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Creating a food Photo Album for use with an online dietary assessment tool (myfood24) to investigate food consumption of Shawi Indigenous people in the Peruvian Amazon

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Despite recognition that climate change will have a negative impact on nutrition in Low- and Middle-income countries⁽¹⁾, there is limited information on food consumption and dietary nutrient intake especially among Indigenous populations⁽²⁾. As part of a community participatory process we identified the need for a visual aid to support collection of dietary data among Amazon Indigenous communities. Our aim is to identify Indigenous key recipes, measure usual portions, and to create a photo album to assist with collection of dietary information.

A preparatory workshop with five community members was conducted to generate a list of Peruvian Shawi foods, to select habitual recipes to be prepared with families, and to determine portion sizes, and take pictures. Researchers were advised to work with at least four Indigenous families of different sizes since this could affect portion size consumed; and to consider portion size by gender. A nutritionist and a Shawi research assistant, stayed in the communities working with volunteer families for over 8 weeks to complete cooking workshops, recipe photography and measure food portions. Due to the pandemic, the work is done individually, minimizing all risks. These results are for the first two families included, of ten and eight family members.

Seven recipes were collected per household over seven days. The majority of these used ingredients obtained only from the forest, or small farms "chacras" located an hour away from their homes. Fish, crabs and shrimp were obtained from the river, while "sacha culantro" (a leaf condiment), plantain, cassava, sweet potato, were obtained from their small farms, and salt was obtained from a local salt mine. Pictures were taken during the cooking workshops for the three main phases: preparation, serving, and for the waste portions on each plate. Individual portion size average and (SD) for men and women respectively varied for prepared dishes as follows: Patarashca (fish wrapped in leaves and barbecued) 68 g (SD33) and 77 g (SD19); Fish pango (boiled fish) 114 g (SD51) and 91 g (SD28); Fish Soup 87 g (SD19) and 61 g (SD35); Chicken soup (boiled chicken with water and some noodles) 59 g (SD6) and 84 (SD8), and Duck soup (boiled duck with water and cassava) 94 g (SD43) and 105 g (SD36). Crab soup was prepared at the first house, while fresh palm soup was prepared at the second one, based on available ingredients. Variation in the portion size with the number of people eating at each household requires further data collection.

Indigenous people still depend on wild, domesticated and forest food for their recipes. A gender approach to determine portion sizes of food consumption could be important in this population. A photo album is being created to be used to evaluate the impact of extreme flooding on diet and nutrition status of Shawi people.

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