



NUTRITION NEWS!

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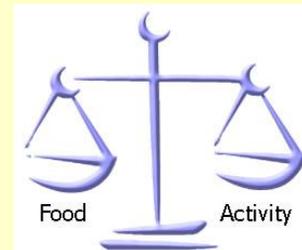
Elementary Nutrition Education Newsletter

Energy Balance

Human beings need energy to survive. To breathe, move, pump blood, and think, people get this energy from calories in foods and beverages. When a food or beverage contains 100 calories, this is a measure of how much energy our body gets from eating or drinking it or **Energy In**.

How many calories we need each day depends on many things: our gender, height, weight, age, and activity level among them. The average school age child needs between 1,600 and 2,500 calories each day. That energy is then used or burned by the activities we do each day and the basic body processes we need to survive. These include sleeping, thinking, pumping blood or **Energy Out**.

Maintaining balance between our **Energy In** and **Energy Out** contributes to an active, healthy lifestyle in many ways. Adults often focus on weight gain or loss. (If we consume more calories than we burn, we gain weight. If we burn more calories than we consume, we lose weight.) For children, however, the focus should be on having enough energy to do all the things they want to do and to grow up strong and healthy; to practice balance,



variety and moderation in their diet; and to be physically active for 60 minutes each day.

Our **Energy In** and our **Energy Out** don't have to balance exactly every day, but our goal should be to maintain balance over time. Energy balance in children happens when the amount of **Energy In** and **Energy Out** supports normal growth and development without promoting excess weight gain. In other words, children need to gain some weight as part of their normal growth and development, so an exact 1:1 ratio of **Energy In** and **Energy Out** is not the goal. What is important for children to understand is the importance of balancing their daily calorie requirements with regular physical activity.

Estimated calorie requirements by age and activity level can be found at <http://www.nhlbi.nih.gov/health/public/heart/obesity/wecan/downloads/calreqtips.pdf>

http://energybalance101.discoveryeducation.com/teachers/lesson_pdf/EB101-K-2_0.0.pdf

Using Pedometers

Basic or Fancy?

All pedometers are not created equal. They range from basic and inexpensive to jam-packed with bells and whistles. A bare-bones unit might simply measure steps, while a fancy one might measure steps, calories, miles, and heart rate. Just know that basic units can be as complicated to set up as a fancy one because they're not as intuitive as the sophisticated versions.

Whatever the model, pedometers all work in a similar fashion by counting the electronic pulses each time you take a step and multiplying those by your preprogrammed stride or step length. Use the instructions that came with your pedometer because some refer to "stride" and "step" interchangeably, while others distinguish "stride" as the distance between one heel striking once and then again which would technically be two steps.



How to Measure Your Stride

The key to getting the best results with your pedometer is an accurate step (or stride) length. There are several ways to measure this, but one of the easiest is to make a mark behind your right heel, then walk 10 steps and mark the spot where your right heel ends. Measure that distance and divide by 10. The catch here is that you're starting from a dead stop, which isn't your normal pace. An alternative is to measure a specific distance such as 20 feet on the sidewalk. Start walking before your measured area, so you're up to your typical walking speed by the time you start counting steps. From your "start" line, measure how many steps it takes you to get to the "finish" line. Divide 20 feet by the number of steps it took you to get there.



Where to Wear It

Now it's just a matter of attaching your pedometer to your clothes. Make sure you position your pedometer on your waistband, in line with your right knee, facing straight up and down, not tilted to the side. It measures the kick of your leg and your hip motion.

<http://www.fitnessmagazine.com/workout/cardio/walking/how-to-use-a-pedometer-to-get-10000-steps/>