

Generating Evidence around the Potential for Aquaculture and Horticulture in Improving Nutrition and Diet Quality in Rural Bangladesh

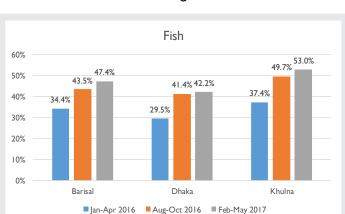
Dietary Diversity:

Findings from a repeat panel in children under five years of age (2016-2017)

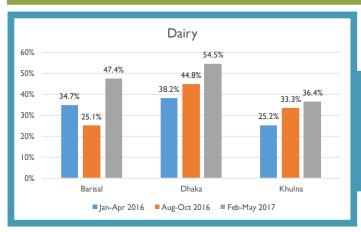
Diet quality in children aged 6-23 months was assessed using the IYCF indicators along with an assessment of consumption of animal source foods, fruits and vegetables.

Animal Source Food Consumption

Overall, diet quality as measured by consumption of at least one ASF increased over time across the three regions. The majority of the children 6-23 months in the three regions consumed at least one animal source food in the previous 24 hours throughout the study, and over time, an increase in animal source food consumption was observed in all three regions.

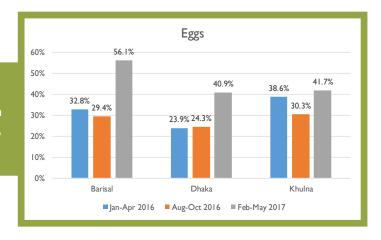


The consumption of eggs increased over the study in Barisal and Dhaka. All regions showed a decrease or slight increase between the first two time points, followed by a significant increase between the second and third time point. Though an increase was observed, egg consumption remains very low among children 6-23 months in Dhaka and Khulna.



At least one animal source food 87.0% 90% 78.8% 80.9% 77.8% 73.0% 69.8% 80% 70 4% 66.1% 70% 60% 50% 40% 30% 20% 10% 0% Barisal Dhaka Khulna ■ Jan-Apr 2016 ■ Aug-Oct 2016 ■ Feb-May 2017

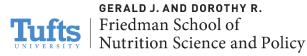
Over the study timeframe, fish, dairy, and egg consumption increase in all three regions. Fish consumption increases steadily over the study in each region, however less than half of the children 6-23 months in Barisal and Dhaka, and just over half of the children in Khulna consumed fish in the past 24 hours in the last survey (Feb-May 2017)



Dairy consumption also increased over time particularly in Barisal and Dhaka. Barisal saw an increase from just over 20% to almost 50% of the children consuming a dairy product in the past 24 hours. Though a steady increase was observed, in the last survey (Feb-May 2017), less than 40% of children 6-23 months had consumed any dairy in the past 24 hours.



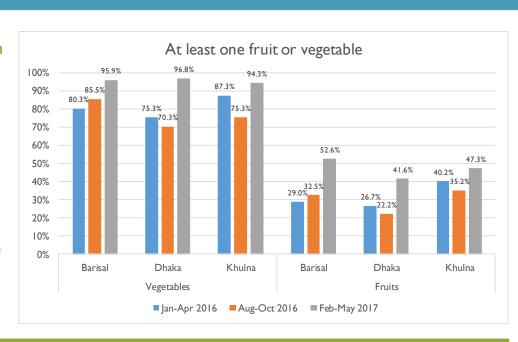


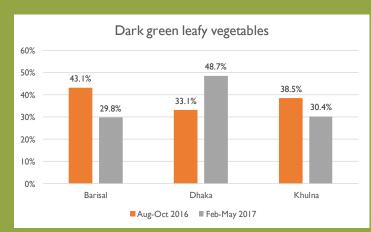


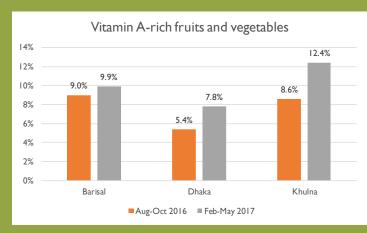


Fruit and Vegetable Consumption

In addition of being a vital source of nutrients for growth and development, fruits and vegetables also provide nutrients that help maintain the child's immune system and keep them healthy. Vegetable consumption was very high among the children 6-23 months across the three regions while consumption of fruits was less than 50% for children 6-23 months in Dhaka and Khulna. An increase in vegetable and fruit consumption was observed over the study in all three regions.



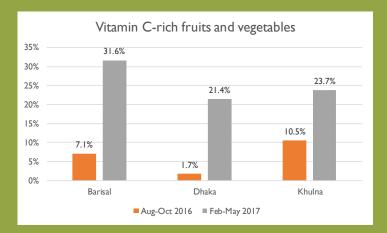




Dark green leafy vegetable consumption varied greatly by region, and only showed an increase in Dhaka.

Vitamin A-rich fruits and vegetables include carrots, pumpkin, papaya, and mango. An increase in these orange-colored fruits and vegetables was observed between the two time points for children 6-23 months in all three regions, with the largest increase in Khulna. Though an increase was observed, consumption of these fruits and vegetables was extremely low, around 10%.

Vitamin C-rich fruits and vegetables, such as citrus, passionfruit, pineapple, jackfruit, and tomatoes were scarcely consumed in the second time point, but increased 15-25 percentage points.



Data on DGLV, vitamin A-rich and vitamin C-rich fruit and vegetable consumption were only collected in the second and third time point.