

IODINE CONTENT OF FIVE SALT BRANDS AVAILABLE AT RETAIL OUTLETS IN KURUNEGALA TOWN

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This study which was aimed at detecting whether iodine level of five popular salt brands in retail shops in Kurunegala town retain iodine within the legislated level of 15-30 ppm, was carried out using biochemical methods, during the period of November 2011 to March 2012.

Selected brands comprised of both crystal and powder form. Total of eighty salt samples including sixteen from each brand (equal number from crystal and powder form) were included for the analysis of iodine. Screening of shops for collecting samples from each brand was carried out under simple random method and determination of iodine level in each sample was carried quantitatively using a titrimetric method. Printed details on the packets of each brand were also recorded.

There were variations in iodine within as well as among the brands. Mean iodine level was 29.64 ppm in the range 5.3-63.8 ppm. This mean level is within the legislated range, but towards the highest point of range. This could be due to brands such as C and D which carried high levels of mean iodine values 39.5 & 33.9 ppm. Average levels of iodine in the other three brands were within the range. Out of total samples, 49 (61.25 %) were within the range and 23 (28.75%) and 8 (10%) were above and below the range, respectively. Compared to powder form crystal form had high mean level of iodine and they were 27.96 and 31.33 ppm respectively. All the brands studied were packed in polythene packets and contained the necessary data for customers such as expiry date, manufactured date, advices for use and storage, level of purity, level of iodine, price and weight.

As a whole it is necessary to monitor the iodine level of salt regularly at production level, retail level and house hold level to ensure safe and adequate distribution of iodized salt among the people.