

Thank you so much for the opportunity to provide this testimony. I am speaking on behalf of The Nutrition Coalition, a not-for-profit group comprised of researchers, doctors, journalists, and members of the public who share a belief that the Dietary Guidelines for Americans are not currently based on rigorous science and that they need to be, to reverse the obesity and type 2 diabetes epidemics we suffer from today.

The Nutrition Coalition receives no funds from any interested industry. We stand for the science alone, solely in the interest of the public health.

It is clear that the Guidelines have failed to safeguard the health of America. Indeed, according to government data, our current obesity epidemic began in 1980, the very year that the Guidelines were launched. (See Attachment #1). Why should that be? There are a number of possible explanations, but the one best supported by the evidence is that the Guidelines have long been based on weak, inconclusive science, causing them to err in number of ways.

This lack of scientific rigor in the Guidelines has now been recognized by the National Academy of Science, Engineering, and Medicine, which in its recent report stated that the Guidelines “lack scientific rigor.” The science falls short of meeting the “best practices for conducting systematic reviews,” and “methodological approaches and scientific rigor for evaluating the scientific evidence” need to “be strengthened,” said the report.

For example, from the start, the Guidelines told Americans to limit their consumption of dietary cholesterol, found in such foods as liver, shellfish, and eggs. Americans complied, reducing their consumption of eggs, for instance, by 13% in recent decades.¹ This undoubtedly harmed American health, since egg yolks—but not the whites—contain many crucial nutrients, including choline and lutein which are essential for healthy brain and eye development. In 2015, the Guidelines eliminated caps on cholesterol, but the health of many millions of Americans likely suffered from inadequate nutrition due to erroneous advice in those intervening decades.

The Guidelines also long recommended a “low-fat” diet, capping dietary fat at around 30% of calories. However, for the last decade at least, the Guidelines have dropped any “low-fat” language, because clinical trials funded by the National Institutes of Health (NIH) on tens of thousands of people found that this diet did nothing to prevent obesity, type 2 diabetes, heart disease or any kind of cancer.² In fact, the 2015 Dietary Guidelines advisory committee stated that the low-fat diet actually *increased* heart-disease risk.

Moreover, that low-fat diet recommendation told Americans to eat instead more carbohydrates—which we did, dramatically increasing our carbohydrate consumption, by 30% (see Attachment #2). According to a large and growing body of scientific literature, we now know that carbohydrate restriction can reverse the insulin resistance that is at the root of obesity and type 2 diabetes, if not also other nutrition-related diseases. Therefore, it is quite likely that the low-fat, high-carbohydrate diet recommended by the Guidelines and followed dutifully for decades by Americans, did nothing to protect the public health and quite likely—tragically--fueled the very chronic diseases that this policy meant to prevent.

¹ Jeanine Bentley. *U.S. Trends in Food Availability and a Dietary Assessment of Loss- Adjusted Food Availability, 1970-2014*, EIB-166, U.S. Department of Agriculture, Economic Research Service, January 2017.

² Teicholz, N. “The scientific report guiding the US dietary guidelines: is it scientific?” *BMJ* 2015;351.

These are but two examples of how the Guidelines have made serious errors, ultimately damaging American health. There are others.

Why these mistakes came to pass is a complex issue, but one simple fact stands out, namely that the Guidelines have long been based on weak, insufficient evidence. Many experts make the argument that we must leap ahead with recommendations based even on this insufficient evidence due to the urgency of the public health problems we face, but this logic can lead to tragic mistakes. Indeed, it *has* led to tragic mistakes. The government should be restrained and modest in making policy—and not make such mistakes again.

Our current Guidelines still contains numerous recommendations based on little to no rigorous science. These recommendations are:

1. The caps on saturated fats. Like the caps on cholesterol, these caps were instated from the start based on weak epidemiological data that has since been contradicted by large, rigorous, NIH-funded clinical trials looking at conclusive, hard-endpoint data. These government-funded clinical trials, which conclude that saturated fats have *no effect on cardiovascular mortality or total mortality*,³ have been consistently ignored by successive Dietary Guidelines advisory committees.⁴
2. The “lower is better” recommendation on salt. This advice is based on clinical trials on hypertensive populations only and should never have been prescribed to the general population at large. Moreover, the current advice on salt is contradicted not only by a 2013 study by the Institute of Medicine but also by numerous papers in top peer-reviewed medical journals.⁵
3. The vegetarian diet. The recent systematic review of the literature by the USDA’s Nutrition Evidence Library concluded that the evidence for this diet’s disease fighting powers is only “limited,” which is the lowest rank for available data. Moreover, although the NEL conducted eight reviews on fruits and vegetables, none found strong (grade 1) evidence to support the assertion that these foods can provide health benefits.⁶
4. The one-size-fits-all diet. Despite assertions that the Guidelines offer a “variety” of dietary patterns, the reality is that all these patterns, in terms of their macronutrient make-up, are essentially the same (see Attachment #3). This approach is inadequate, because there is now an abundant body of science demonstrating that people suffering from obesity, type 2 diabetes, and heart disease—now a majority of the US population—need a different dietary approach from those who are healthy. This body of science, which examines the effect of carbohydrates on glucose control, insulin resistance,

³ Teicholz and Thorn, Saturated Fats and CVD: AHA Convicts, We Say Acquit - Medscape - Jul 12, 2017.

⁴ Ibid.

⁵ G. Mancia, University of Milano-Bicocca, S. Oparil P.K. Whelton, et al. [“The technical report on sodium intake and cardiovascular disease in low- and middle-income countries by the joint working group of the World Heart Federation, the European Society of Hypertension and the European Public Health Association”](#) European Heart Journal (2017); N. Graudal, G. Jürgens, B. Baslund, M.H. Alderman. [“Compared with usual sodium intake, low- and excessive-sodium diets are associated with increased mortality: a meta-analysis”](#) Journal of Hypertension (2014); K. Stolarz-Skrzypek, T. Kuznetsova, L. Thijs, et al; European Project on Genes in Hypertension (EPOGH) Investigators. [“Fatal and nonfatal outcomes, incidence of hypertension, and blood pressure changes in relation to urinary sodium excretion”](#) Journal of the American Medical Association (2011); M. O'Donnell, McMaster University, A. Mente, S. Rangarajan, et al, for the PURE investigators. [“Urinary sodium and potassium excretion, mortality, and cardiovascular events”](#) New England Journal of Medicine (2014); A. Mente, Department of Clinical Epidemiology and Biostatistics, McMaster University, M. O'Donnell, S. Rangarajan, et al, for the PURE, EPIDREAM, and ONTARGET/TRANSCEND Investigators. [“Associations of urinary sodium excretion with cardiovascular events in individuals with and without hypertension: a pooled analysis of data from four studies”](#) The Lancet (2016); E.I. Ekinci, S. Clarke, M.C. Thomas, et al. [“Dietary Salt Intake and Mortality in Patients With Type 2 Diabetes”](#) Diabetes Care (2011).

⁶ Ibid.

obesity and cardiovascular risk factors, has never been considered by any Dietary Guidelines advisory committee.⁷

Thus, the situation today is not one in which we lack enough rigorous, clinical trial evidence to make good recommendations but rather one in which rigorous scientific evidence, most of it funded by the government, *exists* but has been ignored. Why? The principal reason is that successive Dietary Guidelines advisory committees have been comprised of researchers largely devoted to maintaining status-quo advice.

Therefore, a fair and properly balanced advisory committee for the next iteration of the Guidelines *must* include researchers who do not adhere to established, status-quo thinking on the above issues.

The inclusion of a true range of viewpoints on this committee is essential so that long-ignored science may come to light.

What is at stake is not only the need for policy that is truly evidence-based but also the larger need to serve the public health, so that we can finally begin to reverse the epidemics of obesity and diabetes that have taken such a devastating human and financial toll on our nation.

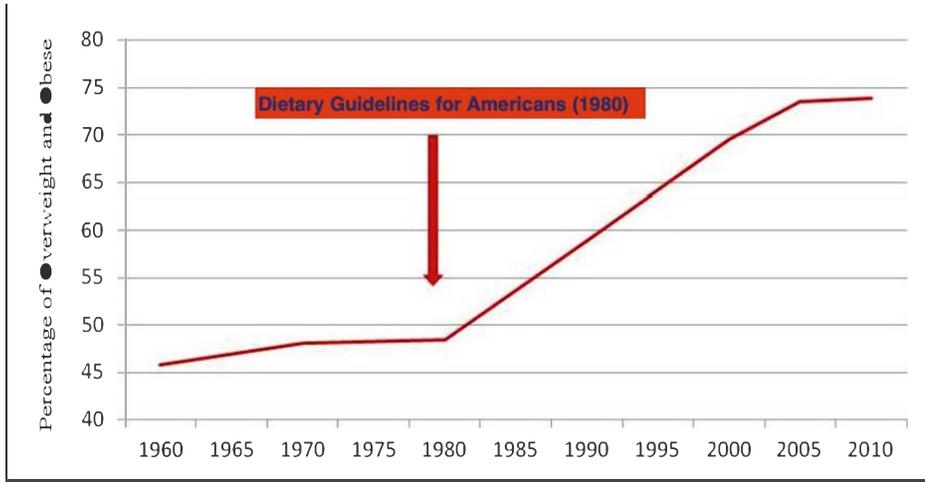
Thank you.

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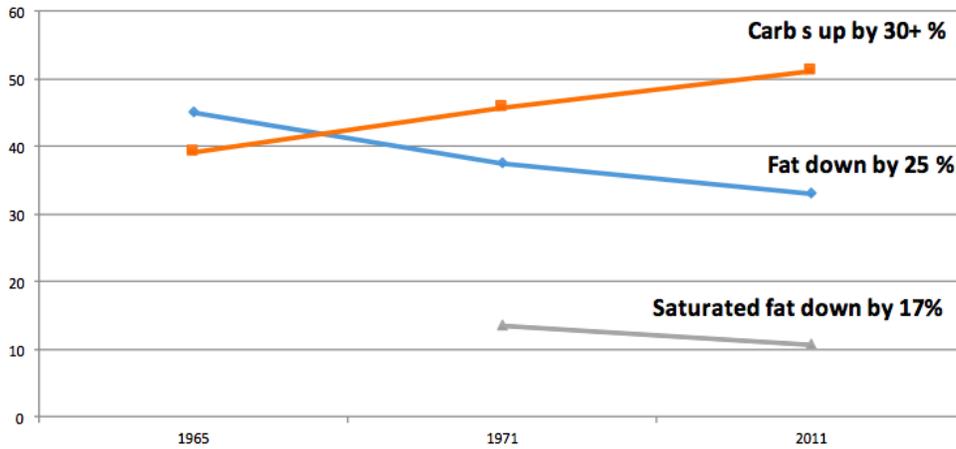
⁷ Ibid.

Attachment #1

Rise in U.S. Overweight/Obesity Coincides with Beginning of Dietary Guidelines



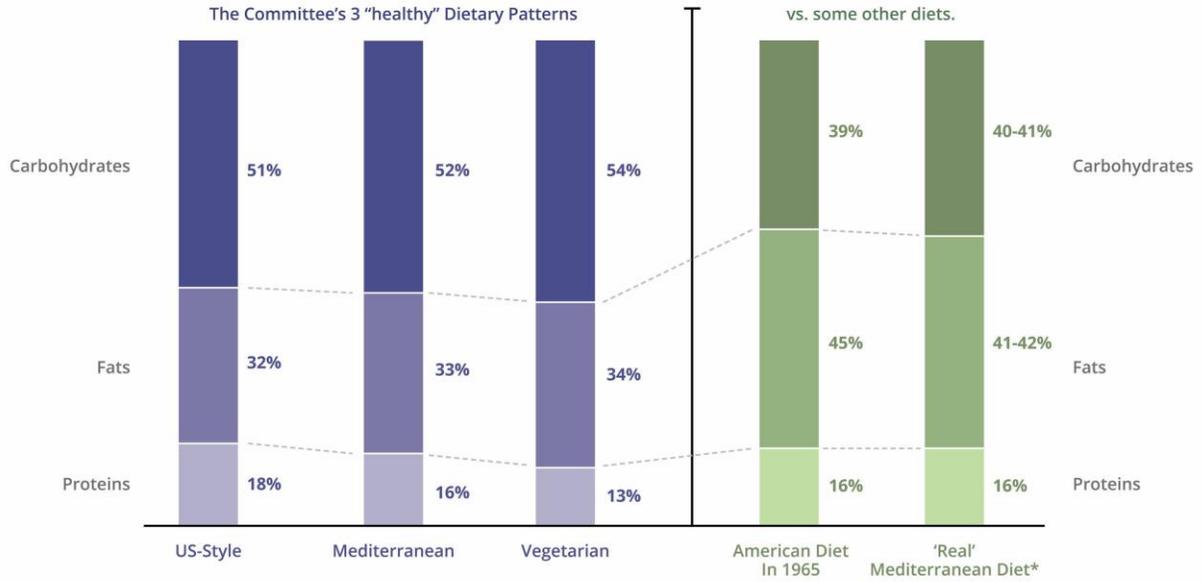
Major macronutrient shift in US 1965-2011



Source: Cohen et. al., *Nutrition*, May 2015, [Volume 31, Issue 5: 727-732](#)

Still a One-Size-Fits-All Diet

2015 Dietary Guidelines Advisory Committee says it presents a “range” of dietary patterns



* This is the Mediterranean Diet that is described in the scientific literature and which was found to show positive cardiovascular benefits, in the largest clinical trial to date.
 Sources: For macronutrients of 2015 Patterns: 2015 DGAC report, Table D1.33; For 1965 data, Cohen et al., *Nutrition*, 2015: 727-732. For Real Mediterranean Diet: Supplementary Appendix to Estruch et al., *New England Journal of Medicine*, 2013: 1279-90, 528; Teicholz, N., *The Big Fat Surprise*, Simon & Schuster, 2014: 181-183.

Note: The “real” Mediterranean diet refers to the one that was tested in a clinical trial in Spain, demonstrating cardiovascular benefit.