CHALLENGE #1: COUNTING CALORIES

HOW TO CALCULATE PERCENTAGE OF CALORIES FROM FAT, CARBOHYDRATE & PROTEIN[1]

A calculation of the percentage of calories that come from fat, carbohydrates and protein requires you to know the specific amounts of each of these calorie sources. This information is available in the nutritional label, which is generally required for most types of food. The percentage of calories that come from fat, carbohydrates and protein is important information if you're on a diet that limits you to specific percentages of each of these sources of calories.

STEP 1

Obtain the amount of fat, carbohydrates and protein in a serving of the food. The nutritional label should provide these values in units of grams.

STEP 2

Derive the number of calories in the food that come from fat. Each gram of fat provides about 9 calories, so the number of calories that come from fat is 9 x F, where F is the number of grams of fat. For example, food that has 11 g of fat. The food, therefore, provides 9 x 11 = 99 calories from fat.

STEP 3

Compute the number of calories that come from carbohydrates. Each gram of carbohydrates provides about 4 calories, so the number of calories that comes from carbohydrates is 4 x C, where C is the number of grams of carbohydrates. For example, food that has 7 g of carbohydrate, provides 4 x 7 = 28 calories from carbohydrates.

STEP 4

Compute the number of calories that come from protein. Each gram of protein provides about 4 calories, so the number of calories that come from protein is 4 x P, where P is the number of grams of protein. Assume the food has 8 g of protein. The food, therefore, provides 4 x 8 = 32 calories from protein.

STEP 5

Find the total number of calories in the food. This will be the sum of the calories from fat, carbohydrates and protein. A food that has 99 calories from fat, 28 calories from carbohydrates and 32 calories from protein will have a total of 99 + 28 + 32 = 159 calories.

STEP 6

Calculate the percentage of calories that come from fat, carbohydrates and proteins. This example has 99 calories from fats and 159 total calories, so 99 / 159 x 100 = 62.3 percent of the calories in the food come from fat. There are 28 calories from carbohydrates and 159 total calories, so 28 / 159 x 100 = 17.6 percent of the calories in the food come from carbohydrates. There are 32 calories from protein and 159 total calories, so 32 / 159 x 100 = 20.1 percent of the calories in the food come from fat.
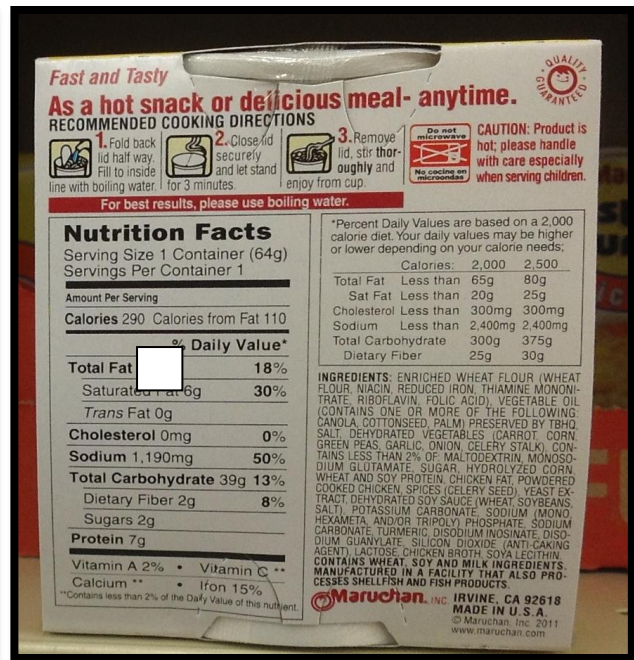
Take the Challenge #1 on Page 2...

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[1] information provided by livestrong.com (http://www.livestrong.com/article/81042-calculate-percentage-calories-fat-carbohydrate)

Nutrition Facts

Serv Size 1 oz (28g/ 1/4 inch slice)
Servings 32

Amount/Serving		% DV*	Amount/Serving		% DV*
Total Fat 5g		8%	Total Carb 3g		1%
Sat Fat 3.5g		18%	Dietary Fiber 0g		0%
Trans Fat 0g			Sugars 2g		
Cholest 15mg		5%	Protein 4g		
Sodium 410mg		17%			

Vitamin A 6% • Vitamin C 0% • Calcium 20% • Iron 0%

INGREDIENTS: NONFAT MILK AND MILKFAT, WHEY, MILK PROTEIN CONCENTRATE, MILK, SODIUM PHOSPHATE, MALTODEXTRIN, CON LESS THAN 2% OF SALT, WHEY PROTEIN CONCENTRATE, CALCIUM PHOSPHATE, LACTIC ACID, SORBIC ACID AS A PRESERV SODIUM ALGINATE, CITRIC ACID, SODIUM CITRATE, CHEESE CULTURE, ENZYMES, APOCAROTENAL AND ANNATTO (COLOR)

CONTAINS: MILK.

KRAFT FOODS GROUP, INC., NORTHFIELD, IL 60093-2753 USA

Kraft foods

AFTER OPENING, REFRIGERATE UP TO 8 WEEKS
DO NOT FREEZE
VELVEETA CONTAINS 5g FAT PER SERVING; CHEDDAR CHEESE CONTAINS 9g FAT PER SERVING

visit us at: velveeta.co
1-800-634-1984
please have package ava
se habla español

Fast and Tasty
As a hot snack or delicious meal- anytime.
RECOMMENDED COOKING DIRECTIONS

1. Fold back lid half way. Fill to inside line with boiling water.
2. Close lid securely and let stand for 3 minutes.
3. Remove lid, stir thoroughly and enjoy from cup.

CAUTION: Product is hot; please handle with care especially when serving children.

For best results, please use boiling water.

Nutrition Facts

Serving Size 1 Container (64g)
Servings Per Container 1

Amount Per Serving

Calories 290 Calories from Fat 110

	% Daily Value*
Total Fat	18%
Saturated Fat 6g	30%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 1,190mg	50%
Total Carbohydrate 39g	13%
Dietary Fiber 2g	8%
Sugars 2g	
Protein 7g	

Vitamin A 2% • Vitamin C **
Calcium ** • Iron 15%
**Contains less than 2% of the Daily Value of this nutrient.

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs;

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

INGREDIENTS: ENRICHED WHEAT FLOUR (WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMINE MONONITRATE, RIBOFLAVIN, FOLIC ACID), VEGETABLE OIL (CONTAINS ONE OR MORE OF THE FOLLOWING: CANOLA, COTTONSEED, PALM) PRESERVED BY TBHQ, SALT, DEHYDRATED VEGETABLES (CARROT, CORN, GREEN PEAS, GARLIC, ONION, CELERY STALK). CONTAINS LESS THAN 2% OF: MALTODEXTRIN, MONOSODIUM GLUTAMATE, SUGAR, HYDROLYZED CORN, WHEAT AND SOY PROTEIN, CHICKEN FAT, POWDERED COOKED CHICKEN, SPICES (CELERY SEED), YEAST EXTRACT, DEHYDRATED SOY SAUCE (WHEAT, SOYBEANS, SALT), POTASSIUM CARBONATE, SODIUM (MONO, HEXAMETA, AND/OR TRIPOLY) PHOSPHATE, SODIUM CARBONATE, TURMERIC, DISODIUM INOSINATE, DISODIUM GUANYLATE, SILICON DIOXIDE (ANTI-CAKING AGENT), LACTOSE, CHICKEN BROTH, SOYA LECITHIN. CONTAINS WHEAT, SOY AND MILK INGREDIENTS. MANUFACTURED IN A FACILITY THAT ALSO PROCESSES SHELLFISH AND FISH PRODUCTS.

Maruchan, INC. IRVINE, CA 92618
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Each serving of Velveeta has 5 grams of fat, 3 grams of carbs and 4 grams of protein.

How many calories are there in each serving?

This cup of ramen noodles has 7 grams of protein, 290 calories and 39 grams of carbs.

How many grams of fat does it have in each serving?

Nutrition Facts

Serving Size 21 Biscuits (54g)
Servings Per Container About 9

Amount Per Serving	Cereal	with ½ cup skim milk
Calories	190	230
Calories from Fat	10	10

	% Daily Value**	
Total Fat 1g*	2%	2%
Saturated Fat 0g	0%	0%
Trans Fat 0g		
Polyunsaturated Fat 0.5g		
Monounsaturated Fat 0g		
Cholesterol 0mg	0%	0%
Sodium 0mg	0%	3%
Potassium 200mg	6%	11%
Total Carbohydrate 46g	15%	17%
Dietary Fiber 6g	23%	23%
Soluble Fiber less than 1g		
Insoluble Fiber 5g		
Sugars		
Protein		
Vitamin A	0%	4%
Vitamin C	0%	0%

A single serving of Frosted Mini Wheats has 190 calories, 1 gram of fat and 46 grams of carbs.

How many grams of protein does each serving have?

How many grams of protein are in the entire box?

(Instructions for Challenges 2-4 can be found on the Weebly site [aaronhollingshead.weebly.com])

CHALLENGE #2: DO THE DEW COMPARISON

PRODUCT	PRICE PER OUNCE
1.	
2.	
3.	
4.	
5.	

CHALLENGE #3: TO BAKE OR TO BUY (PART 1)

	Calories per Serving	Fat per Serving	Cost per Serving
Snack Pack Pudding			
Homemade Pudding			

CHALLENGE #4: TO BAKE OR TO BUY (PART 2)

Ingredients	Calories in the Recipe	Fat in the Recipe	Cost in the Recipe
Sugar			
Shortening			
Brown Sugar			
Eggs			
Vanilla			
Flour			
Baking Soda			
Salt			
Chocolate Chips			
Total			

	Total Calories	Total Fat	Total Cost
Homemade Cookies			
Pre-Made Cookie Dough			
Pre-Made Cookies			