ICDAM 2023
POSTER SESSION 2

Poster Session #2

Wednesday, June 28
12:00-13:45

BIOMARKERS

P2-054 **METABOLOMIC PROFILES OF INFLAMMATORY AND INSULINEMIC DIETARY PATTERNS**

Mary Playdon[1], Kennedy Springer[1], Jennifer Sinnott[2], Benedikt Hauner[1], Benjamin Krick[1], Ben Haaland[1], Prasoona Karra[1], Fred Tabung[2], Britton Trabert[1], Marc Gunter[3], Heather Eliassen[4], Steven Moore[5]

[1]University of Utah, [2]Ohio State University, [3]Imperial College London, [4]Harvard School of Public Health, [5]National Cancer Institute

Diet may modulate chronic disease via inflammation and hyperinsulinemia. We measured the correlation of >1000 blood metabolites with inflammatory and insulinemic dietary patterns within 3 nested case-control studies (N=759). Correlated metabolites included molecules from coffee, fish, wine, wholegrains, fruit/vegetables, and dairy and endogenous metabolites (e.g., energy, plasmalogen, bacterial).

P2-055 **PLASMA CONCENTRATION OF 36 (POLY)PHENOLS AND 5-YEAR BODY WEIGHT CHANGE IN A LARGE EUROPEAN COHORT**

Mercedes Gil-Lespinard[1], Enrique Almanza-Aguilera[1], Jazmín Castañeda[1], Daniel Guiñón-Fort[1], Raul Zamora-Ros[1]

[1]Bellvitge Biomedical Research Institute

Associations between plasma (poly)phenol concentrations and 5-y body weight change were assessed in 761 participants form the EPIC cohort. In fully adjusted models, baseline plasma concentration of individual (poly)phenols showed a tendency towards prospective 5-year BW maintenance or loss, highlighting flavonoid-derived metabolites.

P2-056 **NOVEL DIETARY DNA BIOMARKER METHOD FOR EVALUATING PLANT CONSUMPTION PATTERNS IN CHILDREN WITH OBESITY**

Ammara Aqeel[1], Chengxin Yang[1], Tracy Truong[1], Jun Zeng[1], Brianna Petrone[1], Veronica Carrion[1], Sarah Armstrong[1], Lawrence David[1]

[1]Duke University

Dietary assessment in children is challenging due to several factors. We tested a novel dietary DNA biomarker in a pilot cohort of children with obesity for reconstructing dietary composition using participant stool. We were able to detect 112 unique dietary sequences, capture overall dietary patterns, and measure dietary change due to intervention, demonstrating the capacity of this method.

P2-057 **REPRESENTATION OF ADULTS WITH CLASS III OBESITY IN STUDIES ASSESSING VALIDITY OF SELF-REPORTED ENERGY INTAKE USING DOUBLY-LABELED WATER: A SYSTEMATIC REVIEW**

Erica Howes[1], Eleni Laskaridou[1], Kevin Davy[1], Valisa Hedrick[1]

[1]Virginia Tech

This systematic review assessed the inclusion of adults with class III obesity in dietary validation studies using doubly-labeled water and self-reported energy intake. Of the included studies, only 3.5% of participants had class III obesity. Validity data showed mostly underreporting in adults with class III obesity, but more work is needed given the low representation of these participants.

P2-058 **METABOLOMIC PROFILES OF HEALTHY AND TYPICAL AUSTRALIAN DIETARY PATTERNS: PROTOCOL FOR A RANDOMISED CROSSOVER FEEDING STUDY IN ADULT**

Jordan Stanford[1], **Clare Collins[1]**, Jessica Ferguson[1], Erin Clarke[1], Jordan Stanford[1], Tracy Burrows[1], Lisa Wood[1]

[1]University of Newcastle

Using dietary metabolomics, this study will identify metabolites characterising healthy and unhealthy diets in Australian adults. Participants will be provided with food for an 8-week feeding study, with biospecimens, questionnaires, and physical measures collected. The study will identify objective markers of whole diet patterns, improving understanding of how food affects individual health.

P2-059 **ASSOCIATIONS BETWEEN N-3 PUFA AND FISH INTAKE USING SHORT DIETARY ASSESSMENT METHODS AND WHOLE BLOOD BIOMARKERS**

Anja Biltoft-Jensen[1], Jeppe Matthiessen[1], Tue Christensen[1]

[1]Technical University of Denmark

Estimates of n-3 PUFA and fish intake was compared to blood n-3 PUFA concentrations in 52 males and 68 females aged 18-60 using a 7-day web-based food diary and 2 x 24-hour diet recall. Fish- and almost all n-3 PUFAs estimated from both methods, significantly correlated with biomarker concentrations. Both methods can estimate fish and n-3 PUFA intake. The 2x24hDR requires adjustments for accuracy.

P2-060 **SERUM METABOLITES ASSOCIATED WITH CHOLINE INTAKE IN VEGANS**

Therese Karlsson[1], Anna Winkvist[2], Millie Rådjursöga[3], Lars Ellegård[4], Anders Bay Nord[3], Helen Lindqvist[3]

[1]University of Gothenburg/Chalmers University of Technology, [2]University of Gothenburg/Umeå University, [3]University of Gothenburg, [4]Sahlgrenska University Hospital

Associations of dietary total choline, phosphatidylcholine and free choline with serum metabolites, analyzed by 1H-nuclear magnetic resonance spectroscopy, were explored in 43 healthy vegan subjects. Choline intake was associated with several metabolites and differed to some extent with type of choline intake. No metabolites were good at discriminating lower from higher choline intake.

P2-061 **COMPARISON OF DIETARY PATTERNS IDENTIFIED THROUGH DNA METABARCODING AND SELF-REPORTED DIETARY DATA IN AN INTERNATIONAL COHORT**

Benjamin Neubert[1], Brianna Petrone[1], Sharon Jiang[1], Lara Dugas[2], Candice Choo-Kang[2], Brian Layden[3], Amy Luke[4], Pascal Bovet[5], Estelle Lambert[6], Dale Rae[6], Kweku Bedu-Addo[7], Terrence Forrester[8], Jack Gilbert[9], Lawrence David[1]

[1]Duke University, [2]Loyola University of Chicago, [3]University of Illinois at Chicago School of Medicine, [4]Loyola University, [5]University Center for Primary Care and Public Health (Unisanté), [6]University of Cape Town, [7]Kwame Nkrumah University of Science and Technology, [8]University of the West Indies, [9]University of Chicago

Self-reported dietary assessments are often limited by measurement errors. A new technique, DNA metabarcoding, may complement these assessments by analyzing degraded food DNA in stool to assess the plant component of an individual's diet. In a global study of 463 African-origin individuals, DNA metabarcoding identified dietary patterns comparable to 24-hour recall-based dietary patterns.

P2-062 **IDENTIFYING GENETIC MARKERS OF FREE SUGAR AND SWEET TASTING SUGAR INTAKE**

Suzanne Janzi[1], Minghao Kou[2], Marju Orho-Melander[1], Yan Borné[1], Stina Ramne[3], Lu Qi[2], Emily Sonestedt[1]

[1]Lund University, [2]Tulane University, [3]Novo Nordisk Foundation Center for Basic Metabolic Research

We aimed to identify genetic variants associated with intake of free sugar and sweet tasting sugars in the Malmö Diet and Cancer Study (N=25,660) and UK biobank (N=141,827). Associations were found between both sugar intake definitions and genetic variants in a specific region on chromosome 19. These variants could potentially be used as proxies for sugar intake in future mendelian randomizations.

P2-063 **THE EFFECT OF A CO-DESIGNED EIGHT-WEEK WORKPLACE HEALTH PROMOTION INITIATIVE ON OCCUPATIONAL SEDENTARY TIME, PHYSICAL ACTIVITY AND GLUCOSE CONTROL WITH ADULTS WHO HOLD DESK-BASED OCCUPATIONS: A STUDY PROTOCOL**

Aidan Buffey[1], Brian Carson[1], Jon Salsberg[1], **Alan Donnelly[1]**

[1]University of Limerick

This study protocol describes a co-designed workplace health promotion initiative (WHPI). The WHPI, was co-designed with a research steering committee (RSC) comprising of staff members in the target workplace and informed by an online survey, focus group and RSC meetings. This study aims to improve occupational sedentary time and physical activity with a multi-component behaviour change WHPI.

P2-064 **RELIABILITY AND VALIDITY OF IMAGE-BASED DIETARY ASSESSMENT IN A CLINICAL TRIAL**

Tina Hsueh-Ting Chiu[1], Ya-Hong Chen[1], Hui-Ling Lee[1]

[1]Fu-Jen Catholic University

Image-based dietary assessment (IBDA) using cell phone and other devices have been used frequently in clinical and research settings but very few studies have examine the reliability and validity of IBDA, and the ability of Taiwanese nutrition professionals to perform IBDAs. We validate IBDA against several food biomarkers.

P2-065 **RELATIVE VALIDITY OF THE PLANETARY HEALTH DIET INDEX IN EUROPEAN ADOLESCENTS**

Leandro Cacau[1], Giles Hanley-Cook[2], Inge Huybrechts[3], Stefaan De Henauw[2], Carl Lachat[2], Dirce Marchioni[1], Luis Moreno[4]

[1]University of São Paulo, [2]Ghent University, [3]International Agency for Research on Cancer, [4]University of Zaragoza

This study assessed the relative validity of the Planetary Health Diet Index (PHDI) in European adolescents. Higher PHDI scores were associated with increased nutrient intake from plant-based foods and positively associated with plasma biomarkers, while negatively associated with nutrients from animal-based foods. The PHDI showed good relative validity among European adolescents.

P2-066 **MAXIMUM N-MINUTE STEP COUNT: A PUTATIVE FREE-LIVING MEASURE OF PHYSICAL PERFORMANCE**

Craig Speirs[1], Malcolm Granat[2]

[1]PAL Technologies Ltd/University of Strathclyde, [2]University of Salford

Free-living physical behaviour may provide a better proxy for underlying health compared to currently used clinical measures. We propose the use of maximum free-living step count, measured using a body-worn sensors, as a candidate measure. We suggest measuring maximum step count over a two-minute period as a sizeable minority of individuals never have longer periods of stepping.

COMBINING METHODS TO ENHANCE MEASUREMENT

P2-046 **CATEGORIZING COMBINATION FOODS TO CHARACTERIZE DIETARY SOURCES OF ENERGY AND NUTRIENTS**

Rhonda Sebastian[1], Joseph Goldman[1], Alanna Moshfegh[1]

[1]US Department of Agriculture

In NHANES, addressing combination foods (i.e., eaten together, coded as multiple line items) has not been conducted. Using 24HR data of adults 20+ y, combinations were assigned to one of 169 WWEIA Food Categories (FC), and FC contributions to dietary intake were assessed. This research clarifies sources of energy/nutrients as consumed and aids identification of dietary patterns of this population.

P2-047 **COMPARISON OF DATA FROM A NEW FOOD FREQUENCY QUESTIONNAIRE AND 4-DAY FOOD RECORDS IN THE MALMÖ OFFSPRING STUDY**

Sophie Hellstrand[1], Emily Sonestedt[1], Peter Nilsson[1], Marju Orho-Melander[1], Ulrika Ericson[1]

[1]Lund University

We validated a food frequency questionnaire against the previously validated 4-day food record, RIKSMATEN 2010, in 79 participants of the Malmö Offspring Study. We observed moderate correlations between most of the 15 selected food groups in the 4DFR and FFQ. Our results indicate that the FFQ is a useful and valid instrument for estimation of overall dietary intakes in future Malmö cohorts.

P2-048 **DEVELOPING AND EVALUATING THE PLANETARY HEALTH DIET INDEX FOR THE UNITED STATES TO MEASURE AMERICAN ADHERENCE TO A SUSTAINABLE DIETARY PATTERN**

Molly Parker[1], Sarah Misyak[1], Julia Gohlke[1], Valisa Hedrick[1]

[1]Virginia Tech

To assess American adherence to the Planetary Health Diet proposed by the EAT-Lancet Commission, the Planetary Health Diet Index for the United States (PHDI-US) was developed using NHANES data. Validity and reliability were acceptable. The mean score was 39.1 out of 150, indicating Americans are not meeting recommendations. The PHDI-US can identify areas for improving human and planetary health.

P2-049 **ASSESSMENT OF ENERGY-ADJUSTED INFLAMMATORY POTENTIAL OF THE PORTUGUESE DIET USING OPEN-ACCESS DIETARY DATA TO ESTABLISH A REFERENCE POPULATION**

Sofia Martins[1], Daniela Correia[1], **Catarina Carvalho**[2], Carla Lopes[1], Duarte Torres[2]

[1]Universi, [2]University of Porto

This study presents recently developed energy-adjusted tools to estimate the dietary inflammation potential among younger (C-EDIP) and older (A-EDIP) ages. Individual EDIP calculations used dietary data available on the Global Dietary Database as the reference population and inflammatory effect scores retrieved from the literature. C-EDIP and A-EDIP were estimated for the Portuguese population.

P2-050 **PREVALENCE OF DIETARY MISREPORTING USING DIFFERENT CRITERIA: WHAT SHOULD WE DO?**

Catherine Norton[1]

[1]University of Limerick

Erroneous conclusions derived from misreported (MR) self-described food records may adversely affect policy decisions involving nutrition and health. We describe MR prevalence between 36-82% with differing samples and criteria used. Unanimity is required among the scientific and dietetic communities on how best to screen for UR in dietary surveys, as well as whether to include misreported records.

P2-052 **LINKING A NEW DIETARY CARBON FOOTPRINT DATASET TO NCI'S DIET HISTORY QUESTIONNAIRE (DHQ)**

Kirsten Herrick[1], Emily Krueger[2], Amelia Willits-Smith[3], Donald Rose[4], Erika Faust[1], Lisa Kahle[5], Jill Reedy[1]

[1]National Institutes of Health, [2]Division of Cancer Control and Population Sciences, [3]University of North Carolina-Chapel Hill, [4]Tulane University, [5]Information Management Services, Inc.

To facilitate research on diets that simultaneously investigate human health and environmental impacts, we performed a linkage between the U.S. NCI's Diet History Questionnaire and a new dietary footprint dataset, the Database of Food Recall Impacts on the Environment for Nutrition and Dietary Studies. This linkage will be released publicly and evaluated among the NIH-AARP Diet and Health Study.

P2-053 **MIXED-METHOD RESEARCH EXPLORES THE BENEFITS OF RESISTANCE TRAINING IN POSTMENOPAUSAL WOMEN**

Yi-Chia Yeh[1], Kuei-Yu Chien[1], Chiao-Nan Chen[2], Yu-Hsien Tseng[3], Kuo-Jen Hsu[2], Sheng-Yun Huang[2]

[1]National Taiwan Sport University, [2]National Yang Ming Chiao Tung University, [3]Bachelor Program of International Sport Affairs

The study was aimed to know benefits of resistance training (RT) on postmenopausal women (PMW) with sarcopenic obesity via mixed method research (MMR). Quantitative and qualitative indicators show the physical benefit, while only qualitative one reveals positive mental effect of RT in PMW. Thus, MMR is suggested for studying PMW with low physical or mental score, to show the advantage of RT.

CONTEXTUAL FACTORS AFFECTING PHYSICAL ACTIVITY LEVELS

P2-077 **PROXIMITY TO SOUTH ASIAN GROCERY STORES AND SOUTH ASIAN MEAL CONSUMPTION IN THE COVID-19 PANDEMIC: QUANTITATIVE RESULTS FROM A FOCUS GROUP IN A FORMATIVE STUDY**

Samantha Harris[1], Bridget Murphy Hussain[1], Andrew Ashley[1], **Sarika Dasraj[1]**, Ola Kiszka[1], Twesha Khanna[1], Sameera Talegawkar[2], Rupak Shivakoti[3], Niyati Parekh[1]

[1]New York University, [2]George Washington University, [3]Colombia University

South Asian (SA) cuisine is hallmarked by its large and varied herb and spice use which was impacted by the COVID-19 pandemic. Twenty-nine self-identifying SA adults living in the United States (US) completed a Qualtrics survey and sixteen participated in a Focus Group. The proximity and frequency of visiting SA stores potentially had a positive impact on SA meal consumption during the pandemic.

P2-078 **EXPLORING CONTEXTUAL FACTORS CONTRIBUTING TO LOW REPLICABILITY OF MODIFIED-WEIGHT DIET QUALITY SCORE ASSOCIATIONS WITH MORTALITY RISK**

Haley Parker[1], Maya Vadiveloo[1]

[1]University of Rhode Island

In a national analysis, modified-weight Healthy Eating Index (HEI) vs. standard scores were more strongly associated with mortality but when analyses were replicated in the Multiethnic Cohort, standard and modified HEI scores were similarly associated. Hypothesis-generating findings suggest that healthier dietary patterns may have contributed to low replicability of modified-weight HEI findings.

P2-079 **EFFECTS OF HIGH-INTENSITY INTERVAL EXERCISE ON APPETITE AT DIFFERENT ALTITUDES – A PILOT STUDY**

Yi-Ping Lin Kuo[1], Kuei-Yu Chien[1], Pei-Chen Chu[1]

[1]National Taiwan Sport University

CONCLUSION: Exercise at a MA allowed subjects to feel not dull and bored. Appetite VAS showed that subjects were able to eat more 30 mins after exercise than before. Subjects were more likely to crave sweets at SL. Factors associated with post-exercise hunger varied across environments. At SL, there was a negative correlation with BG levels. At MA, it was positively correlated with P&M fatigue.

P2-080 **USING OUTDOOR SPACES TO INCREASE PHYSICAL ACTIVITY AND REDUCE SEDENTARY BEHAVIOUR: RESULTS FROM A PILOT STUDY**

Thayse Natacha Gomes[1], Sara Suikkanen[2], Kevin Gavin[1], Mabliny Thuany[3], Ilkka Väänänen[2], Alan Donnelly[1]

[1]University of Limerick, [2]LAB University of Applied Sciences, [3]University of Porto

The feasibility of an intervention to evaluate the role of outdoor spaces in increasing physical activity (PA) and reducing sedentary behaviour was tested, sampling 15 inactive adults (Limerick and Lahti cities). No significant differences were observed in the outcomes, but the pilot study's design showed it to be feasible with changes. Future study will compare PA in both "green spaces" and "grey spaces".

P2-081 **SOCIO-ECONOMIC AND ENVIRONMENTAL FACTORS AFFECTING BREASTFEEDING AND COMPLEMENTARY FEEDING PRACTICES AMONG BATWA AND BAKIGA COMMUNITIES IN SOUTH-WESTERN UGANDA**

Giulia Scarpa[1], Lea Berrang Ford[1], Janet Cade[1], Sabastian Twesigomwe[2], Paul Kakwangire[2], Maria Galazoula[1]

[1]University of Leeds, [2]IHACC

We identified four key factors affecting breastfeeding and nutrition practices: marginalisation and poverty; environmental change; lack of information; and poor support. Our findings contribute to the field of global public health and nutrition among Indigenous communities, with a focus on women and children.

P2-082 **THE ROLE OF INDIVIDUAL AND ENVIRONMENTAL FACTORS IN CHILDREN'S PHYSICAL ACTIVITY: A NETWORK ANALYSIS**

Thayse Natacha Gomes[1], Mabliny Thuany[2], Anderson Santos[3]

[1]University of Limerick, [2]University of Porto, [3]Federal University of Sergipe

We verified the complex relationship between individual and environmental factors related to children's PA, in a sample of 145 schoolchildren (aged 6-8y) from a public school in Aracaju (Brazil). Results highlighted the relevance of gestational care, since birthweight is an important factor for children's development and can be related to the possibility to be involved in PA during childhood.

P2-083 **BODY FAT PERCENTAGE DETERMINES THE APPETITE RESPONSES OF POSTMENOPAUSAL WOMEN AFTER A SINGEL BOUT OF INTERMITTENT EXERCISE IN WATER AND ON LAND**

Kuei-Yu Chien[1], Wan-Chun Wu[2]

[1]National Taiwan Sport University, [2]National Sports Training Center

Postmenopausal women with high body fat have significantly lower hunger and desire to eat than those with low body fat after engaging in a single bout of high-intensity intermittent exercise in water and on land.

P2-084 **CHANGES IN SOUTH ASIAN MEAL COOKING METHODOLOGIES IN SOUTH ASIAN ADULTS LIVING IN THE UNITED STATES: RESULTS FROM A FOCUS GROUP IN A FORMATIVE STUDY**

Samantha Harris[1], Bridget Murphy Hussian[1], Andrew Ashley[1], **Sarika Dasraj[1]**, Ola Kiszka[1], Twesha Khanna[1], Sameera Talegawkar[2], Rupak Shivakoti[3], Niyati Parekh[1]

[1]New York University, [2]George Washington University, [3]Colombia University

South Asian (SA) cuisine requires large amounts of time and effort to prepare. Self-Identifying SA adults living in the United States (US) took a Qualtrics survey (n=29) and were invited to participate in focus groups (n=16). Four themes emerged about cooking methodologies and meal consumption. This fast-growing immigrant group in the US changed cooking methodologies to fit their new lifestyle.

P2-085 **IDENTIFYING PREDICTORS FOR MINIMUM DIETARY DIVERSITY AND MINIMUM MEAL FREQUENCY IN CHILDREN AGED 6-23 MONTHS IN UGANDA**

Giulia Scarpa[1], Lea Berrang Ford[1], Janet Cade[1], Florence Tushemerirwe[2], Laura Ahumuza[3], Paul Kakwangire[4], Didacus Namanya[3], Maria Galazoula[1]

[1]University of Leeds, [2]Makerere University, [3]Ministry of Health Uganda, [4]IHACC

By analysing the Ugandan Demographic Health and Surveillance data of 2016, we found that health status, vaccination status and wealth were significantly positively associated with two child nutrition predictors, minimum meal frequency and minimum dietary diversity.

P2-086 **DIET QUALITY ASSESSMENT OF ADULTS WITH CYSTIC FIBROSIS - COMPARISONS TO POPULATION DIETARY GUIDELINES. A CROSS-SECTIONAL STUDY.**

Cian Greaney[1], Katie Bohan[1], Sarah Tecklenborg[2], Ciara Howlett[3], Karen Cronin[3], Clodagh Landers[4], Mary Connolly[5], Derbhla O'Sullivan[6], Katie Robinson[1], Audrey Tierney[1]

[1]University of Limerick, [2]Cystic Fibrosis Ireland, [3]Cork University Hospital, [4]St. Vincent's University Hospital, [5]University Hospital Galway, [6]University Hospital Limerick

Energy requirements for adults with cystic fibrosis (CF) have changed. Assessment of diet quality is needed for new guideline development. 3-day food diaries collected dietary data and poor diet quality was observed. Total energy (%) from fat, protein, sugars, and saturated fat were above guidelines. Revision of adult CF dietary guidelines is needed to prevent diet-related chronic disease.

P2-087 **FOOD INSECURITY AND BODY COMPOSITION OF PRESCHOOL CHILDREN**

Erick Segui[1], Tatiana Collese[1], Adriana de Castro[1], Jacqueline da Silva[2]

[1]Centro Universitário São Camilo, [2]The University of Edinburgh

AIM: To describe children's body composition in food insecurity situations. RESULTS: For children in food-secure households(FS), 15.4% were at overweight risk and 100% had adequate height. For children in food-insecure households(FI) 18.5% were at overweight risk and 4.7% had low height. CONCLUSION: Children in FI were more likely to be at overweight risk and had a higher prevalence of low height.

P2-088 **SMELL DYSFUNCTION IS RELATED TO INCREASED INTAKE OF EMPTY CALORIES IN A NATIONALLY REPRESENTATIVE SAMPLE OF ADULTS**

Jacqueline Vernarelli[1], Dawn Melzer[1]

[1]Sacred Heart University

Loss of smell and smell dysfunction (olfactory dysfunction, OD) have been documented results of COVID-19 infection, and may contribute to altered eating behaviors post-recovery. Using a nationally representative sample of US adults, the association between OD and dietary intake was assessed. Smell dysfunction was associated with greater intake of empty calories in US adults.

P2-089 **EVALUATING THE COST OF HEALTHY AND SUSTAINABLE DIETS IN MEXICO: METHODOLOGICAL CONSIDERATIONS**

Carolina Batis[1], Andrea Arango[1], Mishel Unar[1]

[1]National Institute of Public Health, Mexico

Evidence suggests that healthy diets/foods are more expensive, but findings depend on the methodological approach. In Mexico we found that healthy foods are less expensive by 100 g, but more expensive per 100 kcal. We also compared the cost of baskets generated through the DIETCOST program from INFORMAS and found that healthy and sustainable baskets were less expensive than current baskets.

PATTERNS (MULTIDIMENSIONALITY AND DYNAMISM)

P2-067 **DIETARY PATTERNS, PROCESSED FOODS AND AVAILABILITY NUTRIENTS: CROSS-SECTIONAL STUDY IN COMMUNITY-DWELLING OLDER ADULTS IN SÃO PAULO, BRAZIL**

Rita Aquino[1], Agatha Previdelli[2]

[1]São Judas University, [2]Universidad Autónoma de Chile

The aim of the study was to evaluate the impact of dietary patterns and the food processing in nutrient intake in older adults. Three dietary patterns were evaluated: Traditional Pattern (in natura or minimally processed food), Modified Pattern (processed foods) and Snack Pattern (coffee, milk, bread, butter). The Traditional Pattern was the most appropriate dietary pattern.

P2-069 **MEAL TIMING PATTERNS, SLEEP AND ADIPOSITY**

Camille Lassale[1], Anna Palomar[1], Luciana Pons Muzzo[1]
[1]ISGlobal (Barcelona Institute of Global Health)

Cross-sectional study (n=7505) of a population-based cohort of adults 40-79y from Catalonia, Spain. Meal time as exposure, body mass index as outcome, adjusted for sleep time, Mediterranean diet adherence, physical activity and other covariates (sociodemographic, smoking, mental health). Longer fasting hours, earlier bedtimes and earlier time of first meal were associated with lower BMI.

P2-070 **A SCOPING REVIEW TO IDENTIFY NOVEL ANALYTIC METHODS USED TO CHARACTERIZE DIETARY PATTERNS**

Joy Hutchinson[1], Alexandra Pepetone[1], Lesley Andrade[1], Amanda Raffoul[2], Tabitha Williams[1], Sanaa Hussain[1], Sarah McNaughton[3], Rebecca Leech[3], Jill Reedy[4], Marissa Shams-White[4], Jennifer Vena[5], Kevin Dodd[4], Lisa Bodnar[6], Benoit Lamarche[7], Michael Wallace[1], Sharon Kirkpatrick[1]
[1]University of Waterloo, [2]Harvard Medical School, [3]Deakin University, [4]National Cancer Institute, [5]Alberta Health Services, [6]University of Pittsburgh, [7]Université Laval

A scoping review identified 32 peer-reviewed studies describing novel analytic methods to characterize dietary patterns. Machine learning was used in 22 studies, latent class analysis in seven, least absolute shrinkage and selection operator in two, and one study used compositional data analysis. Most studies (21) assessed relationships between dietary patterns and health outcomes.

P2-072 **DIET QUALITY ACROSS THE LIFESPAN: HEALTHY EATING INDEX-2020 AND HEALTHY EATING INDEX-TODDLERS-2020**

Jill Reedy[1], **Kirsten Herrick[1]**, Marissa Shams-White[1], Jennifer Lerman[1], TusaRebecca Pannucci[2], Meghan Zimmer[1], Kevin Meyers Mathieu[2], Lisa Kahle[3], Eve Stoody[2]
[1]National Cancer Institute, [2]United States Department of Agriculture, [3]IMS

The Healthy Eating Index (HEI) was developed to measure alignment with U.S. dietary guidelines which are updated every 5 years. As the guidance has evolved, the HEI has evolved, too. The release of the latest HEI includes 2 separate indices to reflect the most recent advances: the HEI-2020 (for children and adults 2 years and older) and the HEI-Toddlers-2020 (for toddlers 12 through 23 months).

P2-073 **DEVELOPMENT AND COMPARISON OF TWO INDICES REFLECTING THE GERMAN FOOD BASED DIETARY GUIDELINES AND THE EAT-LANCET RECOMMENDATIONS**

Almut Richter[1], Ramona Moosburger[1], Julika Loss[1], Gert Mensink[1]
[1]Robert Koch Institute

Two indices based on the national Food Based Dietary Guidelines and the EAT-Lancet Commission's Healthy Reference Diet were developed and applied to data from a national health survey in Germany. The evaluation of meat, fish, milk and cereals, show noticeable differences between the indices due to different definitions of the food groups, recommended intake and evaluation criteria.

P2-074 **BRAZILIAN ELDERLY EATING PATTERNS ASSOCIATED WITH DIETARY VARIABLES RELATED TO TYPE 2 DIABETES MELLITUS: COMPARISON OF TWO HYBRID METHODS**

Tais Lopes[1], Iuna Alves[1], Natália Silva[1], Mariana Marques[1], Luciana Guerra[1], Edna Yokoo[2], Rosely Sichieri[3], Rosangela Pereira[1]
[1]Federal University of Rio de Janeiro, [2]Fluminense Federal University, [3]State University of Rio de Janeiro

PLS and RRR were applied to identify and compare dietary patterns associated with type 2 diabetes mellitus-related dietary variables in Brazilian elderly (n=7,811) investigated in the 2017-2018 National Dietary Survey. Both methods explained similarly the food consumption variation and the first pattern was the most interpretable one, including energy-dense, added-sugar, and low-fiber dense items.

P2-075 **CARDIOVASCULAR HEALTH DIET INDEX AND ITS ASSOCIATION WITH SUBCLINICAL ATHEROSCLEROSIS: PREDICTIVE CRITERION VALIDITY AFTER AN 8-YEAR FOLLOW-UP PERIOD**

Leandro Cacau[1], Isabela Bensenor[1], Paulo Lotufo[1], Dirce Marchioni[1]
[1]University of São Paulo

The Cardiovascular Health Diet Index (CHDI) is a newly proposed diet quality score for cardiovascular health, adapted to the Brazilian food culture. Using data from the Brazilian Longitudinal Study of Adult Health (ELSA-Brasil) cohort, we found that a 10-point increase in the CHDI score was associated with a decrease in subclinical atherosclerosis after an 8-year follow-up period.

P2-076 **ASSESSING MACRONUTRIENTS RELIABILITY IN THREE-DAY DIET RECORDS OF PORTUGUESE CHILDREN AGED 4 TO 13 YEARS: GENERATION XXI BIRTH-COHORT**

Milton Severo[1], Ana Marinho[1], Carla Lopes[1]

[1]University of Porto

This study evaluated the reliability of macronutrients and their subtypes using 3-day dietary records from a Portuguese child cohort aged 4 to 13 years. The study identified 3 clusters of macronutrients with varying levels of reliability, decreasing with age, and attaining the lowest value at 10 years. The study concluded that the number of days needed for data collection depends on the age group.

P2-095 **CORRELATION BETWEEN A NEW SCREENER TO ASSESS ADHERENCE TO CANCER PREVENTION RECOMMENDATIONS WITH OTHER VALIDATED NUTRITIONAL ASSESSMENT TOOLS IN WOMEN TREATED FOR BREAST CANCER**

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A short screener (Nutri S-Can) to assess adherence to cancer prevention recommendations has been developed and is currently under validation. Our aim was to correlate the Nutri S-Can with validated tools in women undergoing treatment for breast cancer (internal validation process). Our results show that Nutri S-Can correlates well with other validated indicators of diet quality and physical activity.