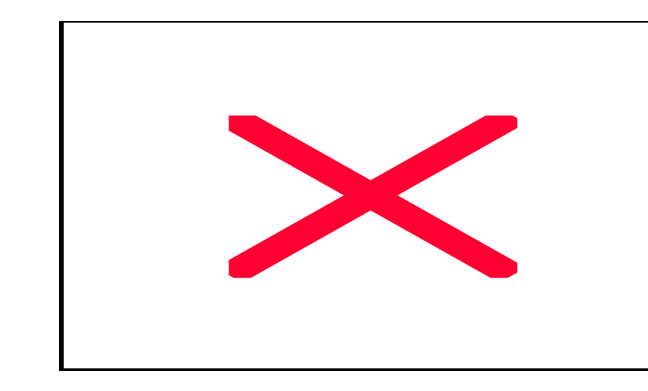


Protein Sources of Vegetarians

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Abstract

Protein is contained in most food. People in the United States have come to identify protein with specific terms and lifestyles, such as vegetarian, to describe people's adherence to certain foods. People who identify with the term vegetarian often eat meat, and get their recommended 55 grams of protein from a variety of foods. Vegetarians eat more grains, legumes, cereals, pasta, rice, and vegetables than non-vegetarians. It is not hard get the recommended amount of protein from plant-based foods. For example, in 1 cup of soy nuts there are 33g of protein, in one cup of lentils there are 18g and in 1 cup of tofu there are 20g. An adult can be a vegetarian, consume protein from many different plant-based sources, and easily meet the recommended daily value of protein, which is about 55g.

Introduction:

There are many health benefits attributed to consuming plant-based protein. Consuming protein from animal-based sources, such as meat, may contribute to certain diseases and cancers (1). Roughly 2.5% of the population aged 18 or older in the United States identifies with the term vegetarian. A survey of an urban population of people aged 11-18 found that 6% of respondents self-identified as vegetarian. But to what dietary patterns does this term really refer? Most people believe that the word vegetarian is used to describe the amounts of animal protein that a person consumes. However, only one third of self-identified vegetarians do not eat meat of any kind. Two thirds reported eating small amounts of animal meat on a regular basis, such as fish, poultry, and even red meat. Vegetarianism refers to differences in the amounts of other foods consumed as well. Vegetarians eat more grains, legumes, cereals, pasta, rice, and vegetables than non-vegetarians, foods that have many long-lasting health benefits, a diet which is lower in total fat, saturated fat, and cholesterol while higher in fiber than non-vegetarian diets. They derive dietary protein from a variety of plant-based foods.

Methodology:

Information was gathered from peer-reviewed journals online. Other internet sources were used to gather nutritional information about specific foods.

Results

According to the Vegetarian Resource Group (2), "Vegetarians do not eat meat, fish, [or] poultry." However, the study *What do vegetarians in the United States eat?* (3) found that this was not the case. Only 1/3rd of self identified vegetarians reported eating no meat on recall days, while 2/3rds reported eating meat such as fish, poultry and even red meat. Roughly 2.5% of the statistical population aged 18 or older self-identifies with the term vegetarian. A survey of an urban population of people aged 11-18 found that 6% of respondents self-identified as a vegetarian. (1).

For the study *What do vegetarians in the United States eat?*, vegetarian status was applied to a person if they consumed less than 10 g of animal flesh protein a day. This category was further subdivided into vegetarians who ate meat on recall days, and vegetarians who ate no meat on recall days. It was found that vegetarians in the US also eat less protein, roughly 12% of their daily caloric intake, compared to 15%-16% for non-vegetarians.

Graph 1:

Graph 2:

Graph 3:

Graph 1: Vegetarians eat more grains, legumes, cereal, pasta, rice, and vegetables such as dark green vegetables, deep yellow vegetables, fruit and dried fruit, and non-meat eating vegetarians drink nearly twice the amount of red wine than the other groups. Vegetarians who reported meat on recall days consumed less red meat and poultry; however, the consumption of fish was nearly twice as high (4).

Chart 1: Specific foods showing calories and protein in a serving size, the calories and protein in a cupful, and the % of the daily value of protein per serving size. These numbers give an idea of the amount of food to eat per day to get enough protein from plant-based sources and maintain a healthy protein intake.

Food	serving size	calories/ serving size	grams of protein/ serving size	calories per cup	grams of protein per cup	% of daily value of protein/ serving size
1% fat cottage cheese	1 cup	163	28	163	28	51%
skim milk	1 cup	86	8.4	86	8.4	15%
whole milk	1 cup	150	11	150	11	20%
soy milk	1 cup	120	9.2	120	9.2	17%
oranges (sliced)	1 cup	85	1.7	85	1.7	3%
bananas (sliced)	1 cup	134	1.6	134	1.6	3%
black beans	1 cup	227	15.2	227	15.2	28%
lentils	1 cup	231	18	231	18	33%
flax seed	1 cup	763	30.2	763	30.2	55%
soy nuts	1/3 cup	140	11	420	33	20%
whole wheat bread	1 slice	100	4.2			7%
spaghetti	1 cup	197	6.7	197	6.7	12%
brown rice	1 cup	218	4.5	218	4.5	8%
Mushrooms	1 cup	15	2.2	15	2.2	4%
sweet red peppers (chopped)	1 cup	39	1.5	39	1.5	2%
carrots	1 cup (chopped)	52	1.2	52	1.2	2%
baked potato	1/2 cup	57	1.2	114	3	2%
squash (chopped)	1 cup	20	1.5	20	1.5	3%
tofu	1/2 cup	100	10	200	20	18%
sweet potato	1 cup	101	2	101	2	4%
almonds (whole)	1/4 cup	205	7.5	821	30	14%
sun flower seeds (shelled)	1/4 cup	205	8.25	821	33	15%
pumpkin seeds	1/4 cup	187	8.5	747	34	15%
peanut butter	2 tbls.	190	8	1545	64	15%
raw romaine lettuce (shredded)	2 cups	20	1.2	10	0.6	2%
carrots (chopped)	1 cup	52	1.2	52	1.2	2%
spinach	2 cups	14	2	7	1	4%

Graph 2 and 3: Vegetarians and people who do not meat consume different amounts of important vitamins and minerals than meat eaters. For example vegetarians and non-meat eaters have more calcium, magnesium, and vitamin C in their diets, as well as more dietary fiber and less cholesterol.

Conclusion

Although often exclusively associated with meat, protein is found in most foods. People who self-identify with the term vegetarian get their proteins from a variety of sources, however, their overall diets differ from meat-eating people in more than just protein consumption. Their intake of certain minerals and vitamins also varies. There are no strict rules to being a vegetarian. People who self identify with the term, even if they continue to eat meat, tend to eat healthier diets. It is easy to get the daily recommended amounts of protein from a wide variety of plant-based foods. Chart 1 shows the specific amounts of foods to eat in order to get the recommended daily 55 grams of protein

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