

# How to Calculate The Percent of Calories from a Calorie Source

**Question:** What percent of calories came from the fat in a beverage containing the following?:

- 10 grams of carbohydrate
- 5 grams of fat
- 2 grams of protein
- 5 grams of alcohol

## Basic Information:

1 gram of carbohydrate	=	4 calories of energy to a cell
1 gram of fat	=	9 calories of energy to a cell
1 gram of protein	=	4 calories of energy to a cell
1 gram of alcohol	=	7 calories of energy to a cell



# How to Calculate The Percent of Calories from a Calorie Source -- Step 1

Calculate the total number of calories in the beverage from all sources, and the total calories in the beverage.

## Beverage Information:

10 grams of carbohydrate	x	4 calories per gram	=	40 calories
5 grams of fat	x	9 calories per gram	=	45 calories
2 grams of protein	x	4 calories per gram	=	8 calories
5 grams of alcohol	x	7 calories per gram	=	35 calories
<b>Total calories in beverage =</b>				<b>128 calories</b>

## How to Calculate The Percent of Calories from a Calorie Source -- Step 2

Use the formula to obtain the percent of calories from fat.

### Basic Formula To Calculate A Percent:

$$( \text{part} \div \text{whole} ) \times 100 = \%$$

'Part' is the calories from source, and 'whole' is the total calories.

### Formula To Calculate the Percent of Calories From A Calorie Source:

$$( \text{calories from source} \div \text{total calories} ) \times 100 = \%$$

## How to Calculate The Percent of Calories from a Calorie Source -- Step 3

### Beverage Information:

10 grams of carbohydrate	x 4 calories per gram	= 40 calories
5 grams of fat	x 9 calories per gram	= 45 calories
2 grams of protein	x 4 calories per gram	= 8 calories
5 grams of alcohol	x 7 calories per gram	= 35 calories
<b>Total calories in beverage =</b>		<b>128 calories</b>

Fat 'calories from source' equals 45.

'Total calories' equals 128.

Divide the calories from source by the total calories first since those figures are within brackets.

### Formula To Calculate the Percent of Calories From A Calories Source:

$$( 45 \div 128 ) \times 100 = \%$$

## How to Calculate The Percent of Calories from a Calorie Source -- Step 4

Multiply the remaining two numbers.

Formula To Calculate the Percent of Calories From A Calories Source:

$$.351563 \times 100 = \%$$

## How to Calculate The Percent of Calories from a Calorie Source -- Step 5

The answer is 35.2 %, and it can be rounded to 35 %.

Formula To Calculate the Percent of Calories From A Calories Source:

$$.351563 \times 100 = 35.2\%$$



**Answer:** The percent of calories which come from the fat in the beverage is 35.2 % or 35 %.