FITNESSGRAM®
The Cooper Institute®

BODY COMPOSITION

Body composition describes what part of total body weight is fat, and what part is fat free. Fat-free body weight includes bones and muscles. Some body fat is needed for overall good health but too much can lead to health problems. Body composition is one of the components used by FITNESSGRAM to assess health-related fitness. Although an assessment of percent body fat utilizing a bioelectric impendence device or skin-fold assessment would be ideal, practical application in schools is very difficult. Therefore, FITNESSGRAM also provides standards for a widely used alternative indicator of body composition known as Body Mass Index (BMI). The BMI is based on weight relative to height and essentially indicates if the weight is appropriate for the height. BMI cannot measure fat directly, but it can help assess health risks related to a body weight that is too great or too little for height. FITNESSGRAM BMI standards for youth take into account age and gender.

FITNESSGRAM believes it is important to educate youth and parents about appropriate levels of body composition. Overweight youth are at a higher risk for becoming overweight adults. Therefore, by maintaining a healthy weight a child can potentially reduce their future risk of health problems; including high blood pressure, high cholesterol, type 2 diabetes and heart disease. Very low levels of body fat may also indicate future health risks. Remember, some fat is necessary for good health. Body composition can be influenced by many factors, including age, gender, and heredity.

In **FITNESSGRAM8 & FITNESSGRAM9** software, the BMI standards were set to correspond with the established, health-related body fat standards. However, recent analyses determined that the widely used CDC growth chart values had similar clinical utility as the FITNESSGRAM BMI standards for detecting risk of metabolic syndrome. Based on these findings, the FITNESSGRAM Scientific Advisory Board decided to modify the FITNESSGRAM standards so that they coincide with the CDC cut points. The alignment of BMI standards will enable youth to receive consistent information from FITNESSGRAM and the CDC/Growth Charts, which are commonly used by pediatricians. The FITNESSGRAM Healthy Fitness Zone® standards now coincide with the CDC categorization of "normal weight". The two associated Needs Improvement zones (NI – Some Risk and NI – Health Risk) in FITNESSGRAM also match the respective CDC values used to categorize youth as "overweight" and "obese". This change will be reflected only in the **FITNESSGRAM10 software**.