

September 10, 2015

Veronique Bouvard, Responsible Officer
Kurt Straif, Head of the IARC Monographs Programme
IARC
Lyon, France

Re: Volume 114: Red Meat and Processed Meat – Call for Data – Intake of Red and Processed Meat in the United States

Dear Drs. Bouvard and Straif:

National Cattlemen's Beef Association, a contractor to the Beef Checkoff, appreciates the opportunity to provide evidence regarding the consumption of red and processed meat in the United States.

There are limited sources of data for red and processed meat exposure available to the IARC Working Group and all vary with regard to timeliness, accuracy, and specificity. The most accessible sources of red and processed meat data available to the IARC Working group are the Food Balance Sheets provided by FAO.¹ These data are gross measures of food availability and thus overestimate intake and provide little specificity with regard to consumption of further processed products. A recent publication comparing intake estimations using FAO data vs. Global Dietary Database (GDD), found world-wide estimates of red and processed meat intake to be 2.2 times higher with FAO as compared to the GDD (Del Gobbo et al., 2015). The GDD appears to provide more precise intake data than the FAO but the database is not publically available (i.e. limited to research group members), almost half of the dietary surveys used were collected prior to the year 2000, and food groups are broad and not clearly defined thus limiting data specificity for red and processed meat.

"Meat" is a broad food category that is ambiguous in nutritional epidemiology. Observational studies commonly report intake of "red meat" or "red and processed meat" without further definition and there is often no intake data to distinguish fresh meat from processed meat, or lean meat from higher fat sources. "Processed meat" often reflects a combination of red meat and poultry-based products, but these are rarely reported separately in observational studies (McNeill and Van Elswyk, 2015). For example, "processed meat" intake was recently estimated using the GDD but the authors do not specify if this is red processed meat only or any processed meat (Imamura et al., 2015). Reliance on GDD data that may be 15 or more years old, also limits the relevancy of this data to today's leaner beef supply and changes in the formulation of processed meat to include less sodium and chemical preservatives (McNeill et al., 2012; Higgs, 2000; Jacobson et al. 2013).

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¹ http://faostat3.fao.org/browse/FB/*E

The National Health and Nutrition Examination Survey (NHANES), via the What We Eat In America (WWEIA) dietary survey component, provides the most current intake estimations for red and processed (cured) meat for the United States. These data are based on nationally representative samples of individuals of all ages residing in a household. The most current surveys were conducted in 2009-2010 and 2011-2012, each sampling a minimum of 7000 subjects on two nonconsecutive days using validated 24-hour recalls. These most recent data confirm previous observations that Americans are steadily lowering their intake of red and processed meat.

Generally speaking, our data can be summarized as follows:

- The average intake of fresh red meat in the United States is 44.2 g per day (WWEIA, 2011-2012)
- The average intake of processed (cured) meat is 27.8 g per day (WWEIA, 2011-2012)
- Usual U.S. adult consumption of red and processed meat is within, and often lower, than that reported in observational studies of the Mediterranean-style dietary pattern which is recognized for its reduction in chronic disease risk (Romaguera et al., 2009; Buckland et al., 2011)
- The Dietary Patterns Method Project (DPMP), which completed a parallel evaluation of the Healthy Eating Index 2010 (HEI-2010), Alternative Healthy Eating Index 2010 (AHEI-2010), Alternate Mediterranean Diet (aMED) score, and Dietary Approaches to Stop Hypertension (DASH) score in 3 large U.S. cohorts, found all-cause, coronary heart disease, and cancer mortality associations with red and processed meat, as an individual contributor to the diet scores, was weak with average risk reductions of -3.7, -3.2, and -3.7 %, respectively (Reedy et al., 2014, Supplemental Tables 1-6). The DPMP project is the first effort to standardize dietary pattern methodology which has otherwise been criticized for inconsistencies that make it difficult to compare results across studies.
- Broader evidence indicates the benefits of including lean red meat, as an important source of high quality protein and essential nutrients, in a wide variety of dietary patterns for cardiovascular health, achieving and maintaining a healthy body weight and composition, and improving vitality and stamina (McNeill , 2014).
- Red meat and its nutrient package play an important role in addressing significant needs for public health, including iron deficiency prevention, healthy aging, and childhood development (McNeill and Van Elswyk, 2015).

For the Working Group's convenience, I'm also providing zip files containing each individual publication. Again, I appreciate the opportunity to provide to provide this evidence. I would like to offer myself as a resource to the Working Group as they further deliberate red and processed meat and risk of cancer.

Sincerely,



Shalene McNeill, PhD, RD
Executive Director, Human Nutrition Research,
National Cattlemen's Beef Association, a contractor to the Beef Checkoff

Attachments:

What We Eat in America Food Consumption Data and Supporting References.zip

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