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The role of soy-based foods in complementary feeding

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Adequate protein consumption is fundamental to human growth and health, especially in the first 1000 days of life. We studied the acceptability and feasibility of the incorporation of soy meal to enhance the nutrient profile of a complementary food containing orange fleshed sweet potato.

Close to 200 mother-infant pairs (6-24 months) living in Ghana Northern Region were recruited. Complementary foods included: Complementary Food for Africa (ComFA) containing OFSP and soy flour, and its variations containing anchovies and moringa leaves, and a control (WeaniMix with sugar). Women filled out demographic questionnaires and were asked to provide 100 g of each food to their children within 10 minutes in separate occasions. Leftovers were weighed and compared. All subjects tested all the foods. A sub-group of women (n=20) received the foods to prepare the four treatments at homes. During focus groups, women were asked to explain potential barriers for the preparation of these foods as well as their thoughts about complementary feeding.

Overall, women liked all the foods evaluated. ComFa with moringa, however, was not as popular. Most women agreed that foods were perceived positively by their children. However, ComFa alone and WeanMix had a slight preference. Based on food leftovers, WeaniMix was preferred than the treatments (ANOVA, $P < 0.05$). Food leftovers of ComFA and its variations were similar in weight (Tukey HSD, $P > 0.05$). From focus groups, women indicated that they wanted to try more ingredients with ComFA (e.g., maize and groundnuts). Women indicated that WeaniMix preparation took longer times and needed more water and energy. All women agree that this was a significant advantage of using ComFA for their children.

ComFA with soy is an alternative nutritious product for complementary feeding. Recipes can be improved with addition of fruits. Studies using other soy products such as TSP are warranted.