IODIZED SALT IN THE ARMED FORCES - USAGE FOR BENEFIT

Dear Editor,

Iodination of salt as an issue, is creating a vexatious controversy in India. Most public health professionals subscribe to the benefits of salt iodination as an important means of delivery of the micro nutrient on a mass scale. The Army has central cook houses functioning, manned by civilian and military cooks, supervised by personnel who may not be specially trained. The cooking process is not of a standardized format, owing to the varied foodstuff, preparation techniques and the diverse cultural composition of the troops. Hence, a community based cross sectional study (N=91) of the knowledge, attitude and practice on the usage of iodized salt was conducted, among cooks and their supervisors to gain an insight into the issue. The source of knowledge and awareness about iodized salt and its benefits were broadly, the print and audio visual media. No participant reported having received any information about iodized salt from Army sources.

The salt storage practices were also ascertained : salt was stored in closed containers by 11 (12.08%), while the large majority kept salt in loose sacks/packets. The storage containers included metal tins, glass bottles, plastic bottles and earthen ware jars.

The diet of an individual in addition to the iodized salt consumed, may supply the recommended average daily requirement of iodine [1]. However, rations, water etc, from an area which is environmentally deficient in iodine, will not provide a source of iodine for the individual, contrary to popular perception. Iodine content of foods and of total diets differ appreciably and are influenced by geochemical, soil and cultural conditions which accordingly modify iodine uptake [2]. Hence, it would be incorrect and unscientific to assume that the rations supplied to our troops, if sourced from an environmentally deficient area, would supply essential macronutrients without the added input from iodized salt.

Discretionary salt use as defined by Melse - Boonstra et al (1998) as the addition of salt while cooking and at the table [3] leads to overindulgence in salt especially while consuming salads, depending on an individual taste preference, rather than on requirement. The average Indian adult intake of 13.8 gm per day, as reported by ICMR, is still relatively on the higher side, and moderation needs to be advocated [4].

The awareness level on recognition of iodized salt was, not surprisingly, on the lower side. The Smiling Sun symbol has been promoted by the Government to allow easy recognition of an iodized salt packet, and to connote the positive influence that iodized salt has on human development, and economic productivity. Most personnel are unaware of this marking on packets, probably due to a lack of specific emphasis on this

particular aspect in health education campaigns. It is considered imperative that all provisioning and supervisory staff in the Armed Forces be made conversant with this aspect, by a specific campaign aimed at increasing this awareness.

The timing of addition of salt which is iodized, to food while being cooked is of importance in preserving the iodine content; ideally salt should be added to cooked food at the end of the cooking process, which is contrary to common culinary practices. Scientific data has shown that frying reduces the iodine content by 20%, grilling by 23% and boiling by as much as 58% [2]. This highlights the importance of proper training and supervision of cooks. This would also need them to be educated about the potential benefits of iodized salt. The timing of addition of salt vis a vis the taste and palatability factors need to be weighed in the correct perspective of the benefit accruing from iodized salt.

The findings of this study and other such studies elsewhere [5] reflect the need for specific health education for consumers, health staff, provisioning and also supervisory staff about the advantages of iodized salt and its recognition as such. It is recommended that a comprehensive health education campaign be carried out, with specific customized content, directed at selected target groups such as cooks, their trainers and supervisors, as also provisioning staff. The campaign should involve not only the medical staff but also staff channel in its implementation for wider reach and effect and would need to be sustained.

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