The following is a compilation of quotes in response to the meat papers, published in the *Annals of Internal Medicine* on September 30th, 2019. These quotes come from leading professionals in the health community- most, but not all are members of True Health Initiative. This is meant to express the concern for public health that could result from the misinterpretation of these meat papers.

John Sievenpiper, MD PhD: (co-author on one of the meta-analyses who strongly disagreed with the conclusions and recommendations from the panel.): "Unfortunately, the leadership of the paper chose to play up the low certainty of evidence by GRADE, as opposed to the protective associations that directly support current recommendations to lower meat intake. The signals would be even stronger if one considered substitution analyses with plant protein sources or investigated dose-response gradients which are used to upgrade data by GRADE, both of which I had requested. Unfortunately, I never saw the galley proofs to ensure that these changes had been made."

Robert McLean, M.D., FACP, President, American College of Physicians: "It should be clear that the articles you reference are not recommendations developed by the American College of Physicians. Annals of Internal Medicine is an editorially independent, peer-reviewed medical journal with its own publishing protocols. ACP leadership does not give direction to the editors of Annals of Internal Medicine on what they should or should not publish.

Marion Nestle, PhD, MPH author of *Food Politics*: Via www.foodpolitics.com. The papers come across to me as a concerted attack on dietary guidelines (national and international), on nutrition science in general, and on nutritional epidemiology in particular. The meat industry and its supporters will love them. Attacks on the quality of nutrition research have been coming from many sources lately: the food industry, of course, but also statisticians (John Ioannidis at Stanford is making a career of this), and some scientists (usually with ties to food companies). The criticisms themselves are not new. What is new is the vehemence and level of effort to discredit observational studies, particularly those based on self-reports of dietary intake. Yes, nutritional epidemiology has flaws, but the methods have been useful in many instances, as argued convincingly by two of its leading practitioners. The way I look at nutrition research is that it is essential to evaluate the totality of information available: laboratory, animal, human epidemiology and clinical studies---to do this in the context of what people actually eat and the number of calories they consume, and to add in a hefty dose of common sense. Common sense is what's missing in these studies.

John Robbins, 2 million copy bestselling author and co-founder of Food Revolution Network: We have a great many studies, published in peer-reviewed medical journals, that have found clear and compelling associations between red meat and early death. One of the largest, involving more than 500,000 people, was published in The British Medical Journal on May 9, 2017. In this enormous study, researchers found that consumption of red meat, both

processed and unprocessed, was associated with increased risk of death from every one of the specific causes of death they looked at — including cancer, heart disease, stroke and other cerebrovascular diseases, respiratory disease, diabetes, infections, kidney disease, and chronic liver disease. We have an overwhelming body of science telling us that by eating less red meat, people will live longer and healthier lives. What we don't need are sensationalized headlines that misrepresent the science, and direct people toward eating foods that will clog their arteries, lead to illness and early death, and also damage the health of the planet."

Danielle Nierenberg, Food Tank: "Not all meat is created equal, but the science is clear that overconsumption of red meat and processed meat can be detrimental for both public health and the environment."

Marco Springmann, Oxford Martin Programme on the Future of Food: "The recommendation that adults continue current red and processed meat consumption is based on a skewed reading and presentation of the scientific evidence... even with this skewed way of presenting the evidence, the reviews clearly indicate the benefits of reducing red and processed meat consumption."

P.K. Newby, ScD, MPH Author of Food and Nutrition: What Everyone Needs to Know:

"The vast majority of headlines flitting through newsfeeds do not reflect key study details: most showed a small and significant effect of red and processed meat on various health outcomes, for example. They also lack context: a number of results are consistent with the larger body of evidence showing increased risks of various diseases among those consuming a diet with higher meat intakes."

Helen Harwatt, PhD Animal Law & Policy Program, Harvard Law School: In addition to considering the non communicable disease impacts of red and processed meats, it is worth noting that the WHO recognises climate change as the greatest threat to human health - and red meat is a particularly significant contributor to global greenhouse gas emissions and rising temperatures. The authors recommendations are therefore irresponsible for public health in a number of high impact ways. Helen Harwatt, Animal Law & Policy Program, Harvard Law School.

In addition to considering the non communicable disease impacts of red and processed meats, according to the World Health Organization "Climate change is the greatest threat to global health in the 21st century. Health professionals have a duty of care to current and future generations." Red meat is a particularly significant contributor to global greenhouse gas emissions and rising temperatures. The authors recommendations are therefore irresponsible for public health in a number of high impact, detrimental ways.

William W. Li, M.D. Author, New York Times Bestseller EAT TO BEAT DISEASE, President and Medical Director, The Angiogenesis Foundation: "The data is unequivocal that reducing

the intake of red meat and processed meats leads to better health outcomes. Not only do the population studies support this conclusion, but a wealth of translational and laboratory research confirms it as well. The public needs to trust in the data — which points away from these foods."

Dean Ornish, MD, Clinical Professor of Medicine, UCSF and author of *Undo It*: Having seen what a powerful difference a whole foods plant-based diet low in fat and refined carbohydrates can make in people's lives, these articles deeply sadden me because they will discourage many people from making changes that can transform their lives for the better.

While modest reductions in beef may not have had hugely beneficial health effects, eliminating beef and most other animal products can *reverse* the progression of many chronic diseases. These include even severe coronary heart disease, type 2 diabetes, high blood pressure, elevated cholesterol levels, and early stage prostate cancer—as well as reversing cellular aging by lengthening telomeres and turning on hundreds of genes that keep us healthy and turning off hundreds more that cause illness within just three months. Many patients improved so much in only 9 weeks that they no longer needed a heart transplant. Most have been able to reduce or discontinue medications under their doctor's supervision that they would have taken the rest of their lives. Medicare is covering this plant-based program for reversing heart disease nationwide.

These *Annals* reports will confuse millions of people into believing that "these damn doctors can't make up their minds," countering decades of consistent research showing that a meat-based diet is unhealthful and undermining the public's confidence in scientific research.

Frank Hu, MD, PhD, Chair of the Department of Nutrition, Harvard T.H. School of Public Health

The panel's blanket recommendation that adults should continue their red meat consumption habits is highly irresponsible. We are facing a growing epidemic of diet-related chronic diseases and a climate change crisis, both of which are linked to high meat consumption. Red meat consumption remains high in economically developed countries and is markedly increasing worldwide. In this context, it is unprecedented for the panel to issue dietary guidelines that are tantamount to promoting meat consumption, despite their own findings that high consumption is harmful to health.

Neal D Barnard, MD, FACC, President Physicians Committee for Responsible Medicine:The fact that the world health organization has found convincing evidence that processed meat causes cancer in humans, and that red meat is a probable human carcinogen, was not disputed in these new "guidelines." rather, the "guidelines" encourage people to continue their exposure to these dangerous products simply because their technically weak

meta-analysis methodology was unable to detect sufficient evidence of benefit of avoiding these products that outweighed the study authors' estimation of how much people like continuing to

eat bacon, hotdogs, sausage, and burgers. The risks of red and processed meat came out loud and clear in the meta-analyses, and that needs to be reflected in any guidelines.

David L. Katz MD, MPH, President of True Health Initiative: "The author conclusions in no way support the bold claim made in this release. The authors effectively say: "these papers show that when diet quality, dietary pattern, and what is replacing meat is systematically ignored because we don't have those data- then very small variations in meat and processed meat intake (we mostly were unable to say which) are apparently associated with small differences in health outcomes- in the expected direction, but with extreme lack of certainty because of the data problems noted above. None of these papers report on 'good health.' They all compare rates of mortality, cardiometabolic disease, and cancer. "No Change" in such outcomes does not mean good health; it means there's more than one way to get the same, bad health."

JoAnn E. Manson, MD, DrPH, Chief of Preventive Medicine, Brigham and Women's Hospital, Harvard: The totality of scientific evidence strongly supports health benefits of a predominantly plant-based diet. The data for environmental and planetary impact are also compelling. Sowing confusion about well-established science leads to inaction and threatens to set back public health.

Christopher Gardner, PhD, Stanford Prevention Research Center: The authors themselves note that their recommendations for people to continue eating unprocessed and processed red meats at current rates are "weak recommendations, with low-certainty evidence". Beyond weak, I believe these are reckless. They will confuse the public & undermine scientific credibility, with potential to harm public health & the environment

Eric Rimm ScD, Harvard T.H. School of Public Health: "We should note that these are primarily health researchers conducting these reviews and they are using terms to assess bias and certainty as if they are systematically reviewing pharma drug trials to determine the effect of a synthetic compound in pill form. The method does not translate to data on dietary patterns

David Jenkins MD, PhD, ScD: "The approach the authors have taken is: You study cohorts that you class as low GRADE (Guyatt). You get results You say the studies are low GRADE and therefore of no consequence. Then you come to your own unhelpful conclusions (climate change??) You feel justified in doing so on the basis of GRADE (despite your all cause mortality cvd, diabetes and cancer findings- a full house of evidence against meat!"

Sara Baer-Sinnott, President, and Kelly Toups, MLA, RD, LDN, Director of Nutrition, Oldways: The current body of research shows very strong relationships between good health and certain eating patterns (more fruits, vegetables, legumes, and whole grains, and limited red and processed meats).

At Oldways, we are dedicated to improving public health using the weight of evidence from all relevant research methods. Unfortunately, the Annals of Internal Medicine article seeks to sow confusion, rather than consensus. This is especially harmful, as confusion gives us a reason not to change our engrained habits. We all need to take a minute today to pause and ask ourselves what each of us can change for the sake of our health and that of the planet.

Audrey Lawson-Sanchez, Executive Director www.balanced.org: "When I see recommendations like those made by these authors, I think first of the people who essentially have "no choice" but to believe them. The individuals and the public more broadly, who don't have the medical or scientific training to review the actual studies and engage in the research with rigor and expertise. I worry about the people who will read the headlines, take them at face value, and have no way of knowing that these recommendations are in fact, dangerous to their health and the health of their families. Recommendations like these are the reason so many people are confused about nutrition and they're a major part of the reason families across the country continue to experience unnecessary and preventable diseases associated with unhealthy, misinformed dietary patterns."