

Fad Diets: Which is Truly Best for You?

by

Robert Grullon

Submitted to the School of Liberal Studies and Continuing Education
in partial fulfillment of the requirements
for the degree of Bachelor of Arts in Liberal Studies

Purchase College
State University of New York

[[May]] [[2019]]

Instructor: Dashielle Horn

An estimated 45 million Americans go on a diet each year (Searing). Majority of the population, start off the year with resolutions to shed pounds or lead a healthier lifestyle by going on a strict diet. More than often, people dive into the latest trend in crash dieting headfirst, ending up either sick or disappointed in the results. In this research, I would like to provide the proper research by leading the focus on the most common types of diets and how they can either help or harm a person depending on what the goal is. Keep in mind; any kind of diet has the potential to be either seriously harmful or helpful. Yes, every fad diet has their importance but by taking on this diet you are also harming your body, in ways you wouldn't believe. A lack of nutrients and vitamins (vice versa) can cause different effects to your body. Effects like different diseases. With that being said, those who eliminate certain foods can harm your body in either a physical or emotional way. Individuals should not take on certain diets, unless prescribed for a medical condition. Many diets can also contribute in disordered eating. Fad diets such as the Keto, and Paleo diets, fall into that category and should not be attempted unless prescribed for an extreme and emergent case. Does who take on these diets need to plan accordingly to see the health benefits.

According to Webster's dictionary, the definition of the word "diet" is the "kind and amount of food prescribed for a person (or animal) for a special reason." (Merriam-Webster) Whether you prefer to diet because of a health issue, like celiac disease or for personal reasons, like weight loss. In this paper, I will be using "diet" as a term to describe the specificity of the restrictions in each regimen. Each regimen we are going to discuss has a specific reason for being and should be coincided with physical activity to truly reap the benefits. The Mayo clinic recommended amount of physical activity per day is a moderate 150 minute, 2 and a half hours, workout or 75 minutes, 1 hour and 15 minutes, vigorous workout (Mayo Clinic). Foundation for

Medical Education and Research). Along with an adequate amount of research, narrowing down the right path to achieve your goal, you can find a diet specifically designed to be nutrition for your body.

Let's begin with the most popular diet, veganism. Thanks to movies like "What the Health?" on Netflix and "Super-Size Me", documentaries focusing on mass marketed and processed food, this diet has now become a trend. Processed food is any food that has been altered in some way during presentation (google definition). For example, foods that has been placed in a can or a bag. Process foods is the packaging of food that will be made more convenient to the consumer. Not all processed food is bad for you but the majority of it is. There are many different techniques that are used to process food. Techniques such freezing, canned, dried, baked, or pasteurized (Carey and Sarachik). The main reason that these foods are bad is because of the added ingredients used to preserve the food. Some ingredients added are dextrose, maltose, Trans fat and hydrogenated oil (Carey and Sarachik). Which means all this added ingredients adds also to your daily intake. Doubling the amount of sodium and sugar intake. Which brings me back to the documentary "Supersize Me". This film is the prime example on why these foods can be so bad for you. The individual in this movie had a strict diet of McDonalds, which is mainly processed food. Through this movie he went through many different health conditions that almost killed him. When connecting the documentary and processed foods, you can see why individuals took upon themselves to eat better and take on popular fad diets. Like veganism but even this fad diet can be dangers for your health. Which brings me to the question, what exactly is veganism? "Veganism is broadly defined as avoiding the consumption of bodily products from sentient beings" (Bruers 271). Carlo Alvaro, a professor with a doctorate in Philosophy and Moral Sciences, ethically argues "killing animals

for food and other products is unnecessary when it is done by people who have an abundance of readily available plant-based alternatives; and therefore, in that case using animals is immoral” (773). There have also been more health-related causes as well. “The consumption of animal fats and animal proteins has been linked to heart disease, colon and lung cancer, osteoporosis, diabetes, kidney disease, hypertension, obesity, and a number of other debilitating conditions...” (About Veganism).

Those who have made the transition to veganism, have attested to lower blood pressure and cholesterol, weight loss, more energy and proven to have been preventative against the common diseases stated before.

“Vegan foods, such as whole grains, vegetables, fruits, and beans, are low in fat, contain no cholesterol, and are rich in fiber and nutrients. Vegans can get all the protein they need from legumes (e.g., beans, tofu, peanuts) and grains (e.g., rice, corn, whole wheat breads and pastas); calcium from broccoli, kale, collard greens, tofu, fortified juices and soy milks; iron from chickpeas, spinach, pinto beans, and soy products; and B12 from fortified foods or supplements.” (About Veganism).

Along with the pros of this regimen, there have been little to none reported down sides to becoming a vegan. It has also been said to be hard to transition to a vegan diet as well. For example, there are some restaurants that added their own little section of vegan options but there are restaurants that don't usually cater to the restrictions of this regimen, making it hard to stay on track. Also, for the restaurants that do cater to vegans, the prices become to expense. Which sometimes leads to irregular eating patterns. This prohibits you from eating the items on the menu, a meal may be missed out altogether. Strong discipline and an extensive amount of patience are required to fully commit to this diet. Miniscule ingredients such as rennet, an

enzyme produced by animals that digest plant-based foods and used to ferment dairy, found in parmesan cheese, yogurt, chips, and beer/wine make those foods obsolete in this regimen.

"Vegans can get vitamin B12 from fortified foods (some brands of soy milk, fake meats, breakfast cereals and nutritional yeast) and from supplements. Vegan diets may be low in calcium and vitamin D although there are vegan sources of these nutrients," says Reed Mangels, PhD, RD, nutrition advisor for The Vegetarian Resource Group (vrg.org)." (Quoted in Bhide)

Not only do people choose the diet and apply it to their food, but they usually to the other aspects of their life as well. This would include, clothing, soaps, toiletries, etc.

The second most common diet is a vegetarian diet. Also known as a low-fat diet in some cases, can be strictly plant based, but some other versions may include dairy, products made from animals, or seafood, which means, the most outstanding quality to this diet is the fewer restrictions compared to veganism. In this diet, if you so choose to include dairy, or products from animals, you will have a wider variety of foods to consume in your regimen. The health effects have been shown to benefit the consumer as well. "Vegetarianism has been associated with reductions in cancer and cardio-metabolic disease...shown to prevent recurrent myocardial infarction in adults with high risk...shown to cause regression of coronary atherosclerosis." (Katz and Meller 88). But there are a number of reasons why people decide to become vegetarians.

Which include,

"treatment of animals in the factor, environmental impact, personal preference, health concerns, dislike for meat or other food from animals, or they believe a plant-based diet is healthier...Many people make the switch to a vegetarian diet because of the potential health benefits. Vegetarian eating patterns have been associated with improved health outcomes including lower levels of obesity, a reduced risk of heart disease and lower

blood pressure. Also, vegetarians tend to consume a lower proportion of calories from fat and fewer overall calories, and more fiber, potassium and vitamin C than non-vegetarians. These characteristics, plus lifestyle factors, may contribute to the health benefits among vegetarians.” (Wolfram).

In this quote, you can see by taking on this diet, there are many positive health benefits. But by canceling certain food, you are cancelling the nutrient your body needs. Individuals take on this diet for good reason like, mistreatment of animals and helping the environment. But what about the concerns of your body? What foods you are missing and how it is affecting you. The daily intake of calories, fiber, potassium and vitamin C is less than what your body needs. This means your body is struggling to find does nutrients elsewhere. Which can be very harmful to the body.

Even though, this diet has a greater variety of food, it doesn't always mean it possesses the best sources. Vegetarians, as well as vegans, are allowed to consume processed food. Which may not provide any health benefits. For example, saturated fats, a fatty acid that is harder to be digested than other fats, can be found in a wide variety of foods. Even though the food may not possess and animal product, the other ingredients may be chemically manufactured. This could potentially lead to health deficits in the long run. Alike veganism, the restrictions on this diet could also cause vitamin depletion.

“...vegetarianism per se is neither necessary nor sufficient for a good diet: indeed, french-fries and soda are vegetarian, as are other harmful factors such as refined grains, starches, added sugars, sweets, trans fats, and sodium. Thus, a vegetarian diet is not a guarantee of health; while a non-vegetarian diet can be rich in healthful foods.” (Mozaffarian 191).

Pescatarian diet is a subcategory that falls under vegetarianism, very similar, and inclusive to all food groups, mainly seafood, except for meat. Shellfish, oysters, clams, fish, and

squid are all acceptable food with in this diet. "...the wide variety of aquatic life available to pescatarians, all of which she says are low in saturated fat and rich in other nutrients. 'Shellfish like mussels, oysters, and clams are loaded with minerals,'... 'Oysters may be the most zinc-rich food on the planet, with one 4-oz serving providing about seven times the daily zinc requirement. Four ounces of mussels cover about 45% of the DV of iron and a whopping 144% of the DV of selenium to fuel the body's antioxidant system. That same amount of clams provides about one-quarter of most people's calcium requirement, as well as a day's worth of selenium.'" Other forms of seafood shouldn't be overlooked. ” (Thalhiemer).

The benefits of this diet include a surplus of omega-3s, a fatty acid that reduces the risk of heart disease, helps lower blood pressure, cholesterol, and metabolic syndrome. "In addition, the study found that pescatarians had lower levels of blood cholesterol and blood pressure, as well as [decreased] risk of diabetes, blood pressure, and metabolic syndrome compared with no vegetarians," Palmer says. "They even have a lower carbon footprint... Lower risk of heart disease, less dementia and depression, smarter kids, lower rates of type 2 diabetes and cancer—the potential benefits are truly impressive.... “(Palmer). The major con about this diet is eating too much fish. Fish are studied to have mercury in their bodies; the larger the fish, the higher the mercury content. It's recommended to eat smaller fish like salmon, anchovies, herring, sardines, oysters, tuna, cod, trout, and mackerel that have lower mercury content in their systems to avoid mercury poisoning. “Guidelines for Americans recommend adults eat 8 oz or more of seafood per week...should limit albacore tuna to 6 oz per week, and avoid tilefish, swordfish, shark, and King mackerel due to their high mercury content” (Thalhiemer). The guidelines specifically recommend salmon, anchovies, herring, sardines, Pacific oysters, trout, and Atlantic and Pacific mackerel (not King mackerel) as choices higher in EPA and DHA and lower in mercury. These

guidelines can fit well with a pescatarian eating pattern. 'It's important to remember that a pescatarian diet doesn't mean that one should eat fish three times a day,'... 'It's a vegetarian diet that includes fish. So that means lots of meals that are based on plant proteins, too—beans, lentils, tofu, nuts, seeds.'" (Thalheimer)

On the opposite side of the dietary spectrum, some people opt to make meat the centerpiece of their diets. The Paleolithic diet can be described as "emulating the dietary pattern of our Stone Age ancestors with an emphasis on avoiding processed foods, and the intake of vegetables, fruits, nuts and seeds, eggs, and lean meats" (Osterweil). This diet can be categorized as a low carb diet, as well. This diet restricts the consumption of processed foods, dairy, and whole grains all together, and replaces them with fresh foods. When following the Pale diet, you will cut the Trans fats and the omega-6 polyunsaturated fats in your diet and increase the healthful monounsaturated and omega-3 fats that were the mainstays of our ancestors.

The common reasons and the trend for partaking in this diet are weight loss, muscle building, and disease prevention. The effects of this diet have resulted in higher intakes of vitamins, minerals, antioxidants, plant phytochemicals, potassium, fiber and protein intake. In the article by Neil Osterweil says that extra protein does not build muscle, working out does. It is a myth, you do not need extra protein to make you stronger. All you need is the modest amount for body to function right (Neil Osterweil). As well as lower glycemic index, carbohydrate, and sodium intake. "...eating plenty of fresh fruits and vegetables naturally leads to higher fiber intake.

Dietary fiber is essential for good health, and despite what you've probably heard, whole grains aren't the place to find it. "Non-starchy vegetables contain eight times more fiber than whole grains and 31 times more fiber than refined grains. Even fruits contain twice as much fiber as whole grains and seven times more fiber than refined grains!"(Cordain). With carbohydrates and

protein intake already accounted for, fat intake comprises the rest of the Paleo diet. We've been taught that fat is something to be avoided at all costs, but it's actually not the total amount of fat in your diet that raises your blood cholesterol levels and increases your risk for heart disease, cancer, and Type 2 diabetes; rather, it's the type of fat that should concern you. "The Paleo diet calls for moderate to higher fat intake dominated by monounsaturated and polyunsaturated fats with a better balance of omega-3 and omega-6 fats." (Cordain).

As I stated before, the premise of this diet is to mimic the dietary habits of our hunter-gatherer ancestors from the Paleolithic age.

"If Paleolithic eating is loosely interpreted to mean a diet based mostly on meat, no meaningful interpretation of health effects is possible. Even more meticulous interpretations of the Paleolithic diet tend to omit details, including but not limited to the very high-caloric throughput of Paleolithic humans" (Katz and Meller 92).

Seeing as to how we've obviously changed, to get the nutrients we'd need to survive like our ancestors, we've had to have an equivalent to the animals and plants they had that are now extinct. This has therefore made the diet somewhat unrealistic in truly being able to be nutritious.

The ketogenic diet, also known as a low carb diet, has also become of the most popular trends. One side not to keep in mind, the keto and low carb diet is the same thing, the only slight difference is the keto diet takes in the least amount carbs and the low carb diet is slightly higher (Young). This diet gets its name from the state it puts the body into by deprivation of carbohydrates and sugars, ketosis. When the body runs out of carbs and sugars to burn for energy, it will burn the present fat as an alternate source. "As dietary carbohydrate is replaced by fat, postprandial spikes in the blood concentrations of glucose and insulin decrease, glucagon secretion increases, and metabolism shifts to a greater reliance on fat oxidation" (Ludwig 3).

Low carb diets have been proven to help provide ease with type 2 diabetes, by the reduced intake of sugars from both carbs and other sources. Weight loss has shown to also be an effect of the diet as well. Compared to the vegetarian diet, the natural sugar complexes found in fruits and vegetables can be tricky to calculate, depending on how much is consumed. Overall calorie intake and calorie burn will be the main determinant in fat loss.

“Carb restriction can have a direct impact on glucose concentrations, lowering them over time. It may be a straight-forward way one could get their diabetes under control. But one should consult a registered dietitian before utilizing this strategy, as a general healthful diet and carb control can produce the same results.” (Satterthwaite)

During the process of the diet, there are a couple of side effects that come along with it. Because of the food groups that are excluded, some nutrients may be left out of consumption leading to a deficiency. This diet is often used as a solution for quick weight loss, but it can come with some gruesome side effects. The total subtraction of carbs from your regular diet to follow this on will result in what called the “Keto Flu”, along with irregular bowel movements.

“During the diet transition you may experience uncomfortable side effects from significantly cutting carbs, sometimes called the “Keto Flu”. Hunger, headaches, nausea, fatigue, irritability, constipation and brain “fog” may last days. Sleep and hydration will help, but it may not be a pleasant transition into the diet.” (Satterthwaite)

From these facts we can conclude that this diet isn't for the faint of heart. This is important to remember because the goal of dieting is to become or maintain a healthy lifestyle.

Gluten free diet that strictly excludes gluten, which is a mixture of proteins found in wheat, as well as barley, rye, and oats. “The inclusion of oats in a gluten-free diet remains controversial, and may depend on the oat cultivar and the frequent cross-contamination with

other gluten-containing cereals” (de Souza 3). Mostly prescribed to those who have Celiac disease, non-celiac gluten sensitivity, gluten ataxia, and wheat allergies. This regimen allows fresh foods, mostly pertaining to those grown from the ground and produced from animals. Eggs, fruits, veggies, beans, seeds, nuts, lean meats, fish, and poultry are all apart of that category. As well as these specific grains, starches, and flours: quinoa, soy, cornmeal, buckwheat, rice, flax, and gluten free flours (rice, soy, almond, corn, potato, and bean).

The dietary restrictions apply to wheat-based products, barley, and rye. Crosses between wheat and rye (Triticale), and some oats. Wheat comes in many forms, including names we may not know, like durum, spelt, emmer, einkorn, kamult, semolina, farina, graham flour, self-rising flour, and enriched flour. That goes to say some processed foods are not allowed as well. For example, chick pea pastas, people can eat the chemically, calorically dense but nutrition-lite pasta, or the chickpea pasta that actually has more protein and nutrients than regular pasta. . The effects of the disease that some may possess while on this diet will be discussed later. Even though there are gluten free versions of these foods, it does not mean they are the healthier alternative. I will show you later on in this research what macro nutrients to pay attention to that will apply to all these diets.

In all of this research, we can clearly see that not one diet is absolutely perfect. Each have their health benefits, along with their harmful factors, and compared to one another, neither outweigh the other. Getting to know what really works for your system, is the smartest way to maintain a healthy, and nutritious lifestyle.

“Our review of the literature on determinants demonstrates that intentions, habits, self-regulatory skills, and the social and physical environment are the most important determinants of a healthy diet, which are in turn amenable to change by intervention

strategies with varying levels of effectiveness. Educational interventions generally show a limited effect on practicing a healthy diet whereas interventions targeting habitual behavior and/or the physical environment seem more promising” (De Ridder 907).

Now, let’s take a look into the medical reasons for partaking in a diet.

As discussed before, Diabetes is a common disease found in over 415 million people. Which means there is an estimated ratio of 1 in 11 adults that have it. The most common forms are: Type 2, where the metabolization of sugar/glucose is affected. “As blood sugar levels increase, the insulin-producing beta cells in the pancreas release more insulin, but eventually these cells become impaired and can't make enough insulin to meet the body's demands.” (Mayo Clinic). Type 1, the pancreas produces little to no insulin, “In type 1 diabetes, there's no insulin to let glucose into the cells, so sugar builds up in your bloodstream. This can cause life-threatening complications” (Mayo Clinic). Prediabetes, the stage of diabetes reached before Type 2, also known as hyperglycemia,

“Prediabetes means that your blood sugar level is higher than normal but not yet high enough to be type 2 diabetes. Without lifestyle changes, people with prediabetes are very likely to progress to type 2 diabetes. If you have prediabetes, the long-term damage of diabetes — especially to your heart, blood vessels and kidneys — may already be starting.” (Mayo Clinic).

Last but not least, Gestational diabetes which affect pregnant women with high blood sugar. “Like other types of diabetes, gestational diabetes affects how your cells use sugar (glucose). Gestational diabetes causes high blood sugar that can affect the pregnancy and the baby's health” (Mayo Clinic). Some are born with it and some progressively form the disease from bad eating habits and lack of exercise. When battling this disease, the symptoms may

include excessive hunger, sweating, thirst, fatigue, weight gain, frequent urination, blurred vision, poor wound healing, sleepiness, fast heart rate, and nausea or vomiting. The most common treatments include insulin therapy and diet changes that reduce the intake of sugar and carbohydrates. Here is where most doctors prescribe the pescatarian or ketogenic diet as opposed to the vegan diet because of the ease of transition, especially if the patient is overweight. By prescribing the ketogenic diet, the doctor is prescribing the least amount of carbs associated with this diet. The reason for not just prescribing a regular low carb diet because there is an increase in carb intake This will help lose the excessive amenities on the body and boost the metabolic rates as well as regulating the glucose levels in the body. The vegetarian diet would not be ideal in this case because of the sugars located in the food.

Another disease attributed to bad exercising and eating habits is High blood pressure, also known as Hypertension. This maybe one of the scariest diseases know because there are no symptoms. The only way to catch it is to get medical advice. If you have it for too long, it could lead to heart diseases or possible strokes in the future. Doctors would prescribe a diet that contains low sodium, like the vegan, and vegetarian diets.

I mentioned celiac disease before, but now I would like to explain in depth what it is and what a specific diet can do to help improve the effects. Celiac disease is an immune system disease that overreacts when gluten, a protein most found in wheat that's responsible for the elasticity texture in dough, is ingested. People who possess this disease where most likely either born with or progressively formed an intestinal lining that cannot digest gluten. The villi, fingerlike projections found in the small intestine that absorb minerals, vitamins, and other nutrients from the food we eat become dull and nonfunctional. Complications of this disease include malnutrition, weight loss, cancer, lactose intolerance, and neurological problems.

Doctors prescribe a gluten free diet to reduce the amount of reactions in the body. Some may have a more aggressive form of the disease that may exclude gluten and other substances. In this case, they are recommended to work with a dietitian to specify which foods to stay away from.

By now, if you find yourself at this point in this report, you may ask the questions, “What if I don’t have a disease? Can I still follow a diet to lose weight?” The answer is simple enough, of course you can! If you would still like to make an adjustment to your lifestyle, it is recommended to study macronutrients: fats, proteins, and carbohydrates. The three main nutrients that can make a major difference your life. Macro nutrients are a key part of staying healthy. Yes, there are substitutes but you have to be care with the replacements because “care needs to be taken since substitution analyses indicate that the associations between single Macronutrients and chronic disease may depend on the replacement macronutrient” (Tapsell 121).

The first macronutrient (macronutrients are vitamins and minerals which are needed in small quantities (Neil Osterweil) we need to discuss is fat. Most commonly, people are terrified of fats, both good and bad but let’s clarify what’s really the good/bad. Fats are a nutrient needed in every diet to helps us obtain energy and absorb vitamins. When in taking fatty food, you do not need to eat a whole bench. Some fats are stored in the body. So, when the body needs to resupply on the nutrients of the fat. The body will have that as a source to resupply. As you take on one of these fed diets, you are completely taking out fats or in taking too much fat. Which means the intake of foods should be in moderation. There are a plethora of the types of fat but we are only going to discuss the main four: Saturated, unsaturated, polyunsaturated, and Tran’s fat.

Saturated fat is one of the unhealthy fats that give “fat” a bad rep. Foods that contain butter, palm and coconut oils, cheese, and red meat have high amounts of saturated fat. From a biological/chemical standpoint, these are the fat that have no double bonds between the carbon molecules because of the saturated hydrogen molecules. This is the fat that causes high blood pressure and high cholesterol. The American Heart Association recommends for a 2,000 calorie diet, only 120 should come from saturated fats. The second type of fat is unsaturated fats, also known as mono-saturated fats, are the good fats that confuse most. Chemically, there is one or more double bond in the fatty acid chain. Meaning that when there are double bonds the hydrogen atoms it has disappears, making the nutrient easier to break apart and readily available to use in the body. Foods like avocado, nuts, and soybean, canola, and olive oils contain unsaturated fats.

As we look at saturated and unsaturated fats, you can see that one of these fats can be more harmful than the other. So does that mean you should cut the other completely out? The answer to that question is no. According to the article “Saturated or Unsaturated fats better for you” by Gillian D’Souza, Most health organizations and dietary experts recommend eating saturated fats in moderation, and replacing them with unsaturated fats when possible”. So out by cutting out foods, you are losing the opportunity to to gain these types of fats. Also, by cutting out a food, you are in taking too much of another food. Which means you can be overdosing on either bad or good nutrients. In the quote above the author of this article uses the word “moderation”, moderation is key, when in taking these different foods.

Polyunsaturated fats are unsaturated fats that possess more than one unsaturated carbon bond in the molecule, this is also called a double bond. They one of the good fats! Foods containing the nutrients are mostly nuts, seeds, fish, seed oils, and oysters. The most common

forms of these fats are Omega 3's and Omega 6's. Recommended for those who have high cholesterol in their systems. "The American Heart Association also recommends eating tofu and other forms of soybeans, canola, walnut and flaxseed, and their oils."(AHA)

Last but not least, we have Tran's fats. Tran's fats are also referred to as trans-unsaturated fatty acids or Trans fatty acids. "The American Heart Association recommends cutting back on foods containing partially hydrogenated vegetable oils to reduce *trans*-fat in your diet and preparing lean meats and poultry without added saturated and trans fat." (AHA) This nutrient is okay to have in smaller portions, but when there is an abundance of it, it becomes detrimental to one's health. Foods that contain this nutrient are commonly found in overly processed, and fried foods. Which people commonly do when partaking in a gluten free diet? People tend to eat too much of these foods. Which means you are achieving little to no nutrients at all.

For Individuals who are afraid of in taking fats into your diets because they are afraid on what it may do to your body. Here are some ways you can continue to eat these foods, without having to take them out your diet. So, so that your body can receive the nutrients it needs. You can choose low fat milk over whole milk, choose to eat lean meat over fatty cuts of meat. Also, by being cautious about foods that claim to be fat-free or low fat, limiting the intake of processed foods and finally you can also grill, bake, and steam food (Souza). By making these switches you do not need to cut out these important food groups that will have a positive effect on your body. .

The second macro nutrient to be discussed are proteins. Proteins are made up of amino acids which are the building blocks of life itself. "The National Academy of Medicine recommends that adults get a minimum of 0.8 grams of protein for every kilogram of body weight per day, or just over 7 grams for every 20 pounds of body weight." (National Academies

of Medicine) You can find the nutrients in red meat, fish, poultry, nuts, and other artificial sources like protein powder. Proteins have many different health benefits that are very important to the body. By cutting these proteins out your diet, your body is having a tougher time, finding different substitute to replace the nutrients of protein. Proteins build and repair tissues. Proteins are also use to build other body chemicals. Chemicals such enzymes and hormones (Osterweil). Proteins builds block of bones, muscles, cartilage, skin, and blood. In the article “The Benefits of Protein” by Neil Osterweil it says that “protein is a macronutrient, meaning that your body needs relatively large amounts of it” (Osterweil). Which means you need these types of nutrient and vitamins that come from protein. If you are taking meat out your diet you are essential losing something that cannot be replace. “Unlike fats and carbohydrates, the body not store protein, and therefore has no reservoir to draw on when it needs a new supply (Osterweil). As you can see vegans are not able to receive these types of vitamins or nutrients because they took meat out there diet.

Now we can talk about the diets that intake too much protein. For example, the Paleolithic die. The intake of mainly protein because it is believe it will make you stronger or build muscle more rapidly. But this diet is not good for your body. Those who have a high intake in protein tend to intake fewer amount of carbs. When this occurs your metabolisms changes into a state called Ketosis (Osterweil). This means the body converts from burning carbs for fuel to buring its own fat (Osterweil). When these fats are burned downed, they are released into the bloodstream as an energy source. “ Ketosis, which also occurs in diabetes, tends to suppress appetite, causing people to eat less, and it also increases the body's elimination of fluids through urine, resulting in a loss of water weight”(Osterweil). Now you can see why even to much is a valuable source of nutrients can be bad for you. Moderation is the key to maintaining a healthy

lifestyle. An increase in protein results in short term benefit for a long term health conditions (Osterweil). Yes, moderation is key but making sure to eat the right kind of proteins is key too. Staying away from processed meats is important. Individuals can have these types of meats once and a while but you have to be careful if you eat it all the time. This can lead to type 2 diabetes and cardiovascular disease. Now let's move on to the final macronutrient carbohydrates.

The last macro nutrient, is carbs, also known as carbohydrates.

“When you eat carbs, your body breaks them down into simple sugars, which are absorbed into the bloodstream. As the sugar level rises in your body, the pancreas releases a hormone called insulin. Insulin is needed to move sugar from the blood into the cells, where the sugar can be used as a source of energy” (AHA).

This nutrient can be broken down into two categories: simple, and complex, depending on their structure. Simple carbohydrates consist of one two sugars in the nutrient and can be broken down easily in the body for energy.

“...are digested quickly and send immediate bursts of glucose (energy) into the bloodstream. That's why you may feel a rush of energy when you eat a dessert, only to be followed by a crash of fatigue when that sudden burst of energy is depleted. Simple sugars are found in refined sugars, like the white sugar you'd find in a sugar bowl. Added sugars (including refined sugars) provide calories, but lack vitamins, minerals and fiber and can lead to weight gain” (AHA).

Complex carbs are made up of long chains of sugar that take your body longer to break up to use for the same purpose as simple carbs. “...digested more slowly and supply a lower more steady release of glucose into the bloodstream. As with simple sugars, some complex carbohydrate foods are better choices than others.” (AHA)

Carbohydrates is a very important to your body. But cutting these carbs out, you are potentially putting your body at a very high risk. When you cut out carbs, it also means you are taking away fruits from your diet which is also an essential food source for your body. Carbs is one of the three main nutrients, your body needs. It turns protein and fat into fuel, this fuel is used for your muscles, organs and brain (Anderson). Yes, low carb diets may seem like they are working, but it does not necessarily mean that it is burning away the fat. In the article” Why Cutting Carbs from Your Diet is A Bad Move” by James Anderson, James has evidence to prove it. He says “By suddenly cutting these out, you’ll put yourself into a calorie deficit where you’re consuming fewer calories than you burn – and it’s creating a calorie deficit that causes weight loss, not the fact you’re not eating carbs” (Anderson). If you think about it, humans eat carbs a lot. It is served at breakfast lunch and dinner. Your muscles, organ and brain loves the intake of carbs. When cutting this out your diet, your body is searching i different places to find these carbs, which can potentially harm your body. That’s why “A balanced diet, Therefore, needs to contain a substantial amount of foods high in carbohydrates. Foods high in carbohydrates are also good sources of dietary fiber and many vitamins and minerals” (Andersson and Bryngelsson 32).

Another important factor that goes into creating a diet specifically for you is calculating your BMR, Basal Metabolic Rate, to calculate the amount of calories your body can consume to eliminate fat from your body. To find this out, the equation takes into account age, sex, activity, height, and weight. For men the equation would be following: $BMR = 10 \times \text{weight (in kilograms)} + 6.25 \times \text{height (in centimeters)} - 5 \times \text{age (in years)} + 5$, and for women: $BMR = 10 \times \text{weight (in kilograms)} + 6.25 \times \text{height (in centimeters)} - 5 \times \text{age (in years)} - 161$.

After you calculate your BMR, the next step is to measure the extra calories you can consume based on your activity. I used a computer calculator and factored in activity, which is moderately active, and it gave me back the amount of calories I'd need to maintain the same weight, mild weight loss (0.5 lbs per week), lose weight (1lb per week), and lose extreme weight (2 lbs per week). If you don't have that calculator, that's no problem. The following classifications will help the manual equation calculations: sedentary (little or no exercise) = $BMR \times 1.2$, lightly active (light exercise/sports 1–3 days/week) = $BMR \times 1.375$, moderately active (moderate exercise/sports 3–5 days/week) = $BMR \times 1.55$, very active (hard exercise/sports 6–7 days a week) = $BMR \times 1.725$, extra active (very hard exercise/sports and physical job or 2x training) = $BMR \times 1.9$ (Kylstra). Remember, the recommended amount of physical activity per day is a moderate 150 minute, 2 and a half hours, workout or 75 minutes, 1 hour and 15 minutes, vigorous workout. Scale your amount of exercise, per day, to that and you come up with the correct value to use in the equation.

Finally, you need to start tracking what you eat and do throughout the day. Nutritional facts on food packaging will be your best friend along this journey. Food diaries come in handy to keep to the goal. If you're like the majority of us and don't exactly know or can remember exactly what you ate/did, then reach for a digital food diary. Apps like MyFitnessPal, make it easier for us to do so because of its database. You can enter your information along with your goal and it will track everything. Whilst dieting, remember to drink as much water as possible. Our bodies are composed of 60% water. With all of the activity your body is going to need as much as it can get. The recommended amount is eight 8-ounce glasses, which equals about 2 liters, or half a gallon.

There is no one true fad diet that is truly better for you. After doing research you can see that by cutting out one food can be bad for you. When you cut out a certain food. You are potentially cutting out the one of the three main macronutrients that your body truly needs. Yes, there may be substitutes for some of these foods. These foods may contain other ingredients that is harmful to your body. Every food should be either eaten in moderation or be eaten less than some certain foods. Moderation is key, can't stress that enough. If you have the discipline to not eat too much of one food, you can continue to eat the foods you love. By doing this you are still able to lose weight, gain muscle and get stronger etc. In the Article "Eating a Balance diet: A Healthy Life through A Balanced Diet in the age of Longevity" by Soo Lim provides a chart on what you should eat everyday (40). In this chart you see you should eat 1-2 glasses of milk dairy products, 2-4 grain products, 3-4 meat, fish, egg, beans and 2 different vegetables everyday (Lim 40). By in taking a balanced diet you it is "essential for children and adolescents to ensure their healthy development (Lim 41). Also when by eating in moderation all these foods, your body is one benefiting off of it but also you have less of a chance of gaining one of these disease and harming your body. There are many fad diet but do not take short term results over long term health conditions. If you work out and eat right. Your body will thank you. "Healthy balanced diet begins with learning how to 'eat smart' and remain fit" (Haque 1307). Eating smart and working out allows you to lose weight, gain muscle and keep you safe from long term diseases and CNS problems. Problem and diseases like "reduces the cardiovascular and Metabolic disorders as well as CNS problems like sleep disturbance, depression and Mood variation" (Haque 1307).

These equations are only a tentative guideline for the goals you have at hand. Nothing is guaranteed. In conclusion, "In view of the large number of people who are concerned about their

diets and make attempts to change their dietary patterns, we conclude that it is crucial to gain a better understanding of both the automatic and environmental influences that are responsible for people not acting upon their good intentions for diet change.” (De Ridder 907) We can see that no diet fad is the best. They all come with their pros and cons. But moderation is Key. Too much of one food can be harmful, but too little of one food can be harmful as well the body needs all these vitamins and minerals from these different food source. These nutrients help the body grow and function correctly. To truly find what works for you takes time dedication, discipline, and a little math.

Works Cited

- Alvaro, Carlo. "Ethical Veganism, Virtue, and Greatness of the Soul." *Journal of Agricultural & Environmental Ethics*, no. 6, 2017, p. 765. EBSCOhost, doi: 10.1007/s10806-017-9698-z.
- Andersson, Agneta, and Susanne Bryngelsson. "Towards a Healthy Diet: From Nutrition Recommendations to Dietary Advice." *Scandinavian Journal of Food & Nutrition*, vol. 51, no. 1, Mar. 2007, pp. 31–40. EBSCOhost, doi:10.1080/17482970701284338.
- Bhide, Monica. "9 Pros and Cons to Going Vegan - Will This Strict Diet Work for You -." AARP, AARP, 14 Feb. 2011, www.aarp.org/food/diet-nutrition/info-02-2011/9-pros-and-cons-to-going-vegan.html.
- Bruers, Stijn. "The Core Argument for Veganism." *Philosophia*, vol. 43, no. 2, June 2015, pp. 271–290. EBSCOhost, doi: 10.1007/s11406-015-9595-5.
- Clinic, Mayo. "Type 2 Diabetes." Mayo Clinic, Mayo Foundation for Medical Education and Research, 9 Jan. 2019, www.mayoclinic.org/diseases-conditions/type-2-diabetes/symptoms-causes/syc-20351193.
- Conner Young. "Keto Vs. Low-Carb: What's The Difference?" *Ample Foods*, www.amplemeal.com/blogs/home/keto-vs-low-carb-whats-difference 2018.
- Cordain PH.D., Loren. "The Paleo Diet Premise |Reduce Risk of Chronic Disease | Dr. Cordain." *The Paleo Diet*TM, The Paleo Diet, 2019, thepaleodiet.com/the-paleo-diet-premise/.
- D'Souza, Gillian. "Saturated vs. Unsaturated Fats: Which Is Better for You?" *Medical News Today*, MediLexicon International, www.medicalnewstoday.com/articles/321655.php.

- De Ridder, Denise, et al. "Healthy Diet: Health Impact, Prevalence, Correlates, and Interventions." *Psychology & Health*, vol. 32, no. 8, Aug. 2017, pp. 907–941. EBSCOhost, doi:10.1080/08870446.2017.1316849.
- De Souza, M Cristina P et al. "Pure Oats as Part of the Canadian Gluten-Free Diet in Celiac Disease: The Need to Revisit the Issue." *Canadian journal of gastroenterology & hepatology* vol. 2016 (2016): 1576360. doi:10.1155/2016/1576360
- "Diet." Merriam-Webster, Merriam-Webster, www.merriam-webster.com/dictionary/diet.
- Haque, Sirajul, et al. "Balanced Diet; Balanced Life." *Professional Medical Journal*, vol. 22, no. 10, Dec. 2015, pp. 1304–1308. EBSCOhost, doi:10.17957/TPMJ/15.2647.
- Elea Carey and Justin Sarachik. "10 Processes foods to avoid". *Health line*. 2019. <https://www.healthline.com/health/food-nutrition/processed-foods-to-avoid>
- James Anderson. "Why Cutting Carbs From Your Diet Is A Bad Move." *The Cusp*, 10 July 2016, thecusp.com.au/why-cutting-carbs-from-your-diet-is-a-bad-move/7128.
- Katz, Meller. "Can We Say What Diet Is Best for Health?" *Annual Review of Public Health*, 2014, p. 83. EBSCOhost, doi: 10.1146/annurev-publhealth-032013-182351.
- Kylstra, Carolyn. "This Is How Many Calories You Actually Need." *BuzzFeed*, 28 Aug. 2018, www.buzzfeed.com/carolynkylstra/heres-how-many-calories-you-should-actually-eat-every-day#.cik1qXLoO.
- Ludwig, David S., et al. "Dietary Fat: From Foe to Friend?" *Science*, no. 6416, 2018, p. 764. EBSCOhost, direct=true&db=edsgao&AN=edsgcl.565512500&site=eds-live.
- Mozaffarian, Dariush. "Dietary and Policy Priorities for Cardiovascular Disease, Diabetes, and Obesity: A Comprehensive Review." *Circulation*, vol. 133, no. 2, Jan. 2016, pp. 187–225.

- Osterweil, Neil. "The Benefits of Protein." *WebMD*, WebMD, www.webmd.com/men/features/benefits-protein#4.
- Satterthwaite, Liz. "The Pros and Cons of the Keto Diet." HealthConnect, 18 Dec. 2018, promedicahealthconnect.org/wellness/the-pros-and-cons-of-the-keto-diet/.
- Searing, Linda. "The Big Number: 45 Million Americans Go on a Diet Each Year." *The Washington Post*, WP Company, 1 Jan. 2018, www.washingtonpost.com/national/health-science/the-big-number-45-million-americans-go-on-a-diet-each-year/2017/12/29/04089aec-ebdd-11e7-b698-91d4e35920a3_story.html?noredirect=on&utm_term=.f4f67f09f90c.
- Soo Lim. "Eating a Balanced Diet: A Healthy Life through a Balanced Diet in the Age of Longevity." *Journal of Obesity & Metabolic Syndrome*, Vol 27, Iss 1, Pp 39-45 (2018), no. 1, 2018, p. 39. EBSCOhost, doi:10.7570/jomes.2018.27.1.39.
- Tapsell, Linda C. "Examining the Relationship between Food, Diet and Health." *Nutrition & Dietetics*, vol. 73, no. 2, Apr. 2016, pp. 121–124. EBSCOhost, doi:10.1111/1747-0080.12276.
- Thalheimer, Judith C. "The Pescetarian Diet." *Today's Dietitian: Magazine for Nutritional Professionals*, Great Valley Publishing Company, Inc., Apr. 2015, www.todaysdietitian.com/newarchives/040715p32.shtml.
- Wolfram, Taylor. "Vegetarianism The Basic Facts." *EatRight, Academy of Nutrition and Dietetics*, All Rights Reserved., 1 Oct. 2018, www.eatright.org/food/nutrition/vegetarian-and-special-diets/vegetarianism-the-basic-facts.