
Subject: Re: Child Anthropometric data

Posted by [Reduced-For\(u\)m](#) on Fri, 13 Jun 2014 05:26:44 GMT

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The formulae and descriptions can be found here:

http://userforum.dhsprogram.com/index.php?t=rview&goto=2396#page_top

The "standard deviations (or z-score)" refers to how many standard deviations from the median of the reference group (defined in the link above) the height of the person is, conditional on age and gender. So the median, well nourished 41 month old boy (or 23 month old girl) would have a value of 0, and someone below the median would have a negative score. Most children in developing countries have a value below 0.

The formula is: $[(\text{respondent height}) - (\text{median height in the reference group})] / (\text{standard deviation of height in the reference group for that age and gender})$

The percentile value is the percentile of the reference group distribution of heights that the person falls into. So a person with a z-score of -2 would be in the 2nd percentile or so, and a z-score of 0 would be in the 50th percentile.

I believe the "percent of ref. median" uses height in cm and the formula would be something like: $[(\text{respondent height}) / (\text{median height of the reference group})]$. I'm not 100% sure about this one.

The standards I provided in the other post are where you get the medians and standard deviations of the reference group (for each age and gender combination). Before you work with any standardized anthropometric measure, you should be sure you fully understand what the measure is telling you. The links I provided should help with that.
