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Carolyn G. Scrafford is the Principal Scientist of Chemical Regulations & Food Safety at Exponent. Dr. Scrafford has 20 years of experience in epidemiological methods, applied statistics, and risk assessment to evaluate the human health effects of food contaminants and additives, nutrients, and environmental compounds in the U.S. as well as Europe and other international settings. Dr. Scrafford has designed, conducted, and analyzed data from clinical trials, market basket surveys, and customized surveys on food consumption patterns and has experience in conducting dietary risk assessments for novel food ingredients, nutrients, heavy metals, and contaminants. She has expertise in the synthesis of epidemiological evidence to both quantitatively and qualitatively evaluate causal associations between dietary and environmental exposures and health outcomes.

Dr. Scrafford has developed GRAS notifications, Food Additive Petitions (FAPs), and Color Additive Petitions (CAPs) in support of pre-market approval submissions to the U.S. FDA as well as regulatory submissions to other international authoritative bodies by providing evaluations of the human safety data and conducting dietary exposure assessments. The exposure assessments are based on a variety of large databases from the US and other countries including NHANES (National Health and Nutrition Examination Survey), the United Kingdom's National Diet and Nutrition Survey (NDNS), EFSA's Comprehensive European Food Consumption Database, and USAID's Demographic and Health Surveys (DHS). Dr. Scrafford also provides technical and expert support related to dietary exposure to food toxins and contaminants including lead, cadmium, inorganic arsenic, and acrylamide. Dr. Scrafford has expertise in designing sampling protocols with the objective to determine levels of components and contaminants in food products currently in the market place. Dr. Scrafford is responsible for analyzing the survey results to estimate the concentration of the contaminants in the food that is combined with consumption data to estimate consumer exposure to these compounds through the diet.

Dr. Scrafford has recently evaluated study protocols for clients conducting clinical trials designed to measure the association between novel food and dietary supplement products on specific health outcomes including weight loss and gastrointestinal health in support of safety and efficacy evaluations. She has also collaborated with academic institutions to investigate the association between dietary patterns and health outcomes using data from ongoing prospective cohort studies. In 2014, Dr. Scrafford published a methodological report for USAID's Demographic and Health Surveys Program (DHS) with researchers at Hopkins and ICF International relating to maternal mortality estimates from over 30 developing countries.

Dr. Scrafford has an undergraduate degree in Biology from Colgate University. Concurrent to her work at Exponent, she earned her MPH (Masters of Public Health) in environmental health, MHS (Masters of Health Science) in Biostatistics, and a Ph.D. and post-doctoral fellowship in epidemiology at Johns Hopkins University Bloomberg School of Public Health. While at Hopkins, Dr. Scrafford was awarded a training

grant from 2008-2010 by the National Institutes of Health to conduct research related to maternal and child nutrition and health in international settings. Her dissertation work took place in Nepal where she was responsible for the design, implementation, and management of a hospital-based prospective study aimed at improving the community-based diagnosis of pneumonia in children.

Dr. Scrafford is a Professorial Lecturer at George Washington University's Milken Institute School of Public Health where she teaches a course on global child health. She is a member of the American College of Epidemiology, the International Epidemiological Association, and the American Society for Nutrition. She has co-authored many peer-reviewed published scientific manuscripts relating to the work she has done both at Exponent and in collaboration with colleagues at Johns Hopkins University and in Nepal.