

Keeping the Balance

1. How many calories would you use watching television from 4:00 to 6:30 p.m.?

Answer:

Step 1: resting or sitting = 40 calories per 30 minutes

Step 2: 4:00 to 6:30 p.m. = 2.5 hours or five 30-minute periods

Step 3: Five 30-minute periods \times 40 calories per 30 minutes = 200 calories

2. If you rode your bike for an hour compared to watching TV for an hour . . .

How many more calories would you use in that hour? Answer: Step 1: 186 calories
– 80 calories = 106 calories

How many extra calories would you use over a week if you substituted an hour of bike riding for an hour of TV watching each day? Answer: Step 1: 106 calories per day \times 7 days = 742 calories

How about for a month (30 days)? Answer: Step 1: 106 calories per day \times 30 days = 3,180 calories

3. Jason spends the day in school and then takes the bus home. He fixes himself a snack (usually chips and a soda) and then does his homework. After dinner, Jason is allowed 1 1/2 hours of television or video games. He sometimes reads a book or calls and text messages his friends. Jason is a little overweight. What can he do to improve his weight and overall health?

Possible answers:

Jason could walk or ride his bike to school.

Jason could do something active in the evening.

Jason could have fruit and a glass of water instead of chips and a soda.

4. How many calories would you use if you ran laps around the playground for 10 minutes and then rode your bicycle home for 10 minutes?

Answer:

Step 1: (183 calories per half hour of running) \div (three 10-minute periods in a half hour) = 61 calories for each 10-minute period of running

Step 2: (93 calories per half hour of bike riding) \div (three 10-minute periods in a half hour) = 31 calories for each 10-minute period of bike riding

Step 3: 61 calories for 10 minutes of running + 31 calories for 10 minutes of riding bike = 92 calories

5. Extra credit: Assume that you weigh 100 pounds (45 kg). How many calories would you use walking 20 minutes to your friend's house and 20 minutes back home each day?

Answer:

Step 1: Walking 20 minutes to friend's house + 20 minutes walking home = 40 minutes of walking, or four 10-minute periods

Step 2: (81 calories per half hour of walking) \div (three 10-minute periods in a half hour) = 27 calories for every 10 minutes of walking

Step 3: (27 calories for every 10 minutes of walking) \times (four 10-minute periods of walking) = 108 calories