considerando-se a média obtida do peso (g) dos hortícolas, fruta, alimento fornecedor de hidratos de carbono e de proteína. Excluíram-se os pratos compostos. As recomendações para as capitações foram calculadas utilizando as recomendações nutricionais da EFSA e o Manual de Equivalentes Alimentares da APN. Estas recomendações foram, posteriormente, comparadas com as capitações oferecidas.

RESULTADOS: Analisaram-se 30 almoços diferentes. A quantidade de hortícolas no prato (12-23 meses: 9,4 g; 24-36 meses: 10,8 g) foi inferior à recomendação mínima de 20g a partir dos 12 meses. As quantidades de alimentos fornecedores de hidratos de carbono apresentaram-se sempre acima das recomendações, principalmente dos 12-23 meses (média oferecida de 62,2 g e orientação de aproximadamente 30g). As recomendações para os alimentos fornecedores de proteína foram cumpridas (9-11 meses: 14,2 g; 12-23 meses: 20,3 g; 24-36 meses: 23,9 g). As capitações oferecidas de fruta dos 6-8 meses (84,6 g) e dos 9-11 meses (133,3 g) apenas cumpririam as recomendações se esta fosse a única refeição diária. Dos 12-36 meses, as capitações médias (53,1 g e 46,6 g) cumpriam as recomendações.

CONCLUSÕES: As quantidades de alimentos oferecidas ao almoço nem sempre estavam de acordo com as recomendações, principalmente no que respeita aos hortícolas (por defeito) e ao alimento fornecedor de hidratos de carbono (por excesso).

CO24. CHANGES IN ESSENTIAL TRACE ELEMENT LEVELS PRE- AND POST-HAEMODIALYSIS SESSION

Rui Azevedo[1]; Mary Duro[1,2]; Agostinho Almeida[1]

[1] LAQV/REQUIMTE, Department of Chemical Sciences, Faculty of Pharmacy, University of Porto

[2] Fernando Pessoa Energy, Environment and Health Research Unit, Fernando Pessoa University

INTRODUCTION: Chronic kidney disease affects over 10% of the world's population and often requires renal replacement therapy, such as haemodialysis. Haemodialysis patients are at an increased risk of trace element imbalances, which may be due to factors such as inflammation, dietary restrictions, and losses during dialysis sessions.

OBJECTIVES: This study aimed to compare the serum concentration of essential trace elements in chronic haemodialysis patients pre- and post-haemodialysis session. Healthy individuals without evidence of renal impairment were used as a control group.

METHODOLOGY: Samples were collected during routine laboratory testing of patients on chronic haemodialysis. The concentration of trace elements Cu, Zn, Se and Mo was determined by ICP-MS.

RESULTS: After a haemodialysis session, the serum concentration of Cu, Zn and Se increased significantly (p < 0.001) by 44% 44%, and 38%, respectively, while Mo decreased by 54% (p < 0.001). Before the haemodialysis session, patients had significantly lower serum Cu, Zn and Se concentrations (p < 0.001) and a significantly higher serum Mo concentration (p < 0.001) compared to the control group. After the haemodialysis session, serum Zn and Se concentrations remained significantly lower (p < 0.001), while serum Cu and Mo concentrations were significantly higher (p < 0.001) than in the control group.

CONCLUSIONS: The haemodialysis process causes significant changes in the serum concentrations of some trace elements. During the haemodialysis session, Mo is extensively removed, while Cu, Zn and Se are concentrated. However, the observed increase in concentration is higher than what would be expected due to the simple effect of haemoconcentration. These findings suggest that other mechanisms (e.g., haemolysis) are also responsible for the increased serum concentrations of Cu, Zn and Se observed post-dialysis. More studies are needed to confirm these results.

CO25. ENERGY-ADJUSTED DIETARY INFLAMMATORY POTENTIAL OF CHILDREN AND ADOLESCENTS (IAN-AF 2015-2016): AN ALTERNATIVE APPROACH TO THE CHILDREN DIETARY INFLAMMATORY INDEX, BASED ON A NEW REFERENCE POPULATION

Sofia Martins[1-3]; Daniela Correia[1-3]; Catarina Carvalho[1,2,4]; Carla Lopes[1-3]; Duarte Torres[1,2,4]

[1] EPIUnit - Institute of Public Health, University of Porto

[2] Laboratory for Integrative and Translational Research in Population Health, University of Porto

[3] Department of Public Health and Forensic Sciences, and Medical School, Faculty of Medicine, University of Porto

[4] Faculty of Nutrition and Food Science, University of Porto

INTRODUCTION: Low-grade inflammation is a pathological process where diet plays a significant role. The Children's Dietary Inflammatory Index has been used to estimate dietary inflammation in younger ages. However, it is limited to participants aged 6-14 years and excludes several food parameters (FP) with anti- or pro-inflammatory effects, such as flavonoids, n-3 & n-6 fatty acids, trans-fatty acids, caffeine, tea, onion and garlic.

OBJECTIVES: This study aimed to develop and describe a comprehensive tool to estimate the Dietary Inflammatory Score (DIS) among children and adolescents aged 3-17 years, accounting for 38 FP, including the abovementioned FP.

METHODOLOGY: DIS was estimated for 1073 participants (51.7% girls) from the National Food and Physical Activity Survey 2015-2016. The first step was calculating each FP's energy-adjusted intake z-score in our sample, using the energy-adjusted dietary intake means and standard deviations from a reference population within the same age range. The corresponding centered percentile was multiplied by each FP's inflammatory effect score (IES) to obtain the FP-specific DIS. Finally, the individual global DIS was calculated by the sum of all the FP-specific DIS.

Our reference population includes 30280 individuals, available on the Global Dietary Database, and IES were collected from the literature.

Mean and standard deviation (SD) were used to describe DIS. The association between DIS and sociodemographic factors and diet quality, measured through Healthy Eating Index (HEI), was assessed using linear regression analysis. Lower DIS relate to more anti-inflammatory effects.

RESULTS: The mean(±SD) DIS was 0.45±1.95, ranging between -4.71 and 5.38. Compared to children, adolescents had significantly higher DIS (β=0.87[95%CI:0.66;1.11]). Individuals in lower HEI quartiles (Q) showed significantly higher DIS: compared to Q4, Q1 was the most pro-inflammatory (β=2.29[95%CI:1.98;2.61]).

CONCLUSIONS: Our findings suggest that DIS is a promising open tool for estimating dietary inflammation among children and adolescents. Nonetheless, a full validation using low-grade inflammation biomarkers should be performed.

CO26. DEVELOPMENT OF A PHOTOGRAPH-BASED INSTRUMENT TO ASSESS NUTRITION LITERACY IN PORTUGUESE ADULTS

Sofia Sousa[1,2]; Nuno Lunet[1-3]; Ana Rute Costa[1-3]; Milton Severo[1,2,4]; Pedro Moreira[1,2,5,6]; Gabriela Albuquerque[1,2]; Patrícia Padrão[1,2,5]

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