

LIFE & ARTS | IDEAS | ESSAY

## A Low-Carb Strategy for Fighting the Pandemic's Toll

Federal dietary guidelines don't reflect the evidence that eating fewer carbohydrates can help to reduce obesity, diabetes and heart disease.

By **Nina Teicholz**  
May 30, 2020

The coronavirus has added a brutal exclamation point to America's pervasive ill health. Americans with obesity, diabetes, heart disease and other diet-related diseases are about three times more likely to suffer worsened outcomes from Covid-19, including death. Had we flattened the still-rising curves of these conditions, it's quite possible that our fight against the virus would today look very different.

***"To combat this and future pandemics, we need to talk about not only the masks that go over our mouths but the food that goes into them."***

To combat this and future pandemics, we need to talk about not only the masks that go over our mouths but the food that goes into them. Next month, an expert committee will issue its advisory report on the federal government's official dietary guidelines for the next five years. First published in 1980, the guidelines are meant to encourage healthy eating, but they have self-evidently failed to stem the ever-rising rates of obesity, diabetes and other chronic diseases in the U.S.

***"Pills and surgery can treat the symptoms of such conditions, but diet-related problems require diet-related solutions."***

Pills and surgery can treat the symptoms of such conditions, but diet-related problems require diet-related solutions. The good news is that changes in diet can start to reverse these conditions in a matter of weeks. In [one controlled trial](#) at the University of Indiana involving 262 adults with Type 2 diabetes, 56% were able to reverse their diagnosis by following a very low-carbohydrate diet, with support from a mobile app, in just 10 weeks. The results of this continuing study have been [sustained for two years](#), with more than half the study population remaining free of a diabetes diagnosis.

Other studies have found that dietary changes can rapidly and [substantially improve cardiovascular risk factors](#), including conditions like hypertension that are major risk factors for worsened Covid-19 outcomes. A [2011 study in the journal Obesity](#) on 300 clinic patients eating a very low-carbohydrate diet saw blood pressure quickly drop and remain low for years. And [a](#)



[2014 trial](#) on 148 subjects, funded by the National Institutes of Health, found a low-carb diet to be "more effective for weight loss and cardiovascular risk factor reduction" than a low-fat control diet at the end of the 1-year experiment.

Since 2018, the American Diabetes Association (ADA) and its European counterpart have considered a low-carb diet as [one standard of care](#) for people with Type 2 diabetes, in part because it lowers blood pressure and improves HDL, the "good" cholesterol. A [2019 ADA report](#) stated that a low-carbohydrate diet "has demonstrated the most evidence for improving glycemia," that is, for keeping blood sugars in check. This could be a crucial factor for avoiding Covid-19's worst outcomes: In [a paper just published](#) in the journal *Cell Metabolism*, researchers found that among 7,337 Chinese patients diagnosed with Covid-19, well-controlled blood sugar was correlated with "markedly lower mortality" among those with Type 2 diabetes.

Yet the federal government's dietary guidelines themselves stand in the way of making low-carb diets a viable option for the [60% of Americans with at least](#)

[one chronic disease](#). That's because the guidelines call for a diet high in grains, with more than 50% of calories coming from carbohydrates. The guidelines aren't mere advice: They drive the National School Lunch Program, feeding programs for the elderly and the poor, and military food. Many patients learn about the guidelines from their doctors and dietitians.

***“To date, government experts overseeing the dietary guidelines have refused to publicly consider low-carbohydrate alternatives.”***

To date, government experts overseeing the dietary guidelines have refused to publicly consider low-carbohydrate alternatives. The expert committee that drafted the current guidelines in [2015 conducted a formal review](#) of the science on low-carbohydrate diets but didn't publish their findings, as revealed by emails obtained through the Freedom of Information Act. [1] By not publishing the low-carb analysis alongside the other diet reviews in the principal part of the report, low-carb diets were effectively excluded. [2]

Harvard professor Frank Hu, a committee member, [questioned this approach](#): “Given the popularity of [a low-carb] pattern and enormous amount of research that has been generated in the past several years, I was wondering if we should have a separate section on low-carb diets rather than burying it in the Methodology section.” He added, “People who are familiar with the field may

complain that we gloss over recent evidence and don't give low-carb diets...sufficient attention that they deserve.”[Note: see pp. 206-216 for conversation cited]

Looking back at the committee's work, chair Barbara Millen says that it reported on an outside paper listing 15 dietary approaches “as options for effective weight loss,” including low-fat, Mediterranean-style and low-carb regimes. But “none of these dietary approaches was shown to be superior in terms of effective long-term weight loss and none was elaborated upon in specific detail in our 2015 report.”[3]

Five years later, there has been far more research about low-carb diets, yet the current committee, whose report is due in June, stated recently that it couldn't find a single study with carbohydrates below 25% of calories.[4] In response, an advocacy group called the Low-Carb Action Network [published a list of 52 such trials](#). One reason that the committee missed these studies is that it decided to exclude all trials on weight loss [5], even though two-thirds of Americans are overweight or obese.

The reason is that the dietary guidelines focus solely on disease prevention in healthy people. Congress mandated in 1990 that the guidelines should address the “general public,” and in that year, most Americans did not have diet-related conditions. Now a majority of them do, yet federal officials have stated their reluctance to expand the scope of the guidelines.

The National Academies of Sciences, Engineering and Medicine (NASEM) warned, in [a 2017 report mandated by Congress](#), that “it will...be essential for the [dietary guidelines]...to include all Americans whose health can benefit by improving their diet... Without these changes, present and future dietary guidance will not be applicable to a large majority of the general population.”

I direct a nonprofit group that advocates for our national guidelines to be based on a rigorous scientific process—one that does not exclude evidence and employs a recognized methodology for reviewing the science, a system to manage bias and greater transparency. These are all reforms urged by the NASEM, yet so far they have [not been adopted by the agencies](#) overseeing our dietary guidelines.

***“As we search for treatments and a vaccine for the coronavirus, we should also be talking about making Americans more fit to fight this and future pandemics at home.”***

In 2010, a group of retired generals published “[Too Fat to Fight](#),” a report sounding the alarm on how diet-related conditions threaten America's fitness on the battlefield. As we search for treatments and a vaccine for the coronavirus, we should also be talking about making Americans more fit to fight this and future pandemics at home.

[1] Link in text is to the search plan and results. Links below are to reviews themselves, obtained via FOIA:

<https://www.scribd.com/document/463682500/Low-CHO-Diets-Summary1-1>

<https://www.scribd.com/document/463682501/Low-CHO-Diets-and-Body-Weight-11-24-142-1>

[2] The committee stated, [in its expert report](#), that only “exploratory searches” had been conducted. p.6, line 228

[3] Not included in the printed article: Millen did not respond to questions about why the systematic review of low-carb diets was not published, why it was described as an “exploratory search,” and why it was put in the ‘Methodology’ section of the report.

[4] Committee member Dr. Carol Boushey states, “No studies meeting inclusion criteria examined carbohydrate distribution below 25.3 percent.” ([timestamp shortly after 0:34:00](#)) The slide she presents is labeled for cardiovascular disease, but a few minutes earlier, at about min. 30, she says, “This is the summary of the literature search and the screening results from the combined search of the three questions,” referring to the questions on obesity, diabetes, and cardiovascular disease.

A non-official yet professional transcript of this public meeting can be found [here](#).

[5] Minute 29:16 of the same transcript. Protocol for search on diet and obesity can be found [here](#).

### **Additional Links:**

#### **Those with metabolic conditions are more likely to suffer worsened Covid-19 outcomes”**

<https://care.diabetesjournals.org/content/early/2020/05/12/dc20-0576>

<https://www.thetimes.co.uk/article/coronavirus-obesity-doubles-risk-of-hospital-qnpl5p7cc>

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)31189-2/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31189-2/fulltext)

<https://www.usatoday.com/in-depth/news/2020/04/15/coronavirus-risk-90-patients-had-underlying-conditions/2962721001/>

<https://www.nature.com/articles/s41574-020-0353-9>

<https://www.discovermagazine.com/health/how-heart-disease-diabetes-and-other-preexisting-conditions-increase-the>

#### **Glucose control closely linked to poor Covid-19 outcomes**

<https://www.sciencedirect.com/science/article/pii/S1550413120302382?via%3Dihub>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7188620/> (see, also, references)

#### **Other studies on low-carb and blood pressure**

<https://www.ncbi.nlm.nih.gov/pubmed/31357547>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3867584/?report=reader>

<https://cardiab.biomedcentral.com/articles/10.1186/s12933-018-0698-8>

[https://pubmed.ncbi.nlm.nih.gov/31231311/?from\\_term=Hallberg+S&from\\_pos=6](https://pubmed.ncbi.nlm.nih.gov/31231311/?from_term=Hallberg+S&from_pos=6)

<https://jamanetwork.com/journals/jama/fullarticle/201882>

<https://pubmed.ncbi.nlm.nih.gov/26718414/>