Randomized Controlled Trials in Nutrition

This is a collection of high quality research studies in nutrition, about some of the topics we cover on this website.

All of these studies are published in respected, peer-reviewed journals.

All of the studies on this page are randomized controlled trials in humans, unless otherwise noted!

Low-Carbohydrate vs. Low-Fat Diets

A low carb diet is based on foods that contain a low amount of carbohydrate. Foods that are high in sugars and starches are replaced with foods that are high in protein and fat.

A low fat diet, is based on foods that contain a low amount of fat, typically under 30% of total calories. Foods like fruits, vegetables and whole grains are emphasized.

The studies below are controlled trials where people are randomized to either a low-carb or a low-fat diet. The outcomes measured are usually body weight and risk factors for disease.


**Low-Carb and Type II Diabetes:**


**Main Results:** Low-carb diets usually lead to more weight loss than low-fat diets, even when the low-fat groups are calorie restricted while the low-carb groups are not.

Low-carbohydrate diets also significantly improve major risk factors for diseases like cardiovascular disease and type II diabetes.

**Meta-Analyses of Low-Carb Diet Studies**

These studies are meta-analyses of randomized controlled trials of low-carbohydrate diets.


**Main Results:** Same as above. Low-carb diets lead to more weight loss and further improvements in metabolic health compared to the low-fat diet that is usually recommended by nutritionists and governments around the world.

**The Paleolithic Diet**

Randomized controlled trials of the paleolithic diet (commonly known as the paleo diet or caveman diet).


**Main Results:** The paleo diet has favorable effects on body weight and major risk factors. However, the studies available are very small so the results must be taken with a grain of salt.

**Vitamin D3 Supplementation**

A deficiency in Vitamin D is very common today, especially in countries where there is little sun...
throughout most of the year.

**Vitamin D3 and cancer:**


**Vitamin D, fractures and falls:**


**Vitamin D3 and Influenza A Infections:**


**Main Results:** Vitamin D supplementation reduces risk of falls and fractures in the elderly at higher doses. May reduce risk of cancer and respiratory infections.

**Is This List Missing Something?**

If you want to be notified when we analyze the evidence behind some other aspect of health, make sure to subscribe to free updates.

There is no cherry picking here. All relevant studies are included.