

Washington DC Section Institute of Food Technologists

## Workshop:

Systematic Reviews and Meta-Analyses in the Development of Food Policy: It's Time to Set a Standardized Approach

## **Meeting Information:**

Date - April 17<sup>th</sup>, 2017 Time - 2:00 – 4:30 pm ET Location - Morgan, Lewis and Bockius, LLP (1100 Pennsylvania Avenue, NW)

## Workshop Description:

This workshop is designed to teach non-researchers the principles, utility and methodologies of qualitative and quantitative evidence synthesis (e.g., systematic reviews and meta-analysis) with a focus on the applications to the synthesis of food and nutrition literature. Leading public health organizations are using systematic reviews (with or without meta-analysis) to develop evidence-based research agendas, revise dietary guidelines, and formulate public health policies. Systematic reviews provide a systematic, transparent means for gathering, synthesizing, and appraising the findings of studies on a particular topic or question. They aim to minimize the bias associated with single studies and nonsystematic reviews. Meta-analysis, commonly included in systematic reviews, is a statistical method that quantitatively combines the results from different studies. Systematic reviews and meta-analysis in public health are more challenging than those in healthcare primarily because complex sets of evidence from study designs other than randomized control trials are required to address public health problems. The quality of systematic reviews and meta-analyses is an important factor affecting their usefulness. This workshop will guide the participants to use tool(s) to assess the quality of a systematic review (with or without meta-analysis) with hand-on exercise and online discussion forum activities. In addition, this workshop will introduce basic principles of metaanalysis and focus on heterogeneity issues (i.e., any kind of variability among studies in a metaanalysis). Common techniques, such as subgroup or meta-regression analysis, to explore heterogeneity will also be introduced. Proper (and improper) interpretations of meta-analysis results using real published examples will be explained.

## Faculty:

Mei Chung, PhD, MPH Department of Public Health and Community Medicine Tufts University

Dr. Mei Chung is an assistant professor at the Department of Public Health and Community Medicine, Tufts University School of Medicine. She is a nutrition epidemiologist by training. She had over 10 years of experiences in conducting Agency for Healthcare Research and Quality



(AHRQ)-commissioned evidence reports to inform health-related policy and clinical guideline developments across diverse health questions. She led the evidence report - Vitamin D and Calcium – that was used by the 2010 DRI committee. Dr. Chung has long-standing research interests in advancing evidence synthesis methods with a special focus on nutrition and nutrition-related chronic diseases. She has authored a series of methodological research papers to advance the understanding of the challenges involved in conducting nutrition-related systematic reviews and in integrating these reviews with nutrition applications.