for this research and based on the Brazilian's Dietary Guidelines (2014). Linear regression analysis was used to test associations between the parents' cooking skills and the ultra-processed foods contribution on the total dinner energy intake, adjusting for sociodemographic variables: parent's age, gender, race, marital status, education, employment status; per capita family income and number of children in the house.

Results: The average age of the parents was 38.3 years old (SD 6.3) and the children's was 7.8 (SD 1.1). The parents were mostly women (93.2%), white (62.2%), married (88.3%), with incomplete higher education or more (51.4%), employed (71.4%), with per capita family income of up to ~USD 320.00/month (37.8%). These parents reached an average of 78.8 points (SD 14.8) according to the Cooking Skills Index – Brazil. Children's average dinner energy intake was 672.2 kcal, with 31.3% coming from ultra-processed foods. The average intake of ultra-processed foods ranged from 37.2% of total energy in the first quintile of the CSI-Brazil to 28.1% of total energy in the last quintile. The analysis showed that the increase of the parents' cooking skills was directly associated with the decrease of consumption of ultra-processed foods (β =-0.18 by quintile of the CSI-Brazil; p=0.008), remaining after adjustment (β =-0.16; p=0.020).

Conclusions: The findings of this study, the first that explores that relationship in Brazil, suggest that parents' cooking skills protect their children against the consumption of ultra-processed foods, indicating the need for a revaluation of cooking in order to promote adequate and healthy eating.

Keywords: Food. Culinary. Diet quality. Children. Parents.

Further collaborators: Source of funding: Sao Paulo Research Foundation/Processo FAPESP 2014/10155-4.

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EFFICACY OF A LOCALLY-PRODUCED MULTIPLE MICRONUTRIENT-FORTIFIED (READY-TO-USE SUPPLEMENTARY FOOD (RUSF) FOR CHILDREN UNDER TWO YEARS IN CAMBODIA

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Background and objectives: Cambodia's progress in combatting malnutrition has stalled. In 2014, 32% of all children under five years were stunted, 24% were underweight and 10% were wasted. This is due in part to poor quality complementary foods leading to

Oral Abstracts

insufficient nutrient intakes. Therefore, UNICEF, the Cambodian Ministry of Agriculture, Forestry and Fisheries and IRD developed a locally-produced multiple micronutrient fortified lipid-based nutrient supplement (LNS) that can be used as a Ready-to-Use Supplementary Food (RUSF). The novel RUSF can be given to children to increase their intake of protein, energy and micronutrients.

This trial assessed the RUSF's efficacy in reducing growth faltering in comparison to CSB++, Sprinkles and a control group.

Methods: The trial was a nonblinded, cluster-randomised control trial. Healthy children aged 6-17 months (n=486) were allocated to one of three intervention groups or the control group for six months. The main outcome was anthropometric status (WHZ, HAZ, WAZ, MUAC).

Results: None of the interventions could completely prevent growth faltering, but children consuming the novel RUSF appeared to falter at a lower rate. The lowest decreases in base-endline z-scores were for the RUSF group, for WAZ [RUSF: -0.01 (-0.14, 0.11); control: -0.14 (-0.26, -0.01)]; HAZ [RUSF: -0.27 (-0.49, -0.05); control: -0.36 (-0.57, -0.15)]; and WHZ [RUSF: 0.00 (-0.17, 0.17); control: -0.10 (-0.28, 0.07)]. Increases in MUAC (cm) were greatest for CSB++ [CSB++: 0.27 (0.08, 0.47); RUSF: 0.22 (0.03, 0.42)].

Older children had slightly better outcomes, and children with lower anthropometric measures at baseline had larger increases over the intervention period, showing that the interventions were helpful for children with poorer nutritional status. Children who consumed more had better weight-related outcomes (WAZ and WHZ), but not HAZ, suggesting that weight is more amenable to intervention than height.

Conclusions: These results suggest that neither the commonly used supplements (Sprinkles and CSB++) nor the novel RUSF could prevent growth faltering. However, in comparison to the control group, all the supplements (particularly the novel RUSF, but also CSB++ and to a lesser extent, Sprinkles) contributed to improved nutritional status.

Keywords: Ready-to-use supplementary food (RUSF), lipid-based nutrient supplement (LNS), complementary feeding, CSB++, Sprinkles.

144/1816

COMPATIBILITY BETWEEN DIMENSIONS OF SUS-TAINABLE DIETS (NUTRITIONAL ADEQUACY, EX-POSURE TO FOOD CONTAMINANT AND 30% RE-DUCTION OF GREENHOUSE GAS EMISSION): AN ANALYSIS BASED ON INDIVIDUAL DIET MODELING

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Background and objectives: To test the compatibility between nutritional adequacy, acceptable exposure to food contaminant and 30% reduction of greenhouse gas emissions at individual level.

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