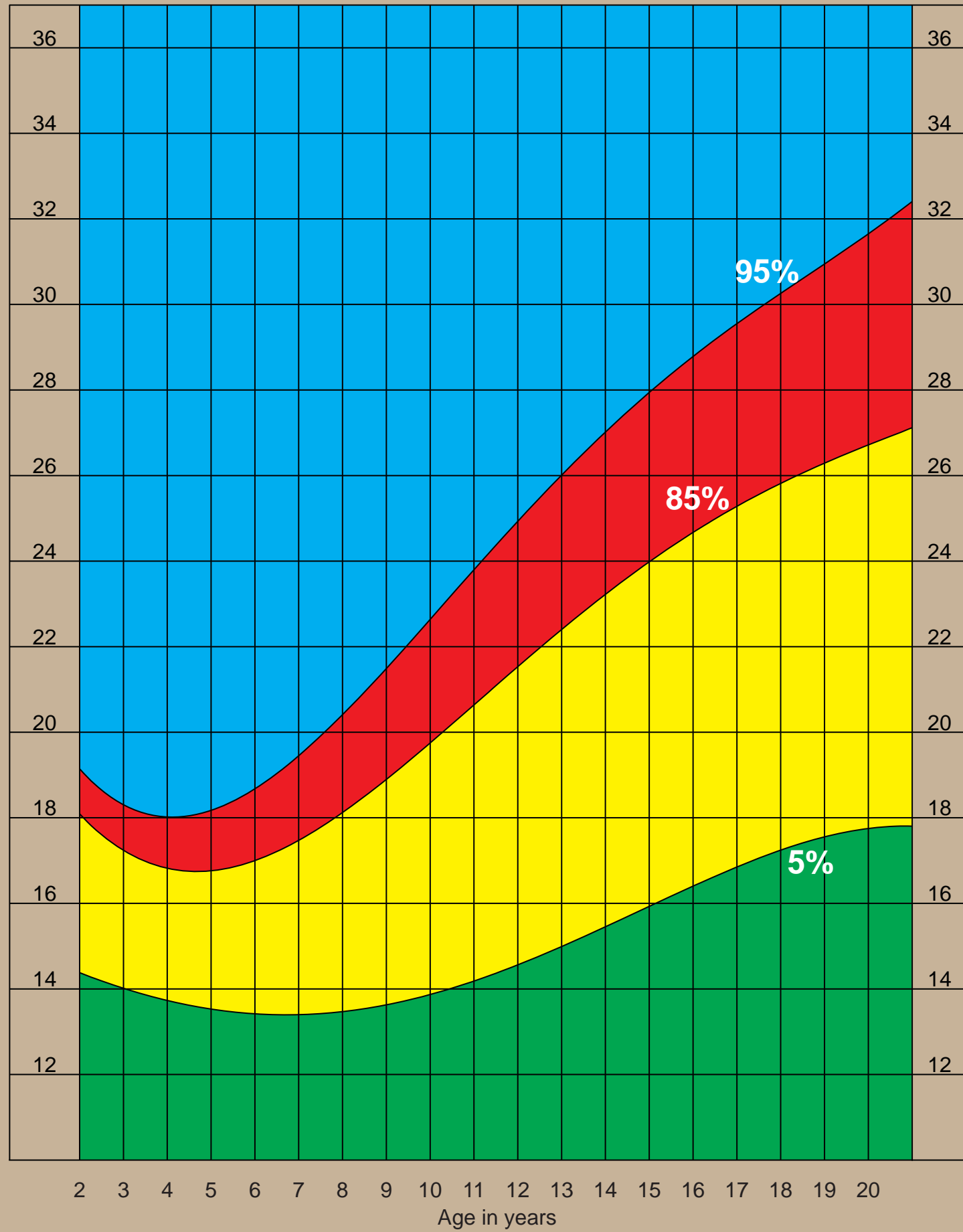
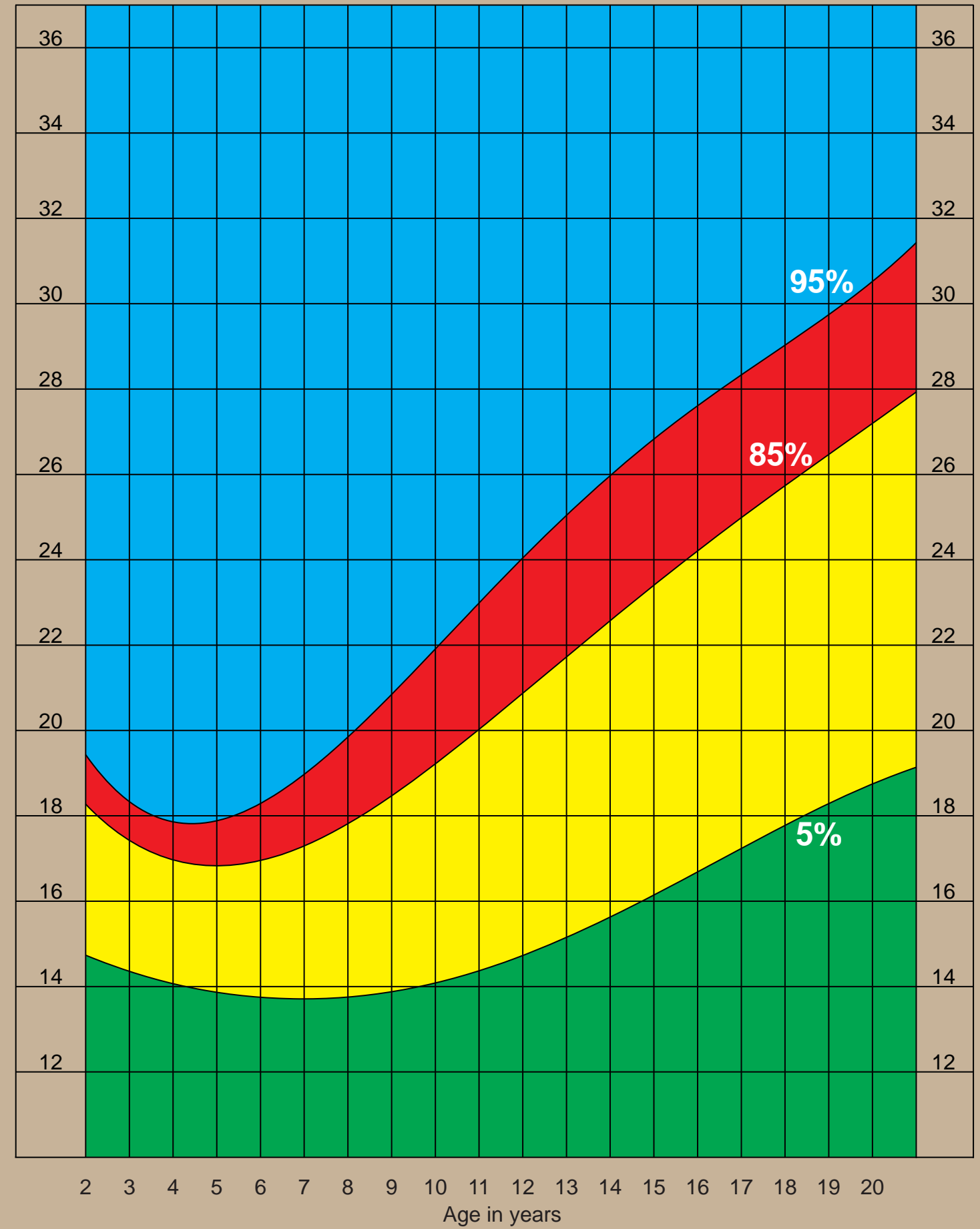


# BMI Graph for Girls



# BMI Graph for Boys



# BMI - Body Mass Index

## What is the BMI?

The body mass index (BMI) is a statistical measurement which compares a person's weight and height. Though it does not actually measure the percentage of body fat, it may be a useful tool to estimate a healthy body weight based on how tall a person is. Due to its ease of measurement and calculation, it is the most widely used diagnostic tool to identify weight problems within a population, usually whether individuals are underweight, overweight or obese. Body mass index is defined as the individual's body weight divided by the square of his or her height. The formulae universally used in medicine produce a unit of measure of kg/m<sup>2</sup>.

## BMI for Children

BMI is used differently for children. It is calculated the same way as for adults, but then compared to typical values for other children of the same age - see illustrations for girls and boys on the other side of this sheet. A BMI that is less than the 5<sup>th</sup> percentile is considered underweight and above the 95<sup>th</sup> percentile is considered obese. Children with a BMI between the 85<sup>th</sup> and 95<sup>th</sup> percentile are considered to be overweight.

## How to calculate the BMI?

$$\text{BMI} = \frac{\text{weight in kg}}{\text{height}^2 \text{ in m}^2}$$

$$\text{BMI} = \frac{\text{weight in lb} \times 703}{\text{height}^2 \text{ in in}^2}$$

$$\text{BMI} = \frac{\text{weight in lb} \times 4.88}{\text{height}^2 \text{ in ft}^2}$$

## Example

A person whose weight is 1.60 m (or 63 inch or 5.25 feet) tall and weights 50 kilogram (or 110 pounds) has a BMI of 19.5.

Calculation with different measurement units:

$$\text{BMI} = \frac{50 \text{ kg}}{1.60 \text{ m} \times 1.60 \text{ m}} = 19.5$$

$$\text{BMI} = \frac{110 \text{ lb} \times 703}{63 \text{ in} \times 63 \text{ in}} = 19.5$$

$$\text{BMI} = \frac{110 \text{ lb} \times 4.88}{5.25 \text{ ft} \times 5.25 \text{ ft}} = 19.5$$

## Acknowledgment

Text and graphics on this sheet have been adapted from [http://en.wikipedia.org/wiki/Body\\_mass\\_index](http://en.wikipedia.org/wiki/Body_mass_index)