

Preface

“A future of sustainable development begins with safeguarding the health of every child.”

*Kofi A. Annan
Secretary-General of the United Nations*

Among the indisputable rights of children is the right to health. Without respecting this right and providing the necessary resources to secure it, we cannot hope to achieve any of the major development goals the world has united around in the United Nations Millennium Declaration. Human capital is essential to all development. Without basic health and nutrition, the potential of our children goes to waste.

Growth references are among the most valuable and widely used tools we have to measure how we manage to fulfill children's basic physical needs. Of course, assessing growth alone is not enough to adequately evaluate an individual's health status. But his or her physical development is a core element.

The usefulness of growth references, however, stretches far beyond that. Because so many physiological processes must “go right” and so many needs must be met in childhood if growth is to proceed normally, divergences and variations within populations and strata can give useful indications of how supportive the children's surroundings are and even help us track our progress in attaining “health for all.” Data collected throughout populations over time can give us important information about their medium- and long-term social and economic development.

Thus, not surprisingly, United Nations and governmental agencies responsible for promoting, securing, and sustaining children's well-being rely on growth references for a wide range of tasks, such as assessing general health status, promoting equity, formulating health and related policies, planning interventions, and monitoring the effectiveness of their efforts and those of others who share commitments and responsibilities to children.

Under the leadership of the World Health Organization (WHO), the United Nations in 1993 undertook a comprehensive review of the uses and interpretation of anthropometric references. As a result of this review, the World Health Assembly (WHA) endorsed the development of a new set of tools to assess infant and young child growth. The Assembly also stressed the need to move beyond past

approaches designed to describe *how children grow in a particular region and time* to the more desirable goal of describing *how all children should grow* when their needs are met. In setting this more ambitious goal, the WHA moved beyond recommending the construction of a *reference*, i.e., a device for grouping and analyzing data, to the development of a *standard* (or as close to one as possible), i.e., a device that embodies the concept of a norm or target, thus enabling a value judgment.

To accomplish this more ambitious goal, WHO and its principal partner, the United Nations University, undertook the Multicentre Growth Reference Study (MGRS). At its core was the recruitment of children who met rigorous standards of health. These children not only had to be free of debilitating diseases, but also had to come from families that had conformed with health recommendations in areas such as breastfeeding and smoking cessation.

Emboldened by WHA's commitment, this effort went two steps further. It recruited children from all of the world's major regions to underscore that all children, regardless of ethnic background or regional origin, grow similarly when their needs are met. Moreover, it linked growth measurements to the assessment of motor development. The latter component was facilitated by key support from UNICEF.

By replacing the present international reference, which is based on children from a single country, with one based on an international group of children, we are significantly strengthening the hand of those working to extend the right to health to all children. Similarly, by linking physical growth to motor development, we highlight the very important point that although normal physical growth is a necessary enabler of human development, it is not sufficient. Attention also must be focused on the functional capacities that normal growth makes possible, but does not assure. Together, these three new elements—the “prescriptive” approach that moves beyond the development of growth references to the approximation of standards, the inclusion of children from around the world, and links to motor development—provide us with a much

better instrument to use in our efforts to meet the needs of the world's children. But it also significantly raises expectations of what we should achieve.

This supplement documents the planning, methods, and implementation of the MGRS. The challenges of its adaptation in six distinct sites—Brazil, Ghana, India, Norway, Oman, and the United States—and the creative approaches used to meet them are evident in its contents. Covering five areas, the supplement:

- » reviews the rationale for developing a new international set of tools to assess infant and child growth;
- » describes the planning, study design, and methodologies adopted to meet the aims of the MGRS;
- » reviews the protocols developed to obtain and standardize anthropometric measurements and motor milestones;
- » outlines the comprehensive and rigorous data management system designed to assure optimal data quality; and
- » systematically considers the site-specific implementation of this global activity.

The outcomes of the MGRS will be scientifically more robust tools to assess child growth than the ones currently available to the international community. Perhaps equally important, these will also be powerful tools for purposes of child health advocacy.

We firmly believe that having tools that provide approximate standards and that are based on children

from all of the world's major regions sends crucial messages about aspects of human development that bind all children, political commitments that enable the biological/physical development of individuals and their communities, and responsibilities that are imposed by the last century's remarkable achievements in health, food and agricultural sectors, and information technology.

This project has been a model example of cooperation and collaboration within the UN family and with its external bilateral partners and civil society, and we take pleasure in that fact. Special recognition is due to literally thousands of volunteers and their families who gave freely of their time to this international effort, the principal investigators and their staffs at each of the study sites, and the hundreds of scientists who served as reviewers and in other advisory roles. Special recognition is also due to the WHO Department of Nutrition for Health and Development for its leadership and day-to-day coordination of this activity; the UNU Food and Nutrition Program for its constant support, leadership, and commitment; and the multiple donors who provided vital financial support, encouragement, and intellectual resources for this activity.

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