Important Notice

Growth Charts UK-WHO is the first mobile app to use UK-specific growth chart data to help health professionals to calculate growth centiles for babies and children.

Growth centile calculations are often prone to error with paper charts, and this app aims to make this process quicker and more reliable.

Data used in this app has been provided by the Royal College of Paediatrics and Child Health (RCPCH), and is a combination of the Neonatal and Infant Close Monitoring Growth Chart (NICM), the UK WHO 0-4 years growth chart, and the UK Growth chart (2-18).

The underlying data is from a combination of the following sources:

- **British 1990** growth reference for height and weight. Published in 1995 and revised in 1996. The reference for head circumference was published in 1998.
 - Freeman JV, Cole TJ, Chinn S, Jones PRM, White E M, Preece MA. Cross sectional stature and weight reference curves for the UK, 1990. Archives of Disease in Childhood 1995;73:17-24.
 - Cole TJ, Freeman JV, Preece MA. British 1990 growth reference centiles for weight, height, body mass index and head circumference fitted by maximum penalized likelihood. Statistics in Medicine 1998;17:407-429.

UK-WHO Child Growth Standards

Data for the 2 weeks to 6 months corrected age and 6 months to 2 years corrected age charts. These charts are derived from the UK-WHO 0-4 years growth charts and use World Health Organization (WHO) data on healthy, non-deprived breastfed children of mothers who did not smoke.

- WHO Child Growth Standards <u>www.who.int/childgrowth/en</u>
- WHO Multicentre Growth Reference Study Group. WHO Child Growth Standards: Length/Height-for-age, Weight-for-age, Weight-for-length, Weight-for-height and Body Mass Index-for age. Methods and Development. 2006. ISBN 92 4 154693 X.
- WHO Multicentre Growth Reference Study Group. WHO Child Growth Standards: Head circumference-for-age, arm circumference-for-age, triceps skinfold-for-age and subscapular skinfold-for age. Methods and Development. 2007. ISBN 978 92 4 154718 5.

Methodology

This app uses methodology from the US CDC: "Percentile Data Files with LMS Values, Centers for Disease Control and Prevention", full information at the CDC website.

Testing and quality assurance

This app has been rigorously tested against the RCPCH Growth Charts. More information can be found at the Royal College of Paediatrics and Child Health at http://www.rcpch.ac.uk/growthcharts. If you do find an error, of course please let us know - click here to send an email.

About

Designed by Chris Kelly, a paediatrician at the Evelina Children's Hospital in London, after far too many hours trying to work out centile calculations from paper charts.

Thank you to Dilshad Marikar and Damian Rowland, who initially encouraged the conversion of the original website version at Paediatrics.co.uk into app form.

Legal Disclaimer

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