

Iodine Nutrition Knowledge of Food Handlers: A Capricorn and Waterberg District Study, Limpopo Province, South Africa

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Opinion

Given the public health importance of eliminating iodine deficiency and its consequences, one can assume that consumers are informed and educated about iodine nutrition and iodine deficiency disorders such as impaired mental function, goitre, hypothyroidism, cretinism, retarded physical development and even child mortality [1]. Salt fortification was an intervention initiated by the government to address iodine deficiency disorders but the community has limited information on the salt fortification and its benefits [2]. Intensive implementation activities of monitoring and evaluation of salt fortification have revealed the limited knowledge of how to translate efficacious interventions into effective programs with relevant mechanisms for program monitoring, quality assurance, and impact evaluation to the beneficiaries of the programme [3].

Although some people have knowledge about salt fortification, socio economic factors play a role since most exclusive users of common salt say the price of iodized salt is a little higher than that of the common salt [4]. Limited knowledge of iodine nutrition among low socio-economic groups has also been reported in South Africa hence people who have less education and less resources, have the least knowledge about the importance of iodized salt [1]. While people who had some knowledge about the importance of iodized salt, a minority reported the use of iodized salt indicating a huge gap in knowledge and practice [1].

Generally, the reasons for iodization failing to eliminate iodine deficiency were that a) only about a third of table salt produced in South Africa was iodized; b) unequal distribution of iodized salt favored urban areas; c) price-sensitive rural and low income

consumers used cheaper non-iodized salt brands; and d) there was a low awareness of the benefits of iodized salt [4,5]. Most people are not sufficiently informed about the health implications of an inadequate iodine intake, nor were they aware of dietary sources of iodine, or the potential benefits of fortification [6]. Study conducted before introduction of mandatory iodization in the country revealed that despite the price of iodized and non-iodized salt being identical, a low proportion of low socio-economic households (between 4.3 and 25%) used iodized salt [4]. A study in towns of the Northern Cape Province in South Africa showed that only 2% of the mothers correctly knew the health benefits of iodine in iodized salt [5]. Although large nutritional studies have been conducted in South Africa on iodine and its benefits, there is scarcity of data concerning the iodine nutrition knowledge of food handlers in primary schools in particular. In view of this, the study was conducted to assess the iodine nutritional knowledge of food handlers in Capricorn and Waterberg district, Limpopo Province, South Africa.

Of all food handlers 55.3% had no idea what salt fortification was and 34.7% were from Capricorn district as compared to 21.3% in Waterberg district. About 96.1% of food handlers knew the importance of using iodized salt and majority were from Capricorn district 58.7% as compared to 38.7% in Waterberg district. In addition, 32% in Capricorn district don't read the labeling when buying salt as compared to 12% in Waterberg district.

Of all food handlers, 17.3% in Capricorn district indicated that iodine was a vitamin as compared to 8% in Waterberg district. In Capricorn district 26.7% indicated that iodine is added to maize meal as a fortificant as compared to 29.3% in Waterberg district. About 25.3% of food handlers in Capricorn district didn't know

what iodine was as compared to 24% in Waterberg district. Only 18.7% of food handlers in the study knew that iodized salt was the sources of iodine. About 12% and 6.7% of participants from Capricorn and Waterberg districts respectively knew the body part that needs iodine for normal functioning. Furthermore the results of the study showed that 5.3% correctly knew the consequences of iodine deficiency [7]. The results of the study appears to be suggesting that while South Africa made good progress as far as the implementation of salt iodization and coverage is concerned, the advocacy and educational aspects are seriously lacking. The results of the study also suggest that nutrition knowledge is inadmissibly low among food handlers. Of particular concern is the finding that the international education strategy to increase public awareness that iodine deficiency is a preventable cause of mental retardation appear to have had little or no impact to most South Africans. The low level of iodine nutrition knowledge requires vigorous public awareness campaigns targeting people from low socio-economic groups.

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Conflict of Interest

Authors declare that there is no conflict of interests.

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