

## Preventive Medicine & Nutrition

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### Vegetarian Starter Kit

## Protein Myth

In the past, some people believed one could never get too much protein. In the early 1900s, Americans were told to eat well over 100 grams of protein a day. And as recently as the 1950s, health-conscious people were encouraged to boost their protein intake. Today, some fad diet books encourage high-protein intake for weight loss, though Americans tend to take in twice the amount of protein they need anyway. And while individuals following such a diet have had short-term success in losing weight, they are often unaware of the health risks associated with a high-protein diet. Excess protein has been linked with osteoporosis, kidney disease, calcium stones in the urinary tract, and some cancers.

### The Building Blocks of Life

People build the proteins of their bodies from amino acids, which, in turn, come from the proteins they eat. A varied diet of beans, lentils, grains, and vegetables contains all of the essential amino acids. It was once thought that various plant foods had to be eaten together to get their full protein value, but current research suggests this is not the case. Many nutrition authorities, including the American Dietetic Association, believe protein needs can easily be met by consuming a wide variety of amino acid sources over an entire day. Also, eating enough calories is essential for the best use of protein by the body.<sup>1</sup>

### The Trouble with Too Much Protein

The average American diet contains meat and dairy products. As a result, it is too high in protein. This can lead to a number of serious health problems:

***Kidney Disease:*** When people eat too much protein, they take in more nitrogen than they need. This places a strain on the kidneys which must expel the extra nitrogen through urine. People with kidney disease are encouraged to eat low-protein diets.<sup>2</sup> Such a diet reduces the excess levels of nitrogen, and can help prevent kidney disease, too.

***Cancer:*** Although fat is the dietary substance most often singled out

for increasing one's risk for cancer, protein also plays a role. Populations that eat meat regularly are at an increased risk for colon cancer,<sup>3</sup> and researchers believe that the fat, protein, natural carcinogens, and the absence of fiber in meat all play roles. In 1982, the National Research Council noted a link between cancer and protein.<sup>4</sup>

***Osteoporosis and Kidney Stones:*** Diets that are rich in protein, especially animal protein,<sup>5</sup> are known to cause people to excrete more calcium than normal through their urine<sup>6</sup> and increase the risk of osteoporosis. Countries with lower-protein diets have lower rates of osteoporosis and hip fractures.<sup>7</sup>

Increased calcium excretion increases risk for kidney stones. Researchers in England found that by adding about 5 ounces of fish (about 34 grams of protein) to a normal diet, the risk of forming urinary tract stones increased by as much as 250 percent.<sup>8</sup>

For a long time it was thought that athletes needed much more protein than other people. The truth is that athletes need only slightly more protein, which is easily obtained in the larger servings athletes require for their higher caloric intake. Vegetarian diets are great for athletes. To consume a diet that contains enough, but not too much, protein, simply replace animal products with grains, vegetables, legumes (peas, beans, and lentils), and fruits. As long as one is eating a variety of plant foods in sufficient quantity to maintain one's weight, the body gets plenty of protein.

#### *References*

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