Animal Protein Vs Plant Protein: Do We Have to Choose?

By Kedist Tedla — August 24, 2016

Nowadays, people are becoming nutrition savvy and choosing healthier foods. Particularly in the Western world, the quest for the ideal weight-loss-diet is driving the popularity of a high-protein/low carbohydrate lifestyle.

The importance of protein for muscle-building and cell functions was discovered in the 1830's [1], but there is still some controversy regarding what is considered an ideal source of protein for overall health.

What we know for sure is that humans cannot produce all the components of protein (amino acids) and must rely on food to meet the body’s protein requirement. Protein is in many food sources, i.e., plants (grains, nuts, beans, and legumes) or animal products (dairy, eggs, meat, pork, poultry, and fish).

Studies have linked red meat - particularly processed meats such as hot dogs, bacon, and deli meats – to cardiovascular diseases (CVD) such as heart attack and stroke, even cancer while promoting the health benefits of plant-based proteins. A recent study in the Journal of American Medical Association (JAMA, August 2016) [2] directly compared animal protein with plant protein. The study re-analyzed data from 2 extensive studies [3] previous done on the health impact of consuming red meat.

Those two studies [4] offered 32 years of data (collected during 1980-2012 and 1986-2012) on the diet, health history, and cause of death of 131,342 participants. The researchers concluded the following:

1. **Plant Protein**: People with a high percentage (>3%) of plant protein per daily calorie intake
had a significant drop in risk of death from CVD and other causes; however, this benefit was confined to those with at least one other lifestyle risk such as alcohol abuse, smoking status, or lack of exercise.

2. **Animal Protein**: People with a high percentage (>10%) of animal protein per daily calorie intake had a non-significant increase in the risk of death from cardiovascular and other causes.

3. **Equal Substitution**: When people switched 3% of their daily calories from animal to plant protein, mortality risk declined significantly (34%) in those giving up processed red meat and, to a lesser extent, unprocessed red meat (12%). This benefit was not seen in those who switched from other animal proteins such as poultry or fish.

Interestingly, the researchers noted that the same participants who consumed more plant-based protein seemed to weigh less, exercise more, eat less food high in saturated fats and use less tobacco, and alcohol. On the other hand, the group eating more animal proteins tended to be overweight and had at least one unhealthy habit.

The study did not show increase in mortality from animal protein. What it does is highlight some of what we already know: A diet disproportionately high in foods with high saturated fat, combined with an unhealthy lifestyle, can increase the risk of cardiovascular disease.

Conversely, a predominantly plant-based diet accompanied by a healthy lifestyle offers health benefits. Any type of food that is high in calories and saturated fat; if consumed regularly and in large amount, will likely result in elevated cholesterol and weight gain, which has been linked to type 2 diabetes and CVD.

Foods containing high levels of sodium are not ideal for those concerned about high blood pressure.

The bottom line is this: we do not have to choose between animal and plant protein in order to maintain good health. Like in everything else in life, moderation is the key to having a diet that is both health conscious and enjoyable.

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**Links**

[1] [https://en.wikipedia.org/wiki/Protein#History_and_etymology](https://en.wikipedia.org/wiki/Protein#History_and_etymology)
[4] [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3847817/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3847817/)