

**ICDAM 2020, May 17-20, 2020, Ede, The Netherlands**  
**TENTATIVE PROGRAM**

**Saturday 16 May 2020**

9:00 - 16:00 Pre-conference workshops

**Sunday 17 May 2020**

9:00 - 16:00 Pre-conference workshops

17:00 - 19:00 Welcome reception

**Day 1: Monday 18 May 2020**

9:00 - 9:40 **ICDAM 2020 opening and welcome** **THEATRE**

9:40 - 10:30 **Plenary** **THEATRE**  
*The 24-hour revolution in activity assessment*  
**Dr. Tim Olds, University of South Australia**

10:30 - 11:00 **Networking break** **NEW YORK FOYER**

<b>ROOMS</b>	<b>THEATRE</b>	<b>CERISE</b>	<b>KERNHEM</b>
11:00 - 12:30	<p><i>S1.Symposium: Methodological issues related to measurement error in assessing diet and physical activity</i></p> <p><b>Chair: Sharon Kirkpatrick</b></p> <p>Integrating dietary assessments with biomarker measurements in aetiological models</p> <p><b>Pietro Ferrari</b></p> <p>Categorizing variables measured with error</p> <p><b>Hendriek Boshuizen</b></p>	<p><i>S2. Symposium: Assessing contextual factors to assist understanding of eating and activity behaviours</i></p> <p><b>Chair: Rebecca Leech</b></p> <p>Introduction</p> <p><b>Rebecca Leech</b></p> <p>Assessing contextual factors to assist understanding of eating and activity behaviours</p> <p><b>Laura Johnson</b></p>	<p><i>S3. Symposium: Free data! NIH-sponsored physical activity measures: MoTrPAC and NHANES</i></p> <p><b>Chair: Stewart Trost</b></p> <p>Introduction</p> <p><b>Stewart Trost</b></p> <p>Free data! NIH-sponsored physical activity measures: MoTrPAC and NHANES</p> <p><b>Stephanie George</b></p>

<p>New insights into the effects of time-varying error-prone exposure in the analysis of longitudinal studies of physical activity <b>Victor Kipnis</b></p>	<p>Understanding situational factors associated with sugar-sweetened beverage intake in young adults using real-time assessment of eating occasions <b>Rebecca Leech</b></p>	<p>Free data! NIH-sponsored physical activity measures: MoTrPAC and NHANES <b>Rick Troiano</b></p>
	<p>Seeing is believing – using wearable cameras to capture diet and activity behaviours in people living with heart failure <b>Ralph Maddison</b></p>	<p>Panel discussion <b>Stephanie George &amp; Rick Troiano</b></p>
	<p>Panel discussion <b>Carol Boushey</b></p>	

12:30 - 14:00 **Lunch and poster session** **NEW YORK FOYER**

<b>ROOMS</b>	<b>THEATRE</b>	<b>CERISE</b>	<b>KERNHEM</b>
14:00 - 15:30	<p>S4. Oral presentations: <i>Comparison and validation research</i> <b>Chair: Inge Brouwer</b></p>	<p>S5. Oral presentations: <i>Usual intake analysis</i> <b>Chair: Marga Ocke</b></p>	<p>S6. Oral presentations: <i>Combining methods</i> <b>Chair: Janet Cade</b></p>
	<p>Physical activity intensity and energy expenditure by different estimates of selected daily activities <b>Luiz Antoniodos Anjos</b></p>	<p>Within-person variation in nutrient intakes across populations and settings: implications for the use of external estimates in modeling usual nutrient intake distributions <b>Caitlin French</b></p>	<p>Measurement of transport modes in young adults using wearable cameras and the global physical activity questionnaire <b>Alyse Davies</b></p>
	<p>Comparison of the Oxford WebQ – a web-based 24-hour dietary questionnaire – with 4-day diet diaries and biomarkers <b>Kathryn Bradbury</b></p>	<p>Using the NCI method to estimate usual dietary intake distributions from repeated 3-day weighed food records – a comparison of two approaches <b>Linda Hierath</b></p>	<p>The use of automated wearable cameras with 24-hour recalls in adolescents <b>Claire Smith</b></p>

Evaluation of the New Zealand Women’s Food Frequency Questionnaire to assess nutrient intakes in women: the PROMIsE Study <b>Rozanne Kruger</b>	Estimation of habitual dietary consumption with a multiple-source method and validation of its utility against nutritional biomarkers: the United Kingdom National Diet and Nutrition Survey <b>Fumiaki Imamura</b>	Evaluation of a photographic food record to assess evening meal intake of 18-month-old children in the Baby’s First Bites Study <b>Janneke Schultink</b>
Reproducibility and validity of the Cancer Prevention Study-3 Modified Food Frequency Questionnaire using multiple 24-hr recalls and biomarkers among a racially/ethnically diverse subgroup <b>Marjorie L. McCullough</b>	A new statistical method for estimating usual intakes of nearly-daily consumed foods and nutrients using only one 24-h dietary recall <b>Hanqi Luo</b>	Development of quality index to classify meal healthiness through photos: first step for app of meal assessment using machine learning <b>Josiane Steluti</b>
Accuracy of tablet vs. paper based 24-Hour individual dietary recall compared to weighed food records in Burkina Faso and Viet Nam <b>Winnie Bell</b>	Reducing measurement error and strengthening diet-disease associations by combining baseline and repeated dietary intake data: a case-study of fruit intake and IHD risk in UK Biobank <b>Keren Papier</b>	Improvement of fatty fish intake data by combining assessment methods and validation against the objective biomarker 3-carboxy-4-methyl-5-propyl-2-furanpropanoic acid <b>Ulrika Ericson</b>
The dynamic food metabolome: implications for dietary assessment and nutrition research <b>Gunter G. Kuhnle</b>	Correcting the effects of salt and alcohol intake on blood pressure using simulation extrapolation for 24-hour dietary recall data <b>Timm Intemann</b>	Associations between estimated dietary pesticide residue exposure and mortality in a population-based prospective cohort of men and women <b>Agneta Åkesson</b>

15:30 - 16:00 **Networking break**

**NEW YORK FOYER**

**ROOMS**

16:00 -17:30

**THEATRE**

S7. Symposium: *Innovative advances in dietary patterns that can help inform population guidelines*  
**Chair: Jill Reedy**

**CERISE**

S8. Symposium: *Biomarkers for food and beverage intake – results from the FoodBall project*  
**Chair: Edith Feskens**

**KERNHEM**

S9. Symposium: *Conducting dietary surveys in Low-and Middle-Income Countries: Challenges, experiences and*  
**Chair: Edwige Landais**

Introduction <b>Jill Reedy</b>	Introduction to the Foodball project <b>Edith Feskens</b>	Introduction <b>Edwige Landais</b>
Innovative advances in dietary patterns that can help inform population guidelines <b>Angela Liese</b>	Finding and validating biomarkers of food and beverage intake by metabolomics <b>Lars Dragsted</b>	INDDX24: A new global dietary assessment platform to scale up the availability, access, and use of dietary data <b>Jennifer Coates</b>
Temporal dietary patterns Identified by a two-stage hierarchical clustering method <b>Yikyung Park</b>	Biomarkers for Cola beverage consumption identified by untargeted GC-MS-based metabolomics approaches <b>Carina Mack</b>	Technical assistance for dietary surveys in low- and middle-income countries: Intake – Center for Dietary Assessment <b>Megan Deitchler</b>
Reproducibility of diet-disease associations for exploratory dietary patterns <b>Matthias Schulze</b>	Non-targeted and targeted metabolomics to identify and validate biomarkers of fermented dairy intake <b>Katherine Li</b>	Towards FAIR food and nutritional data <b>Carl Lachat</b>
Panel discussion <b>Sarah McNaughton &amp; Sharon Kirkpatrick</b>	Metabolomics-based dietary biomarkers in nutritional epidemiology - current status and future opportunities <b>Lorraine Brennan</b>	Panel discussion

**Day 2: Tuesday 19 May 2020****ROOMS**

8:30 -10:00

**THEATRE**

S10. Symposium: *Novel approaches to assessing dietary quality in the food system: combining methods to enhance measurement for dietary surveillance and interventions*

**Chairs: Niyati Parekh & Maya Vadiveloo Chair: Lorraine Brennan**

**CERISE**

S11. Symposium: *Statistical considerations for the use of biomarkers to assess dietary intake*

**Chair: Lorraine Brennan**

**KERNHEM**

S12. Symposium: *Addressing reactivity bias with food recording: can mobile methods advance the field?*

**Chair: Carol Boushey**

Introduction <b>Niaty Parekh</b>	Calibration of amino acid stable carbon isotope ratios as biomarkers of human diet <b>Pamela Shaw</b>	Introduction <b>Carol Boushey</b>
Evaluating the effect of targeted food incentives on grocery purchases: The Smart Cart Study protocol for a randomized controlled cross-over trial <b>Maya Vadiveloo</b>	Estimating habitual salt intake distribution from 24-h urinary sodium excretion and the potential of the use of external within-person variance <b>Janneke Verkaik-Kloosterman</b>	Addressing reactivity bias with food recording: can mobile methods advance the field? <b>Deborah Kerr</b>
Application of the NOVA framework to enhance assessment of diet quality in US nationally representative surveys of dietary intake and grocery purchase <b>Filippa Juul</b>	Prediction equations for blood concentration markers for carotenoids, tocopherols, retinol, vitamin B12 and folate in the HCHS/SOL Nutrition and Physical Activity Assessment Study <b>Lillian Boe</b>	A smartphone app for the collection of individual dietary intake data in settings where shared plate eating is common: design and development process <b>Megan Rollo</b>
Assessing validity of self-reported dietary intake within a Mediterranean Diet clinical trial intervention <b>Mercedes Sotos-Pietro</b>	Spot urine biomarkers and 24-hour dietary recalls: validation and measurement error correction <b>Iris Pigeot</b>	Examining reactivity and the use of image-based food records to monitor dietary intake <b>Carol Boushey</b>
Discussion <b>Niyati Parekh</b>		

10:10 - 11:00 **Plenary** **THEATRE**  
*Wija's Will: Reflections and perspectives inspired by Wija van Staveren*  
**Prof. Lisette de Groot and Prof. Edith Feskens, Wageningen University & Research Center**

11:00 - 11:30 Networking break **NEW YORK FOYER**

<b>ROOMS</b>	<b>THEATRE</b>	<b>CERISE</b>	<b>KERNHEM</b>
11:30-13:00	S13. Oral presentations: <i>Technological advances</i> <b>Chair: Kate Lyden</b>	S14. Oral presentations: <i>Diet quality and patterns</i> <b>Chair: Carol Boushey</b>	S15. Oral presentations: <i>Machine learning</i> <b>Chair: Rick Troiano</b>

<p>Ten years of research on the feasibility and validity of the Automated Self-Administered 24-hour Dietary Assessment Tool: Lessons for the implementation of technology-enabled assessment</p> <p><b>Sharon Kirkpatrick</b></p>	<p>A systematic review of dietary pattern assessment methods</p> <p><b>Sarah McNaughton</b></p>	<p>Development of a machine-readable knowledge base for nutritional and dietary assessment data</p> <p><b>Chen Yang</b></p>
<p>Recent and upcoming enhancements to the Automated Self-Administered 24-hour Dietary Assessment Tool (ASA24)</p> <p><b>Kirstin Herrick</b></p>	<p>Identifying dietary patterns using novel supermarket transaction data</p> <p><b>Michelle Morris</b></p>	<p>Applying machine learning to derive sex-specific nutrition risk profiles for predicting cardiovascular disease using Canadian linked population-based data</p> <p><b>Jason Morgenstern</b></p>
<p>A comparison of food portion size estimation methods: 3D food models vs an online tool using food portion photos (Intake24)</p> <p><b>Jennifer Bradley</b></p>	<p>Socioeconomic inequities in diet quality among Canadian adults: A nationally representative analysis of change between 2004 and 2015</p> <p><b>Dana Olstad</b></p>	<p>Can machine learning activity classification models developed in children with Cerebral Palsy (CP) be used in children with an Acquired Brain Injury?</p> <p><b>Stewart Trost</b></p>
<p>Relative validity of The Eetmeter - a food diary app to provide healthy diet advice</p> <p><b>Marga Ocke</b></p>	<p>Multidimensional characterization of alcohol consumption in the Framingham Offspring Study (FOS) – Longitudinal trends 1971-2014 and association with diet quality</p> <p><b>Lauren Lissner</b></p>	<p>Eating behaviour assessed using upper limb mounted motion sensors: A systematic review</p> <p><b>Megan Rollo</b></p>
<p>Selection of an automated dietary assessment tool for use in the UK National Diet and Nutrition Survey (NDNS) Rolling Programme (RP)</p> <p><b>Toni Steer</b></p>	<p>Multidimensional characterization of alcohol consumption in the Framingham Offspring Study (FOS) – Longitudinal trends 1971-2014 and association with diet quality</p> <p><b>Filippa Juul</b></p>	<p>Improving the Healthy Eating Index: Application of two novel methods to empirically reweight a composite diet score</p> <p><b>Eli Kravitz</b></p>

	The FoodTrack study: A combined GPS and ecological momentary smartphone assessment study to track individuals' food environment exposure, food purchases, and food consumption <b>Maartje Poelman</b>	The development of a short food frequency questionnaire to assess diet quality in UK adolescents <b>Sarah Shaw</b>	Joint temporal dietary and physical activity patterns associate with health status indicators <b>Heather Eicher-Miller</b>
13:00 - 14:30	<b>Lunch and poster session</b>		<b>NEW YORK FOYER</b>
14:30 - 15:20	<b>Plenary</b> <i>Scaling up dietary assessment globally challenges, inroads, and future opportunities</i> <b>Dr. Jennifer Coates, Tufts University</b>		<b>THEATRE</b>
<b>ROOMS</b>	<b>THEATRE</b>	<b>CERISE</b>	<b>KERNHEM</b>
15:30 - 17:00	S16. Oral presentation: <i>Methods on diet quality</i> <b>Chair: Sandra Crispim</b>	S17. Oral presentation: <i>Biomarkers</i> <b>Chair: Lisette de Groot</b>	S18. Oral presentation: <i>Statistical methods</i> <b>Chair: Edith Feskens</b>
	Dietary diversity indicators and their associations with nutritional adequacy of the diet and health outcomes – a systematic review <b>Eric Verger</b>	Twenty-four hour urinary sucrose and fructose is a good measure of total sugars but not added sugars intake in US participants <b>Natasha Tasevska</b>	What do Australian adults eat for snacks? A latent variable mixture modelling approach <b>Rebecca Leech</b>
	The Healthy and Sustainable Diet Index: a novel theoretically derived index, applied and evaluated using images collected with the mobile food record <b>Amelia Harray</b>	Validity coefficient of urinary marker of sugar intake is comparable to urinary nitrogen as marker of protein intake in free-living individuals <b>Taymara Abreu</b>	Are predictive equations for estimating total energy intake reliable in older adults? <b>Lais Duarte Batista</b>
	Associations between eating behaviors according to Canada's Food Guide, diet quality score and cardiometabolic risk markers: insights from the PREDISE study <b>Didier Brassard</b>	Continuous glucose variations as biomarker for the relation between food intake, glucose health status, and wellbeing. Lessons learned and preliminary results from a real-world study <b>Willem van den Brink</b>	Comparison of several energy intake misreport identification methods on the accuracy of nutrient intake estimations using urinary biomarkers <b>Vânia Magalhães</b>

Designing food databases for Indigenous Populations: lessons learned from South-Western Uganda <b>Giulia Scarpa</b>	Measuring micronutrient intake in children: comparison of 24-hour diet records, 24-hour urine, and duplicate diets for estimating potassium, sodium, and iodine <b>Rachael McLean</b>	Stability of dietary patterns in cross-sectional and longitudinal samples of Brazilian schoolchildren between 2013 and 2015: a latent profile analysis <b>Maria Alice Assis</b>
VALIDA project: Validating the use of photos for food portion quantification <b>Sandra Crispim</b>	Can skin colour spectrophotometry be used as an objective biomarker for fruit and vegetable intake in Kenyan adults? <b>Karin Borgonjen - van den Berg</b>	Predicting mortality in the National Health and Nutrition Examination Survey using a lasso-weighted and 6-component Healthy Eating Index-2015 <b>Haley Parker</b>
Validation of 24-h dietary recall for estimating nutrient intakes and adequacy in adolescents 10-11 and 12-14 y of age in Burkina Faso <b>Joanne Arsenault</b>	The carbon isotope ratio of serum alanine predicts added sugar intake in a controlled feeding study of US postmenopausal women <b>Diane O'Brien</b>	Substitution analyses of diet-related greenhouse gas emissions: How to reduce emissions by switching to plant-based meals for lunch <b>Katarine Bälter</b>

18:00 Buses depart

18:30 - 22:00 **Conference dinner**

**Day 3: Wednesday 20 May 2020**

**ROOMS**

**THEATRE**

**CERISE**

**KERNHEM**

8:30 - 10:00

S19. Symposium: *Closing the gap with digital dietary assessment*

S20. Symposium: *Measures of dietary patterns and food environments for diverse populations and settings*

S21. Symposium: *Understanding and adjusting for the impact of Berkson error arising from prediction equations in nutritional and physical activity epidemiology*

**Chair: Alison Eldridge**

**Chair: Sharon Kirkpatrick**

**Chair: Pamela Shaw**

Current reality and gaps in digital dietary assessment tools

Introduction

Estimating the distribution of usual nutrient intake using predicted values from a calibration equation in a complex survey design

**Anne-Kathrin Illner**

**Sharon Kirkpatrick**

**Daniela Sotres-Alvarez**

<p>Closing the gap on 24-h recalls <b>Sai Krupa Das</b></p>	<p>Development and adaptation of dietary assessment tools and technologies for use in low-income contexts <b>Gary Frost</b></p>	<p>Methods of analysis when an outcome variable is a prediction with Berkson error <b>Laurence Freedman</b></p>
<p>Closing the gap on individualised feedback <b>Eileen Gibney</b></p>	<p>Validity of a novel food-based index for measuring diet quality in low- and middle-income countries <b>Sabri Bromage</b></p>	<p>Berkson error with outcome model misspecification: Bias when using predicted values in place of observed covariates <b>Gregory Haber</b></p>
<p>The future of digital dietary assessment <b>Damian Mehers</b></p>	<p>Application and refinement of the Prime Diet Quality Score for different contexts <b>Selma Gicevic</b></p>	<p>Discussion <b>Grace Yi</b></p>
	<p>A comprehensive approach for adapting and evaluating a home food inventory to meet the cultural needs of diverse populations <b>Jayne Fulkerson</b></p>	
	<p>Adapting a home food inventory for an urban Minnesota Somali and Latina population <b>Mary Hearst</b></p>	
	<p>Discussion <b>Leslie Lytle</b></p>	

10:10 - 11:00 **Plenary** **THEATRE**  
*Measuring physical activity and sedentary behavior in large underserved populations*  
**Dr. Job Godino, UC San Diego**

11:00 - 11:30 **Networking break** **NEW YORK FOYER**

<b>ROOMS</b>	<b>THEATRE</b>	<b>CERISE</b>	<b>KERNHEM</b>
11:30 - 13:00	<p>S22. Oral presentations: <i>Development of methods</i></p> <p><b>Chair: Jeanne de Vries</b></p> <p>Nutritools: an interactive guided website including validated dietary assessment tools and a food questionnaire creator <b>Janet Cade</b></p> <p>Development of the Dutch food consumption application DitEetIk! <b>Ceciel Dinnissen</b></p> <p>Environmental sustainability of diet – feasibility of linkage to automated online dietary assessment tools <b>Holly Rippin</b></p> <p>Comparison of large-scale grocery purchases and individual-level food consumption: Results from the LoCard-study <b>Henna Vepsäläinen</b></p> <p>Validation of dietary supplement use reported by food frequency questionnaire with repeated 24-hour recall data in the Cancer Prevention Study-3 Diet Assessment Sub-study <b>Terry Hartman</b></p>	<p>S23. Oral presentations: <i>Contextual factors</i></p> <p><b>Chair: Rick Troiano</b></p> <p>Development of a Dutch Diet History Questionnaire to assess the dietary intake of low SES pregnant women <b>Yvette Beulen</b></p> <p>Ranking barriers to healthy eating in young adults: application of a discrete choice experiment <b>Katherine Livingstone</b></p> <p>The impact of sugar-sweetened beverages consumption on healthy food markers: National Dietary Survey 2008-2009 <b>Maria Eliza de Mattos Tobler Mastrangelo</b></p> <p>The relationship between adults' dietary intakes and food insecurity status in Canada: implications for future population assessment <b>Joy Hutchinson</b></p> <p>Restricting promotions of unhealthy foods and beverages by price and location: applying UK Nutrient Profiling Models to a retail product dataset. <b>Victoria Jennesson</b></p>	<p>S24. Oral presentations: <i>Databases</i></p> <p><b>Chair: Elske Brouwer</b></p> <p>Rationalisation of the UK Nutrient Databank to enable the UK National Diet and Nutrition Survey to move to a web-based 24hr recall (Intake24) <b>Birdem Amoutzopoulos</b></p> <p>Obtaining nutrient contents for commercial food items - comparison of two approaches <b>Johanna Conrad</b></p> <p>Nova food classification: how specific do survey data need to be? <b>Vanessa Cardozo Mendes</b></p> <p>FAO/WHO Global Individual Food consumption data Tool (FAO/WHO GIFT): increasing the availability, harmonization and use of individual quantitative food consumption data worldwide <b>Rita Ferreira de Sousa</b></p> <p>EU Menu project harmonised food consumption data collection and challenges to face <b>Sofia Ioannidou</b></p>

Examining the effect of voluntary fortification on usual nutrient intakes in the Canadian population <b>Valerie Tarasuk</b>	Investigating eating architecture: how precise does time of eating have to be? <b>Laura Johnson</b>	Methodology for estimating the intake of free sugars: a food disaggregation approach in the context of the Finnish food composition database <b>Niina Kaartinen</b>
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13:00 - 14:00

**Lunch**

14:00 - 15:30

**Plenary & ICDAM 2020 Closing**

*Facilitated discussion: A global 2020 vision for diet and activity methods*

**THEATRE**