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## Food Alternative & Benefits

While discovering that most people have gone through changes with their health, many have gone through different methods. Some of which can help them with what they are struggling physically and mentally. In some countries, there are people who are dealing with diseases, stress, or being economically unstable. More importantly, a new way for people to help themselves who are going through a diet such as a plant-based type. A plant based diet has many health benefits which includes cholesterol, cardiovascular diseases, the high rate of obesity and the list goes on. It can also improve the planet, along with resources being consumed. Many will overlook this and think of it as impossible. A plant based diet is beneficial not just for the human body but for everyone.

Most plant-based diets consist mostly of foods derived from plants which includes fruits or vegetables, grains, nuts, seeds, and with a few or no animal products. These diets are created to help people who are suffering from diseases and unhealthy food disorders. Diets like these can help or prevent the risk of having high cholesterol, being overweight, and many other heart diseases. A prime example of this would be obesity which is still a problem especially in the United States. As the population continues to rise, more resources are burned for the purpose. Since obesity occurs from overeating and less body movement; a diet low in animal-based products and high plant-based foods can potentially prevent being overweight along with other

factors playing into the diet. This diet can maintain a healthy weight and can lower the risk of heart disease.

For those who happen to eat meat the most can switch to a vegetarian diet since it's for the best. Eating lots of meat including red meats can cause either cancer or a heart disease. If a person's diet consists of eating meat daily such as red meat, then "some of them are high in saturated fat which raises blood cholesterol. High levels of LDL (low-density lipoprotein) cholesterol increase the risk of heart disease" (Lee, L. Gelfand). If a plant-based diet is played into this, then the chances of people who happen to be suffering can make a difference.

Ever since the "Impossible Burger" was released it's only been getting better ever since more people have been developing plant-based meats. Unlike a veggie burger, the "Impossible Burger" actually tastes like meat. If more plant-based meats can be produced, it can not only change the way people think when it comes to their next meal but also change how they perceive other factors that come into play with their daily lives. Companies such Impossible Foods and Beyond Meat have offered plant-based meats, another food alternative. Since it takes more time and resources to raise and breed cattle; this can hurt the environment.

Since animals need space in order to breed, many forests are burned down just for that purpose. The way the media sees it, some would think the fact forests are burned just to raise cattle is insane. Since the planet is dealing with natural causes, including global warming which is due to deforestation causing damage towards the atmosphere. Greenhouses have a negative result where it can cause extreme weather, an increase in food shortages (possibly), and wildfires such as in California or Australia. Both cases where forests are burned due to extreme heat trapped. The causes of this would be methane. "Methane is a powerful greenhouse gas that, along with nitrous oxide, carbon dioxide and some other compounds in the atmosphere, create a

blanket around our planet to keep us warm." (Rotz, Hristov). As seen as a good thing, the increase of cattle makes the blanket thicken which also isn't very good. Since greenhouse gases include carbon dioxide, nitrous oxide, along with some other gases; it's no different from burning fossil fuels. The more it is burned, the more gases produced which can turn up the heat and thus results in global warming.

When it comes to a plant-based diet, the difference between plants and meats is the different nutrients it gives. The most important of them all is protein. Not all plants are in favor of giving the necessary nutrients such as meat. But the one thing meat lacks in is amino acids. Barrington notes that the human body needs at least 20 amino acids, 11 in which the body produces and 9 are the most essentials in a diet. The only difference is that some plants have more essential nutrients than meat and are high in fiber and there is less calorie intake. This can boost the person's health such as having healthy muscles and tissues. Although some meats can do the same as plant protein, it does not matter whether or not a person decides for a plant or meat based diet because in the end, protein is the most essential nutrient needed.

Plant-based meats are continuously growing and it only gets better. A few decades ago when the veggie burger was announced, it wasn't as good as the "Impossible Whopper". The burger was made just to mimic the texture, smell and taste of a normal beef patty. But ever since people have started to recognize plant-based meats, it has only evolved since then. Most of the nutrients humans receive is coming from what they take in such as the sun and the food products they consume. Most meats and plant-based products carry most nutrients. Since most animals feed off of plants such as hay, grass and silage, most of the nutrients where people are receiving is from the plants they eat. Humans mostly get energy mainly from the sun, so do plants and cattle as well. Since cattle feed on plants to get energy that's coming from the sun, the cattle are

just the middlemen and humans don't really need to consume them because most energy is coming from the sun and we're just eating plants to take off the power source. There is more variety of essential nutrients coming from vegetables and fruits than in everyday animal-based products. Giancoli, a registered dietitian, states that plant-based proteins are far healthier than their meat counterparts and that's because, "pound-for-pound", they pack more nutrients into fewer calories. The one thing animals completely lack is fiber which they don't have. It can not only help with digestion but also reduce risks of cardiovascular diseases.

Most people who see this diet as a better alternative choice when it comes to choosing their next meal. But there are some who are stubborn and would think that a plant-based diet or a plant-based burger is absurd. There are some cases where a vegetarian or plant-based diet can lead to a "choline crisis". "Choline helps with this vital breakdown of food. It does so by donating methyl groups to other molecules." (Clarke). Even if the body is unable to receive choline, it doesn't mean that anyone can't have animal-based products in their diet. Other foods such as eggs can help with this and so supplements can be added along. Not all vegetarian diets can't have animal-based products, what really matters is who's deciding to choose what they choose to have.

It just so happens that raising cattle and burning landscapes such as forests is not only harmful to the Earth but even more dangerous than riding your everyday vehicle. Raising animals just to breed, kill and transport them is even more harmful than using transportation vehicles because of the amount of greenhouses being released from them. Lean states that livestock also produces more than 100 other polluting gases, including more than two-thirds of the world's emissions of ammonia, one of the main causes of acid rain. If a plant-based diet was implemented into everyone, then having to choose to eat plants rather than meat can help with

the environment and possibly other factors being put in place that can help stop worldwide pollution. Mainly because raising livestock has been always difficult and due to the negative outcomes of greenhouse gases that has been deteriorating the Earth's atmosphere.

As many years go by, many high performance athletes are switching to go for a plant-based diet such as Arnold Schwarzenegger, Kyrie Irving, Nate Diaz, and a whole ton of others. If any of these athletes happen to be switching their diets then it's best to say it's just as good for anyone else. Barnard states that meat consumption and high cholesterol levels exacerbate inflammation, which can result in pain and impair athletic performance and recovery. There's been studies shown that a plant-based diet can be the opposite with inflammation. Thus helping athletes after a workout. Not only does it improve their athletic abilities, "it helps improve blood viscosity, or thickness. That helps more oxygen reach the muscles, which improves athletic performance" (Barnard). Not to mention Arnold Schwarzenegger, a famous movie star and former Olympic champion, happens to switch to a plant-based diet due to aging. "Seniors tend to have a higher risk for diabetes since the body has more difficulty processing insulin with age. Plant-based diets greatly reduce diabetes risk because they increase the body's sensitivity to insulin" (Coast Care Partners). Older adults may find this useful since it can help boost their health and make healthy lifestyle choices and possibly their grocery bill. Since certain foods are too rich for the elderly, this diet can help slow food absorption so then they are less likely to have damaging blood sugar spikes after a meal.

By all counts and proven results, plant-based diets are not only the better alternative just for people but of all ages and aspects. In developing countries, it can improve with many other situations where people are dealing with poverty, stress and poor health. This can revolutionize the way people think and their lifestyle. As plant-based foods continue to evolve, it can possibly

rejuvenate the environment and set straight with making the right choices and not just for themselves but for things being involved with.

## Citations

https://www.beefresearch.org/resources/beef-sustainability/fact-sheets/global-warming

(C. Alan Rotz, Alex N. Hristov, USDA Agricultural Research Service, Penn State University College of Agricultural Sciences)

https://www.naturespath.com/en-us/blog/benefits-plant-based-protein/

(Food & Health, Culture & Lifestyle by Kate Barrington on June 7, 2018)

https://www.webmd.com/food-recipes/features/the-truth-about-red-meat

(Elizabeth Lee, Medically Reviewed by Jonathan L Gelfand, MD on August 29, 2011)

https://www.ucdavis.edu/food/news/making-cattle-more-sustainable

(Amy Quinton June 27, 2019, UCDavis)

https://www.freshnlean.com/blog/what-is-choline/

(Warren Clarke May 6, 2021)