What you eat plays a major role in your risk for heart disease. Along with exercise and smart lifestyle choices, the right diet can help protect your heart. Unfortunately, the wrong dieting choices can cause obesity and inflammation and increase your blood pressure and cholesterol levels — all factors that can up your risk for heart attack and stroke.

There are diets specifically designed for people at risk for heart disease, namely: the DASH, Mediterranean and Ornish diets. These diets all have similar approaches, with a heavy focus on whole foods including lots of vegetables, fruits and whole grains. The Mediterranean and DASH diets also focus on lean proteins like fish and chicken, where the Ornish diet is mostly vegetarian.

In this guide, we’ve included information on these three diets as well as other popular diets. Before changing your diet, you should always talk to your primary care physician. He or she can help you make sure your diet choices match up with your health goals and are safe for you.

**DASH**

**What is it?**

DASH stands for Dietary Approaches to Stop Hypertension. It is comprised of fruits, vegetables, low-fat or nonfat dairy. It also includes mostly whole grains; lean meats, fish and poultry; nuts and beans. It is high fiber and low to moderate in fat. It is a plan that follows US guidelines for sodium content, along with vitamins and minerals.

**Risk Factors**

The diet is relatively safe for most patients.

**What scientific research is there?**


MEDITERRANEAN / MODIFIED MEDITERRANEAN

What is it?
There is no single definition of a Mediterranean diet, but such diets are typically high in fruits, vegetables, whole grains, beans, nuts and seeds; include olive oil as an important source of monounsaturated fat; and allow low to moderate wine consumption. There are typically low to moderate amounts of fish, poultry and dairy products, with little to no red meat.

The modified Mediterranean diet is also referred to as the standard Mediterranean diet but there are various definitions and variations of the modified Mediterranean diet. Most variations focus on eating locally grown foods and including a moderate amount of lean red meat. Some variations of the Modified Mediterranean Diet go a step further than the standard Mediterranean diet to help assure you are not including common allergens, such as gluten, in your diet.

Foods commonly included in the Mediterranean diet:
1. Vegetables: tomatoes, broccoli, kale, spinach, onions, cauliflower, carrots, Brussels sprouts, cucumbers
2. Fruits: apples, bananas, oranges, pears, strawberries, grapes, dates, figs, melons, peaches
3. Nuts and seeds: almonds, walnuts, macadamia nuts, hazelnuts, cashews, sunflower seeds, pumpkin seeds
4. Legumes: beans, peas, lentils, pulses, peanuts, chickpeas
5. Tubers: potatoes, sweet potatoes, turnips, yams
6. Whole grains: whole oats, brown rice, rye, barley, corn, buckwheat, whole wheat, whole-grain bread and pasta
7. Fish and seafood: salmon, sardines, trout, tuna, mackerel, shrimp, oysters, clams, crab
8. Poultry: chicken, duck, turkey
9. Eggs: chicken, quail and duck eggs
10. Dairy: cheese, yogurt, Greek yogurt
11. Herbs and spices: garlic, basil, mint, rosemary, sage, nutmeg, cinnamon, pepper
12. Healthy Fats: extra virgin olive oil, olives, avocados and avocado oil

Foods commonly restricted in Mediterranean diets include:
1. Added sugar: soda, candies, ice cream, table sugar and many others
2. Refined grains: white bread, pasta made with refined wheat, etc
3. Trans fats: found in margarine and various processed foods
4. Refined oils: soybean oil, canola oil, cottonseed oil and others
5. Processed meat: processed sausages, hot dogs, etc
6. Highly processed foods

Risk Factors
The diet is relatively safe for most patients.

What scientific research is there?
THE ORNISH DIET

What is it?
The Ornish diet, founded by Dr. Dean Ornish, is based on the thought that foods are neither good nor bad, but some are more healthful for you than others — predominantly fruits, vegetables, whole grains, legumes, soy products, nonfat dairy and egg whites in their natural forms, as well as some good fats that contain omega 3 fatty acids. This mainly vegetarian diet focuses on the foods that are rich in good carbs, good fats, good proteins and other protective substances. What you include is as important as what you exclude. The diet plan also heavily focuses on stress management, exercise and love and support as much as the food component of the diet.

Risk Factors
Patients who have or are at risk of deficiencies in the following should be monitored: iron, vitamins B-12 and D, calcium and omega-3 fatty acids due to the restriction of meat and poultry.

What scientific research is there?
1. Dean Ornish. The Spectrum.

ALKALINE

What is it?
The alkaline diet is also known as the acid-alkaline diet or alkaline ash diet. It is based around the idea that the foods you eat can alter the acidity or alkalinity (the pH value) of your body. The theory is that some foods, like meat, wheat, refined sugar and processed foods, cause your body to produce acid. The diet focuses on maintaining optimal body pH by limiting acid-inducing foods and drinks such as caffeine and alcohol, meat and dairy and anything processed or fried and replacing it with alkaline-inducing substances like raw veggies, low-glycemic fruits and green smoothies.

Risk Factors
An overall excess of alkalinity in the body may cause gastrointestinal issues and skin irritations. Too much alkalinity may also agitate the body’s normal pH, leading to metabolic alkalosis.

What scientific research is there?
ATKINS

What is it?
A high-protein, high-fat, low-carbohydrate weight-loss diet popularized by Dr. Robert C. Atkins that allows for unrestricted amounts of meat, cheese and eggs while severely restricting carbohydrates, including sugar, bread, pasta, milk, fruits and vegetables. The Atkins diet is based on the theory that eating carbohydrates stimulates the production of insulin, which in turn leads to hunger, eating and weight gain.

Risk Factors
Physicians should monitor patients with diabetes or on insulin, kidney disease and those at increased risk of heart disease, osteoporosis and cancer.

What scientific research is there?
3. McCartney Margaret. Margaret McCartney: Promising miracle diet fixes isn’t fair on anyone BMJ 2017; 358: j4226

GLUTEN-FREE

What is it?
A diet that doesn’t contain any gluten. Gluten is a protein that is found in wheat, rye, barley and (sometimes) oats. Many foods, such as breads, pasta, pizza, cereals and crackers have gluten in them.

Risk Factors
Foods excluded in the diet tend to be a good source of: iron, calcium, fiber, thiamin, riboflavin, niacin and folate. These vitamins and minerals may want to be monitored.

What scientific research is there?
HCG

What is it?
The hCG diet is a low-calorie diet combined with the use of hCG (human Chorionic Gonadotropin), such as a daily injection of 125mg of the hCG hormone or hCG drops. HCG is a hormone produced during pregnancy that is made by the developing embryo after conception and later by part of the placenta. The mechanism of action for hCG is not clear but some experts believe it improves metabolism and allows the body to release abnormal fat stores and use them for fuel.

Risk Factors
According to the FDA - hCG is not approved for weight loss. The prescription drug label notes there “is no substantial evidence that it increases weight loss beyond that resulting from caloric restriction, that it causes a more attractive or ‘normal’ distribution of fat, or that it decreases the hunger and discomfort associated with calorie-restricted diets.”

What scientific research is there?
1. US Food and Drug Administration “HCG diet products are illegal” FDA Consumer Health Information. 2011 Dec

INTERMITTENT FASTING

What is it?
Intermittent fasting is an eating pattern where you cycle between periods of eating and fasting. It does not say anything about which foods to eat, but rather when you should eat them. There are several different intermittent fasting methods, all of which split the day or week into eating periods and fasting periods. The thought process behind fasting is that the human body experiences several different physiologic phases during a fast: post absorptive, gluconeogenesis, ketosis and protein conservations. It is also hypothesized to influence metabolic regulation via effects on circadian biology, gastrointestinal microbiota and modifiable lifestyle behaviors. There are multiple varieties of intermittent fasting and it is important to understand which one you want to try.

Types of fast:
Short fasts
1. 16-hour fast: eating is done within an eight-hour window every day
2. 20-hour fast: eating is done within a four-hour window every day

Long fasts
3. 24-hour fasts: essentially eating one meal a day
4. 5:2 plan fast: eating normally for five days a week and restricting calories the other two days
5. Alternate-day fast: eating normally one day and restricting calories the next
6. 36-hour fast
7. 42-hour fast
Extended fasts
8. Any fast longer than 42 hours

Risk Factors
Patients who are old, frail, multiple disease states with multiple medications, and pregnant women. Physicians must closely monitor blood glucose in diabetics as well as monitor blood pressure, phosphorus, and magnesium levels in all patients due to volume and nutrition depletion. Make sure patients drink plenty of water and are taking a multivitamin, especially if on an extended fast.

What scientific research is there?
2. The Longevity Diet, Valter Longo, PhD

KETOGENIC

What is it?
The ketogenic diet is a high-fat, adequate-protein, low-carbohydrate diet. The diet forces the body to burn fats rather than carbohydrates. Normally, the carbohydrates contained in food are converted into glucose, which is then transported around the body and is particularly important in fueling brain-function. However, if there is little carbohydrate in the diet, the liver converts fat into fatty acids and ketone bodies. The ketone bodies pass into the brain and replace glucose as an energy source. An elevated level of ketone bodies in the blood is a state known as ketosis, not to be confused with ketoacidosis. The ketogenic diet is most widely used in patients with recurrent seizures.

People who follow this diet must keep their total daily carb count under 50 grams per day, although most ketogenic diets restrict carbohydrates to 20 grams daily. As a result, most of their daily calorie intake comes from protein and fat. The diet isn’t meant to be a high protein diet; most protein calculations go by one gram of protein per kilogram of lean body mass. Most patients tend to consume more protein than what is recommended.

Foods commonly included in the ketogenic diet:
1. Natural fats, such as butter, olive oil and coconut oil
2. Fish and seafood
3. Meat and poultry
4. Eggs
5. Cheese
6. Vegetables that grow above ground, such as cauliflower, cabbage, avocado, broccoli
7. Nuts in moderation, preferably macadamia, walnuts and pecans
8. Water, coffee, tea

Foods commonly restricted in ketogenic diets include:
1. Fruits
2. Potatoes
3. Pastas
4. Rice
5. Breads
6. Soda, juice, beer
7. Candy
Risk Factors
High levels of fat can cause health concerns in patients who have a history of gallbladder disease or cholecystectomy. Volume sensitive patients should also be monitored because most patients become dehydrated when entering ketosis. Patients with renal disease or GI issues should also be monitored due to the higher amount of protein. Patients who have diabetes should also be monitored carefully to avoid hypoglycemia due to the low amount of carbohydrates. Their medication doses may need to be adjusted.

What scientific research is there?

PALEO

What is it?
A nutritional approach that focuses on eating only foods that are high in nutrients, unprocessed and based on the foods that were available and eaten by humans in Paleolithic times. The main idea behind the paleo diet is that if humans were not able to consume a food thousands of years ago — before industrial agriculture, the domestication of animals and modern food processing existed, then humans should not consume these types of foods today, because the human body is not adapted to them. The typical person views the paleo diet as a steak and bacon diet and without the right direction, the paleo diet can be harmful.

Foods commonly included in the paleo diet include:
1. Lean cuts of beef, pork and poultry, preferably grass-fed, organic or free-range selections
2. Game animals, such as quail, venison and bison
3. Eggs, but no more than six a week and preferably free-range
4. Fish, including shellfish
5. Fruit, such as strawberries, cantaloupe, mango and figs
6. Non-starchy vegetables, such as asparagus, onions, peppers and pumpkin
7. Nuts and seeds, including almonds, cashews, walnuts and pumpkin seeds
8. Olive oil, flaxseed oil and walnut oil, in moderation
9. Water

Foods commonly restricted from the paleo diet include:
1. All dairy products, including milk, cheese, yogurt and butter
2. Cereal grains, such as wheat, rye, rice and barley
3. Legumes, like beans, peanuts and peas
4. Starchy vegetables, such as potatoes (and some even say sweet potatoes)
5. Sweets, including all forms of candy as well as honey and sugar
6. Artificial sweeteners
7. Sugary soft drinks and fruit juices
8. Processed and cured meats, such as bacon, deli meats and hot dogs
9. Highly processed foods
Risk Factors
The typical paleo diet puts most at risk for deficiencies in calcium and vitamin D, due to lack of dairy products, which are critical to bone health. At the same time, saturated fat and protein can be consumed far above recommended levels, increasing the risk of kidney and heart disease and certain cancers.

What scientific research is there?

SOUTH BEACH

What is it?
The South Beach Diet, which is named after an area of Miami, is sometimes called a modified low-carbohydrate diet. The South Beach Diet is lower in carbohydrates and higher in protein and healthy fats than is a typical eating plan, but it’s not a strict low-carb diet and you don’t have to count carbs. The diet says that it’ll teach you about eliminating so-called “bad” carbs from your diet. It uses the glycemic index and glycemic load to determine which carbs you should avoid. It also teaches about the different kinds of dietary fats and encourages you to limit unhealthy fats, while eating more foods with healthier monounsaturated fats. The South Beach Diet emphasizes the benefits of fiber and whole grains and encourages you to include fruits and vegetables in your eating plan.

Risk Factors
There are no indications of serious side effects, but children and pregnant women are advised not to participate. Physicians should monitor those patients who are at risk or have a kidney disorder due to the increase of protein.

What scientific research is there?

VEGAN

What is it?
Veganism is a plant-based diet avoiding all animal foods such as meat (including fish, shellfish and insects), dairy, eggs and honey. It’s also a lifestyle where participants also avoid products like leather and those tested-on animals.

Risk Factors
Patients who have or are at risk of deficiencies in the following should be monitored: iron, vitamins B-12 and D, calcium and omega-3 fatty acids due to the restriction of meat.
What scientific research is there?

ZONE

What is it?
The Zone Diet is based on the theory that metabolism can be best regulated with a diet of 40 percent carbohydrates, 30 percent protein and 30 percent fat. This idea is now widely known as the 40-30-30 plan. The diet does not prohibit any foods, but severely restricts those high in fat and carbohydrates. Fruits and vegetables are the preferred source of carbohydrates in the Zone Diet. Protein is limited to low-fat portions that are no bigger and no thicker than the palm of the hand. Monounsaturated fats such as olive oil, canola oil, almonds, macadamia nuts and avocados are recommended.

Risk Factors
Physician should monitor patients with diabetes or on insulin, kidney disease and those at increased risk of heart disease, osteoporosis and cancer.

What scientific research is there?