FACT survey: salt iodization in Pakistan needs strengthening


High levels of micronutrient deficiencies exist among young children and women of reproductive age in Pakistan, which may have long-term negative effects on their health and economic prospects.

A cross-sectional Fortification Assessment Coverage Toolkit (FACT) survey was implemented between October and December 2017 by the Ministry of Planning, Development and Reform Pakistan, the Global Alliance for Improved Nutrition (GAIN) and Oxford Policy Management (OPM). The objective was to determine the coverage and likely contribution of fortified and fortified foods (including iodized salt) to micronutrient intake among women (18–49 years) and children (<5 years) in Pakistan. The survey included a provincially representative household assessment in three provinces (Balochistan, Punjab, and Sindh) and a market assessment in four provinces (Balochistan, Punjab, Sindh, and Khyber Pakhtunkhwa).

Key findings related to iodized salt

1. Availability and quality of iodized salt (Figure 1)
   - 30 brands of salt were present in market places (3 rural and 7 urban) across the four provinces. All brands except one were locally produced.
   - 26 (87%) salt brands were confirmed to be fortified to some extent, but only one brand (4%) was fortified according to national fortification standards, and four (13%) brands were fortified above standard.

2. Household coverage of iodized salt (Figure 2)
   - Coverage of salt: Salt was universally consumed in all provinces.
   - Coverage of fortifiable (industrially produced) salt: Fortifiable salt was universally consumed in Sindh, and by 84% of households in Balochistan and 75% in Punjab.
   - Coverage of iodized salt (based on samples collected from markets): Relatively low (11–36%); however, this may be an understimation due to a high proportion of households with unknown fortification status (i.e., households where no salt brand was reported, or the brand reported was not found in the market survey. This proportion was 71.0% in Balochistan; 37.8% in Punjab; and 64.1% in Sindh).

3. Current and potential iodine contribution from fortified salt among the total population
   - Fortified salt currently contributes 31-54% of the estimated average requirement (EAR) for iodine among young children (12–59 months) and 37-51% among women of reproductive age. If fortified to the required standard, it could meet the daily requirements for both population groups.

Conclusions and recommendations

- Given there are few natural iodine sources in the diet, salt fortification could fulfill iodine intake requirements among young children and women if all salt is fortified according to standards. However, households that do not consume fortifiable salt (i.e. 25% in Punjab, 16% in Balochistan) may not be reached.
- Drivers of poor compliance with fortification standards at production level need to be ascertained and addressed to increase the availability of appropriately fortified salt.

At a dissemination event in Islamabad on 10 August 2018, Dr. Baseer Achakzai, Director of Nutrition, Ministry of National Health Services, stressed the need to focus more efforts on improving iodization compliance at production level to ensure that more salt brands are fortified according to standards. GAIN’s country director, Dr. Qaiser Pasha expressed hope that the evidence generated through this scientifically rigorous survey will be used by government and partners to inform new programs and improve on-the-ground implementation. FACT is a survey instrument that was developed by GAIN for carrying out coverage assessments of both population-based (i.e. staple foods and/or condiments) and targeted (e.g. infant and young child) fortification programs to help stakeholders achieve greater program impact by documenting successes, identifying potential barriers related to program coverage, and improving them based on evidence of program performance.