









World Health Organization Geneva

**lodine status** 

WHO Global Database

on Iodine Deficiency

worldwide

# lodine status worldwide

WHO Global Database on lodine Deficiency

### **Editors**

Bruno de Benoist Maria Andersson Ines Egli Bahi Takkouche Henrietta Allen



Department of Nutrition for Health and Development World Health Organization Geneva 2004

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### Preface

In 1960, the World Health Organization (WHO) published the first global review on the extent of endemic goitre. This review, covering 115 countries, was instrumental in focusing attention on the scale of the public health problem of Iodine Deficiency Disorders (IDD). It was only in the mid 1980s that the international community committed themselves to the elimination of IDD, through a number of declarations and resolutions.

WHO subsequently established a global database on iodine deficiency which now holds surveys dating back from the 1940s to the present day. Its objective is to assess the global magnitude of iodine deficiency, to evaluate the strategies for its control and to monitor each country's progress towards achieving the international community's goal of IDD elimination.

In 1993, WHO published the first version of the WHO Global Database on Iodine Deficiency with global estimates on the prevalence of iodine deficiency based on total goitre prevalence (TGP), using data from 121 countries.

Since then the international community and the authorities in most countries where IDD was identified as a public health problem have taken measures to control iodine deficiency, in particular through salt iodization programmes – the WHO recommended strategy to prevent and control IDD. As a result, it is assumed that the iodine status of populations throughout the world has improved over the past decade. The WHO Global Database on Iodine Deficiency is therefore being revised and updated to reflect the current situation of iodine deficiency worldwide.

Until the 1990s TGP was the recommended indicator for assessing iodine status. However, goitre responds slowly to a change in iodine status and today urinary iodine (UI) is recommended as a more sensitive indicator of recent changes in iodine nutrition. The methodology used for this updated version of global iodine status thus rests on UI data and only uses TGP to make a comparison with the data published in 1993.

This report provides general information on iodine deficiency, its health consequences and current control interventions (Chapter 1). The methodology used to generate estimates at national, regional and global levels is described in Chapter 2. The estimates of iodine deficiency at national, regional and worldwide levels are given in Chapter 3 followed by a critical analysis of the methodology used. Annex 1 provides detailed information on the status of iodine deficiency, UI and TGP, for each country for which data are available.

The objective of this report is to provide an updated analysis of the iodine deficiency situation in the world at the beginning of the 21st century. It forms part of WHO's work to track the progress made by each country to meet the goal of IDD elimination. We hope that this report will help governments recognize the progress made in improving iodine nutrition over the past decade, and also to be aware that iodine deficiency is still a public health problem in some countries. In order to reach the goal of IDD elimination continued efforts are needed on the part of health authorities. It will also require that control programmes are sustained and strengthened.

#### Bruno de Benoist, MSc, MD

Focal Point, Micronutrient Programme Department of Nutrition for Health and Development World Health Organization, Geneva

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The database was developed and managed by Henrietta Allen and Maria Andersson under the coordination of Bruno de Benoist. Grace Rob was assisting in data management. Bruno de Benoist, Maria Andersson, Bahi Takkouche and Ines Egli were engaged in data analysis and preparation of the report.

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## **Abbreviations**

CDC	Centers for Disease Control and Prevention			
FAO	Food and Agricultural Organization of the United Nations			
ICCIDD	International Council for Control of Iodine Deficiency Disorders			
IDD	Iodine deficiency disorders. The spectrum of clinical, social and intellectual consequences of iodine defi-			
	ciency.			
IIH	Iodine-induced hyperthyroidism			
MI	The Micronutrient Initiative			
ppm	Parts per million			
SAC	School-age children (6–12 years)			
TGP	Total goitre prevalence. Prevalence of enlarged goitres in a population (usually school-age children).			
TSH	Thyroid stimulating hormone			
UI	Urinary iodine			
UL	Upper limit			
UN	United Nations			
UNICEF	The United Nations Children's Fund			
USI	Universal salt iodization			
WHO	World Health Organization			

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