PO38. EATING BEHAVIOUR OF CHILDREN WITH FAILURE TO THRIVE: THE ROLE OF SIBLINGS AND FAMILY HISTORY

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INTRODUCTION: Besides family history, the impact of siblings on eating behaviour of children and adolescents as role models and social peers has not yet been widely studied.

OBJECTIVES: To study the relationship between eating behaviour of children with failure to thrive and the number of siblings and their age, as well as to evaluate their family history.

METHODOLOGY: In this study we evaluated 33 children with failure to thrive and assessed their eating behaviour through the Children's Eating Behaviour Questionnaire.

RESULTS: One third of the children had prior cases of failure to thrive and/or underweight in the family, higher than the reports of overweight and/or obesity (30.3%).

We found relationships between having older siblings and higher scores in the subscales "Enjoyment of food" (mean=2.00, sd=0.60 vs. 2.59, sd=0.93, p=0.046) and "Emotional over-eating" (mean=1.64, sd=0.47 vs. 2.07, sd=0.70), although not statistically significant (p=0.055) and with lower "Food fussiness" (mean=3.77, sd=0.55 *vs*. 3.09, sd=0.91, p=0.017). Having older siblings favours the pattern of attraction to food and decreases at least one avoidance subscale, which could suggest higher intake, however the relationship with weight status is somewhat contradictory. Having older siblings correlates with lower weight percentiles (n=17; median=16.5 *vs*. 1.00, p=0.023), regarding BMI percentile, despite not being statistically significant (p=0.121), children with older siblings showed a lower median (25.5 *vs*. 8.0). Older siblings seem to act as models and they also imitate the role played by caregivers, encouraging thinner siblings to eat more.

CONCLUSIONS: Children with failure to thrive with older siblings have potentially a more favourable eating behaviour, despite not reflecting directly in their weight status. The family history report and the identified relationships demonstrate the importance of the household in the construction of children's eating behaviour.

PO39. BIOACCESSIBILITY OF BIOACTIVE FISH PEPTIDES INCORPORATED IN A RTE SEAFOOD PRODUCT

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INTRODUCTION: North-Western Atlantic fisheries are responsible for a significant fraction (7%) of landed underutilized fish products (discarded species and by-products). Its valorisation is relevant to promote food waste reduction and circular economy, transforming them, through enzymatic approaches, in added value bioactive compounds to be used as ingredient for functional food.

OBJECTIVES: The work aimed the bioaccessibility of bioactive peptides obtained from several species of fish discards and by-products (blue whiting (*Micromesistius poutassou*), Atlantic horse mackerel (*Trachurus trachurus*), gurnard (*Trigla spp.*), pouting (*Trisopterus luscus*), red scorpionfish (*Scorpaena scrofa*) and four spot megrim (*Lepidorhombus boscii*) in a Ready-to-eat seafood product.

METHODOLOGY: Alfa-glucosidase, alfa-amylase, and Angiotensin Converting Enzyme (ACE) inhibition were measured before and after *in vitro* digestion. This digestion describing the gastrointestinal human tract (mouth, stomach, and small intestine) was made to evaluate the biological activities in the bioaccessible fraction.

RESULTS: Among hydrolysates, Gurnard FPH (Gu_Sb) showed the higher biological activities (ACE inhibition = 82.41%, IC50 (a-amylase) = 27.82mg/ml) (Table 1). Therefore, this hydrolysate was selected to prepare microencapsulates to be incorporated in a ready-to-eat seafood product. ACE and amylase inhibitory activities of this hydrolysate were preserved during the digestion process.

CONCLUSIONS: Preservation of ACE and alfa-amylase inhibition in microencapsulated gurnard FPH after digestion, evidences the potential of this ingredient in the design of food products with health benefits, promoters of quality life.

TABLE 1

Results of α-amylase and ACE inhibitory activities after *in vitro* digestion

α-AMYLASE INHIBITION (%)	ACE INHIBITION (%)
Gu_Sb hydrolysate (1.74±0.69)	Gu_Sb hydrolysate (85.55 ±1.64)
Microencapsulates (86.86±4.10)	Microencapsulates (86.67±1.28)
RTE without Microencapsulates (59.52±2.25)	RTE without Microencapsulates (88.46±1.65)
RTE with Microencapsulates (64.30±2.06)	RTE with Microencapsulates (89.27±0.80)

PO40. PATIENTS SOCIAL AND ECONOMIC PERCEPTIONS, ACCESSIBILITY AND ACCEPTABILITY OF A LOW FODMAP DIET

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INTRODUCTION: Irritable Bowel Syndrome (IBS) is a chronic multifactorial disease resulting in functional gastrointestinal symptoms (FGS), with the Low-FODMAP Diet (LFD) being a promising alternative to control it. However, there are external aspects that may limit correct compliance with the diet.

OBJECTIVES: To assess the perception of economic and social barriers, as well as the accessibility and acceptability in patients following a LFD.

METHODOLOGY: The sociodemographic data were collected, and a LFD was implemented during 6 weeks. The adherence level was evaluated, based on a percentage scale and the global evolution of the FGS through the IBS - Global Assessment Scale (IBS-GAI). A questionnaire with 3 response levels was applied to assess the economic and social aspects, as well as the accessibility and acceptability of the diet.

RESULTS: The 36 participants (94.4% females), had a mean age of 38.8 years (sd = 12.7). Most lived with family (94.4%), were professionally active (72.2%), attended university (47.3%), with an average monthly household income between 500 and 1000€ (47.2%).

The participants adherence level to LFD was > 75%, with 88.9% of them improving moderate/substantially in IBS-GAI. It was easy for 52.8% of participants to implement LFD and 66.7% saw themselves following this diet but acknowledged the existence of social and economic limiting factors (labor, cost and supply) with other social facilitators being family and friends. About accessibility, the more mentioned affirmations were those related to lack of information (52.8%) and specific products offer (50.0%).

Significant differences were observed between levels of education for the "use of extra information materials" and "label reading"; and between income levels for the "use of extra information materials", "diet taste" and "easiness in low-FODMAP food purchase".

CONCLUSIONS: LFD appears to be effective in remission of SGI; however there are barriers that need to be transposed, by improving health education.