

**CONCLUSÕES:** Uma vez que as comorbilidades associadas ao excesso de peso parecem desenvolver-se cada vez mais na população pediátrica, o estabelecimento de abordagens multidisciplinares, que se baseiem no incentivo à mudança de estilo de vida e adoção de cuidados alimentares, tem um impacto positivo no IMC das crianças e adolescentes assim como no tratamento da dislipidemia.

## PO66. IMPACT OF PULSE CONSUMPTION ON METABOLISM AND HEALTH: A SYSTEMATIC REVIEW

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**INTRODUCTION:** Pulses are nutrient-dense foods recommended by major health organizations as a way to reduce the risk of chronic diseases. However, scientific data directly evaluating the effects of controlled consumption of pulses on health, in free-living environments, is still limited.

**OBJECTIVES:** The purpose of this review is to gather the scientific output of the last 20 years regarding health benefits of pulse consumption and emphasizing the corresponding metabolic impact.

**METHODOLOGY:** The following search words or expressions [(“dietary pulses” OR “pulses” OR “legumes” OR “grain legumes” OR “bean” OR “beans” OR “chickpea” OR “pea” OR “lentil” OR “cowpea” OR “fava bean” OR “lupin”) AND (“inflammation” OR “inflammatory markers” OR “C-reactive protein” OR “blood lipids” OR “cholesterol” OR “cardiometabolic health” OR “cardiovascular disease” OR “diabetes” OR “glycaemia” OR “insulin” OR “HOMA-IR” OR “body weight” OR “body fat” OR “obesity” OR “overweight” OR “metabolome” OR “metabolic profile” OR “metabolomics” OR “biomarkers” OR “microbiome” OR “microbiota” OR “gut”)] were used for searches on PubMed, selecting papers published since 1997. Only papers referring to human dietary interventions, longer than one day, focusing on whole pulses intake and in English, were included. Of the initial 371 papers, 20 fulfilled the inclusion criteria.

**RESULTS:** The majority of papers (n=16; 80%) report indirect effects of pulses consumption on cardiovascular risk factors, in particular blood lipid lowering properties (n=12; 60%). Metabolic impact was accessed through common standard biofluid analyses, with no reference to the use of metabolomics technologies. Concerns regarding the lack of studies with controlled diets, short trial durations and low compliance rates, are evident.

**CONCLUSIONS:** There is growing evidence regarding pulses’ benefits, but these are mostly based on nutrient composition and remain limited. Advanced metabolomics strategies, e.g. based on NMR spectroscopy, could be explored to enlighten the biochemical mechanisms behind the proclaimed health effects of pulse intake.

## PO67. AVALIAÇÃO DO RISCO DE DESENVOLVIMENTO DE DIABETES NOS COLABORADORES DA CÂMARA MUNICIPAL DO PORTO

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**INTRODUÇÃO:** Segundo o último relatório da OCDE, em 2015, Portugal tinha uma prevalência de diabetes de 9,9% em adultos, valor acima da média da OCDE35 (7%). O INSEF constatou que a prevalência desta doença na população portuguesa é superior nos homens (12,1%) e na faixa etária dos 65-74 anos (23,8%).

**OBJETIVOS:** Determinar o risco de desenvolvimento de Diabetes Tipo 2 a 10 anos, nos colaboradores da Câmara Municipal do Porto, no âmbito das atividades desenvolvidas no projeto Municipal Porto sem Diabetes.

**METODOLOGIA:** Para a avaliação do risco, recorreu-se ao teste *Findrisk®*, aplicado por entrevista. Por forma a aumentar a fiabilidade das respostas, foram avaliados parâmetros antropométricos, nomeadamente peso e perímetro da cintura, de acordo com as recomendações da Organização Mundial da Saúde (OMS), tendo sido a estatura autorreportada. A avaliação foi feita por profissionais da DMPS, devidamente formados, respeitando os requisitos de privacidade.

**RESULTADOS:** Avaliaram-se 79 colaboradores, a maioria (n=49;62%) do sexo feminino, com idades compreendidas entre os 28–69 anos. 46,8% (n=37) e 39,2% (n=31) apresentaram risco baixo e ligeiro de desenvolver Diabetes a 10 anos, respectivamente. 46,8% (n=37) dos indivíduos avaliados apresentavam sobrecarga ponderal. A maioria (50,6%;n=40) apresentava um perímetro da cintura acima das recomendações da OMS.

**CONCLUSÕES:** A maioria dos colaboradores avaliados apresentou risco baixo ou ligeiro de vir desenvolver diabetes a 10 anos. No entanto, um número considerável apresentava fatores de risco com elevado contributo para o desenvolvimento desta patologia, cuja prevalência tem vindo a aumentar na população. Deste modo, considera-se pertinente reforçar a prevenção primária e atendendo à validade, versatilidade e cariz pedagógico da ferramenta *Findrisk®*, consideramos que a mesma contribui para o aumento da literacia em saúde.

## PO68. BRAZILIAN’S ELDERLY INADEQUATE MICRONUTRIENT INTAKE BY SEX, AGE AND HOUSEHOLD ARRANGEMENTS - NATIONAL DIETARY SURVEY 2008-2009

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**INTRODUCTION:** Worldwide the population is aging. Nutrition is an important quality of ageing determinant due to its potential to modulate the transition from vulnerability to frailty and dependence. Considering that, it is important to estimate the prevalence of inadequate nutrient intake and it has been a strategy used in international health and nutrition surveys to identify individuals at risk of nutritional deficiencies.

**OBJECTIVES:** Estimate the prevalence of inadequate intake of micronutrients by sex, age groups (60-44, 65-69, 70-74, and 75 years or older) and home arrangement (household with only the elderly; and mixed).

**METHODOLOGY:** Data from the National Dietary Survey, corresponding to one module of the 2008-2009 Household Budget Survey were used. Data on food intake were obtained through two food records on non-consecutive days completed by residents aged 60 and over. The rates of prevalence of inadequate were estimated according to sex, age groups and home arrangement, using recommendations established by the DRI.

**RESULTS:** A high prevalence of inadequate intake (> 50%) of vitamins E, D and A, calcium and magnesium for both sexes. Only women aged 60-64 years residing in households with only elderly individuals had an intake above the vitamin A recommendation. The household arrangement was also shown to have an impact; with men residing in mixed households had lower prevalence of inadequacy when compared to the elderly in this same context. On the other hand, for the elderly, residing in households composed only of residents aged 60 years or older, appeared to interfere positively with their food intake.

**CONCLUSIONS:** The age groups and the home arrangement influences the estimation of nutritional inadequacy and intake and should not be disregarded when evaluating the elderly people.