



October 11, 2016

Dr. Ruth Lunn
Director, Office of RoC
Division of NTP
National Institute for Environmental Health Sciences
111 T.W. Alexander Drive
P.O. Box 12233
Research Triangle Park, NC 27709

Dr. Windy Boyd
OHAT
Division of NTP
National Institute for Environmental Health Sciences
111 T.W. Alexander Drive
P.O. Box 12233
Research Triangle Park, NC 27709

Re: Nominations to the National Toxicology Program (NTP) for the Report on Carcinogens (RoC) and Office of Health Assessment and Translation (OHAT); Request for information; FR Doc. 2016-21698

Dear Drs. Lunn and Boyd:

The National Cattlemen's Beef Association (NCBA) submits these comments to the Office of the Report on Carcinogens (RoC) in response to the National Toxicology Program's (NTP) September 9, 2016, Federal Register (80 FR 62513-14) request for information regarding the possible evaluation of consumption of red meat, processed meat, and meat cooked at high temperatures for future editions of the RoC.

As the largest and oldest national association of cattle producers, NCBA represents more than 140,000 cattle producers through direct membership and our state affiliates. NCBA's Nutrition and Health Statement of Principles demonstrates our strong commitment to providing a wholesome, nutritious food and is based on accurate information relative to beef's nutritional qualities. Overwhelming scientific evidence supports the role of beef in a healthful diet, and our Principles reflect the belief that dietary balance, variety and moderation coupled with appropriate physical activity provides the foundation for a healthful life.

The RoC was congressionally mandated in 1978, as part of the Public Health Services Act, in response to American's "concerns regarding the relationship between their environment and cancer." It was to be a science-based, public health report to identify "substances" in the

environment that may potentially increase the risk of cancer.¹ However, NCBA is greatly concerned that NTP is venturing beyond their scope of expertise in evaluating non-food agents, chemical substances and mixtures. Complex food matrices must be assessed in the context of a total diet, and require specialized knowledge and methodology to adequately evaluate whole foods.

Prior to this nomination, NTP has never evaluated a whole food for the RoC. Further, guiding principles from the National Research Council (1996) indicate that evaluation of a whole food as a carcinogen is not justified.² These findings were again highlighted in a 2009 Institute of Food Technologists report commissioned by Bidlack et al, which notes the critical limitations of evaluating substances in foods including, but not limited to, the level of naturally occurring and synthetic chemicals in the diet are “so low that they are unlikely to pose an appreciable cancer risk”, “the varied and balanced diet needed for good nutrition also provides significant protection from natural toxicants” and “most naturally occurring minor dietary constituents occur at levels so low that any biologic effect, positive or negative, is unlikely.”³

Based on the scientific evidence currently available, it is not possible to effectively evaluate the plausibility of red meat, processed meat and meat cooked at high temperatures as potential carcinogens. Evaluation of the aforementioned foods as human carcinogens is scientifically premature, and NCBA encourages NTP not to select these nominations for further evaluation based on the following scientific rationale:

- Extremely limited and unreliable data on the various temperatures that meat is consumed;
- National survey data and subsequent research studies fail to clearly separate or consistently define meat, red meat, processed meat, etc.;
- Meat is consumed as one component of a whole diet, with countless nutrient and non-nutrient interactions that can either enhance or inhibit the potential carcinogenicity of the foods being consumed and have a notable effect of the total diet;
- For red meat specifically, lack of a clearly defined, plausible mechanism by which red meat uniquely may influence cancer risk, limits the specificity needed in a cancer evaluation and doesn't offer the public with meaningful guidance.

NTP has recognized that the ability to evaluate the carcinogenicity of a single substance associated with the consumption of meat is limited, and further acknowledges that the complexity of cooked meat precludes a meaningful exposure assessment of compounds formed during cooking.⁴ Interest in using a category of meat to evaluate a diversity of non-meat specific compounds is scientifically flawed. As such, NCBA believes NTP would serve the public better by updating their review on heterocyclic amines, expanding their review of polycyclic aromatic

¹ U.S. Department of Health and Human Services, National Toxicology Program website. Retrieved from <http://ntp.niehs.nih.gov/?objectid=72016262-BDB7-CEBA-FA60E922B18C2540>.

² National Research Council. (1996). Carcinogens and anticarcinogens in the human diet. A comparison of naturally occurring and synthetic substances. <http://www.nap.edu/catalog/5150.html>.

³ See IFT “Making decisions about the risks of chemicals in foods with limited scientific information” (<https://www.purdue.edu/hhs/nutr/fish4health/HealthRisks/IFTChemicalRisk09.pdf>).

⁴ National Toxicology Program (NTP). 2014. Report on Carcinogens, Thirteenth Edition. Research Triangle Park, NC: U.S. Department of Health and Human Services, Public Health Service.

hydrocarbons, and providing scientific evaluations that can more completely inform public health recommendations on the role these compounds may or may not play in everyday lives at current consumption levels from any food.

In conclusion, NCBA strongly urges NTP to delay the consideration of red meat, processed meat, and meat cooked at high temperature for evaluation for the RoC until adequate scientific evidence is available to complete a rigorous and reliable evaluation that can meaningfully inform, not misguide, public health.

Respectfully submitted,

Signature redacted

Colin Woodall
Senior Vice President, Government Affairs
National Cattlemen's Beef Association