

The BMI calculation:

(weight in pounds x 704.5) / (height in inches x height in inches)

For example, for a person who weighs 150 pounds and is 6 foot tall (72 inches):

$(150 \times 704.5) / (72 \times 72) = 105675 / 5184 = 20.4$

BMI alerts for adults (age 21 and older) are:

under 19, underweight

19 to 24.9 is healthy weight

25 to 29.9 is overweight

30 and over is obese

The BMI calculation for children is the same, but the alerts for children (ages 2 to 20) are different--they are set up as percentiles compared to a bell curve and separated by sex (plotted on the attached charts). I'm not sure how you can program this. I've attached the graphs that plot the percentile bell curves. Let me know what you think. We could defer this functionality to a later phase until we can figure it out.