

BACKGROUNDER 1

What are the WHO Child Growth Standards?

The World Health Organization is launching new global Child Growth Standards for infants and children up to the age of five.

With these new WHO Child Growth Standards it is now possible to show how children *should* grow. They demonstrate for the first time ever that children born in different regions of the world and given the optimum start in life, have the potential to grow and develop to within the same range of height and weight for age.

The WHO Child Growth Standards will be widely used as a tool in public health, medicine and by governmental and health organizations for monitoring the well-being of children and for detecting children or populations not growing properly or under- or overweight and may require specific medical or public health responses. Normal growth is an essential expression of health and a way to measure efforts designed to reduce child mortality and disease. The new charts therefore provide a simple tool to assess the effectiveness of such efforts.

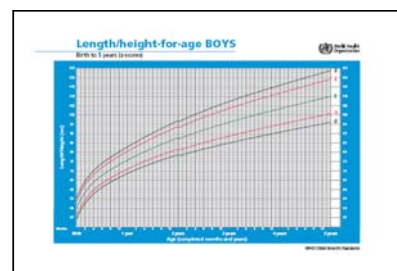
They will be in use around the world in doctors' offices, clinics and other health facilities, and by research institutions, child health advocacy organizations and ministries of health.

What do these charts look like, and what do they show?

Parents, caregivers and health workers around the world are familiar with growth references. They are the values of weight and height for each age against which they measure the growth of the children under their care. The current references do not indicate how children should grow for the best health outcome, however, rather they simply describe how the average child grows.

The WHO Child Growth Standards go beyond the current references. They allow important growth measurements, such as body weight and length/height of infants and children to be assessed against a standard optimum value. There are charts for boys and for girls, and for infants to one year, and for children up to five years.

These measurements are important indicators of health and help determine whether a child or a population of children is healthy and growing well. For example, children who are short for their age (below the red line on the length/height chart) or underweight (below the red line on the weight chart) indicate that their health may be compromised - the further from the red lines, the more indicative of a health problem. In clinical practice, these measurements help with early diagnosis of illness and help monitor progress during treatment.



Importantly, for the first time there now exist standardized Body Mass Index - BMI - charts for infants to age five, which is particularly useful for monitoring the increasing epidemic of childhood obesity.

Additionally, the new Child Growth Standards also include *Windows of Achievement* describing the range and timeline for six key motor development milestones for children, such as sitting, standing and walking.

There are more than 30 Child Growth Standard charts in all. Most doctors, healthcare providers and parents will use only a few of these charts regularly (height/length, weight, BMI, for e.g.) but researchers and those working at the population level will use a broader range of charts for measurement and evaluation.

How are the new WHO Child Growth Standards different from existing growth charts?

The new WHO Child Growth Standards differ from any existing growth charts in a number of innovative ways:

For the first time they describe “how children *should* grow,” which is a prescriptive approach, not just descriptive. These charts show that all children across all regions can attain a similar standard of height and weight and development with correct feeding practices, good healthcare and a healthy environment. It is, then, a more proactive way of measuring and evaluating child growth, setting out normative conditions and evaluating children and populations against that standard.

As such, a key characteristic of the new standard is that it establishes breastfeeding as the biological “norm” and the breastfed infant as the standard for measuring healthy growth. Previous reference charts were based on the growth of a random mixture of breastfed and artificially-fed children.

Furthermore, the pooled sample from the six participating countries allows the development of a truly international standard, which is in contrast to the previous international reference based on children from a single country.

The development for the first time of standardized Body Mass Index (BMI) charts for infants to five years of age is a major innovation in assessing healthy weights of children.

Additionally, the development of *Windows of Achievement* for six key motor development milestones will provide a unique link between physical growth and motor development.

How were the new WHO Child Growth Standards developed?

The new WHO Child Growth Standards are the result of an intensive study initiated by WHO in 1997 to develop a new international standard for assessing the physical growth, nutritional status and motor development in children from birth to five years of age.

As a result, *The Multicentre Growth Reference Study (MGRS)* has been a community-based, multi-country project conducted in Brazil, Ghana, India, Norway, Oman, and the United States.

Crucially and by design of the research project, the 8,440 children included in the study were raised in environments that promote healthy growth such as breastfeeding, good diets and prevention and control of infections. In addition, their mothers followed health practices such as not smoking during and after pregnancy, and ensuring adequate healthcare for the children.

This project was lead by WHO and supported by several governments, non-governmental organizations and the United Nations University and other UN agencies. It was supported financially by the governments of Brazil, the Netherlands, Norway, Oman, USA, and the Bill & Melinda Gates Foundation.

When and how will the new WHO Child Growth Standards be available to countries and healthcare providers?

They will be available from the day of the launch (27 April, 2006) at the WHO website (www.who.int/childgrowth) for consultation, download and use. Ministries of Health, national pediatric associations and other key health decision makers will determine whether and when they will be officially adopted by their country.