

**CONCLUSÕES:** A abordagem focada nos alimentos (IG) permitiu aos participantes a identificação das refeições mais incompletas e desequilibradas (M1 e M2). A disponibilização desta abordagem em ementas, menus, receitas e dietas, facilitaria a consciencialização da quantidade consumida em relação às porções diárias, assim como melhoraria a perceção do conceito de porção, e de como o conjunto das diferentes refeições e produtos alimentares permitem atingir as recomendações alimentares e nutricionais.

## PO124. NUTRITIONAL COMPOSITION OF ULTRA-PROCESSED PLANT-BASED BURGERS IN OUT-OF-HOME ENVIRONMENT: THE PORTUGUESE CASE

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**INTRODUCTION:** People who change their habits to a plant-based diet are growing continuously. Vegetarianism, with a predominance of plants on the diet and veganism, with a complete rejection of animal products, is an increasing population, especially among women. Plant-based diets can present beneficial associations with obesity, type 2 diabetes, and hypertension, although strict vegan diets can be critical due to the risk of an undersupply of essential nutrients. In Portugal, the vegan population lives mainly in urban environments where ready-to-eat and street foods are more available.

**OBJECTIVES:** The study intends to characterize the nutritional composition of ready-to-eat food available to the vegetarian public.

**METHODOLOGY:** A representative sample collection of Vegan burgers available on out-of-home sites in Lisbon was randomly collected. Eleven vegan burgers were lab-analysed for energy, macronutrients, amino acids, and minerals content. The content was evaluated following ingestion reference values.

**RESULTS:** One median serving size of vegan burgers (260g) provided 28% of energy intake (562Kcal) and contributed 37% of dietary fibre, 42% of protein, 58% of total fat, and 47% of sodium intake. Also, provide 12-23% of the adequate calcium, potassium, and magnesium intake, 26% for zinc and 44-58% for manganese, phosphorus, and iron. Total fat present values between 14-35 g/serving and 1.8 to 9.0 g/serving of saturated fat. Protein content varies from 5.4-9.7g/100g, with low protein quality according to amino acid composition.

**CONCLUSIONS:** Ultra-processed plant-based foods, such as vegan burgers, contain high energy levels, sodium, and saturated fatty acids. It is a potential source of protein, but the quality of protein is low and constitutes a good source of dietary fibre and essential minerals. The ranges observed on the nutritional profile highlight the need for improvements to better support healthy dietary habits, such as reducing salt and fatty acids while also enhancing protein quality.

## PO125. IODINE AND SELENIUM CHARACTERIZATION IN FOODS CONSUMED IN VEGETARIAN DIETS

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**INTRODUCTION:** Vegetarian diets have gained popularity in the last decade,

and it has been found that increased consumption of plant-based foods brings numerous health benefits. The number of vegetarians has quadrupled in the last ten years, currently representing around 9% of the population residing in Portugal. Therefore, the nutritional study of the most consumed foods by the vegetarian population becomes important. Iodine and selenium are essential nutrients for the synthesis of thyroid hormones. By compromising the supply of these micronutrients, health consequences may occur like hypothyroidism, goiter or the formation of nodules.

**OBJECTIVES:** The objective of this study was to evaluate the iodine and selenium content in foods consumed by the vegetarian population.

**METHODOLOGY:** Food selection was based on the National Food and Physical Activity Survey. The iodine and selenium content were analyzed by ICP-MS, in 37 samples (iodine) and 27 samples (selenium).

**RESULTS:** Among the analyzed foods, dried Nori seaweeds presented the highest levels of iodine,  $6511 \pm 321 \mu\text{g}/100 \text{ g}$ , followed by dairy products, namely cheese (between  $53.4 \pm 0.4$  and  $28.0 \pm 0.9 \mu\text{g}/100 \text{ g}$ ) and yoghurts (between  $17.2 \pm 0.2$  and  $14.4 \pm 0.1 \mu\text{g}/100 \text{ g}$ ). When resorting only to food, the vegetarian and vegan population may have difficulty to achieve the daily iodine requirement ( $150 \mu\text{g}/\text{day}$ ). Selenium content varies between  $< 2.0 \mu\text{g}/100 \text{ g}$  (LQ) in yoghurt and  $208 \pm 7 \mu\text{g}/100 \text{ g}$  in Brazilian nuts. To supply the daily selenium requirements for women ( $26 \mu\text{g}/\text{day}$ ) or men ( $34 \mu\text{g}/\text{day}$ ) it is only necessary to consume about 12 or 16 g of Brazilian nuts, respectively.

**CONCLUSIONS:** It is necessary to consider alternatives that can lessen the nutritional deficits of iodine and prevent possible consequences on health. These may include using iodized salt, crop fortification, food fortification or supplementation.

## PO126. ATTENDANCE TO UNIVERSITY AND CHANGES IN THE EATING HABITS OF YOUNG ADULTS: A PROSPECTIVE COHORT STUDY

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**INTRODUCTION:** Evidence is lacking about whether there are differences in the changes in the diet of young people according to university attendance.

**OBJECTIVES:** To study the association between attendance at university and changes in eating habits of young Portuguese adults.

**METHODOLOGY:** Data is from 891 participants from the EPITeen prospective cohort, who were assessed at 13 and 21 years of age. Food intake was evaluated through a food frequency questionnaire, and participants were classified according to their tertile of consumption for each food group, at each age. Odds ratios (OR) and 95% confidence intervals (95%CI) were computed through multinomial regression models to assess the association between attendance at university and changes of tertiles of food consumption between 13 and 21 years, adjusted for sex, tobacco use and physical exercise.

**RESULTS:** Using data collected at 21 years, 67.8% of our participants attended or have attended university. University participants had lower odds of maintaining a high consumption of sugary drinks (OR=0.40 95%CI 0.24–0.69) and of increasing their consumption (OR=0.30 95%CI 0.18–0.50) than to maintain a low consumption between 13 and 21 years of age, when compared to non-university participants. On the other hand, regarding coffee and tea consumption, university participants were more likely to increase consumption than to keep consumption low when compared to non-university participants (OR=1.63 95%CI 1.12–2.36). Regarding alcohol consumption, only consumption at age 21 was assessed.

University participants were more likely to belong to the second and third tertiles of consumption than the first, when compared to non-university participants (OR=2.62 95%CI 1.80–3.83 and OR=4.45 95%CI 2.94–6.74, respectively).

**CONCLUSIONS:** Entering university was associated to an increase in the intake of tea, coffee and higher consumption of alcoholic beverages, but with a decrease in the consumption of sugary drinks, in comparison to those not pursuing higher education.

## PO127. IMPACT OF COVID-19 PANDEMIC: ASSOCIATIONS BETWEEN FAMILY SOCIOECONOMIC FACTORS AND UNHEALTHY EATING HABITS IN SCHOOL-AGE CHILDREN IN PORTUGAL

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**INTRODUCTION:** COVID-19 pandemic led to unprecedented changes in family's lifestyles, including in eating habits and socioeconomic situation, which represented a contemporary Public Health challenge.

**OBJECTIVES:** To characterize the associations between family socioeconomic factors during pandemic with energy-dense food consumption of Portuguese school-age children (6-8 years old).

**METHODOLOGY:** This study follows a cross-sectional design based on data from the 6<sup>th</sup> round (2021/2022) of the Childhood Obesity Surveillance Initiative (COSI) in Portugal (n=6205). The information on family socioeconomic indicators and children's eating habits during pandemic was obtained through a family form. The maternal and paternal education were classified as "lower" and "higher", and the maternal and paternal employment status were categorized as "employed", "unemployed" and "inactive". Parents also indicated if their children's consumption of soft drinks containing sugar, sweet and savoury snacks "decreased" or "increased" during pandemic in comparison to pre-pandemic period. A logistic regression analysis was carried out to estimate the adjusted odds ratio (OR) and their 95% confidence intervals (CI) (p<0.05).

**RESULTS:** Having a mother with lower education level was positively associated with a decrease in children's consumption of soft drinks containing sugar (OR=1.43, CI 95%: 1.11-1.84) and was inversely associated with an increase in children's consumption of sweet and savoury snacks (OR=0.58, CI 95%: 0.47-0.71 and OR=0.66, CI 95%: 0.52-0.83, respectively) during pandemic. Having a mother unemployed was positively related with a decrease in children's consumption of soft drinks containing sugar, sweet and savoury snacks (OR=1.64, CI 95%: 1.13-2.38; OR=1.94, CI 95%: 1.26-2.97 and OR=1.53, CI 95%: 1.01-2.32, respectively) during COVID-19 period. Children whose mother was inactive were less likely to have an increase in the consumption of sweet snacks (OR=0.64, CI 95%: 0.44-0.95).

**CONCLUSIONS:** This study was an important step for a better understanding of socioeconomic disparities in children's unhealthy eating habits, particularly during a Public Health emergency.

## PO128. AVALIAÇÃO DO DESPERDÍCIO ALIMENTAR HOSPITALAR: UM CONTRIBUTO PARA A MELHORIA DA OFERTA ALIMENTAR E A PROMOÇÃO DA SAÚDE

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**INTRODUÇÃO:** Face às preocupações globais em torno do desperdício alimentar, o sector dos cuidados de saúde, em particular os hospitais, são um contribuinte significativo para este problema. Para além de enfrentarem o desafio de gerir o excesso de alimentos, necessitam de manter os requisitos nutricionais e respeitar as preferências dos utentes. Tal como noutros países, Portugal não dispõe de dados específicos sobre o desperdício alimentar hospitalar a nível nacional.

**OBJETIVOS:** Avaliar e comparar o desperdício alimentar nos serviços do hospital e efetuar uma análise global exaustiva no hospital, durante dois períodos distintos do mesmo ano.

**METODOLOGIA:** Em 2023, o desperdício alimentar foi avaliado em 17 serviços do Hospital Santa Luzia de Viana do Castelo, durante dois períodos distintos. Para além disso, foram realizadas duas avaliações globais para todo o hospital. O desperdício alimentar foi avaliado ao almoço e ao jantar através do método físico de pesagem da refeição antes e depois da distribuição. As medições foram efetuadas para a sopa, prato principal (carne ou peixe, com massa, arroz ou batata e hortícolas), sobremesa e temperos (vinagre e/ou azeite). Foram avaliadas seis dietas hospitalares (geral, ligeira, sem sacarose, mole, cremosa e líquida).

**RESULTADOS:** O desperdício alimentar foi avaliado em 2142 refeições (1129 almoços e 1013 jantares). Nos 17 serviços avaliados, os produtos com maior desperdício foram: tintureira (59,6%), escamudo (50,5%), brócolos (72,5%), espargado de espinafres (68,7%), cenoura (56,5%), e feijão-verde (55,6%). Observou-se também que o frango, o arroz e a couve-flor e cenoura, foram dos produtos que apresentaram menor desperdício. A maçã crua foi a sobremesa que apresentou maior desperdício.

**CONCLUSÕES:** Estes dados foram fundamentais para identificar os produtos mais rejeitados pelos utentes, que representam maior desperdício alimentar, e contribuem para o défice de ingestão alimentar que pode potenciar a desnutrição, e influenciar a recuperação e tempo de internamento dos utentes.

## P.O. VENCEDORES

### 1.º Prémio

**PO126 | Attendance to University and Changes in the Eating Habits of Young Adults: a Prospective Cohort Study**

### 2.º Prémio

**PO89 | Avaliação do Perfil Nutricional de Alimentos Transformados à Base de Cereais Destinados a Lactentes e Crianças Pequenas**

### 3.º Prémio

**PO71 | Insights into Tea and Herbal Infusion Labels**