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Aine Hearty, Ph.D.

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Professional Profile

Dr. Hearty's background is in human nutrition and she has extensive experience in modelling dietary intake data for estimating exposure to food chemicals (including additives, flavourings and food contact material migrants), enzymes, nutrients and novel ingredients. She has strong technical knowledge and experience in applying different methodological approaches in this field, and in reviewing exposure data generated for safety assessments.

Related to this experience, Dr. Hearty has worked extensively on submissions and notifications to regulatory authorities in the European Union and the United States.

Along with a demonstrated expertise in dietary exposure assessments, Dr. Hearty has extensive experience in managing data from international nutrition surveys and in implementing alternate methods of analyzing dietary intake data. Dr. Hearty has also previously worked with market research companies to gather and review bespoke dietary intake data in response to clients' requirements. Additionally, Dr. Hearty has experience in working with trade associations and in managing their extensive datasets to address requests from regulatory authorities.

Dr. Hearty held the position of the Dietary Intake Specialist for Intertek Scientific and Regulatory Consultancy, based in the UK for over four years. Prior to this she was Project Manager on an EU 7th-Framework funded project assessing exposure to flavourings, additives, and food contact materials (FACET) involving 20 partners across the EU. She has previously been invited to participate in the European Food Safety Authority (EFSA) working groups on Food Additive and Nutrient Sources (ANS) and Food Consumption and Exposure assessment (FCE WG), where she made significant contributions to developments in this area.

Academic Credentials & Professional Honors

Ph.D., Public Health Nutrition, University College Dublin (UCD), 2008

M.Sc., Public Health Nutrition, Trinity College, Ireland, 2005

B.Sc., Human Nutrition & Dietetics, Trinity College, Ireland, 2002

Prior Experience

Scientific & Regulatory Consultant, Intertek Scientific & Regulatory Consultancy, 2010-2015

Project Manager, FACET (Flavourings, Additives and Food Contact materials Exposure Task): 7th Framework E.U. funded project, based at University College Dublin, 2008-2011

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Senior Research Nutritionist, Institute of Food & Health, University College Dublin, Ireland, 2005-2008

Publications

Hearty AP, Lau A, Roberts A. Chewing gum intake in Europe: A survey of intakes in France, Germany, Italy, Spain and the United Kingdom. Food Additives and Contaminants Part A 2014; 1147-1157.

Devlin NF, McNulty BA, Turrini A, Tlustos C, Hearty AP, Volatier JL, Kelleher CC, Nugent AP. Identifying core foods for total diet studies: a comparison of four different approaches. Food Additives and Contaminants Part A 2014; 31(8):1347-1357.

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Hearty AP, Gibney MJ. Dietary patterns in Irish adolescents: a comparison of cluster and principal component analyses. Public Health Nutrition 2013; 16(5):848-857.

Le Donne C, Catasta G, Ferrari M, Hearty A, Connolly A, Leclercq C, Flavours, Additives and Food Contact Material Exposure Task (FACET) Consortium (2013). Use of market share data to select food products for an occurrence survey on flavourings in eight EU countries within the FACET project. International Journal of Food Sciences and Nutrition 2013; 64(6):768-779.

Vin K, Connolly A, McCaffrey T, McKevitt A, O'Mahony C, Prieto M, Tennant D, Hearty A, Volatier JL. Estimation of the dietary intake of 13 priority additives in France, Italy, the UK and Ireland as part of the FACET project. Food Additives and Contaminants Part A 2013; 30(12):2050-2080.

Hearty AP. The FACET project: A chemical exposure surveillance system for Europe. Food Science and Technology 2011; 25(2):26-29.

Merten C, Ferrari P, Bakker M, Boss A, Hearty AP, Leclercq C, Lindtner O, Tlustos C, Verger P, Volatier JL, Arcella D. Methodological characteristics of the national dietary surveys carried out in the European Union as included in the European Food Safety Authority (EFSA) Comprehensive European Food Consumption Database. Food Additives & Contaminants 2011; 28(8):975-995.

Hearty AP. FACET: Providing an integrated and holistic approach to the exposure assessment of food chemicals. Food and Nutrition Bulletin 2010; 35(4):340-347.

Connolly A, Hearty AP, Nugent A, McKevitt A, Boylan E, Flynn A, Gibney MJ. Pattern of intake of food additives associated with hyperactivity in Irish children and teenagers. Food Additives & Contaminants Part A 2010; 27(4):447-456.

Leite JC, Hearty AP, Nugent AP, Gibney MJ. A method for assessing dietary intakes of n-3 long-chain polyunsaturated fatty acids and trans fatty acids in an Irish adult population. International Journal of Food Sciences and Nutrition 2010; 61(6):583-599.

Hearty AP, Duffy E, Gibney MJ. Intake estimates of naturally occurring phytosterols using deterministic and probabilistic methods in a representative Irish population. International Journal of Food Sciences and Nutrition 2009; 60(6):533-546.

Hearty AP, Duffy E, Joyce J, O'Connor C and Gibney MJ. Phytosterol-enriched products on the Irish market: examination of intake and consumption patterns. Public Health Nutrition 2009; 12(1):51-58.

Hearty AP, Gibney MJ. Comparison of cluster and principal component analysis techniques to derive dietary patterns in Irish adults. British Journal of Nutrition 2009; 101(4):598-608.

Hearty AP, Gibney MJ. Meal pattern analysis: Analysis of meal patterns using supervised data mining techniques—Artificial neural networks and decision trees. American Journal of Clinical Nutrition 2008; 88(6):1632-1642.

Duffy E, Hearty AP, McCarthy S, Gibney MJ. Estimation of exposure to food packaging materials. 3: Development of consumption factors and food-type distribution factors from data collected on Irish children. Food Additives & Contaminants 2007; 24(1):63-74.

Hearty AP, McCarthy SN, Kearney JM, Gibney MJ. Relationship between attitudes towards healthy eating and dietary behaviour, lifestyle and demographic factors in a representative sample of Irish adults. Appetite 2007; 48(1):1-11.

Ryan AM, Hearty AP, Prichard RS, Cunningham A, Rowley SP, Reynolds JV. Association of hypoalbuminemia on the first postoperative day and complications following esophagectomy. Journal of Gastrointestinal Surgery 2007 Oct; 11(10):1355-1360.

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Duffy E, Hearty AP, Gilsenan MB, Gibney MJ. Estimation of exposure to food packaging materials. 1: Development of a food-packaging database. Food Additives & Contaminants 2006; 23(6):623-633.

Duffy E, Hearty AP, Flynn A, McCarthy S, Gibney MJ. Estimation of exposure to food-packaging materials. 2: Patterns of intakes of packaged foods in Irish children aged 5-12 years. Food Additives & Contaminants 2006 Jul; 23(7):715-725.

Presentations

Hearty AP. Realistic dietary exposure estimations. Understanding what EFSA Needs. Presented at Nutraformulate, NMM Birmingham. March 18, 2014.

Hearty AP. Dietary exposure assessment for EU applications. Presented at Food Ingredient (FI) Europe, Frankfurt, Germany, Day 2: November 20, 2014.

Hearty AP, Roberts A. EU dietary exposure: Current and future regulatory perspectives. Webinar presentation, September 25, 2014.

Hearty AP. Food additive intakes. Presented at the 33rd European Meeting of the Toxicology Forum, Brussels, Belgium, October 27, 2010.

Hearty AP. Food additive intakes in Ireland. Presented at the FSAI Additives Seminar, Dublin, Ireland, September 22, 2010.

Hearty AP. The FACET Project. Presented at the Scientific Seminar DG RTD - DG SANCO Shanghai World Expo, Shanghai, China, June 6, 2010.

Hearty AP, Gibney MJ. A novel approach to dietary analysis: Exploration of Food Consumption Databases at the Meal Level Using Association Rules. Paper presented at the 7th International Conference on Diet and Activity Methods, Washington DC, USA, June 5-7, 2009.