IODINE DEFICIENCY DISORDER (IDD) TRENDS AMONG FILIPINOS: 1998 TO 2013

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Background There is progress in eliminating iodine deficiency disorders (IDD) worldwide; but it is still a global health problem. Salt iodization is the most widely used strategy to control and eliminate IDD. In the Philippines, in response to the increasing goiter rates, an Act for Salt Iodization Nationwide (ASIN Law) was passed in 1995. This law mandates all salt for human and animal consumption to be iodized.

Objectives This paper presents urinary iodine excretion (UIE) as a measure of IDD and household salt iodine levels from 1998–2013.

Methods Data on UIE and salt iodine levels were from the 1998, 2003, 2008 and 2013 National Nutrition Survey (NNS) conducted by FNRI-DOST. UIE was determined using the acid digestion method. Presence of iodine in household salt was determined by WYD. UIE was evaluated using WHO/ICCIDD criteria.

Result Based on UIE levels among school children, iodine status of Filipinos has shifted from mild iodine deficiency (UIE 71 µg/L) in 1998 to a level (201 µg/dL) corresponding to above requirements in 2003. UIE levels in 2008 (132 µg/L) and 2013 (168 µg/L) corresponded to optimal iodine nutrition. Overall, iodine nutrition in is optimal, but pockets of deficiency still exists. Meanwhile, UIE levels (≥300 µg/L) corresponding to excessive intakes has steadily increased from 0.1%, 13.3%, 17.5% and 23.2% for the 1993, 1998, 2003 and 2013 NNS, respectively. This level may cause adverse health consequences such as iodine induced hyperthyroidism and autoimmune thyroid diseases. Improvement of iodine status among Filipinos assessed through UIE levels did not conform with levels of iodine in household salt which was below acceptable standards. Only 25% consumed adequately iodized salt.

Conclusion Iodine nutrition among Filipinos is optimal. However, pockets of deficiency still exists in certain regions. Further study to assess adverse health consequences among those with excessive intakes is warranted.