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Office of Disease Prevention and Health Promotion  
Office of the Assistant Secretary for Health  
Department of Health and Human Services  
1101 Wootton Parkway, Suite 420  
Rockville, MD 20852

**RE: Comments on the Scientific Report of the 2025 Dietary Guidelines Advisory Committee (Docket No. HHS-OASH-2024-0017)**

The National Pork Producers Council (NPPC) appreciates the opportunity to comment on the Scientific Report of the 2025 Dietary Guidelines Advisory Committee. NPPC is the global voice for the U.S. pork industry and consists of 42 affiliated state organizations representing America's 60,000+ pork producers who supply a demonstrably safe, wholesome, and nutritious protein product appreciated on American and international tables.

The pork industry recognizes the importance of the Dietary Guidelines for Americans (DGA), as it informs all federal nutrition programs and provides recommendations to health professionals. With the rising prevalence of diet-related diseases and the continued challenge of food security, nutrition is paramount to addressing these critical issues in the United States. Additionally, food insecurity and diet-related diseases tend to disproportionately impact underserved communities.

The pork industry strives to provide a safe, affordable, and healthy protein. Pork can fill the protein deficiency gap and provide amino acids, vitamins, minerals, and other micronutrients. As food inflation is a major concern for the American people, pork remains an affordable protein option for families and federal nutrition programs.

NPPC has serious concerns with the Scientific Report of the 2025 Dietary Guidelines Advisory Committee (DGAC), as many recommendations are aimed at reducing and replacing red meat with plant-based proteins. Such recommendations lack scientific support to justify this proposal and undermine the integrity of the DGA. When animal-based protein food subgroups are reduced and replaced with plant-based protein foods, there are several differences between nutrients, the nutrient gap widens, and a decreased essential amino acid bioavailability.

NPPC urges the U.S. Department of Health and Human Services (HHS) and the Department of Agriculture (USDA) to consider the devastating nutrition and food security impacts of replacing animal-based proteins with plant-based proteins.

### **Nutrient Gaps**

When decreasing or eliminating animal-based protein, there are several nutrient gaps that plant-based proteins cannot meet. A published dietary modeling study showed a 10% decrease in protein and multiple key micronutrients when removing 3 oz. of meat or poultry.<sup>1</sup> The key micronutrients that resulted in a decrease are those described in the Health Dietary Patterns (HDPs), used by the USDA for the Dietary Guidelines for Americans. Those are iron, phosphorus, potassium, zinc, selenium, thiamine, riboflavin, niacin, vitamin B6, vitamin B12, and choline, as well as cholesterol and sodium.<sup>2</sup> The study concluded that not only are there unintended consequences when removing animal-based proteins, but it also supported that fact that meat is more nutrient-dense, provides a higher protein quality, and is a more efficient source of dietary protein than plant-based protein.

The unintended consequences of removing animal-based protein were evidenced in 56 studies on reduced or eliminated animal-based protein intake to reduce environmental impacts, resulting in a decrease in zinc, calcium, iodine, vitamin B12, vitamin A, and vitamin D.<sup>3</sup> Australia also used a modeling study that replaced animal-based protein with plant-based protein, and once again, there were major nutrient deficiencies. Iodine, vitamin B12, zinc, and omega-3 fatty acids would all decrease, and the risk of other nutritional deficiencies would increase.<sup>4</sup> Nutrient gaps are not simply the absence of these nutrients from plant-based protein, but they also address how these foods can hinder absorption. Many plant-based foods contain compounds that reduce the absorption of nutrients by binding to them – phytate and phenolic compounds, for example. Plant-based foods that contain these compounds would severely reduce the bioavailability of nutrients such as iron and zinc.<sup>5</sup>

Certain groups of people would be disproportionately impacted by reducing animal-based protein. Infants, young children, adolescent girls, pregnant and lactating women, and older adults all require higher amounts of protein and nutrients provided by animal-based proteins. Infants and young children require higher amounts of protein, because of their growth during this stage in life. Removing animal-based protein would compromise the growth of this age group.<sup>6</sup> Adolescent girls exhibit low intakes of nutrients such as calcium, magnesium, and vitamin D, which can be met through consuming animal-based foods. The absence of these nutrients will lead to poor growth and bone health.<sup>7</sup> Pregnant and lactating women also require increased needs in protein and nutrients to support fetal health and infant nutrition. Older adults have increased nutritional needs that animal-based foods will supply during this life stage.

When animal-based proteins are reduced or removed, there are multiple unintended consequences. Protein and many nutrients are currently under consumed by Americans. Eliminating a food that can supply these nutrients would further exacerbate nutrient gaps, especially in certain life-stage groups.

### **Essential Amino Acid (EAA) Bioavailability**

The body uses essential amino acids (EAA) for muscle and whole-body protein building. Animal-based protein is a major contributor to supplying EAAs. A study from Purdue University found that consuming the same ounce-equivalent of animal-based and plant-based proteins did not provide the same EAA content. The study was set up as a cross-over randomized control trial on 30 healthy young adults and 25 older adults. The participants in the study ate a two-ounce equivalent of animal-based protein, such as pork loin, or a plant-based protein, such as black beans. Blood samples showed that the bioavailability of EAAs decreased when consuming the same ounce-equivalent plant-based protein as compared to the animal-based protein.

Overall, the study's results confirmed that not all protein sources are the same. This is especially important, as the DGA recommendations are set in ounce-equivalents, and the proposed food pattern modeling will not consider the bioavailability of the nutrients for different life stages.<sup>8</sup> Because of these results, it is important for the DGAC to recognize that different protein sources on an ounce-equivalent basis will not yield the same results for EAAs. All protein sources are not created equal.

### **Inequitable Nutrients**

Pork is an animal-based protein that provides a nutrient-dense protein, EAAs, and key nutrients, such as copper, potassium, selenium, sodium, zinc, thiamin, niacin, vitamin B6, and choline. The DGAC presented choline a nutrient that would be significantly decreased when reducing animal-based protein in the food pattern modeling.<sup>9</sup> In fact, 37-48% of choline in the DGA healthy dietary pattern is from protein, specifically animal-based protein, which accounts for as the best source for choline in the diet. According to the National Health and Nutrition Examination Survey (NHANES), the U.S. population is already deficient in choline daily intake. When these animal-based proteins are removed, choline falls significantly below recommended intakes and will cause public health concerns, specifically muscle damage, liver damage, and nonalcoholic fatty liver disease. Once again, specific life-stage populations, such as pregnant women and infants, do not consume adequate choline and prenatal supplements; and infant formulas normally do not contain choline. Reducing or removing animal proteins would drastically alter choline daily intake and put at-risk populations in jeopardy.<sup>10</sup>

Furthermore, a recent food modeling study published by NHANE, showed that animal protein intake, such as pork, meets the nutrient needs for children and adults. The data showed that a person consuming pork (including processed pork) has a higher intake of nutrients of public concern. These

include copper, potassium, selenium, sodium, zinc, thiamine, niacin, vitamin B6, and choline. The study used a sample size of 5,757 children and 11,555 adults who consumed pork. The study extrapolated the data to look at a national perspective. The data represented 36,523,218 children and 135,707,272 adults. When looking at specific nutrients of concern, such as potassium, the research estimated that 7.09% more children and 4.25% more adults would be at or above the required intake for potassium. This means that, if they consumed pork, 2.5 million more children and 5.7 million more adults would meet their potassium recommendations.<sup>11</sup>

Lastly, multiple studies have found nutrient deficiencies when consuming a plant-based diet, including a lack of high-quality protein, iron, zinc, calcium, vitamin A, vitamin D, and B vitamins.<sup>12</sup> These deficiencies lead to incredible public health concerns and do not support a healthy diet, as described by the DGA.

### **Reordering of Protein Subgroups**

There is no scientific justification to reorder the protein subgroups in the Healthy U.S.-Style Dietary Pattern. Scientific evidence must support this change of putting beans, peas, and lentils above meat; however, none was presented to make this reordering. This change would have serious impact, as there would be an emphasis on favoring plant-based protein sources over lean red meats, and it would lead to inaccurately portraying plant-based proteins as nutritionally superior. There is no justification to reduce red meat. In fact, data shows that many Americans are under consuming fresh, lean red meat.<sup>13</sup> Downgrading red meat in favor of plant-based proteins will decrease the consumption of nutrient-dense meat and increase the nutritional gap for many Americans. The Dietary Guidelines for Americans should not mislead consumers that plant-based proteins are nutritionally superior – this is not scientifically correct. This is a dangerous recommendation that would put many already vulnerable groups further nutritionally deficient.

### **Socioeconomic Importance of Pork**

In the executive summary of the report, the committee stressed the importance of health equity. However, the recommendations of replacing meat protein with plant-based proteins disregard socioeconomic factors. Recommending proteins that are at higher cost per equivalent ounce and do not provide equivalent nutrients is completely against the priority of health equity. Pork offers the nutrient-dense and affordable option to meet nutritional recommendations. In fact, pork producers have tailored the nutritional value of pork into a healthier protein choice through the use of scientific genetics and swine nutrition advancements. This led to eight cuts of fresh pork listed as lean, as they contain 16% less total fat and 27% less saturated fat than the pork produced 20 years ago.<sup>14</sup> In fact, pork tenderloin is as lean as skinless chicken breast and is a Heart-Check Certified food, along with boneless pork sirloin roast.<sup>15</sup> Pork producers are committed to providing a safe, nutritious, and

affordable protein. The recommendations from the scientific report will irrevocably damage the rural communities who rely on the economy of pork production as well as damage the public health outcomes of Americans who need quality and affordable protein.

### **Conclusion**

NPPC appreciates the opportunity to comment on the Scientific Report of the 2025 Dietary Guidelines Advisory Committee. NPPC understands the importance of health and nutrition to the U.S. population and urges USDA and HHS to support the science proving the importance of red meat, such as pork, in the American diet and invalidating the reduction and replacement of red meat. Reducing or eliminating animal-based proteins – and reordering the protein subgroup – will severely compromise public health. Plant-based proteins are not comparable to animal-based proteins: there are several nutrient gaps, a decrease in EAA bioavailability, and a lack of nutrients. The pork industry is committed to supporting human nutrition by producing a safe, wholesome, and nutritious protein product for consumers in the United States and globally.

Sincerely,



Dr. Ashley Johnson  
Director of Food Policy  
National Pork Producers Council

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