**CONCLUSIONS:** These results reveal that the consumption of BC among Portuguese infants and young children is low. Sodium intake and the prevalence of inadequacy did not differ largely between the AS, suggesting that replacing BC by IC (and vice-versa) would not have a major impact in sodium intake for this age group.

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## CO14: DIETARY INTAKE MISREPORT AND ITS ASSOCIATION WITH SPECIFIC FOOD GROUPS

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**INTRODUCTION:** Dietary intake misreport may impact consumption estimates as it has been linked with specific foods/drinks.

**OBJECTIVES:** To identify which foods/drinks are associated with under or over-report.

**METHODOLOGY:** Participants from the Portuguese National Food, Nutrition and Physical Activity Survey (IAN-AF 2015-2016), aged 18-84 years were included (n=3639). Dietary intake was measured by two 24-Hour recall. Under, plausible and over-reporters were identified according to the Goldberg method. The contribution of each food group to the individual total energy intake (TEI) was estimated and categorized as below or equal vs. above the median (for "Alcoholic beverages", non-consumers *vs.* consumers). The association between misreport and the contribution of food groups to the TEI was assessed through binary logistic regression models.

**RESULTS:** Dietary misreport prevalence was 29.9%, being 28.5% of under-report and 1.4% of over-report. Compared to plausible reporters, under-reporters showed higher odds of having a contribution to TEI below the median from "Fats" and "Cereals, derivatives and tubers" (OR:2.47, CI95%:2.18-2.88 and OR:1.95, CI95%:1.68-2.27, respectively) and by the contrary, over-reporters showed lower odds of having a contribution from those food groups below the median (OR:0.39, CI95%:0.21-0.74 and OR:0.54, CI95%:0.30-0.99, respectively). Under-reporters showed higher odds of having a contribution below the median for "Meat, fish and eggs", "Sweets, cakes and cookies" and "Alcoholic beverages" (OR:1.89, CI95%:1.63-2.20; OR:1.64, CI95%:1.42-1.91 and OR: 2.48, CI95%: 2.12-2.91; respectively). Under-reporters also showed lower odds of lower consumption of "Non-alcoholic beverages" (OR:0.42, CI95%:0.36-0.48) while over-reporters reported more (OR:3.56, CI95%:1.78-7.17). For "Fruit and vegetables" and "Dairy", the contribution to TEI was similar among under, plausible and over-reporters.

**CONCLUSIONS:** "Fats", "Cereals, derivatives and tubers" and "Non-alcoholic beverages" were conversely associated with under and over-report. Under-reporters report less "Meat, fish and eggs", "Sweets, cakes and cookies" and "Alcoholic beverages". A particular attention should be taken with these food groups during the data collection.

## CO15: MATERNAL ADHERENCE TO MEDITERRANEAN DIET: EFFECTS ON PRETERMS' GROWTH AND GUT MICROBIOTA – RESULTS FROM THE FEEDMI TRIAL

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**INTRODUCTION:** Preterm infants present an immature immune system with high susceptibility for early- or late-onset of intestinal dysbiosis. Maternal nutrition has been shown to be crucial for a healthy fetal growth and for the development of infant's immune system.

**OBJECTIVES:** The aim of this study was to evaluate the association between adherence to Mediterranean Diet (MD) during pregnancy in women delivering prematurely and preterm microbiota and clinical outcomes.

**METHODOLOGY:** This is an observational study including very preterm infants with gestational age lower than 32 weeks, hospitalized in the neonatal intensive care unit of *Maternidade Dr. Alfredo da Costa*. After delivery, mothers were asked to collect their own fecal samples and were invited to complete a semi-quantitative food frequency questionnaire (FFQ) in order to estimate their MD adherence. Fecal microbiota composition were quantified by real-time polymerase chain reaction. Maternal and neonatal sociodemographic and clinical data were collected from medical records. This trial is registered in clinicaltrials.gov as NCT03663556.

**RESULTS:** From the FEEDMI trial, 82 mothers-infants pairs were selected for the analysis. Preterm newborns delivered by mothers with MD adherence (23.7%) had significantly higher weight at birth (p=0.016) which is correlated with total amount of Firmicutes phylum in mothers' gut microbiota (r=0.543; p<0.0001). In addition, maternal MD adhesion promote a higher bacterial colonization of meconium (p=0.040) and a higher amount of Lactobacillus in the offspring at third week of life (p=0.011). The mode of delivery did not influence the infants' gut microbiota composition or even their clinical outcomes.

**CONCLUSIONS:** MD adherence increased the fetal intrauterine growth and favored the gut microbiota composition of the preterm infants.

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## CO16: COGNITIVE FUNCTION AND NUTRITIONAL STATUS IN COMMUNITY-DWELLING OLDER ADULTS (PEN-3S STUDY)

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