

Albania

A poster presented at the International Workshop on “Iodine Deficiency in Europe”, held in Brussels, Belgium in 1992 reported 41% goiter prevalence among 6-20y old participants in a survey of nearly 200,000 people in Albania. The same survey also identified 192 cretins and 46 deaf-mutes (1). A first national survey using formal systematic sampling was carried out in 1993 by the Institute of Public Health, Tirana, collecting urine samples from 2,395 8-10y old children from 32 clusters. Thyroid volume was measured of 241 children in four villages in the Northeast, and blood TSH was determined of 227 newborns in a maternity clinic in Tirana. In children, median UI levels by cluster varied from 20 to 49µg/L and elevated thyroid volume was 29%; 33% of newborn TSH levels were elevated. These findings confirmed the existence of moderate to severe iodine deficiency in Albania (2).

Almost all salt in Albania is imported, mainly from Greece (±80% of imported) and Italy. The 2000 MICS (3) reported that 57% of Albanian households used adequately iodized salt, with a significant contrast between rural (48%) and urban (71%) areas. To stimulate progress, UNICEF provided iodization and QA technology and training to the Vlora salt company, but domestic salt production has been slow to develop. The Albanian Government created a National IDD Committee and the PM issued a Decree banning the import of non-iodized salt for human consumption. The standard for salt iodization was set at 25mg iodine/kg. A public awareness campaign and a salt quality monitoring system were started also with UNICEF support. A scientific study in 2003 (4) illustrated the continued inequity between the rural and urban areas: Among urban schoolchildren of Southern Albania, the median UI was 45µg/L, goiter prevalence 32%, and 78% of household salt samples were <15mg/kg; In rural schools, the median UI was 17µg/L, goiter 95% and no household salt samples were adequately iodized. The MICS of 2005 reported that 77% of the households used imported Niki salt, followed by locally produced Vlora salt.

In 2006, a national iodine survey was conducted with UNICEF support by the Institute of Public Health and the Hospital of Bolzano, Italy (5), covering 6-13y old schoolchildren and pregnant women (<6 months pregnant) in 30 clusters stratified by 4 zones: Coastal cities; Coastal villages; Internal cities and Internal villages.

Population indicator	Coastal		Internal		Albania
	Cities	Villages	Cities	Villages	
Median salt iodine (mg/kg)	18.5	15.9	26.5	16.4	21.2
% adequately iodized salt (≥15mg/kg)	61	53	75	53	60
Median UI in children (µg/L)	113	70	119	59	86
Median UI in pregnant women (µg/L)	122	98	100	71	95
% child Tvol elevated (BSA reference)	9.9	18.9	10.2	44.0	24.4

Table 1: Iodine status indicators, Albania, 2006

From each group, urine and household salt samples were collected for quantitative analyses; thyroid size was quantified by ultrasound. In total 840 children and 365 pregnant women were examined. The survey results are summarized in Table 1. The survey confirmed that iodine deficiency is more intense in rural than in urban Albania. Overall, 60% of household salt samples were adequately iodized and UI levels in school children indicated adequate status in the cities. Nevertheless, the iodine status among pregnant women was insufficient in all the strata and the median salt iodine content was below the national standard. Concluding, despite the ongoing program efforts aimed at promoting USI, Albania still remains severely to moderately (UI levels in schoolchildren and pregnant women) iodine deficient.

The Parliament of Albania enacted a USI Law on 26 June 2008 and enforcement was stepped up during the same year to ensure that all salt for human nutrition (consumer salt, food-industry salt and salt for livestock) is adequately iodized. The Agribusiness Council has become involved in advocacy among food processors, traders and retailers; Customs officers have been trained in improved control of salt imports and mobilization campaigns among the population were organized through schools with the use of rapid test kits and educational activities, jointly conducted with health and education authorities. These activities are focused especially on areas known from the previous surveys to be more deficient. The Government of Albania has recently privatized the Vlora salt factory, thus rekindling the hope that the domestic production of iodized salt may improve in the future.

Participation of national officers in UNICEF-supported regional iodine meetings:

- Conference on Elimination of Iodine Deficiency Disorders (IDD) in Central Eastern Europe, the Commonwealth of Independent States, and Baltic States, 3-6 September 1997, Munich, Germany
- Regional Salt Producers' Meeting, 29 September – 1 October, 1999 Kiev, Ukraine
- Workshop on Strengthening Strategies for the Elimination of Micronutrient Malnutrition. Antalya, 4-8 April 2005
- Workshop on Strengthening of Laboratory Capacity and Iodine Status Assessments for Monitoring of Sustained IDD Elimination through USI in the CEE/CIS Region. Istanbul, Turkey, 18-19 May 2006

References/important documents

1. Delange F, Dunn JT, Glinioer D, 1993. Iodine Deficiency in Europe: A continuing concern. Proceedings of a Workshop held in Brussels, Belgium, 24-28 April 1992. New York, Plenum
2. Bardhoshi A, Bizhga V, Gjoka M, Gutekunst R, Grimci L, Subashi A, 1997. Iodine Deficiency Disorders in Albania. *IDD Newsletter* **13(1)**: 9
3. <http://www.childinfo.org/files/albaniatables.pdf>, page 12 (Accessed 19 January 2010)
4. Zimmermann MB, Bridson J, Bozo M, Grimci L, Stuart Tanner M, 2003. Severe iodine deficiency in Southern Albania. *Int J Vit Nutr Res* **73**: 347-350
5. Hyska J, Frauzelliu F, Bushi E, 2007. Assessment of iodine deficiency status among Albanian children and pregnant women. UNICEF, Institute of Public Health, Hospital of Bolzano