

How can you convert the RDA into the total grams of protein you need per day? See the **You Do the Math** box on this page to calculate Theo's protein requirements, and then calculate your own.

You Do the Math

Calculating Your Protein Needs

Theo wants to know how much protein he needs each day. During the off-season, he works out three times a week at a gym and practices basketball with friends every Friday night. He is not a vegetarian. Although Theo exercises regularly, he would not be considered an endurance athlete or a strength athlete during the off-season. At this level of physical activity, Theo's requirement for protein probably ranges from the RDA of 0.8 up to 1.0 g per kg body weight per day. To calculate the total number of grams of protein Theo should eat each day:

1. Convert Theo's weight from pounds to kilograms. Theo presently weighs 200 pounds. To convert this value to kilograms, divide by 2.2:


$$200 \text{ pounds} \div 2.2 \text{ pounds/kg} = 91 \text{ kg}$$


2. Multiply Theo's weight in kilograms by his RDA for protein, like so:

$$91 \text{ kg} \times 0.8 \text{ g/kg} = 72.8 \text{ grams of protein per day}$$

$$91 \text{ kg} \times 1.0 \text{ g/kg} = 91 \text{ grams of protein per day}$$

What happens during basketball season, when Theo practices, lifts weights, and has games 5 or 6 days a week? This will probably raise his protein needs to approximately 1.2 to 1.7 g per kg body weight per day. How much more protein should he eat? See below:

$$91 \text{ kg} \times 1.2 \text{ g/kg} = 109.2 \text{ grams of protein per day}$$

$$91 \text{ kg} \times 1.7 \text{ g/kg} = 154.7 \text{ grams of protein per day}$$

Now calculate your own recommended protein intake based on your activity level.

Answers will vary depending upon body weight and individual activity levels.