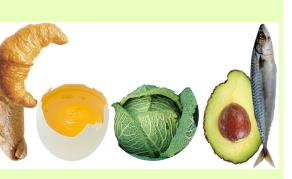


D-FEND FAST FACT



BASICS OF NUTRITION What is nutrition?

THE STUDY OF FOODS, THEIR **NUTRIENTS** AND OTHER CHEMICAL COMPONENTS, THEIR ACTIONS AND INTERACTIONS IN THE BODY, AND THEIR INFLUENCE ON **HEALTH** AND **DISEASE**.



MACRONUTRIENTS

Macronutrients are responsible for providing the energy (or calories) that the body uses to fuel activity. Examples of macronutrients include:

- Carbohydrates
- Proteins
- Fats

CALORIC VALUE

Each macronutrient has a different caloric value. This is defined as the amount of calories (kcal) in one (1) gram of that nutrient. The caloric value of each macronutrient is:

Carbohydrate = 4 kcal/gram



- Protein = 4 kcal/gram
- Fat = 9 kcal/gram

EXAMPLE OF HOW TO CALCULATE TOTAL CALORIES FROM MACRONUTRIENTS

NUTRITION FACTS:

CALCULATION:

Carbohydrates: 45 grams — 45 grams x 4 kcal = 180

Protein: 25 grams → 25 grams x 4 kcal = 100

Fat: 28 grams _____ 28 grams x 9 kcal = 252

TOTAL CALORIES = 532

HOW TO CALCULATE PERCENTAGE OF TOTAL ENERGY **INTAKE FROM MACRONUTRIENTS**

The percentage (%) of your total energy intake from carbohydrate, fat, and protein can then be determined by dividing the number of calories from each energy nutrient by the total calories, and then multiplying your answer by 100 to get the percentage.

NUTRITION FACTS:

CALCULATION:

Carbohydrates: 45 grams (45 g x 4 kcal) / 532 = 0.338 x 100= 34% Protein: 25 grams _____ (25 gx 4 kcal) / 532= 0.187 x 100= 19% Fat: 28 grams — (28 g x 9 kcal) / 532 = 0.473 x 100 = 47%

> Project D-FEND: Diet, Food, Exercise, and Nutrition during social distancing. A collaboration between the University of Arkansas System Division of Agriculture's Center for Human Nutrition and the University of Arkansas Exercise is Medicine Program. The University of Arkansas System Division of Agriculture is an equal opportunity/affirmative action institution.