Protein and Humans

FACT: Plant foods offer abundant protein.

Based on caloric value vegetables are around 23% protein on average, beans 28%, grains 13%, and even fruit has 5.5%.

For comparison, human breast milk is only 5% (designed for the time in our lives when our protein needs are as high as they'll ever be).

The US Recommended Daily Allowance is 8%, and the World Health Organization recommends 4.5%.

How much protein do you need?

The first clue to how much protein you need comes from what nature designed for us. Human breast milk is 5.5% protein. It's designed to nourish us at the point in our lives when we're growing the fastest and our protein requirement is as high as it will ever be. Obviously, if nature wants us to have 5.5% when we're growing, we can easily do with less than that once we're already grown.

It is interesting to note that cow's milk is 29%. Cows grow much faster than humans, and grow to be much larger, so it's not surprising that their protein requirement is higher.

We can also ignore nature and look at official recommendations. Experts disagree on exactly how much protein you need, but the range of recommendations is between 2.5 to 8.0% of your total diet. Even the highest recommendation (the U.S. RDA, at 8%) is easily obtained on an all-plant diet.

A report in the American Journal of Clinical Nutrition established that grown humans do fine with a diet consisting of 2.5% protein. The U.S. Food & Nutrition Board set their figure at 4.5%, then added a safety margin to bump it up to 6.0%. The U.S. National Research Council added another safety margin when setting the RDA (Recommended Daily Allowance), at 8.0%. The World Health Organization recommends 4.5% (the figure we used in our chart), or 6.0% during pregnancy.

How much protein is there in meat?

It varies wildly depending on the meat. Bacon is only 5%, while light Turkey is 79%, although the average is around 50%. But remember, more is NOT better in the case of protein -- it's worse. Our bodies weren't designed to handle 50% protein, and that's why we suffer from cancer, osteoporosis, kidney failure, and other degenerative diseases when we eat meat every day.
A final thought

It's odd that people think we need to eat animals for protein, but the animals that we eat consume nothing but plants! Where do pigs, cows, and sheep get their protein? From plants. Does anybody ever worry that cows or sheep aren't getting enough protein? The cows and sheep certainly don't.

When I bring up this point, people often counter, "But humans aren't cows!" What is that supposed to mean -- that only humans need protein and cows don't? Nonsense. All animals need protein to grow and maintain body tissues. Is it supposed to mean that humans and cows process protein differently? Nonsense again. Protein is used universally the same way in all creatures.

Consider something else. Many people eat animals because they think that there are some magical nutrients in meat. But realize that meat is simply flesh... and humans are simply flesh! Look at your own arm -- you're nothing but walking meat. Anything that you might expect to get from eating flesh you already have, because you're MADE of flesh!

A diet in which protein makes up more than 30% of your caloric intake causes a buildup of toxic ketones. So-called ketogenic diets can thrust your kidneys into overdrive in order to flush these ketones from your body. As your kidneys rid your body of these toxic ketones, you can lose a significant amount of water, which puts you at risk of dehydration, particularly if you exercise heavily.

That water loss often shows up on the scale as weight loss. But along with losing water, you lose muscle mass and bone calcium. The dehydration also strains your kidneys and puts stress on your heart.

And dehydration from a ketogenic diet can make you feel weak and dizzy, give you bad breath, or lead to other problems.

About the percentages for the different foods

Protein percentages were derived from the bible of nutritional data, the U.S. Department of Agriculture Handbook #8: Nutritional Values of Foods in Common Units.

Foods for each category were averaged. For example, not all vegetables are 23% protein; we took several common vegetables (such as Potatoes, 11%, and Broccoli, 37%), and reported the average, which was 23%. Other types of foods were averaged the same way.