The objective was to quantify iodine losses during transit and storage from production to retail end over 12 months to inform the policy.

In this field based study, we measured in duplicate iodine content in salt using iodometric titration method of 450 samples at the inception of the study and 443 samples at 12 months, produced through routine production process and transported through road. The samples included a range of following combinations: Salt produced in eight geographic areas considering the unique chemical composition of brine; five types of processed salt; four processing methods; three types of packing material; packed in 1kg or 50kg bags and stored in six geo-climatic zones across the country.

The salt samples were iodized at 30 ppm (±2 ppm) with average iodine content at the inception was 30.8 ppm (±3.6 ppm SD) and 28.5 (±6.5 ppm SD) at 12 months, indicating a loss of 2.34 ppm (8%) over the study period. The highest loss was in salt packed in LLDPE bags at 2.9 ppm with average iodine content on inception at 31.1 (±4.1 ppm SD) and 28.50 (±5.5 ppm SD) at 12 months.

The findings indicated an average iodine loss of 8% over 12 months, suggesting a need to relook at the existing standard of production end to retail end.

The study reveals that there is a need to relook at the existing standard of 30 ppm at the production end and 15 ppm at the retail end, which assumes 100% loss during movement of salt from production unit to retail end.

## METHODS

- In this study, six types of salt samples (Crystal, Crushed, Crushed and Washed, Refined and Vacuum evaporated) were used, procured from 8 geographical area (Nawa – Rajasthan, Halved, Kharagoda and Mithapur – Gujarat, Sanikatta – Karnataka, Tuticorin and Vedaranyam – Tamil Nadu and Kharagoda – Maharashtra) and each samples set had back up samples with loggers installed at storage location.
- To share the evidence on loss with policy maker for developing single standard.

## RESULTS

The findings indicated an average iodine loss of 8% over 12 months, suggesting a need to relook at the existing standard of 30 ppm at the production end and 15 ppm at the retail end, which assumes 100% loss during movement of salt from production unit to retail end.

## CONCLUSIONS

The study reveals that there is a need to relook at the existing standard of 30 ppm at the production end and 15 ppm at the retail end which assumes 100% loss during the movement of salt from production end to retail end.

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