

Reforms to allow and encourage direct primary health care so that doctors have more time to focus on nutritional therapies could improve the health of Americans and dramatically reduce U.S. health care costs.



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Did The Government Make Us Fat?

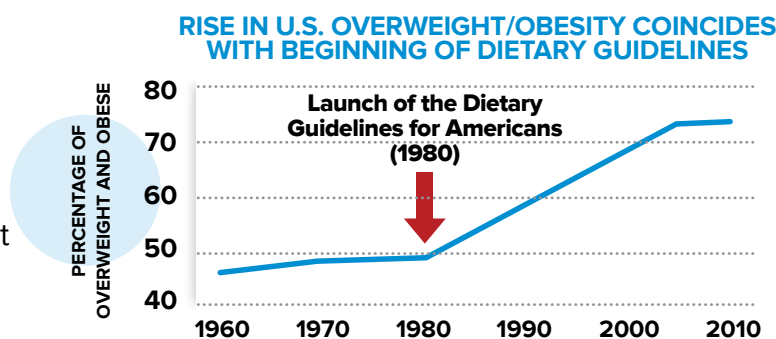
According to the Centers for Disease Control and Prevention, 70% of Americans are overweight and 40% obese.¹ Some scholars and organizations blame the food industry's marketing of "hyper-palatable" processed foods,² plus larger portion sizes³ as families eat out more. Other researchers say obesity and autoimmune diseases result from the reduced diversity of our microbiomes (the trillions of microbes inside digesting the food we eat).⁴

However, over the last decade, new voices, mostly MDs sharing success stories and research, have influenced thousands of doctors and millions of people to reduce carbohydrates and increase fat in their diet, rejecting the federal low-fat dietary guidelines.⁵ A series of influential magazine articles, then books,⁶ podcasts and online medical conferences highlighted peer-reviewed research supporting LCHF (Low Carb Healthy Fat) diets. A group called the Nutrition Coalition⁷ marshaled this research to urge reform, blaming forty years of federal low-fat food guidelines for surging obesity, diabetes, heart disease and other chronic conditions.

The Low-Fat Guidelines

Ann La Berge, associate professor of science and technology studies at Virginia Tech, notes:

After 1980, the low-fat approach became an overarching ideology, promoted by physicians, the federal government, the food industry, and the popular health media. Many Americans subscribed to the ideology of low fat, even though there was no clear evidence that it prevented heart disease or promoted weight loss. Ironically, in the same decades that the low-fat approach assumed ideological status, Americans in the



From "US Dietary Guidelines for Americans - 101." Nutrition Coalition, <https://www.nutritioncoalition.us/dietary-guidelines-for-americans-dga-introduction>

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aggregate were getting fatter, leading to what many called an obesity epidemic.⁸

Embedded in the low-fat dietary guidelines is the “energy balance” theory of weight gain (and loss), popularized in the 1930s by Louis Newburgh of the University of Michigan.⁹ The low-fat dietary guidelines followed the Seven Countries study by Ancel Keys,¹⁰ which blamed saturated fats for heart disease and hearings of the 1977 Senate Select Committee on Nutrition and Human Needs, led by Senator George McGovern.¹¹ Critics claimed Keys was biased in his research (choosing seven countries from the original twenty-two studied, for example). And he was aggressive in undermining the reputations of researchers skeptical of his low-fat diet-heart hypothesis.¹²

The Energy Balance Theory

Doctors and nutritionists—following federal guidelines—have been advising overweight Americans to “eat less and exercise more.” That advice fails for most overweight Americans who attempt calorie-restricted diets, leaving them frustrated, depressed, and still overweight. People can lose weight for a time by eating less and exercising more, but soon their metabolism drops to conserve energy. At that point they are no longer losing weight.

Science journalist Gary Taubes explains:¹³

For nearly a century, obesity research has been predicated on the belief that the cause of the disorder “is an energy imbalance between calories consumed and calories expended,” to quote the World Health Organization. By this ubiquitous thinking, obesity is an energy balance disorder: People get fat because they take

in more calories than they expend. They stay lean when they don’t...

This energy-in–energy-out conception of weight regulation, we [referring to his coauthors, including Harvard scholar David Ludwig] argue, is fatally, tragically flawed: Obesity is not an energy balance disorder, but a hormonal or constitutional disorder, a dysregulation of fat storage and metabolism, a disorder of fuel-partitioning. Because these hormonal responses are dominated by the insulin signaling system, which in turn responds primarily (although not entirely) to the carbohydrate content of the diet, this thinking is now known as the carbohydrate-insulin model [or CIM].¹⁴

Writing in the *American Journal of Clinical Nutrition*, David Ludwig and his coauthors (including Taubes) write:¹⁵

...obesity rates remain at historic highs, despite a persistent focus on eating less and moving more, as guided by the energy balance model (EBM). This public health failure may arise from a fundamental limitation of the EBM itself.

The energy-in-energy out conception of weight reduction is fatally flawed.

Conceptualizing obesity as a disorder of energy balance restates a principle of physics without considering the biological mechanisms that promote weight gain. An

alternative paradigm, the carbohydrate-insulin model (CIM), proposes a reversal of causal direction. According to the CIM, increasing fat deposition in the body—resulting from the hormonal responses to a high-glycemic-load diet—drives positive energy balance. That is, eating too many carbohydrates, with their load of glycemic sugars, creates hormonal responses that deposit fat in the body.

Yet the CDC continues to advise energy

balance on its [Adult Obesity Causes & Consequences](#) web page.¹⁶

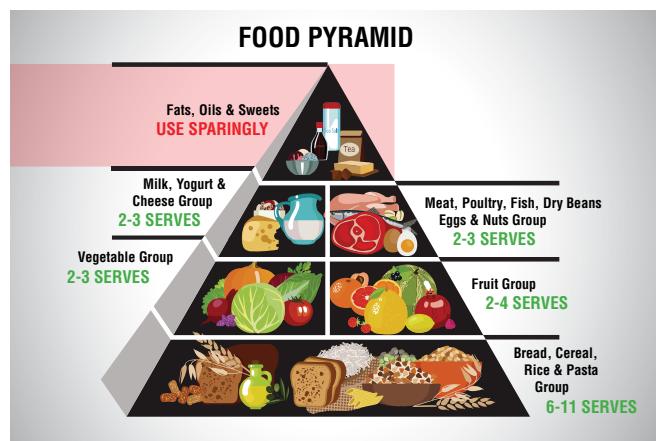
Healthy behaviors include regular physical activity and healthy eating. Balancing the number of calories consumed from foods and beverages with the number of calories the body uses for activity plays a role in preventing excess weight gain.

The Energy Balance Model and Low-Fat Food Pyramid

The CDC, the Department of Agriculture and other federal and state agencies advocate multiple daily servings of whole grains, fruit, and vegetables, and a small amount of lean “protein foods.” The USDA promotes a *Let’s Eat for the Health of It* pamphlet,¹⁷ picturing children and parents with bowls of lettuce, whole tomatoes, and carrots, plus slices of bread. In the picture, a youngster reaches for the tomato bowl, while looking eagerly at the carrots.

Since 2011, the U.S. Department of Agriculture (USDA) has presented food choices through its MyPlate program. MyPlate replaced the 1992 Food Pyramid approach – but still reflects its basic message.¹⁸

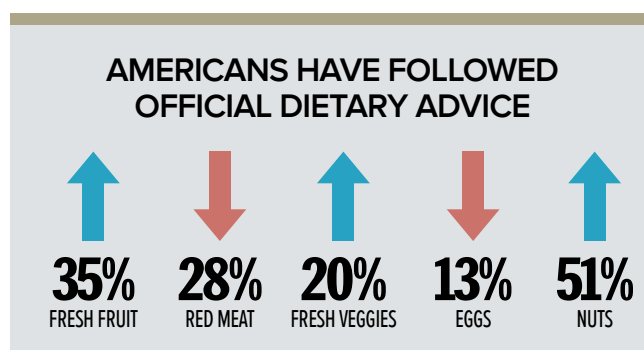
The MyPlate campaign pictures five food Groups: Fruit, Vegetables, Grains, Protein Foods, and Dairy (and a new version, *Start Simple with*



MyPlate, was launched in 2019.¹⁹ Protein is described as “all foods made from seafood; meat, poultry, and eggs; beans, peas, and lentils; and nuts, seeds, and soy products.” Not listed is red meat. Dairy includes advice to “move to low-fat or fat-free dairy milk or yogurt...”

In other words, two key agencies of the federal government—the CDC and the USDA—are both promoting increased carbohydrates and less fat, especially less saturated fat.

The history and politics that started and fueled this policy are described by Nina Teicholz in her book *The Big Fat Surprise* and in her online presentations.²⁰ Teicholz is a respected journalist who discovered research on nutrition that contradicted much of what Americans had been taught. She makes the case that the government’s promoting of carbohydrates and demonizing meat and saturated fat is the major cause of obesity, diabetes, and cardiovascular disease in the U.S. and around the world. (In a



Americans Have Been Following Nutrition Guidelines - According to New Food Consumption Data

US Food Consumption Data: <https://ninateicholz.com/new-us-food-availability-data/>

2020 essay in the *Wall Street Journal*, Teicholz further argued that these policies contributed to the pandemic’s severity.²¹)

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Promoted by public health agencies and policies, the energy balance model is integrated into the MyPlate nutritional guidelines (eat more carbs and less fat, measure portions, exercise more). Yet these top-down public health campaigns have corresponded with the nation's increasing obesity, diabetes, high blood pressure, and cardiovascular disease. And they occurred while mounting high-quality peer-reviewed nutritional research suggested the theory was wrong.

The good news is the surging health care revolution spreading across new medical nutrition associations and direct-care providers, many of whom learned first from patients who had lost weight by reducing carbohydrates, or from their own failed efforts to lose weight by “exercising more and eating less.” Dr. David Unwin, a British general practitioner, is a compelling speaker who has published on the successful results of putting diabetes in remission with dietary changes.^{22 23}

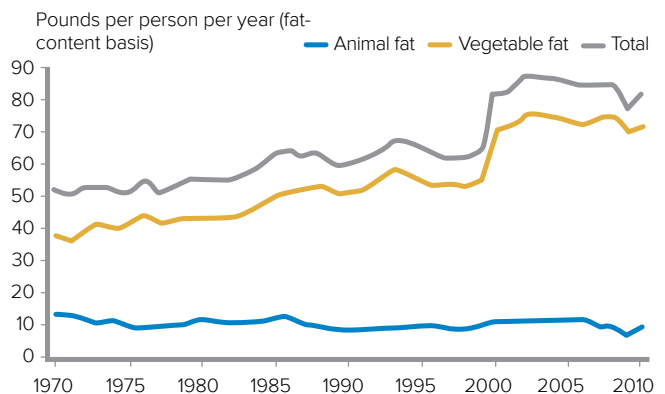
Doctors and nutrition researchers who favor a low-carb approach have given presentations at medical conferences and online, many available online at [Low Carb DownUnder](#), [DietDoctor](#), [LowCarbUSA](#), [CrossFit Health](#), and [LowCarbMD](#).²⁴ Critical of low-carb claims are doctors and nutritionists who emphasize the nutritional benefits and fiber from fruits and vegetables, beans and legumes, and whole-grain bread and pasta. They say higher carbohydrate diets are better for energy and essential nutrients. Among them are advocates of plant-based diets, who recommend beans and whole grains, which are high in carbohydrates. While these advocates are primarily opposed to meat, their guidelines encourage high carb and low fats, much the same as the federal dietary guidelines. Critics of low-carbohydrate

facts include [NutritionFacts.org](#), with support from the [Jesse & Julie Rasch Foundation](#).²⁵ See also videos from [Plant Based News](#), such as [Low Carb Keto Diet - Debunking 7 Misleading Statements](#).²⁶

John Mackey, the founder and longtime CEO of Whole Foods Market, debates Nina Teicholz in [this 2015 program](#) hosted by the New York City Junto.²⁷ Both are critical of “ultra-processed” and high-sugar foods but Mackey cites studies critical of meat, and he notes that fat consumption and portion size have increased. Teicholz counters, claiming the observational studies Mackey cites are flawed both because people misremember what they have eaten and because other lifestyle factors influence health.²⁸ Also the increases in fats consumed—some 30 pounds per person per year since 1970—have been vegetable oils, not animal fats. (See the table.²⁹) In addition to

Figure 10

Added fats and oils availability increased almost 30 pounds between 1970 and 2010



Note: In 2000, the number of firms reporting vegetable oil production to the Census Bureau increased, and this contributed to the spike in the data for salad and cooking oils, shortening, and aggregated numbers that use these estimates, such as total vegetable fats & oils, total added fats & oils and total calories from added fats & oils and from all foods. Source: USDA, Economic Research Service, Food Availability Data.

promoting low-fat diets, the federal guidelines recommend vegetable oils (actually oil from seeds) rather than saturated fats from animal sources.³⁰ In 2019, the Soho Forum also hosted a debate on vegetarian vs. omnivore diets.³¹

Without the continuing public health policies



and campaigns, Americans might return to the eggs-for-breakfast traditions popular for the much leaner pre-Food Pyramid America. Just look at high school yearbooks through the 1970s. There are few overweight teens and teachers. Nina Teicholz comments that what today is labeled a low-carbohydrate diet is what most Americans ate before the low-fat public health campaigns launched in the late 1970s and 1980s.

From Yesterday's Low-Fat Campaigns to Today's Nutrition Education

Nutrition education, research, and public health policies have been and continue to be deeply politicized. Special interest groups have long been active in shaping nutritional guidelines for religious,³² commercial,³³ and institutional³⁴ reasons. And in recent years environmental and animal rights organizations have joined in promoting low-fat and no-meat diets. For example, the [EAT-Lancet Commission on Food, Planet, Health](#)³⁵ was formed by the medical journal *The Lancet* to change the world's eating habits. Physician Georgia Ede outlines major problems with EAT-Lancet, emphasizing the poor quality of most nutritional research:

The vast majority of human nutrition research — including the lion share of the research cited in the EAT-Lancet report — is conducted using the tragically flawed methodology of nutrition epidemiology. Nutrition epidemiology studies are not scientific experiments; they are wildly inaccurate, questionnaire-based guesses (hypotheses) about the possible connections between

foods and diseases. This approach has been widely criticized as scientifically invalid....³⁶

Across the “nutrition ideology” spectrum there is agreement that a healthy diet requires protein. But nutrition researchers, environmental groups and animal rights groups disagree over the best source of that protein: animals, vegetables or beans? Nutrition researchers and advocates also disagree over when and how often we should eat. Three, two, or just one meal a day? Or many small meals, sort of grazing through the day? Research on time-restricted eating (often called intermittent fasting—the opposite of grazing) has found major metabolic benefits.³⁷

Other players in the nutrition world are the

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major weight-loss companies. Every overweight person is a potential customer and every failed diet an opportunity for the next diet. The global weight loss market is estimated at over \$250 billion in 2021 and headed to \$377 billion by 2026.³⁸

Other studies estimate the U.S. “weight loss & diet control” market at \$72 billion in 2019.³⁹ The ubiquity of this market suggests that there is something wrong with the paradigm they are following.

Many heated debates and many partisans pervade nutrition and public health communities. The plant people vs. the meat people, polyunsaturated oils advocates vs. saturated fat advocates,⁴⁰ the lots-of-small-meals grazing nutritionists vs. the intermittent fasting/time-restricted eating advocates. Others blame the increase in vegetable oils (PUFAs) for the obesity epidemic.⁴¹ One result of these debates is that doctors working for major health care providers are often unable to recommend low-carb diets, even when they are on these diets themselves.

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Learning New Ways of Staying Healthy

Even so, “everyday people” are learning from friends and online medical entrepreneurs that reducing carbohydrates and increasing protein and fats may be a better way to stay healthy. The [Low Carb MD](#) and [Diet Doctor](#) podcasts each have had some five million downloads or views. [Dr. Eric Berg](#) (a low-carb nutrition and fasting educator)⁴² has had more than ten million views for his top YouTube videos. Other online nutrition entrepreneurs include Jaime Seeman, a board-certified obstetrician/gynecologist whose [Dr. Fit and Fabulous](#) website builds on her medical experience (and good looks); Paul Saladino’s [Carnivore MD](#); Robb Wolf’s [Paleo Diet](#); Dr. Ben Bikman’s [HLTH Code](#); and many, many others.⁴³

More peer-reviewed studies are being published,⁴⁴ including those from [Virta Health](#), a company focused on reversing Type 2 diabetes through nutritional intervention. For the millions of Americans with metabolic syndrome (insulin resistance), reducing carbohydrates reduces blood glucose and insulin levels and they become metabolically healthy, lose weight, and in many cases put their type 2 diabetes into remission.

After 1 year, patients in Virta’s clinical trial eliminated 63% of diabetes-specific medications, and 94% of patients on insulin eliminated or reduced usage.⁴⁵

Virta Health research papers document significant cost savings for patients and third-party payers. A 2021 study documented \$10,000 per patient in reduced payer savings (\$5,000 per year) from nutritional intervention.⁴⁶

At two years of treatment, Virta trial patients still experienced clinically significant improvements in HbA1c%, metabolic syndrome rate, and markers of inflammation. More than half of trial completers met the criteria for diabetes reversal, and a significant portion of those individuals also had partial and complete diabetes remission. Along with these improvements in health outcomes, 67% of diabetes-specific prescriptions were discontinued, and 91% of patients who began on insulin either reduced or eliminated their insulin dosage.⁴⁷

In addition, patients following the very low-carb diets and CCI (Continuous Care Interventions) lost an average of 20 pounds over two years

Patients following the very low-carb diets and continuous care interventions lost an average of 20 pounds over two years compared to those receiving usual care.

compared to those receiving UC (Usual Care).⁴⁸

The Society of Metabolic Health Practitioners (SMHP)⁴⁹ lists 1,264 medical professionals (January 31, 2022) and offers Clinical

Guidelines for doctors offering patients nutritional interventions for various chronic conditions.⁵⁰ CrossFit launched a new division, CrossfitHealth, to provide training in nutrition as Vox health correspondent Julia Belluz reports.⁵¹

Patient after patient would stream into [Ronda Rockett’s] clinic with diabetes, weight problems, and heart disease. Rockett followed the medical guidelines, recommending healthier diets and more exercise. But despite her best efforts — even texting and emailing motivational follow-ups — many failed to change at all, either because they didn’t want to or didn’t have the means.



In 2013, eager to try something new, Rockett decided to quit medicine and close up her practice. What she did next, she says, is the most meaningful contribution to health care she's made to date. She opened a CrossFit gym.

A couple of years ago, [CrossFit founder Greg] Glassman discovered that at least 20,000 US doctors regularly went to CrossFit gyms. He also learned that many of them felt like Rockett — disappointed by their inability to prevent chronic disease and help patients change their behavior...”

CrossFit Health is offering an alternative to traditional medicine, writes Belluz:

CrossFit CEO Eric Roza would like to know if I have a primary care doctor. When I sheepishly tell him that I do not, he grins. I've just helped prove his point that the traditional primary care system, the one rooted in doctor's offices and hospitals, isn't working as it should.

My lack of a doctor is “indicative of the problem,” he says. Traditional primary care “takes time, it takes money. You're not seeing the value, right?”

That problem is what CrossFit—a fitness company famous for high-intensity workouts that combine weight lifting and cardio...is trying to solve with its latest offering, CrossFit Precision Care.⁵²

The Campaign to Revise Federal Dietary Guidelines

Nina Teicholz leads the [Nutrition Coalition](#),⁵³ an organization working to revise the Federal Dietary Guidelines to incorporate recent research on metabolic health, insulin resistance, and the benefits of increasing healthy fat and reducing

carbohydrates.

Changing the federal Dietary Guidelines for Americans⁵⁴ to reflect peer-reviewed research would improve nutrition for millions of Americans whose high-carb meals are encouraged by federal programs and policies, Teicholz contends. Teicholz explains that the government's Dietary Guidelines

have a tremendous influence over...food programs that are delivered to one in four Americans each month, including school lunches, school breakfasts, food baskets for women and infant children, feeding programs for the elderly... also the dietary guidelines that informs all K-12 education and medical education. Most doctors and dietitians teach the dietary guidelines, most health care workers teach them, it also affects our military, we have an obesity crisis in our military that is almost equal to what we see in the general population...and the dietary guidelines really affects our whole food supply because manufacturers of processed foods want to have what is called a “clean label” so they can follow the guidelines...⁵⁵

Should We Return to the Banting Diet?

Over the last decade, everyday doctors and overweight people have discovered that government nutritional advice and guidelines don't work, but the Banting Diet from the 1860s does. Named for William Banting and his *Letter on Corpulence*, Banting's advice is: cut carbohydrates to lose weight. Gary Taubes' 2007 book *Good Calories, Bad Calories* begins with the story of the Banting diet and then focuses on excess carbohydrates.

Taubes disputes the idea that a low-fat diet promotes weight loss and better health. Obesity is caused, he argues, not by the

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quantity of calories you eat but by the quality. Carbohydrates, particularly refined ones like bread and pasta, raise insulin levels, promoting the storage of fat.

People Differ

People are different inside as well as outside. Our metabolic processes, microbiomes, and nutritional requirements vary from person to person. So one-size-fits-all, top-down federal dietary guidelines can't be right for everyone, any more than the federal Recommended Dietary Allowance (RDA) for vitamins are right for everyone.

Nina Teicholz notes that though the Federal Dietary Guidelines can work for metabolically healthy Americans, the guidelines are not right for the majority of Americans who suffer from obesity, diabetes, or other chronic conditions related to insulin resistance.

Life around us is complicated and mysterious, but life inside us is even more mysterious. How

can we learn what's going on with our individual metabolic system and microbiome and what foods are best for us? It's a challenge and one we should welcome and take responsibility for. We are all metabolically different and our nutritional needs vary. Those overweight and metabolically unhealthy have a variety of villains to point to, from the processed food industry and pharmaceutical companies to bureaucratic health care companies, major diet product companies, and, perhaps most of all, to federal agencies still promoting low-fat dietary guidelines and the energy balance weight loss advice.

The federal dietary guidelines can't yet

be ignored by doctors employed by major health care companies, because they are subject to state and federal health and medical reimbursements and

regulations. Reforms to allow and encourage direct primary health care so that doctors have more time to focus on nutritional therapies could improve the health of everyday Americans and dramatically reduce U.S. health care costs.

One-size-fits-all, top-down federal dietary guidelines can't be right for everyone.

Endnotes

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⁶ Gary Taubes, “What If It’s All Been a Big Fat Lie?” *New York Times Magazine* (July 7, 2002) and his book *Good Calories, Bad Calories* (New York: Alfred A. Knopf, 2007). Also, Nina Teicholz, “How Americans Got Red Meat Wrong,” *The Atlantic* (June 2, 2014), and her book *The Big Fat Surprise* (New York: Simon & Schuster, 2015).

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They wrote (and continue to write) numerous text books on the subject. They have also written many nursing textbooks and produce a wide range of medical literature and they also own a great many hospitals. They own 60+ publishing houses, 400+ TV stations and several hundred radio stations. They are the second biggest educator after the Catholic Church. They also own 24 food industries and they started the soy industry.”

³³ Kevin B. Miller et al., “Role of Food Industry in Promoting Healthy and Sustainable Diets, Nutrients,” *Nutrients* (August 10, 2021), <https://pubmed.ncbi.nlm.nih.gov/34444900/>. Miller et al. write, “An emerging movement called regenerative agriculture (a holistic, nature-based approach to farming) provides a pathway to delivering sustainable foods at an affordable cost to consumers. A broad coalition among academia, government, and the food industry can help to ensure that the food supply concurrently prioritizes sustainability and nutrient density in the framework of consumer-preferred foods. The coalition can also help to ensure sustainable diets are broadly adopted by consumers.”

³⁴ Nutrition Coalition, “Guidelines Fall Short of Best Scientific Practices,” <https://www.nutritioncoalition.us/2020-dietary-guidelines-info/dietary-guidelines-fail-to-meet-review-standards>. “The last two meetings of the expert committee reviewing the science for the 2020 Dietary Guidelines for Americans (DGA) have revealed many alarming problems. At a minimum, the process lacks transparency, does not use any verified methodology for reviewing the science, and excludes large numbers of rigorous studies while instead relying primarily on weak data for its conclusions.” Accessed January 12, 2022.

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³⁶ Georgia Ede, “EAT-Lancet’s Plant-Based Planet: 10 Things You Need to Know,” *Psychology Today* (January 19, 2019), [https://www.psychologytoday.com/us/blog/diagnosis-diet/201901/eat-lancets-plant-based-planet-10-](https://www.psychologytoday.com/us/blog/diagnosis-diet/201901/eat-lancets-plant-based-planet-10-things-you-need-to-know)

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⁴⁰ Franziska Spritzler, “Vegetable Oils: Are They Healthy?” *DietDoctor*, <https://www.dietdoctor.com/low-carb/vegetable-oils>, July 13, 2021. See also Diet Doctor Podcast #78 Vegetable Oils: Are they Healthy?” <https://www.dietdoctor.com/video/podcast/episode-78-are-vegetable-oils-healthy>. Some authorities promote vegetable oils as a health food, but others see them as a clear danger to our health.

⁴¹ Julia Belluz, “Americans Are Eating Way More Fat. But It’s Not Butter,” *Vox*, July 31, 2018, <https://www.vox.com/science-and-health/2017/2/2/14485226/americans-avocado-consumption-usda-report>.

⁴² Eric Berg, “Get Healthy, Lose Weight, and Feel Great!” <https://www.youtube.com/c/DrEricBergDC/video>.

⁴³ See, for example: Jaime Seeman, <https://www.doctorfitandfabulous.com/>, Paul Saladino’s “Carnivore MD,” <https://carnivoremd.com/author/paul-saladino/>, Robb Wolf’s “Paleo Diet,” <https://robbwolf.com/category/paleo-diet-basics/>, and Dr. Ben Bikman’s “HLTH Code,” <https://gethlth.com/>.

⁴⁴ Many nutritional studies are profiled on [DietDoctor.com](#). Search for “peer

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reviewed studies”: <https://www.dietdoctor.com/?s=peer+reviewed+studies&search=&st=any>.

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