

Designing a Food Plate for Dietary Counseling of Pregnant Women



Some women get special attention when they are pregnant. Husbands pamper them. Mothers-in-law dote on them. Friends remind them to “eat for two” every chance they can. But, in many parts of the world, this isn’t the norm.

Instead of overeating, pregnant women in rural Bangladesh are often undernourished. Micronutrient deficiencies arising from lack of dietary diversity have been reported, putting unborn babies at risk of growth restriction in the womb, low birth weight, and compromised growth and nutrition after birth.

The SHIKHA project is implementing interventions to improve diet and nutrition among pregnant women and children ages 0 to 2 in rural Bangladesh. As part of SHIKHA’s maternal nutrition component, nutrition workers use a food plate to counsel pregnant women about healthy and balanced diets. This document describes the seven steps used to design the plate.

Step 1: Literature Review

SHIKHA reviewed desired dietary patterns developed by the Bangladesh Institute of Research and Rehabilitation in Diabetes, Endocrine, and Metabolic Disorders with support from the Ministry of Food and the Food and Agriculture Organization of the United Nations. Baseline survey findings from the SHIKHA project and research on nutrition and dietary practices of pregnant women in Bangladesh were also reviewed to conceptualize the food plate. A decision was made to use the plate primarily to promote dietary diversity. Dietary diversity is associated with micronutrient adequacy and is an important aspect of a healthy diet. This aspect is neglected in Bangladesh.

Step 2: Original Design

The original food plate had borders illustrating food groups that pregnant women should eat every day during pregnancy. The middle of the plate contained a photo of a



typical lunch or dinner meal. A main message about eating a variety of foods in sufficient amounts during pregnancy was written in Bangla across the bottom of the plate.



What Is a Food Plate?

Some countries use a “food plate” as an educational tool to help citizens follow national dietary guidelines. An example from the United States, called MyPlate, is a colorful image of a plate of food divided into basic food groups. In developed countries, this concept has even been adapted for specific populations such as pregnant women. SHIKHA took the initiative to design a customized plate for pregnant women in Bangladesh, where promoting dietary diversity is a challenge because families often have very little money to spend on food.

Step 3: First Expert Consultation

The original design was presented and approved during an expert consultation held in Dhaka on September 4, 2014. After the meeting, sample melamine plates were produced for field use and testing.

Step 4: Field Use and Testing



The melamine plates were distributed to SHIKHA's nutrition workers and incorporated into counseling sessions to promote dietary diversity in the intervention areas. Feedback was gathered through focus group discussions and in-depth interviews with 10 nutrition workers, 11 pregnant women, and four experts in the management and design of nutrition projects. Suggestions included improving the quality of the photo, including more affordable and recognizable foods, adjusting portion sizes, and adding more messages.

Step 5: Second Expert Consultation

The original design was revised based on the feedback from the field. Two new options were presented at a second expert consultation held in Dhaka on June 10, 2015. The experts preferred one option over the other but suggested adding more messages and fine-tuning them through additional field testing.

Step 6: More Field Testing

Images of the revised plate were printed and laminated for field testing. Focus group discussions and in-depth interviews were held with 16 rural women and 14 nutrition workers to improve the messages on the plate. The feedback was incorporated into the final design.

Organizations/Projects Consulted During Design

- Alive & Thrive
- Bangladesh Institute of Research and Rehabilitation in Diabetes, Endocrine, and Metabolic Disorders
- Bangladesh University of Health Sciences
- BRAC
- BRAC University
- Food and Agriculture Organization of the United Nations
- Helen Keller International
- Institute of Nutrition and Food Science/University of Dhaka
- International Potato Center
- Ministry of Food
- SPRING
- UNICEF
- U.S. Agency for International Development
- WASHplus
- WorldFish
- World Food Programme

Step 7: Final Design

The final design, which contains four messages, will soon be transformed into more than 5,000 melamine plates that nutrition workers and pregnant women can hold in their hands during counseling sessions. The practical, colorful, evidence-based plate is an educational tool with the potential to improve maternal nutrition not only within SHIKHA's intervention areas but throughout Bangladesh. In its final year, SHIKHA will work with the Bangladesh government to explore opportunities for wider use of this tool.



WHAT ARE THE MESSAGES?

1.

Half plate of rice and at least four other varieties of food

2.

Eating a variety of food in appropriate amounts keeps mothers and children healthy

3.

Eat a little more food during pregnancy

4.

Wash both hands with soap and running water before preparing and eating food