20th International Congress of Nutrition

Abstracts

Contains abstracts of the Nutrimenthe International Conference in Granada, Spain, September 13 – 14 2013

Granada, Spain
15 - 20 September 2013

Volume 1 of 3

Editors:

A. Gil
J. A. Martinez

C. Campoy
B. Koletzko

Paralleled Symposia

T1 ADVANCES IN NUTRITION RESEARCH
- NPS1-1 Early life nutrition intervention: Effects on long term health and function ........................................ 1-2
- PS1-1 Developments in personalized nutrition: What's next? (Food4me Project)
- PS2-9 Biomarkers of nutrition for development: An overview BOND ............................................................. 4-6
- PS2-17 Immunonutrition in health and disease ........................................................................................................ 6-7
- PS3-25 New biomarkers for health claims made on food ......................................................................................... 7-11
- PS3-33 OMICS technologies with nutritional perspectives .......................................................................................... 11-12
- PS4-41 Public health genomics in individualized nutrition ......................................................................................... 12-14
- PS4-49 Biomarkers of response to dietary interventions ............................................................................................ 14-16
- PS5-57 Early programming and nutrition in Latin America .......................................................................................... 16-19
- PS5-65 Metabolic and nutritional aspects of genetic diseases .................................................................................... 19-21

T2 NUTRITION THROUGH LIFE COURSE
- NPS1-2 Efficacy of lipid-based nutrient supplements for prevention of maternal and infant undernutrition in Africa: Results of the iLiNS Project .................................................................................. 23-26
- PS1-2 Nutrition and lifestyle in adolescents: The HELENA study ........................................................................... 26
- PS2-10 Energy balance and active living .................................................................................................................. 26-28
- PS2-18 Healthy life style promotion .......................................................................................................................... 28-29
- PS3-26 Scaling up nutrition to improve infant and young child feeding (IYCF) (Alive & Thrive) .............................. 29-30
- PS3-34A Nutrients and exercise performance – What is the evidence behind recent claims of major benefits? .................................................................................................................. 30-32
- PS3-34B Past and current experiences in leveraging multiple program and partner platforms to scale-up nutrition interventions (The SPRING project) .......................................................... 32-34
- PS4-42A Complimentary feeding and infant health (FAO) ......................................................................................... 34-36
- PS4-42B Generating evidence of impact for integrated programs aimed to improve child nutrition during the first 1000 days (IFPRI) .................................................................................. 36-38
- PS4-50 Early diet is critical for later development - New research into changing early eating habits (HABEAT and VIVA) ........................................................................................................ 38-40
- PS5-58 NUAGE research ............................................................................................................................................ 41-43
- PS5-66A Trace elements and chronic diseases ........................................................................................................ 43-44

T3 PUBLIC HEALTH NUTRITION AND ENVIRONMENT
- NPS1-3 Nutrition and enviromental sustainability (FAO) .......................................................................................... 45-46
- PS2-11 Global challenges in maternal and child nutrition for today and the future ............................................. 46-47
- PS2-19 Confronting the global epidemic of noncommunicable diseases: Findings from the NHLBI/ UHG Global Network ........................................................................................................... 47-49
- PS3-27 Community-based programme to prevent obesity: Lessons and perspectives from 20 years of experience (EPODE International Network) ........................................................................ 49
- PS3-35 Promoting healthy growth and preventing childhood stunting – a WHO initiative ..................................... 50-51
- PS4-43 Nutrition Profiling (WHO) ............................................................................................................................ 51
- PS4-51 Nutrition, physical activity and the prevalence of NCDs in the Middle-East and North-Africa ........................................................................................................................................ 51-53
- PS5-59 Food insecurity and obesity across the life cycle ............................................................................................. 54-55
- PS5-67 Type 2 diabetes in Asia's rapid growth is due to genetic or dietary change? .................................................. 55-58

T4 NUTRITION AND MANAGEMENT OF DISEASES
- NPS1-4 Dietary lipids and the risk of common diseases ............................................................................................ 59-60
- PS1-4 Scaling up prevention and treatment of malnutrition ........................................................................................ 60-62
- PS2-12 Food, nutrition, physical activity and cancer – Keeping the evidence current: WCRF/AICR Continuous Update Project (CUP) - (WCRF) .................................................................................. 62-64
- PS2-20 Tackling obesity in pre-school children: First results from the ToyBox-Study ............................................. 64-66
T7 FOOD CULTURE AND NUTRITIONAL EDUCATION

PS3-28 Role of dietary macronutrients on weight management. Role of protein and glycermic index in body weight regulation – Lessons from the Diogenes intervention study .........66-68

PS3-36 ISCOLE: International Study of Childhood Obesity, Lifestyle and the Environment .....68-70

PS4-44 Nutrition in inflammatory bowel diseases. From basic to clinical application ................. 70

PS4-52 International Life Sciences Institute (ILSI) Session on Food Allergy .................................... 70

PS5-60 Maternal nutritional supplementation of HIV-infected women during lactation: Implications for maternal and infant health in resource poor settings ............................................... 71-72

PS5-68 New insights in obesity, metabolic syndrome and diabetes ............................................. 72-73

T5 NUTRIENTS AND NUTRITIONAL ASSESSMENT

NPS1-5 Methods and outcomes of nutritional assessment and health monitoring ..................... 75-78

PS1-5 The SMILING Project: A South East Asian- European collaborative action to prevent micronutrient deficiencies in women and young children in South-East Asia .......... 78-81

PS2-13 Harmonization of human zinc requirements and country experiences in

assessing population zinc status ........................................................................................................... 81-82

PS2-21 Assessment of body composition from birth to 2 years ................................................. 82-84

PS3-37 Findings from 5 birth cohorts from developing countries: The COHORTS collaboration ...84-86

PS4-45 Iron and Malaria (FeM al) Project Results .............................................................................. 86-88

PS4-53 Strengthening micronutrient nutrition surveillance: WHO and CDC tools and methods ...88-89

PS5-61 Micronutrient Fortification. Science and Strategies for Public Health Improvement in Asia ................................................................................................................................. 90-93

PS5-69 Evaluation of food fortification and biofortification interventions in developing countries using stable isotopes ........................................................................................................................................... 93-94

T6 FUNCTIONAL FOODS AND BIOACTIVE COMPOUNDS

NPS1-6 PREVIEW Project ...................................................................................................................... 95-98

PS1-6 Diversity of physiological functions of amino acids and peptides ........................................ 98-99

PS2-14 Dietary reference values for DNA damage prevention ................................................... 99-101

PS2-22 The role of nutrition in healthy ageing: Insight from the CHANCES Project ................. 101-102

PS3-30 Fibres and the gut immune system (FIBEBIOTICS Project) .................................................. 102-103

PS3-38 HEALTHGRAIN Forum Symposium - Cereal foods and health - New results

and science based nutrition guidelines ................................................................................................. 103-106

PS4-46 Functional roles of human milk and other selected oligosaccharides .................................. 106-107

PS4-54 Functional roles of prebiotic inulin-type fructans .................................................................. 108-109

PS5-70 Phytochemicals responsible for the food function, from the chemistry to

physiological relevance and human health ......................................................................................... 110-111

T7 FOOD CULTURE AND NUTRITIONAL EDUCATION

NPS1-7 The role of nutraceuticals in health along with basic nutrition ........................................ 113-114

PS1-7 Cultural differences in diet and nutrition across Europe. Impact on health ...................... 114-116

PS1-7B Professionalism and Capacity Building in Nutrition – a UK perspective ......................... 116

PS2-15 Linking food security and nutrition education to improve infant and young

child feeding ........................................................................................................................................ 116-118

PS2-23A China’s nutrition transition: Implications of rapid social and economic change for

non-communicable disease risk ........................................................................................................ 118-121

PS2-23B A global partnership to improve nutrition medicine in Vietnam ..................................... 121-122

PS3-31A Building research capacity in Latin America to address NCDs and obesity .................... 122-123

PS3-31B Traditional, Indigenous and cultural food and nutrition ................................................. 123-125

PS3-39A ENLP - Nutrition during times of economic crisis, let’s cook something up! ................ 126-127

PS3-39B Capacity development in innovative techniques in food and nutrition research .......... 127-128

PS4-47 Mediterranean diet and disease ......................................................................................... 128-129

PS4-55 PREDIMED study ................................................................................................................. 129-130

PS5-63A Regulation Versus Innovation (IUFoST) ............................................................................ 130-132

PS5-63B Food systems for nutrition and health: Growing, shopping, cooking and eating .......... 132-134

PS5-71A The value of nutrition labelling: Has nutrition labelling reduced any chronic diseases? (IUFoST) .............................................................................................................................. 134-135

PS5-71B Urbanization and Food Security ....................................................................................... 135-137
T8 AGRICULTURE, FOOD SCIENCE AND SAFETY

NPS1-8 IMAPP (Intake, Monitoring and Program Planning): Software nutrient intake data. 139-141
PS1-8 Food-based approaches to improve multiple micro-nutrient deficiencies and protein quality. 141-144
PS2-16 Food composition (FAO). 144-146
PS2-24 Sugars and health: The controversies continue. 146-147
PS3-32 Low-calorie sweeteners: Are they safe and can they help with weight management? 147-148
PS3-40 FESNAD forum. 148-151
PS4-48 Bellagio report on healthy agriculture, healthy nutrition, healthy people. 151-153
PS4-56 Food and nutrition reporting in the media. 153-154
PS5-64 Feeding workers. 154-155
PS5-72 The shift toward a modern industrialized food system, potential implications for nutrition related chronic diseases and for public policies. 155-156

Oral Communications

O001 TUMOR SUPPRESSOR GLYCINE-N METHYLTRANSFERASE REGULATES ONE CARBON TRANSMETHYLATION KINETICS. 157
O002 RELATIONSHIP BETWEEN VITAMIN A STATUS OF LACTATING SENEGALESE WOMEN AND THEIR 6 MONTHS OLD INFANTS. 157
O003 GENOME-WIDE VARIANCE CONTRIBUTION OF GENOTYPE BY ERYTHROCYTE N-3 POLYUNSATURATED FATTY ACIDS INTERACTION TO DIABETES RELATED TRAITS. 158
O004 THE METABONOMIC RESEARCH ON PRETERM INFANTS WITH NRDS. 158
O005 THE EXPRESSION OF TASTE RECEPTOR HTAS2R FAMILY OF DIABETICS. 159
O006 LEPTIN RECEPTOR GENETIC VARIANTS ARE SEX SPECIFIC ASSOCIATED WITH BMI IN OBESE CHILDREN. 159
O007 THE MTHFR 677TT GENOTYPE AND ITS INTERACTION WITH RELATED B-VITAMINS IN HYPERTENSION. 160
O008 PRECLINICAL EVALUATION OF THE INFLUENCE OF FEEDING WITH SLOW DIGESTING CARBOHYDRATES DURING PREGNANCY ON PROGRAMMING OFFSPRING METABOLIC HEALTH (NIGOHEALTH STUDY). 160
O009 BREASTFEEDING ATTENUATES THE EFFECT OF LOW BIRTH WEIGHT ON ABDOMINAL ADIPOSITY; THE HELENA STUDY. 161
O010 NUTRITION EFFECT OF YYB INTERVENTION ON 6-24 MONTHS INFANTS IN WENCHUAN EARTH QUACK REGION IN CHINA. 161
O011 INFANT MACRONUTRIENT INTAKE AND CARDIOVASCULAR STRUCTURES AND FUNCTION IN CHILDHOOD; THE GENERATION R STUDY. 162
O012 MICRONUTRIENT DEFICIENCIES OF ADOLESCENT GIRLS IN CENTRAL MOZAMBIQUE – ZANE STUDY. 162
O013 IS THE CURRENT STATUS CONTRIBUTING TO REDUCE THE EXCLUSIVE BREASTFEEDING LENGTH? 163
O014 EFFECT OF ANIMAL-SOURCE FOODS AND MICRONUTRIENT - FORTIFICATION COMPLEMENTARY FOODS ON BODY COMPOSITION, LINEAR GROWTH, IRON STATUS – THE WINFOOD PROJECT IN CAMBODIA. 163
O015 MATERNAL LCPUFA STATUS DURING PREGNANCY AND CHILD INTERNALISING AND EXTERNALISING PROBLEMS. THE GENERATION R STUDY. 164
O016 VITAMIN B12 SUPPLEMENTATION OF BANGLADESHI WOMEN DURING PREGNANCY AND LACTATION INCREASES VITAMIN B12 IN BREAST MILK AND IMPROVES INFANT STATUS. 164
O017 DIGESTIVE HEALTH AND BOWEL FUNCTION DURING THE MENSTRUAL CYCLE: THE EFFECT OF DIET AND HORMONAL CONTRACEPTIVE USE. 165
O018 EVIDENCE ABOUT SUGAR-SWEETENED BEVERAGES AND WEIGHT GAIN: IS THE POTENTIAL FINANCIAL CONFLICTS OF INTEREST BIASING THE CONCLUSIONS?: A SYSTEMATIC REVIEW. 165
O019 IRON FORTIFICATION INTERVENTIONS: SYNTHESIS OF RESULTS FROM
THREE RANDOMIZED TRIALS IN ASIA .......................................................................................... 166
O020 PARENTAL SPORTS AND TV TIME AS MEDIATORS OF PARENTAL
EDUCATION DIFFERENCES IN CHILDREN’S SPORTS AND TV TIME:
THE ENERGYPROJECT ................................................................................................................ 166
O021 RISK FACTORS FOR PRELACTEAL FEEDINGS IN SEVEN LATIN AMERICA
AND CARIBBEAN COUNTRIES …................................................................................................ 167
O022 CALORIES AND ENERGY BALANCE: THE IMPORTANCE OF SMALL STEPS
TO TRIGGER BIG CHANGE TOWARDS REVERSING OBESITY ........................................ 167
O023 HEMOCHROMATOSIS GENE (HFE) MUTATIONS AND THE RISK OF GASTRIC
CANCER IN THE EUROPEAN PROSPECTIVE INVESTIGATION INTO
CANCER AND NUTRITION STUDY .................................................................................. 168
O024 THE SPANISH OBSERVATORY OF NUTRITION AND STUDY OF OBESITY:
A NECESSARY ACTION .............................................................................................................. 169
O025 EFFECTS OF DIETARY SUPPLEMENTATION WITH EICOSAPENTAENOIC
ACID AND LIPOIC ACID IN HEALTHY OVERWEIGHT/OBESE WOMEN
FOLLOWING AN ENERGY RESTRICTED DIET ...................................................................... 169
O026 IMPACT OF VITAMIN A AND ZINC ON DIARRHEAL E. COLI INFECTIONS
AND ASSOCIATED DIARRHEAL EPISODES AMONG CHILDREN IN
MEXICO CITY, MEXICO .............................................................................................................. 170
O027 INPATIENT MANAGEMENT OF INFANTS SUFFERING FROM ACUTE
MALNUTRITION AND THEIR OUTCOME DEPENDING OF
THEIRS CHARACTERISTICS ...................................................................................................... 170
P028 EFFECTS OF L-CARNITINE SUPPLEMENT ON PLASMA COAGULATION AND
ANTICOAGULATION FACTORS IN HEMODIALYSIS PATIENTS ........................................ 171
O029 THE BENEFICIAL EFFECTS OF THE RESMENA DIETARY PATTERN ON
OXLDL IN PATIENTS WITH METABOLIC SYNDROME .................................................. 171
O030 EFFECT OF PHYSICAL ACTIVITY OR NUTRITION EDUCATION ON
ANTHROPOMETRY AND BLOOD PRESSURE OF OVERWEIGHT OR OBESE
ADOLESCENTS .......................................................................................................................... 172
O031 NUTRITIONAL AND GENETIC DETERMINANTS OF CAROTID
ATHEROSCLEROSIS, INFLAMMATORY CYTOKINES AND BONE MASS IN
CHINESE ADULTS: A 3-YEAR PROSPECTIVE STUDY .................................................. 172
O032 EFFECTS OF ZINC SUPPLEMENTATION ON SERUM LEPTIN LEVEL AND
INSULIN SENSITIVITY IN OBESE PEOPLE ........................................................................ 173
O033 ASSOCIATION BETWEEN THE IMPROVEMENT IN ANXIETY SYMPTOMS WITH
WEIGHT LOSS IN SUBJECTS WITH METABOLIC SYNDROME ........................................ 173
O034 VALIDATION OF THE INTERACTIVE TWENTYFOUR HOUR RECALL METHOD
AMONG GHANAIAN CHILDREN ............................................................................................. 174
O035 BODY COMPOSITION OF KUWAITI CHILDREN; ESTABLISHMENT OF A STABLE
ISO TOPE FACILITY FOR ASSESSMENT OF TOTAL BODY WATER IN KUWAIT ........ 174
O036 PERCENTILE DISTRIBUTION OF ANTHROPOMETRIC VARIABLES OF BODY
COMPOSITION IN PREGNANT WOMEN .............................................................................. 175
O037 GROUNDWATER IRON IN BANGLADESH: DOES IT CONTRIBUTE TO
POPULATION IRON NUTRITION? ......................................................................................... 175
O038 IDENTIFYING KEY FOOD SOURCES OF VITAMIN A, IRON AND ZINC AND
POTENTIAL FOOD FORTIFICATION VEHICLES IN BANGLADESH ................................ 176
O039 ADOLESCENT GIRLS IN INDONESIA ARE AT RISK OF INADEQUATE MICRONU-
TRIENT INTAKES ...................................................................................................................... 176
O040 THE MAIN GROWTH PARAMETERS OF 7 AND 8 YEAR-OLD LITHUANIAN
CHILDREN IN HISTORICAL PERSPECTIVE ....................................................................... 177
O041 CROSS-SECTIONAL ADIPOSI TY AND LEAN MASS OF SIX MONTH OLD
INFANTS DETERMINED BY DEUTERIUM OXIDE DOSE-TO-INFANT
IN RURAL KENYA ....................................................................................................................... 177
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>O042</td>
<td>DADIZEIN SOY ISOFLAVONE AND ITS GUT METABOLITE, EQUOL: A REVIEW OF ANIMAL AND HUMAN STUDIES</td>
<td>.................................................................................................................. 178</td>
</tr>
<tr>
<td>O043</td>
<td>EFFECT OF FRUCTOOLIGOSACCHARIDES AND GALACTOOLIGOSACCHARIDES IN GERM FREE MICE</td>
<td>.................................................................................................................. 178</td>
</tr>
<tr>
<td>O044</td>
<td>DEVELOPMENT OF MULTIFUNCTIONAL BAKERY BIO-INGREDIENTS CONTAINING TWO IMPORTANT VITAMINS, FOLATE AND B12</td>
<td>.................................................................................................................. 179</td>
</tr>
<tr>
<td>O045</td>
<td>ANTI-INFLAMMATORY EFFECTS OF HYDROALCOHOLIC EXTRACT FROM EUTERPE OLERAECIA MART. (AÇAI)</td>
<td>.................................................................................................................. 179</td>
</tr>
<tr>
<td>O046</td>
<td>COMPARING THE EFFECT OF PROBIOTIC AND CONVENTIONAL YOGHURT CONSUMPTION ON LIPID PROFILE IN PATIENTS WITH NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD)</td>
<td>.................................................................................................................. 180</td>
</tr>
<tr>
<td>O047</td>
<td>ROLE OF POLYPHENOL JUICE DRINKS IN THE PREVENTION OF POSTPRANDIAL INFLAMMATORY STRESS IN HUMANS</td>
<td>.................................................................................................................. 180</td>
</tr>
<tr>
<td>O048</td>
<td>THE EFFECT OF DAILY ORANGE JUICE CONSUMPTION ON BLOOD LIPIDS, IN OVERWEIGHT MEN</td>
<td>.................................................................................................................. 181</td>
</tr>
<tr>
<td>O049</td>
<td>A FRAXINUS EXCELSIOR L. SEED EXTRACT, FRAXIPURE® HAS FAVORABLE EFFECTS ON GLUCOSE HOMEOSTASIS IN ELDERLY OVERWEIGHT SUBJECTS</td>
<td>.................................................................................................................. 181</td>
</tr>
<tr>
<td>O050</td>
<td>RELAPSES FROM ACUTE MALNUTRITION IN A COMMUNITY-BASED MANAGEMENT PROGRAM IN BURKINA-FASO</td>
<td>.................................................................................................................. 182</td>
</tr>
<tr>
<td>O051</td>
<td>NATIONAL DIETARY SURVEY (NDS): FAMILIAL AGGREGATION OF DIETARY PATTERNS IN BRAZIL</td>
<td>.................................................................................................................. 182</td>
</tr>
<tr>
<td>O052</td>
<td>THE MEDITERRANEAN DIET IMPROVES THE LOWDENSITY LIPOPROTEIN PARTICLE SIZE PHENOTYPE IN MEN WITH METABOLIC SYNDROME</td>
<td>.................................................................................................................. 183</td>
</tr>
<tr>
<td>O053</td>
<td>IMPACT OF FORTIFIED FOODS DURING LAST DECADE IN THE NETHERLANDS</td>
<td>.................................................................................................................. 183</td>
</tr>
<tr>
<td>O054</td>
<td>FOOD SECURITY AND NUTRITIONAL STATUS OF FISHING COMMUNITIES IN THE BOLIVIAN AMAZON BASIN</td>
<td>.................................................................................................................. 184</td>
</tr>
<tr>
<td>O055</td>
<td>WEIGHT OF MODERNITY PART II: THE NUTRITION AND HEALTH IMPLICATIONS OF THE DISAPPEARING AUSTRALIAN DESSERT</td>
<td>.................................................................................................................. 184</td>
</tr>
<tr>
<td>O056</td>
<td>DIETS OF MALIAN AND MOROCCAN PEOPLE LIVING IN THEIR HOME COUNTRIES AND IN FRANCE AND ITS ASSOCIATION WITH ECONOMIC STATUS</td>
<td>.................................................................................................................. 185</td>
</tr>
<tr>
<td>O057</td>
<td>UPGRADE ON THE NUTRITIONAL TRANSITION IN BOLIVIA</td>
<td>.................................................................................................................. 185</td>
</tr>
<tr>
<td>O058</td>
<td>INFLUENCE OF PROXIMATE VALUES ON VITAMIN A STABILITY OF NIGERIAN WHEAT FLOUR AND BREAD</td>
<td>.................................................................................................................. 186</td>
</tr>
<tr>
<td>O059</td>
<td>THE DISTRIBUTION AND CONTENT OF FOUR PURINES IN 600 COMMON FOOD</td>
<td>.................................................................................................................. 186</td>
</tr>
<tr>
<td>O060</td>
<td>NUTRITIONAL AND TOXICOLOGICAL ANALYSES OF LEAVES AND FRUITS OF SOLANUM MACROCARPON LINN (SOLANACEAE) IN COTONOU (BENIN)</td>
<td>.................................................................................................................. 187</td>
</tr>
<tr>
<td>O061</td>
<td>AN EVALUATION OF THE HEALTH AND ECONOMIC IMPACT OF THE CURRENT NATIONAL POLICY TO ELIMINATE TRANS FAT ACIDS (TFA) IN ARGENTINA</td>
<td>.................................................................................................................. 187</td>
</tr>
<tr>
<td>O062</td>
<td>LEAF PROTEIN CONCENTRATES FROM INDIGENOUS PLANTS FOR IMPROVING NUTRITIONAL QUALITY OF LOCAL FOODS IN THE GARH Wal HIMALAYAS, INDIA</td>
<td>.................................................................................................................. 188</td>
</tr>
<tr>
<td>O063</td>
<td>EVALUATION OF MACRO AND MICRO NUTRIENT COMPOSITION ON SOME PROCESSED LESSER KNOWN GREEN LEAFY VEGETABLES IN SOUTH EAST NIGERIA</td>
<td>.................................................................................................................. 188</td>
</tr>
<tr>
<td>O064</td>
<td>THE HIGHER THE INTAKE OF PROCESSED AND ULTRA-PROCESSED FOOD PRODUCTS, THE LOWER THE AMOUNT OF FRUITS IN THE BRAZILIAN DIET</td>
<td>.................................................................................................................. 189</td>
</tr>
<tr>
<td>O065</td>
<td>STUNTING AMONG CHILDREN UNDER TWO IN RURAL NEPAL: THE ROLE OF WOMEN'S EMPOWERMENT IN AGRICULTURE</td>
<td>.................................................................................................................. 189</td>
</tr>
<tr>
<td>O066</td>
<td>TOTAL ENERGY AND SATURATED FAT INTAKE MODULATE THE ASSOCIATION BETWEEN AN OBESITY GENETIC RISK SCORE AND BMI</td>
<td>.................................................................................................................. 190</td>
</tr>
<tr>
<td>ISBN</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>0067</td>
<td>OBESITY IN ADOLESCENTS FROM SOUTH OF EUROPE VERSUS CENTER-NORTH OF EUROPE: ROLE OF PHYSICAL ACTIVITY, DIET AND GENETICS</td>
<td>190</td>
</tr>
<tr>
<td>0068</td>
<td>RIBOFLAVIN LOWERS BLOOD-PRESSURE IN HYPERTENSIVE'S WITH THE MTHFR 677TT GENOTYPE</td>
<td>191</td>
</tr>
<tr>
<td>0069</td>
<td>CHRONO-NUTRITION: MOLECULAR MECHANISM OF DISRUPTION OF LIVER CLOCK BY IRREGULAR FEEDING</td>
<td>191</td>
</tr>
<tr>
<td>0070</td>
<td>DIETARY LOW PROTEIN COMBINED WITH HIGH FAT INDUCES ABDOMINAL FAT ACCUMULATION IN RATS</td>
<td>192</td>
</tr>
<tr>
<td>0071</td>
<td>THE ANTI-PROLIFERATIVE EFFECT OF BOWMAN-BIRK INHIBITORS ON HT29 COLON CANCER CELLS IS ASSOCIATED WITH THE INHIBITION OF SERINE PROTEASES</td>
<td>192</td>
</tr>
<tr>
<td>0072</td>
<td>ALDOSE REDUCTASE (AR) ACTIVITY IN RBCS &amp; AR ACTIVITY AND EXPRESSION IN TUMORS OF HUMAN CANCER SUBJECTS</td>
<td>193</td>
</tr>
<tr>
<td>0073</td>
<td>INFLUENCE OF DIET ON COLONIC FERMENTATION AND ENDOGENOUS FORMATION OF N-NITROSO COMPOUNDS</td>
<td>193</td>
</tr>
<tr>
<td>0074</td>
<td>MATERNAL OBESITY, PRE-PREGNANCY AND GESTATIONAL DIABETES AND IMPACT ON BIRTH SIZE OF OFFSPRING, AUSTRALIA</td>
<td>194</td>
</tr>
<tr>
<td>0075</td>
<td>LOW OMEGA-3 INDEX IN PREGNANCY IS A POSSIBLE BIOLOGICAL RISK FACTOR FOR POSTPARTUM DEPRESSION</td>
<td>194</td>
</tr>
<tr>
<td>0076</td>
<td>EFFICACY OF DRIED AMARANTH LEAVES (Amaranthus cruentus) CONSUMPTION ON VITAMIN A, IRON AND ZINC OF CHILDREN IN KAJIADO COUNTY, KENYA</td>
<td>195</td>
</tr>
<tr>
<td>0077</td>
<td>FIRST TRIMESTER FOLIC ACID SUPPLEMENTATION ENHANCES FOLATE STATUS THROUGHOUT PREGNANCY AND REDUCES THE EFFECT OF THE MTHFR 677C&gt;T POLYMORPHISM</td>
<td>195</td>
</tr>
<tr>
<td>0078</td>
<td>THE DIETARY PATTERNS OF MOTHERS DURING PREGNANCY, THEIR CHILD AT AGE FIVE YEARS AND CHILD WEIGHT STATUS</td>
<td>196</td>
</tr>
<tr>
<td>0079</td>
<td>CELL PHONE BASED PEER COUNSELING TO SUPPORT EXCLUSIVE BREASTFEEDING IS ASSOCIATED WITH MORE FREQUENT HELP AND DECREASED BREASTFEEDING PROBLEMS</td>
<td>196</td>
</tr>
<tr>
<td>0080</td>
<td>EFFECT OF BREASTFEEDING PATTERN ON GROWTH AND MOTOR MILESTONE DEVELOPMENT OF INFANTS ATTENDING BABY CLINIC IN A NIGERIAN TEACHING HOSPITAL</td>
<td>197</td>
</tr>
<tr>
<td>0081</td>
<td>THE DIETARY EFFECT OF SERVING SCHOOL MEALS BASED ON THE NEW NORDIC DIET – A RANDOMISED CONTROLLED TRIAL IN DANISH CHILDREN</td>
<td>197</td>
</tr>
<tr>
<td>0082</td>
<td>PRESCHOOL FOOD AND DRINK PROVISION AND CONSUMPTION IN EARLY YEARS EDUCATION AND CARE SETTINGS IN ENGLAND</td>
<td>198</td>
</tr>
<tr>
<td>0083</td>
<td>INTAKE OF WHOLE GRAINS AND INCIDENCE OF GASTRIC AND OESOPHAGEAL CANCER IN THE HELGA COHORT</td>
<td>198</td>
</tr>
<tr>
<td>0084</td>
<td>PHYSICAL ACTIVITY LEVELS AMONG COLOMBIAN ADULTS: INEQUALITIES BY SEX AND SOCIOECONOMIC STATUS</td>
<td>199</td>
</tr>
<tr>
<td>0085</td>
<td>CONSUMPTION OF ULTRA-PROCESSED PRODUCTS IS ASSOCIATED WITH OBESITY IN ADOLESCENTS AND ADULTS IN BRAZIL</td>
<td>199</td>
</tr>
<tr>
<td>0086</td>
<td>COMPARISON OF MUAC AND PERCENT WEIGHT GAIN AS DISCHARGE CRITERION IN A LARGE TFP PROGRAM IN BURKINA FASO - 2007-2011</td>
<td>200</td>
</tr>
<tr>
<td>0087</td>
<td>DAILY SODIUM CONSUMPTION AND CARDIOVASCULAR MORTALITY IN GENERAL POPULATION. SYSTEMATIC REVIEW AND META-ANALYSIS OF PROSPECTIVE STUDIES</td>
<td>200</td>
</tr>
<tr>
<td>0088</td>
<td>DIETARY PROTEIN INTAKE AND THE INCIDENCE OF TYPE 2 DIABETES IN EUROPE: THE EPIC-INTERACT CASE-COHORT STUDY</td>
<td>201</td>
</tr>
<tr>
<td>0089</td>
<td>LOW DIETARY DIVERSITY IS ASSOCIATED WITH CHILD STUNTING IN RURAL ETHIOPIA</td>
<td>201</td>
</tr>
<tr>
<td>0090</td>
<td>DNA DAMAGE AND CHROMOSOMAL STABILITY IN HEALTHY AND DIABETIC INDIVIDUALS AND THE IMPACT OF VEGETABLES AND WALNUT OIL</td>
<td>202</td>
</tr>
</tbody>
</table>
ERYTHROPOIETIC FUNCTION OF CARNITINE DEFICIENT PATIENTS ................. 214

SOCIAL REPRESENTATION OF OBESITY IN A RURAL COMMUNITY OF MEXICO .... 214

MAJOR DIETARY PATTERNS OF IRANIAN WOMEN AND THEIR RELATION WITH ETHNICITY AND DURATION OF RESIDENCE IN THE CAPITAL CITY (TEHRAN) ... 215

CONTRIBUTION OF SORGHUM TO ENERGY, IRON AND ZINC INTAKES OF MOTHERS AND PRESCHOOL CHILDREN IN RURAL BURKINA FASO ................. 215

HYDRATION STATUS AND ITS RISK FACTORS AMONG INDONESIAN ADOLESCENTS AND ADULTS ................................................................. 216

SODIUM AND NUTRIENT DENSITY OF SOME TRADITIONAL DISHES AS CONSUMED IN NIGERIAN URBAN POPULATION IN RELATION TO CARDIOVASCULAR DISEASE (CVD) ................................................................. 216

IDENTIFICATION OF TRADITIONAL FOOD RESOURCES AND THEIR IMPORTANCE IN A RURAL FARMING COMMUNITY IN SOUTHWESTERN NIGERIA ........................................................................................................... 217

ECONOMIC INEQUALITY AND OBESITY: MULTILEVEL ANALYSIS OF INDONESIAN COMMUNITIES .............................................................. 217

INADEQUATE ENERGY AND PROTEIN INTAKES HAVE CONTRIBUTED TO THE HIGH PREVALENCE OF STUNTING IN INDONESIAN YOUNG CHILDREN .............. 218

CONFLICTING INDICATORS OF FOOD INSECURITY FROM A PILOT STUDY OF WATER, SANITATION, HYGIENE AND NUTRITION INTERVENTIONS IN RURAL WESTERN KENYA .................................................................................................................. 218

AVAILABILITY OF NUTRITION SERVICES IN MATERNAL, NEONATAL AND CHILD HEALTH (MNCH) FACILITIES IN BANGLADESH ................................................. 219

COMBATING VITAMIN A DEFICIENCY DISEASES: BUILDING THE EVIDENCE BASE AND PARTNERSHIPS FOR FOOD BASED APPROACHES ........................................ 219

DELIVERY OF MICRONUTRIENT POWDER SACHETS THROUGH SALES BY FRONTLINE HEALTH WORKERS ENABLES HIGH REACH, BUT HOUSEHOLD POVERTY CONSTRAINS UPTAKE .................................................................................... 220

UPDATED NUTRIENT DATA ON DANISH BEEF AND VEAL ........................................... 220

CHARACTERIZATION OF OATS SAFETY IN CELIAC DISEASE IN RELATION TO THE CULTIVAR....................................................................................................................... 221

HOUSEHOLD WATER ACCESS AND SANITATION AS INDICATORS OF VITAMIN A AND ZINC EFFICACY ON GUT PARASITE RESOLUTION ........................................ 221

DETERMINATION OF TOTAL PHENOLICS, ANTHOCYANINS AND ANTIOXIDANT ACTIVITY OF AN ALGERIAN DATE FRUIT VARIETY (DEGLET – NOUR) ........... 222

LONG-TERM HEALTH CONSEQUENCES OF EARLY LIFE STARVATION: EVIDENCE FROM FAMINEBORN COHORTS IN UKRAINE ........................................... 222

CHANGES IN IRON METABOLISM, HAEMATOLOGICAL AND INFLAMMATORY PARAMETERS OF DIABETIC RATS TREATED WITH VANADIUM AS AN ANTIDIABETIC AGENT .................................................................................................................. 223

PUFA AND OXIDATIVE STRESS: FROM CYTOTOXIC EFFECT TOWARD ANTIOXIDANT DEFENCES ................................................................................. 223

DIETARY COFFEE POLYPHENOLS DON’T ATTENUATE FEATURES OF THE METABOLIC SYNDROME AND ENDOTHELIAL DYSFUNCTION IN MICE FED A HIGH-FAT DIET ................................................................. 224

THE INFLUENCE OF BLOOD SELENIUM STATUS AND SELENOPROTEIN GENE VARIATION ON COLORECTAL CANCER RISK .................................................... 224

RELATIONSHIP BETWEEN METHIONINE METABOLISM PATHWAY GENES WITH PLASMA HOMOCYSTEINE AND RISK OF TYPE 2 DIABETES IN CHINESE .... 225

IMPACT OF BREAST-FEEDING COMPARED TO FORMULA-FEEDING ON BLOOD-CELL TRANSCRIPT-BASED POTENTIAL BIOMARKERS OF HEALTH IN CHILDREN ............................................................................................................ 225

ANTENATAL MULTIPLE MICRONUTRIENTS COMPARED TO IRON-FOLIC ACID LENGTHENS GESTATION, INCREASES BIRTH SIZE AND REDUCES
<table>
<thead>
<tr>
<th>Paper Number</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>O139</td>
<td>RISK OF LBW IN RURAL BANGLADESH</td>
<td>226</td>
</tr>
<tr>
<td>O140</td>
<td>GLOBAL PROGRESS ON REDUCING ANEMIA IN PREGNANT WOMEN AND YOUNG CHILDREN</td>
<td>227</td>
</tr>
<tr>
<td>O141</td>
<td>INCREASED N-3 PUFA STATUS IS ASSOCIATED WITH IMPROVED MATH AND READING PERFORMANCE IN THE OPUS SCHOOL MEAL STUDY</td>
<td>227</td>
</tr>
<tr>
<td>O142</td>
<td>MOTHER’S POSITIVE ATTITUDE AND FAMILIARITY TOWARDS FORMULA MILK MAY CONTRIBUTE TO LOW DIETARY DIVERSITY AMONGST</td>
<td>228</td>
</tr>
<tr>
<td>O143</td>
<td>INCREASED N-3 PUFA STATUS IS ASSOCIATED WITH IMPROVED MATH AND READING PERFORMANCE IN THE OPUS SCHOOL MEAL STUDY</td>
<td>227</td>
</tr>
<tr>
<td>O144</td>
<td>MOTHER’S POSITIVE ATTITUDE AND FAMILIARITY TOWARDS FORMULA MILK MAY CONTRIBUTE TO LOW DIETARY DIVERSITY AMONGST</td>
<td>228</td>
</tr>
<tr>
<td>O145</td>
<td>INCREASED N-3 PUFA STATUS IS ASSOCIATED WITH IMPROVED MATH AND READING PERFORMANCE IN THE OPUS SCHOOL MEAL STUDY</td>
<td>227</td>
</tr>
<tr>
<td>O146</td>
<td>MOTHER’S POSITIVE ATTITUDE AND FAMILIARITY TOWARDS FORMULA MILK MAY CONTRIBUTE TO LOW DIETARY DIVERSITY AMONGST</td>
<td>228</td>
</tr>
<tr>
<td>O147</td>
<td>INCREASED N-3 PUFA STATUS IS ASSOCIATED WITH IMPROVED MATH AND READING PERFORMANCE IN THE OPUS SCHOOL MEAL STUDY</td>
<td>227</td>
</tr>
<tr>
<td>O148</td>
<td>MOTHER’S POSITIVE ATTITUDE AND FAMILIARITY TOWARDS FORMULA MILK MAY CONTRIBUTE TO LOW DIETARY DIVERSITY AMONGST</td>
<td>228</td>
</tr>
<tr>
<td>O149</td>
<td>INCREASED N-3 PUFA STATUS IS ASSOCIATED WITH IMPROVED MATH AND READING PERFORMANCE IN THE OPUS SCHOOL MEAL STUDY</td>
<td>227</td>
</tr>
<tr>
<td>O150</td>
<td>MOTHER’S POSITIVE ATTITUDE AND FAMILIARITY TOWARDS FORMULA MILK MAY CONTRIBUTE TO LOW DIETARY DIVERSITY AMONGST</td>
<td>228</td>
</tr>
<tr>
<td>O151</td>
<td>INCREASED N-3 PUFA STATUS IS ASSOCIATED WITH IMPROVED MATH AND READING PERFORMANCE IN THE OPUS SCHOOL MEAL STUDY</td>
<td>227</td>
</tr>
<tr>
<td>O152</td>
<td>MOTHER’S POSITIVE ATTITUDE AND FAMILIARITY TOWARDS FORMULA MILK MAY CONTRIBUTE TO LOW DIETARY DIVERSITY AMONGST</td>
<td>228</td>
</tr>
<tr>
<td>O153</td>
<td>INCREASED N-3 PUFA STATUS IS ASSOCIATED WITH IMPROVED MATH AND READING PERFORMANCE IN THE OPUS SCHOOL MEAL STUDY</td>
<td>227</td>
</tr>
<tr>
<td>O154</td>
<td>MOTHER’S POSITIVE ATTITUDE AND FAMILIARITY TOWARDS FORMULA MILK MAY CONTRIBUTE TO LOW DIETARY DIVERSITY AMONGST</td>
<td>228</td>
</tr>
<tr>
<td>O155</td>
<td>INCREASED N-3 PUFA STATUS IS ASSOCIATED WITH IMPROVED MATH AND READING PERFORMANCE IN THE OPUS SCHOOL MEAL STUDY</td>
<td>227</td>
</tr>
<tr>
<td>O156</td>
<td>MOTHER’S POSITIVE ATTITUDE AND FAMILIARITY TOWARDS FORMULA MILK MAY CONTRIBUTE TO LOW DIETARY DIVERSITY AMONGST</td>
<td>228</td>
</tr>
<tr>
<td>O157</td>
<td>INCREASED N-3 PUFA STATUS IS ASSOCIATED WITH IMPROVED MATH AND READING PERFORMANCE IN THE OPUS SCHOOL MEAL STUDY</td>
<td>227</td>
</tr>
<tr>
<td>O158</td>
<td>MOTHER’S POSITIVE ATTITUDE AND FAMILIARITY TOWARDS FORMULA MILK MAY CONTRIBUTE TO LOW DIETARY DIVERSITY AMONGST</td>
<td>228</td>
</tr>
<tr>
<td>O159</td>
<td>INCREASED N-3 PUFA STATUS IS ASSOCIATED WITH IMPROVED MATH AND READING PERFORMANCE IN THE OPUS SCHOOL MEAL STUDY</td>
<td>227</td>
</tr>
<tr>
<td>O160</td>
<td>MOTHER’S POSITIVE ATTITUDE AND FAMILIARITY TOWARDS FORMULA MILK MAY CONTRIBUTE TO LOW DIETARY DIVERSITY AMONGST</td>
<td>228</td>
</tr>
<tr>
<td>O161</td>
<td>INCREASED N-3 PUFA STATUS IS ASSOCIATED WITH IMPROVED MATH AND READING PERFORMANCE IN THE OPUS SCHOOL MEAL STUDY</td>
<td>227</td>
</tr>
<tr>
<td>O162</td>
<td>MOTHER’S POSITIVE ATTITUDE AND FAMILIARITY TOWARDS FORMULA MILK MAY CONTRIBUTE TO LOW DIETARY DIVERSITY AMONGST</td>
<td>228</td>
</tr>
<tr>
<td>O163</td>
<td>INCREASED N-3 PUFA STATUS IS ASSOCIATED WITH IMPROVED MATH AND READING PERFORMANCE IN THE OPUS SCHOOL MEAL STUDY</td>
<td>227</td>
</tr>
<tr>
<td>O164</td>
<td>MOTHER’S POSITIVE ATTITUDE AND FAMILIARITY TOWARDS FORMULA MILK MAY CONTRIBUTE TO LOW DIETARY DIVERSITY AMONGST</td>
<td>228</td>
</tr>
</tbody>
</table>

XIII
O165 DESIGN, ASSESSMENT OF REPRODUCIBILITY AND VALIDITY OF A FOOD FREQUENCY QUESTIONNAIRE IN A SAMPLE OF ADULTS LIVING IN QUITO-ECUADOR (QFA-QUITO) ............................................................................................. 240
O166 RELATIONSHIP BETWEEN MAGNESIUM INTAKE, C-REACTIVE PROTEIN LEVELS AND THE METABOLIC SYNDROME COMPONENTS IN A HEALTHY ADULT POPULATION FROM MADRID ............................................................................................. 241
O167 DETERMINANTS OF VITAMIN D STATUS IN PATIENTS WITH STABLE ANGINA ... 241
O168 RISK FACTORS OF IRON DEFICIENCY AMONG CHILDREN 6-59 MONTHS IN THE NORTHERN REGION OF GHANA ................................................................................................................................. 242
O169 TOWARDS A COMPREHENSIVE WEB-BASED DIETARY RESEARCH INFRASTRUCTURE TO SUPPORT INTERNATIONAL MONITORING AND EPIDEMIOLOGICAL NUTRITIONAL STUDIES ............................................................................................. 242
O170 COLD PRESSED OILS AS A SOURCE OF BIOACTIVE COMPOUNDS ...................... 243
O171 INHIBITORY EFFECTS OF LYCOPENE ON THE PROLIFERATION AND PROGRESSION OF HUMAN COLON CANCER CELLS IN BOTH IN VITRO AND IN VIVO MODELS ................................................................................................. 244
O172 ANTI-INFLAMMATORY AND ANTIOXIDANT PROPERTIES OF FLAVONOID-RICH EXTRACTS FROM HELICHRYSUM AND GRAPEFRUIT IN INSULIN RESISTANT RATS ................................................................................................................................. 244
O173 ORAL INTAKE OF A SPECIFIC OREGANO EXTRACT BY HEALTHY HUMANS INCREASES CALMNESS, VIGILANCE AND MENTAL PROCESSING SPEED ................................................................................................................................. 245
O174 IMPROVEMENT EFFECTS OF CHLOROGENIC ACID ON LATE DIABETES THROUGH ADIPONECTIN RECEPTOR SIGNALING PATHWAYS IN DB/DB MICE ................................................................................................................................. 245
O175 YOUNG ZEA MAYSPOWDER IMPROVES SOME NUTRIENT COMPOSITION AND REDUCES GLYCEMIC INDEX OF BUTTER BISCUIT ................................................................................................................................. 246
O176 GLYCEMIC AND INSULINEMIC RESPONSES DIFFER DEPENDING ON THE CONTENT OF SLOWLY DIGESTIBLE STARCH IN CEREAL PRODUCTS INCLUDED IN BREAKFAST ................................................................................................................................. 246
O177 COMPARISON OF THE EFFECT OF DARK AND WHITE CHOCOLATE ON APO B, APOA-1, LIPID PROFILE, HS-CRP, GLYCEMIC CONTROL AND BLOOD PRESSURE IN HYPERTENSIVE TYPE 2 DIABETICS ................................................................................................................................. 247
O178 ADOLESCENT DIETARY PATTERNS: TRADITION OR CONVENIENCE ...................... 247
O179 IMPROVING WOMEN AND CHILDREN NUTRITION THROUGH TARGETED CAPACITY BUILDING INTERVENTIONS: EXPERIENCE FROM ETHIOPIA ................................................................................................................................. 248
O180 CONDITIONS OF NUTRITION OF CHILDREN FROM 7 TO 10 YEARS IN PUBLIC SCHOOLS AT REGION MARUÍPE, VITORIA/ES - BRAZIL ................................................................................................................................. 248
O181 TRENDS IN FOOD CONSUMPTION OVER 25 YEARS IN A DUTCH ADULT POPULATION ................................................................................................................................. 249
O182 SOCIO-DEMOGRAPHIC PATTERNS OF HYPERTENSION, KNOWLEDGE, BEHAVIOURS AND PRACTICES OF ADULT TRIBAL (ADIVASIS) POPULATION IN INDIA: A FIRST NATIONAL MONITORING SURVEY ................................................................................................................................. 249
O183 THE EFFECT OF AFRICAN LEAFY VEGETABLES ON THE MICRONUTRIENT STATUS OF SCHOOL CHILDREN IN SOUTH AFRICA: A RANDOMIZED CONTROLLED TRIAL ................................................................................................................................. 250
O184 DEVELOPING HEALTHY INDIGENOUS MENUS THROUGH WOMEN’S GROUP PARTICIPATION ................................................................................................................................. 251
O185 PURCHASES OF ULTRA-PROCESSED PRODUCTS BY COLOMBIAN HOUSEHOLDS AND THEIR ASSOCIATION WITH DIETARY QUALITY ................................................................................................................................. 251
O186 THE INFORMAS FRAMEWORK FOR MONITORING AND BENCHMARKING DIET QUALITY GLOBALLY: A STEP-BASED APPROACH ................................................................................................................................. 251

XIV
O188 HIGH BIOAVAILABILITY IRON MAIZE (Zea maysL.) DEVELOPED THROUGH MOLECULAR BREEDING PROVIDES MORE ABSORBABLE IRON IN-VITRO (Caco-2) AND IN-VIVO (Gallus gallus) ................................................................................... 252

O189 ASSOCIATION BETWEEN DIETARY INTAKES OF POLYCHLORINATED BIPHENYLS (PCBs) AND RISK OF OBESITY .......................................................................................... 252

O190 COMPARISON OF EFFECT OF CASH TRANSFER WITH OR WITHOUT SPECIAL NUTRITIOUS FOOD ON PREVENTING CHILDHOOD ACUTE MALNUTRITION IN NIGER ........................................................................... 253

O191 POTENTIAL OF WILD EDIBLE PLANTS TO COMBAT NUTRITIONAL AND FOOD INSECURITY: A CASE FROM INDIAN HIMALAYAN REGION ................................................. 253

O192 EFFECTIVE COMMUNICATION CHANNELS FOR COMMUNITY MOBILIZATION DURING VITAMIN A SUPPLEMENTATION CAMPAIGNS IN 3 STATES OF NIGERIA ........................................................................... 254

O193 PHYTOCHEMICAL COMPOSITION OF PROCESSED AND RAW SAMPLES OF SOME LESSER KNOWN VEGETABLES FROM EASTERN ZONE NIGERIA ........................................ 254

O194 TOWARDS NUTRITION GUIDELINES FOR MATERNAL AND INFANT NUTRITION TO INFLUENCE LONG-TERM HEALTH OF THE OFFSPRING: THE PAST AND FUTURE OF ILSI EUROPE WORK ON METABOLIC IMPRINTING.......................... 255

Posters

T1. Advances in nutrition research ............................................................................................. 257-540
T2. Nutrition through life course ............................................................................................... 541-811
T3. Public Health Nutrition and Environment ............................................................................. 813-1132
T4. Nutrition and Management of Diseases ................................................................................. 1133-1395
T5. Nutrients and Nutritional Assessment ..................................................................................... 1397-1550
T6. Functional Foods and Bioactive Compounds .......................................................................... 1551-1721
T7. Food culture practices and Nutritional Education ...................................................................... 1723-1782
T8. Agriculture, Food Science and Safety ..................................................................................... 1783-1857

Abstracts NUTRIMENTHE

01 CHILDHOOD DIETARY PATTERNS AND COGNITIVE FUNCTION ........................................ 1859
02 PEDIATRIC OBESITY, A RISK FACTOR FORiron deficiency and its COGNITIVE COMPLICATIONS: A NEED FOR DEVELOPMENT OF INTEGRAL NUTRITION PROGRAMS .......................................................... 1859
03 UNDER-NUTRITION LOWERS LEARNING AND MEMORY ABILITY AMONG CHILDREN AGE 5-6 YEARS OLD IN BOGOR – INDONESIA .............................................................. 1860
04 HABITUAL MISSING OF DINNER WAS ASSOCIATED WITH POOR NUTRITIONAL STATUS IN POOR URBAN PRESCHOOL CHILDREN, LAGOS, NIGERIA .................................................................. 1860
05 THE RELATION BETWEEN DIET AND ALLERGEN CONCENTRATIONS IN BREAST MILK; OVALBUMIN CONCENTRATIONS AND LACTOFERRIN LEVELS IN BREAST MILK ........................................................................................................... 1861
06 ONTOGENY OF HYPOTHALAMIC EXPRESSION OF OBESITY RISK GENES REVEALS TIME SPECIFIC WINDOWS FOR FTO, MC4R AND GNPDUA2 ........................................... 1861
07 ASSOCIATION BETWEEN DIET AND MENTAL PERFORMANCE OF CHILDREN: VIEWS OF PARENTS AND TEACHERS IN FOUR EUROPEAN COUNTRIES ......................................... 1862
08 FACTORS AFFECTING FOOD CHOICES OF PARENTS OF CHILDREN AGED 4-10 YEARS IN FOUR EUROPEAN COUNTRIES .............................................................................................................. 1862
09 ASSOCIATION BETWEEN DIET AND PHYSICAL AND MENTAL DEVELOPMENT OF CHILDREN: VIEWS OF PARENTS AND TEACHERS IN FOUR EUROPEAN COUNTRIES ........................................ 1863
10 MILD IODINE DEFICIENCY IN PREGNANCY IN EUROPE AND ITS CONSEQUENCES FOR COGNITIVE AND PSYCHOMOTOR DEVELOPMENT OF CHILDREN: A REVIEW ................................................... 1863
11 THE EFFECTS OF BREAKFAST ON IN-CLASS BEHAVIOUR IN CHILDREN AND ADOLESCENTS ................................................................................................................................. 1864