a supplement may be recommended."

Summary and Conclusions

Clearly, the Standard American Diet has not been a health-preserving diet and government dietary advice has been mixed and confusing to the public, often flying in the face of facts and reason. The fact is that *chronic disease among Americans is at an all-time high* and numerous studies have connected this phenomenon with consumption of processed foods and nutrient deficiencies resulting there from. (See., e.g., Tristan Asensi M et al. Nutrients. 2023 15:1546; Lane MM et al., BMJ. 2024. 384:e077310; Jardim MZ et al. Nutr Res. 2021. 95:19-34; Micha R. et al. JAMA. 2017 317:912; Souza M, et al. Metabolism. 2025. 165:156134.)

However, there is a diet of *un*processed—that is, whole—foods that supplies nutrients in sufficient amounts and is connected with a striking lack of chronic disease. Moreover, it is the *only time-tested diet*, having been pursued for millennia. Let's examine this diet now….

The Hunter-Forager Diet:

The Only Time-tested Diet

(a.k.a. ***The Paleolithic Diet*** or *the* ***Stone-Age [Caveman] Diet***)

Original Diet of Australian Aborigines and of Native-Americans,
plus small pockets of peoples in Africa, Asia, Oceania, and South America.

Was Diet of Most Peoples during the Paleolithic Age, Precursor to the
Neolithic Age ("Age of Agriculture") of the last 10,000 Years

Derived from Eight Food Groups Only:

Fruits

Greens

Roots, Rhizomes, & Tubers

Nuts

Animals (Mammals, Birds, Reptiles, Amphibians, etc.)

Arthropods (Shellfish & Insects)

Fish

Eggs

Nothing Else!
(*No* Grains, Milk, or
Legumes [e.g., soy, peanuts])

Maxims for the Hunter-Forager Diet:

"If You Can't Pick It or Kill It, Don't Eat It!"

"If It Won't Rot, Don't Eat It!"

Original modern scientist who promoted this diet was
Walter L Voegtlin, a gastroenterologist, in 1975

Championed next by **S. Boyd Eaton** in scientific articles and in his book *The Paleolithic Prescription* in 1989.

Championed next by **Loren Cordain** in scientific articles and in a book that became very popular, entitled *The Paleo Diet*, in 2002, and revised in 2011.

Resources (Books):

Voegtlin Walter L. ***The Stone Age Diet***, 1975

Eaton, S. Boyd, et al. ***The Paleolithic Prescription,*** 1989

Cordain, Loren. ***The Paleo Diet****, 2002,* rev. ed. *2011*

Wolf, Robb. ***The Paleo Solution: The Original Human Diet*****,** 2010

Gedgaudas. Nora. ***Primal Body, Primal Mind*****,** 2011

Cordain, Loren. ***The Paleo Answer***, 2012

Kresser, Chris. ***The Paleo Cure*****,** 2013

Clinical Trials and Observational Studies Reveal that this Hunter-Forager, or Paleolithic, Diet Sustains Health in a Variety of Ways, Such As….

Is Nutrient Dense & Supplies an Optimal Amount of Nutrients

Estimated macronutrient and fatty acid intakes from an East African Paleolithic diet.
Kuipers RS[1], Luxwolda MF, Dijck-Brouwer DA, Eaton SB, Crawford MA, Cordain L, Muskiet FA.

Br J Nutr. 2010 Dec;104(11):1666-87. doi: 10.1017/S0007114510002679. Epub 2010 Sep 23.

An investigation of an East-African Paleolithic diet yielded moderate-to-high protein (25-29% of calories), moderate-to-high fat (30-39% of calories), and moderate carbohydrates (39-40% of calories), being "consistently higher protein" than in the S.A.D. and "high in alpha-linolenic acid" (ALA, an omega-3 fatty acid), but with "lower linoleic acid" (an omega-6 fatty acid) than in the S.A.D. The authors concluded that "these [results] are likely to contribute to the known beneficial effects of Paleolithic-like diets."

Diets of modern hunter-gatherers vary substantially in their carbohydrate content depending on ecoenvironments: results from an ethnographic analysis. Strohle, A., Hahn, A. Nutr Res. 2011 June; 31(6):429-35.
PMID: 21745624.

The investigators found that "hunter-gatherer diets were characterized by an identical carbohydrate intake (30-35% of the total energy) over a wide range of latitude intervals (11-40 degrees north or south of the equator). However, with increasing latitude, intervals from 41degrees [and more],… carbohydrate intake decreased markedly from approximately equal to 20%...."

Supports Optimal Blood Sugar Levels and Cardiovascular Health

Paleolithic nutrition for metabolic syndrome: systematic review and meta-analysis.
Manheimer EW, van Zuuren EJ, Fedorowicz Z, Pijl H.
Am J Clin Nutr. 2015 Aug 12. pii: ajcn113613. [Epub ahead of print]

PMID:26269362

A systematic review of randomized, controlled clinical trials found that a "Paleolithic diet resulted in greater short-term improvements on metabolic syndrome components than did guideline-based control diets."

A Palaeolithic diet improves glucose tolerance more than a Mediterranean-like diet in individuals with ischaemic heart disease.
Lindeberg S, Jönsson T, Granfeldt Y, Borgstrand E, Soffman J, Sjöström K, Ahrén B.
Diabetologia. 2007 Sep;50(9):1795-1807. doi: 10.1007/s00125-007-0716-y. Epub 2007 Jun 22.
PMID: 17583796.

After 12 weeks, there was a 26% decrease of AUC Glucose in those consuming a Palaeolithic Diet compared to only a 7% decrease in the group eating along Mediterranean Diet guidelines.

Beneficial effects of a Paleolithic diet on cardiovascular risk factors in type 2 diabetes: a randomized cross-over pilot study.
Jönsson T, Granfeldt Y, Ahrén B, Branell UC, Pålsson G, Hansson A, Söderström M, Lindeberg S.Cardiovasc Diabetol. 2009 Jul 16;8:35. doi: 10.1186/1475-2840-8-35.

PMID:19604407

13 patients with type-II diabetes for an average of 9 years and on antidiabetic drugs were put on both a Paleolithic diet and a standard diabetes diet for two consecutive periods of three months. The results were that the Paleolithic diet bettered their HgA1c, triacylglycerol, diastolic blood pressure, BMI and waist circumference, and HDL over the diabetes diet.

Metabolic and physiologic effects from consuming a hunter-gatherer (Paleolithic)-type diet in type 2 diabetes.
Masharani U, Sherchan P, Schloetter M, Stratford S, Xiao A, Sebastian A, Nolte Kennedy M, Frassetto L.
Eur J Clin Nutr. 2015 Aug;69(8):944-8. doi: 10.1038/ejcn.2015.39. Epub 2015 Apr 1.PMID:2582862

When 14 type-II diabetic patients were put on a Paleolithic diet for two weeks, they achieved superior benefits in the way of glucose control and lipid profiles than did 10 diabetics put on a diet recommended by the American Diabetes Association (ADA) that emphasized whole grains, low-fat dairy, and legumes.

Metabolic and physiologic improvements from consuming a paleolithic, hunter-gatherer type diet

Frassetto LA, Schloetter M, Mietus-Synder M, Morris RC Jr, Sebastian A.. Eur J Clin Nutr. 2009 Aug;63(8):947-55. doi: 10.1038/ejcn.2009.4. Epub 2009 Feb 11. Erratum in: Eur J Clin Nutr. 2015 Dec;69(12):1376. doi: 10.1038/ejcn.2015.193. PMID: 19209185.

In this study of nine, non-obese, sedentary healthy volunteers, the participants consumed their usual diet for 3 days, three ramp-up diets of increasing potassium and fiber for 7 days, and then a paleolithic diet for 10 days. The result was significant reductions in plasma insulin and blood pressure and large significant reductions in total cholesterol, LDL, and triglycerides.

Favourable effects of consuming a Palaeolithic-type diet on characteristics of the metabolic syndrome: a randomized controlled pilot-study.

Boers I, Muskiet FA, Berkelaar E, Schut E, Penders R, Hoenderdos K, Wichers HJ, Jong MC. Lipids Health Dis. 2014 Oct 11;13:160. doi: 10.1186/1476-511X-13-160. PMID:25304296

When 34 pre-diabetic subjects averaging 53.5 years in age were randomized either on a Paleolithic diet or a "healthy reference diet based on guidelines of the Dutch Health Council" for *only two weeks*, those on the Paleolithic diet achieved *lower systolic blood pressure, diastolic blood pressure, total cholesterol,* and *triglycerides* and *higher HDL* ("good") cholesterol than did those on the Dutch Health Council diet. The former also *lost weight*.

Supports Balanced Lipid (Cholesterol & Triglyceride) Levels

Paleolithic nutrition improves plasma lipid concentrations of hypercholesterolemic adults to a greater extent than traditional heart-healthy dietary recommendations.

Pastore RL, Brooks JT, Carbone JW.
Nutr Res. 2015 Jun;35(6):474-9. doi: 10.1016/j.nutres.2015.05.002. Epub 2015 May 14.

PMID:26003334

When 20 volunteers (10 M, 10 F) aged 40-62 years with elevated lipids were put on a "traditional heart-healthy diet" for four months, followed by a Paleolithic diet for four months, the latter diet "significantly lowered" mean total cholesterol, LDL, and TG and boosted HDL independent of alterations in body weight, relative to the baseline and the so-called "heart healthy diet."

Reduces Inflammation

Paleolithic and Mediterranean Diet Pattern Scores Are Inversely Associated with Biomarkers of Inflammation and Oxidative Balance in Adults

Whalen KA[1], McCullough ML[2], Flanders WD[3], Hartman TJ[4], Judd S[5], Bostick RM[6].
J Nutr. 2016 Jun;146(6):1217-26. doi: 10.3945/jn.115.224048. Epub 2016 Apr 20.
PMID:27099230

Supports Satiety & Ideal Weight

Subjective satiety and other experiences of a Paleolithic diet compared to a diabetes diet in patients with type 2 diabetes.

Jönsson T, Granfeldt Y, Lindeberg S, Hallberg AC.
Nutr J. 2013 Jul 29;12:105. doi: 10.1186/1475-2891-12-105. PMID:23890471

When 13 patients with type-II diabetes were assigned to eat a Paleolithic diet for a 3-month period and then a "diabetes diet" for a 3-month period afterwards and to compare satiety, there was "a trend towards more comments on the Paleolithic diet being *more satiating* and improving *blood sugar* values, and significantly more comments on *weight loss*."

Plant-rich meals based on Palaeolithic diet principles have a dramatic impact on incretin, peptide YY and satiety response, but show little effect on glucose and insulin homeostasis: an acute-effects randomised study.

Bligh HF[1], Godsland IF[2], Frost G[3], Hunter KJ[1], Murray P[1], MacAulay K[1], Hyliands D[1], Talbot DC[1], Casey J[1], Mulder TP[4], Berry MJ[1].
Br J Nutr. 2015 Feb 28;113(4):574-84. doi: 10.1017/S0007114514004012. Epub 2015 Feb 9. PMID: 25661189

In a randomized, crossover study, healthy subjects were given three meals on separate occasions to compare a Paleolithic diet (2 of the meals) with a reference diet (one of the meals) based upon WHO guidelines. The Paleolithic diet proved superior in perceived satiety by the subjects.

Benefits of a Paleolithic diet with and without supervised exercise on fat mass, insulin sensitivity, and glycemic control: a randomized controlled trial in individuals with type 2 diabetes.

Otten J[#1], Stomby A[#1], Waling M[2], Isaksson A[3], Tellström A[1], Lundin-Olsson L[4], Brage S[5], Ryberg M[1], Svensson M[3], Olsson T[1].Diabetes Metab Res Rev. 2017 Jan;33(1). doi: 10.1002/dmrr.2828. Epub 2016 Jun 30.PMID:27235022

Thirty-two patients with type II diabetes (age 59 ± 8 years) followed a Paleolithic diet for 12 weeks. Fat mass decreased by 5.7 kg (IQR: -6.6, -4.1; $p < 0.001$) Insulin sensitivity improved by 45%. HbA_{1c} decreased by 0.9%. Leptin decreased by 62%. The conclusion of the study authors was that a Paleolithic diet improves fat mass and metabolic balance, including insulin sensitivity, glycemic control, and leptin in subjects with type II diabetes.

Composition of Ad-Libitum Paleolithic vs. Australian Guide to Healthy Eating Diets: A 4-Week Randomised Trial.

Genoni A[1], Lyons-Wall P[2], Lo J[3], Devine A[4].
Nutrients. 2016 May 23;8(5). pii: E314. doi: 10.3390/nu8050314. PMID: 27223304

39 healthy women were randomized to either the Paleolithic or the Australian Guide to Healthy Eating (AGHE) diet for four weeks. Significantly greater weight loss occurred in the Paleolithic Diet and it induced greater changes in body composition over the short-term intervention.

Long-term effects of a Palaeolithic-type diet in obese postmenopausal women: a 2-year randomized trial.

Mellberg C[1], Sandberg S[2], Ryberg M[1], Eriksson M[3], Brage S[4], Larsson C[5], Olsson T[1], Lindahl B[2].

Eur J Clin Nutr. 2014 Mar;68(3):350-7. doi: 10.1038/ejcn.2013.290. Epub 2014 Jan 29

Seventy obese postmenopausal women (mean age 60 years) were assigned to a Paleolithic Diet (PD) or a Nordic Nutrition Recommendation Diet (NNR) diet in a 2-year randomized controlled trial. Both groups significantly decreased total fat mass at 6 months and 24 months, with a more pronounced fat loss in the PD group at 6 months. Waist circumference and sagittal diameter were decreased in the Paleolithic group at 6 months. Triglyceride levels decreased significantly more at 6 and 24 months in the PD group than in the NNR group. The conclusions of the study authors was that "the PD has greater beneficial effects vs an NNR diet regarding fat mass, abdominal obesity and triglyceride levels in obese postmenopausal women."

Weight Loss Outcomes: Systematic Review of Findings from Clinical Trials.

Stephen D. Anton,[1,2,*] Azumi Hida,[1,3,*] Kacey Heekin,[1] Kristen Sowalsky,[4] Christy Karabetian,[1,2] Heather Mutchie,[1,5] Christiaan Leeuwenburgh,[1] Todd M. Manini,[1] and Tracey E. Barnett[6]

Nutrients. 2017 Jul 31;9(8). pii: E822. doi: 10.3390/nu9080822.
PMID: 28758964

The authors found that the high-fat, low-carb Atkins diet had the most well-constructed clinical trials in its favor for promoting weight loss. However, the Paleolithic diet, which also advocates less than 45% of calories being consumed as carbohydrates, was also found to produce substantial short- and long-term weight loss in a recent clinical trial. It added: "The findings of this review are not in line with current recommendations of the Dietary Guidelines Advisory Committee, which state that diets with less than 45% of calories as carbohydrates are not more successful than other diets for long-term weight loss (12 months)."

Supports Colon Health

Adherence to the Paleolithic diet and Paleolithic-like lifestyle reduce the risk of colorectal cancer in the United States: a prospective cohort study.

Xiao Y, Wang Y, Gu H, Xu Z, Tang Y, He H, Peng L, Xiang L. J Transl Med. 2023 Jul 19;21(1):482. doi: 10.1186/s12967-023-04352-8. PMID: 37468920; PMCID: PMC10357623.

Supports Breast Health

Palaeolithic diet score and risk of breast cancer among postmenopausal women overall and by hormone receptor and histologic subtypes

Shah S, Mahamat-Saleh Y, Hajji-Louati M, Correia E, Oulhote Y, Boutron-Ruault MC, Laouali N.. Eur J Clin Nutr. 2023 May;77(5):596-602. doi: 10.1038/s41430-023-01267-x. Epub 2023 Feb 1. PMID: 36726032.

Associations of the Paleolithic Diet Pattern Scores and the Risk of Breast Cancer among Adults: A Case-Control Study.

Sohouli MH, Baniasadi M, Hernández-Ruiz Á, Magalhães EIDS, Santos HO, Akbari A, Zarrati M. Nutr Cancer. 2023;75(1):256-264. doi: 10.1080/01635581.2022.2108466. Epub 2022 Aug 8. PMID: 35938520.

Benefits Sufferers of Multiple Sclerosis

Randomized control trial evaluation of a modified Paleolithic dietary intervention in the treatment of relapsing-remitting multiple sclerosis: a pilot study.

Irish AK, Erickson CM, Wahls TL, Snetselaar LG, Darling WG.
Degener Neurol Neuromuscul Dis. 2017 Jan 4;7:1-18. doi: 10.2147/DNND.S116949. eCollection 2017. PMID:3005037

Benefits Sufferers of Autoimmune Thyroid Disease

The Effects of the Paleo Diet on Autoimmune Thyroid Disease: A Mixed Methods Review.

Hollywood JB, Hutchinson D, Feehery-Alpuerto N, Whitfield M, Davis K, Johnson LM. J Am Nutr Assoc. 2023 Nov-Dec;42(8):727-736. doi: 10.1080/27697061.2022.2159570. Epub 2023 Jan 4. PMID: 36598468.

The authors summarized: "The Paleo diet has been documented to improve AITD antibodies and thyroid hormones in both Hashimoto's thyroiditis and Graves' disease."

Reduces Risk of Anxiety

The association between paleolithic diet pattern scores and psychological disorders in Iranian adults.

Khodadadi N, Sohouli MH, Mirzaei M, Hosseinzadeh M. Nutr Neurosci. 2024 Dec;27(12):1370-1379. doi: 10.1080/1028415X.2024.2336720. Epub 2024 Apr 3. PMID: 38568874.

Supports Overall Health

Paleolithic diets as a model for prevention and treatment of Western disease. Lindeberg, S. Am J Hum Biol. 2013. Mar-Apr;24(2)L110-15. PMID: 22262579

The author noted that observational studies of hunter-gatherers reveal that their diet may reduce the risk of many modern, degenerative diseases such as *cardiovascular disease, metabolic syndrome, type-II diabetes, acne, nearsightedness*, and *cancer*. They also note that intervention studies using a diet based on Paleolithic food groups showed promising results such as beneficial alterations in *weight, waist circumference, HbA1c, glucose tolerance, insulin secretion, insulin sensitivity, lipids, blood pressure,* and inflammatory markers such as *C-reactive protein.*

Metabolic and Physiologic improvements from consuming a Paleolithic, hunter-gatherer type diet.

Frassetto LA[1], Schloetter M, Mietus-Synder M, Morris RC Jr, Sebastian A.

Eur J Clin Nutr. 2009 Aug;63(8):947-55. doi: 10.1038/ejcn.2009.4. Epub 2009 Feb 11.

What Happened to Cultures That Left Off a Hunter-Forager Diet and Adopted the Standard American Diet?

Quite Simply, It Destroyed the Health of These Peoples!

A Study That Looked at How the Modern Western Diet Destroyed the Health of Australian Aborigines….

Westernisation, insulin resistance and diabetes in Australian aborigines.
O'Dea K.
Med J Aust. 1991 Aug 19;155(4):258-64. PMD 1875844

The study's objective was to examine published data relative to the impact of westernization on chronic health conditions such as coronary heart disease (CHD), non-insulin dependent diabetes mellitus (NIDDM), and obesity in Australian Aborigenes.

As data sources, 55 articles from Australian and non-Australian sources, most of which were peer-reviewed, were cited. The study author chose 28 reports that gave data on the diet, health, lifestyle, and "lifestyle diseases" of Australian Aborgines prior to and subsequent to the impact of westernization. To assist in interpreting the Aboriginal data, an additional 27 articles pertaining to CHD, NIDDM, obesity, insulin resistance, and effects of diet and exercise were utilized.

Relative to data extraction, the study noted that **"**information on dietary composition, anthropometry, disease and risk factor prevalence, and relevant biochemical measurements were used for comparative and interpretive purposes."

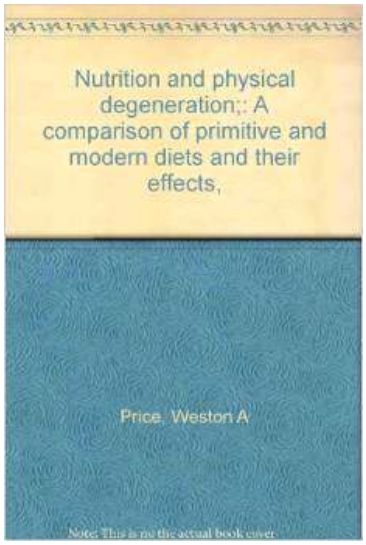
In synthesizing the data, the study author noted that the traditional hunter-gatherer lifestyle of Australian Aborigines, which was marked by pronounced physical activity and a low energy diet, "promoted the maintenance of a very lean body weight and minimized insulin resistance." The author then contrasted this with the lifestyle that ensued from westernization and which was marked by "reduced physical activity and an energy-dense diet (high in refined carbohydrate and fat)," noting that this switchover resulted in obesity ("with an android pattern of fat distribution"), insulin resistance, hyperinsulinemia, impaired glucose tolerance, elevated triglycerides, and hypertension.

The author's crowning observation was: "The striking improvements in carbohydrate and lipid metabolism in diabetic and non-diabetic Aborigines after a temporary reversion to a traditional hunter-gatherer lifestyle highlight the potentially reversible nature of the detrimental effects of lifestyle change, particularly in young people who have not yet developed diabetes."

S.A.D. Destroyed the Health of Native Americans

In the early 1930s, a dentist and member of the American Association of Physical Anthropologists named Weston A. Price (1870-1948) initiated a study of the health of primitive peoples around the world, including a detailed study of Native Americans. (He had the advantage of being able to investigate and to interview the Indians of the British Columbia and Yukon Territory, who remained as nomadic wandering tribes because of not having signed a treaty with the government to obtain federally supplied foods.). His research led him to discover that primitive peoples manifested straight, healthy teeth free of dental caries, excellent physiques and bone structure, healthy joints, remarkable resistance to disease, and a lack of chronic or degenerative diseases marking modern Western peoples.

When Dr. Price analyzed the foods of these primitive peoples, he found that they yielded at least *four times* the water-soluble vitamins, calcium, and some other minerals, and at least *ten times* the fat-soluble vitamins (A and D) from animal foods. He documented his discoveries in a landmark book entitled *Nutrition and Physical Degeneration: A Comparison of Primitive and Modern Diets and Their Effects.*



What made his book so striking were its many photographs contrasting the healthy bodies, teeth, and other features of primitive peoples with those of their modern counterparts (descendants of these peoples who had since adopted the Standard American Diet), evincing the *physical degeneration* that occurs when cultures abandon nourishing traditional diets in favor of modern, processed foods. (In the case of Native Americans, the S.A.D. was forced upon them when they were confined to reservations—often too small or inadequate to hunt and to forage—and were provided only with federal provisions of largely processed foods.) In this regard, it has been well-documented that reservation-bound Native Americans have manifested higher rates of degenerative diseases (diabetes, cardiovascular disease, obesity, arthritis, etc.) than have North-Americans and Europeans in general. See, in this regard, studies such as the following:

Redwood DG, Lanier AP, Johnston JM, Asay ED, Slattery ML. Chronic disease risk factors among Alaska Native and American Indian people, Alaska, 2004-2006. Prev Chronic Dis. 2010 Jul;7(4):A85.

O'Connell J, Yi R, Wilson C, Manson SM, Acton KJ. Racial disparities in health status: a comparison of the morbidity among American Indian and U.S. adults with diabetes. Diabetes Care. 2010 Jul;33(7):1463-70.

Wilson K, Rosenberg MW, Abonyi S, Lovelace R. Aging and health: an examination of differences between older Aboriginal and non-Aboriginal people. Can J Aging. 2010 Sep;29(3):369-82

Resources:

Price, Weston A. *Nutrition and Physical Degeneration*, 1939; many editions since

Fallon, Sally. *Nourishing Traditions,* rev ed., 1999

Shanahan, Cate. *Deep Nutrition: Why Your Genes Need Traditional Food,* 2017

Website: www.westonaprice.org

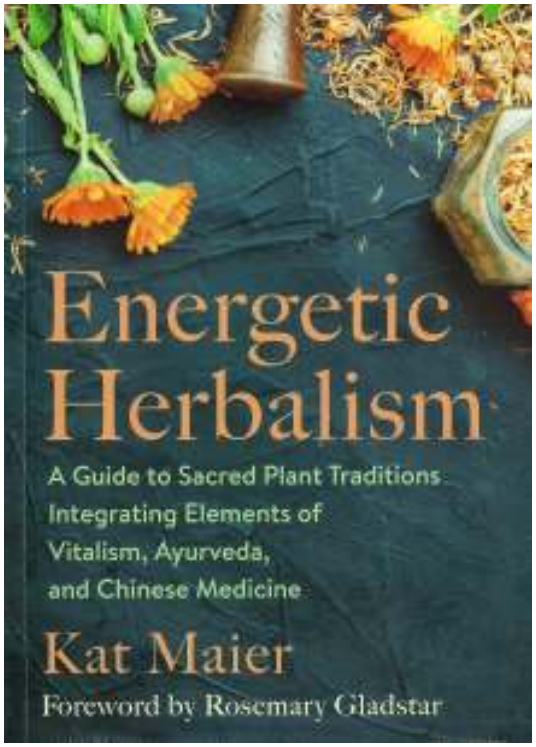
Book Review

Energetic Herbalism: A Guide to Sacred Plant Traditions Integrating Elements of Vitalism, Ayurveda, and Chinese Medicine

by Kat Maier

Chelsea Green Publishing, 2021, 379 pages

Reviewed by Sylvia Burgos Toftness



It isn't often that a book delivers on the promise of its title and cover art. This one does. Thanks to Kat Maier's formal training and decades of clinical experience, the book is credible. Her excellent writing and storytelling skills also make *Energetic Herbalism* an engaging read. Throughout the book she presents a thoughtful picture of the strengths and questions of diverse herbalism paradigms. While that sounds lofty and academic, the language and content of this book are *very* practical.

The book is divided into sections that flow and build on one another, fulfilling her commitment (in the Foreword) to present information useful to student and clinician alike.

She begins by explaining the language of energetics. She goes on to frame the use of herbal medicine through the seasons and weaves these illustrations with the ethnobotany of First Nations, Ayurvedic philosophy, and Western Vitalism. She strongly writes of the need for sustainable sourcing and for all people to build their knowledge and skills for creating tonics and remedies. She provides instructions for creating formulas and for building a basic apothecary. The book offers a good variety of tonics and remedies for a range of common needs.

Kat Maier conveys an anchored commitment to holistic herbalism: knowing body systems, understanding tissue states, and the need to match tonics and remedies to plant actions, spirituality, and sense of place.

Maier intentionally limited the book's materia medica to 25 plants—those she felt would be most readily available in North America. She hopes the short list will challenge the reader (herbalist) to fully explore the broader applicability of each plant. She also urges the reader to look for the helpful plants thriving in their locales.

Each monograph provides key basic information: common and Latin names and family; plant energetics and corresponding tissue states; and plant actions. As in many guides, there are also brief descriptions of the plant's physical appearance, where it grows and under what conditions, what parts of the plant are used and when harvested. Maier's book differs in that these monographs are anchored in cultural and scientific study and they are enriched with stories of clinical successes. Maier also details plant effects on different systems/organs, outlines specific preparations, and carefully provides important cautions.

This is a book I turn to again and again because it's anchored in practicality and backed by deep experience. The language is direct and understandable. It is ultimately readable while rich in complex information.

Sylvia Burgos Toftness is in the MWSHS Master-Herbalist program. Her work life has included television news, teaching English at the University of Minnesota, years in public relations, and grazing cattle. She and her husband David now devote their farm to medicinal permaculture.