

# GUIDING PRINCIPLES FOR ESTABLISHING CHRONIC DISEASE DRIs

AUGUST 2017 • GUIDING PRINCIPLES FOR DEVELOPING DIETARY REFERENCE INTAKES BASED ON CHRONIC DISEASE

## WITH RESPECT TO SYSTEMATIC REVIEWS:

1. Well-structured and established protocols that include the question of interest and analytical frameworks are necessary to address multiple major and ancillary scientific issues related to the degree of confidence in evidence for causal associations.
2. Protocols should be developed with guidance from a technical expert panel that includes relevant content experts in nutrition science, toxicology, scientific study design and analysis, public health, biostatistics, nutrition epidemiology and chronic disease epidemiology, and disease pathogenesis.
3. In consultation with the technical expert panel, systematic reviews should be sufficiently inclusive of all study designs that potentially contribute to evaluation of the causal NOFS–chronic disease relationship of interest and identification of associated intake–response relationships.
4. Protocols should include studies that use various dietary assessment approaches, including self-report and biomarkers of intake, while taking the quality of exposure assessment into account when rating study quality.
5. Protocols should include studies that document outcomes or surrogates of outcomes of potential importance for assessing benefits and harms, while taking the quality of outcome assessments into account in rating study quality.
6. Instruments and analytical methods applied to systematic reviews should be thoughtfully chosen and defensible. Instruments to assess the internal validity of the studies should include considerations that apply to nutrition research and various study designs (observational and intervention studies).
7. Results from the systematic review should be clearly presented in study-by-study evidence tables and summary tables of the total evidence for each outcome and study type.

## WITH RESPECT TO DRI COMMITTEE REVIEWS OF THE TOTALITY OF THE EVIDENCE:

8. The DRI committees should include content experts and methodologists relevant to the primary scientific issues and to evidence review. DRI committees should be free of significant financial, intellectual, and professional conflicts of interest. In some cases, the required expertise might not be found without some conflicts of interest. In such cases, it is necessary to identify, disclose, and manage any potential conflicts of interest. Mechanisms to allow for interactions between the DRI committee and members representing both the technical expert panel and systematic review team, while also protecting against inappropriate influence on the systematic review methods, are strongly encouraged.
9. Particular elements of needed expertise will be guided by the general scientific question(s) and specific questions and will generally include nutrition science, scientific study design and analysis, public health, biostatistics, nutrition and chronic disease epidemiology, disease pathogenesis, and evidence review conduct.
10. The evidence review should be sufficiently comprehensive to anticipate the major scientific issues and methods that will likely be a part of the ensuing guideline development process.
11. Sufficient documentation, clarity, and transparency in the evidence review process is needed so that others can comprehend and evaluate this process and its activities, methodological considerations, final decisions, and the rationale for decisions about each outcome.
12. The review of the evidence and other aspects of the systematic review should be replicable and subject to expert peer review.
13. When apparent discrepancies in the evidence exist, DRI committees should attempt to determine whether they can be explained by differences in methodology or conceptualization of diet-disease relationships and, where possible, incorporate such explanations into the process of rating the evidence.
14. Where they exist, quantitative intake-response relationships should include a thorough description of the scientific uncertainties associated with them.