

Veganism and Vegetarianism: Growing acceptance in United States of America



Table of Contents

Vegetarianism and Veganism: A fad or a real trend?	2
Why are people adapting plant-based diet?	2
A case study on search trends in United States of America	6
Conclusion:	8
References:.....	8
Appendix:	10



Vegetarianism and Veganism: A fad or a real trend?

Introduction: Many of us have heard a lot about the word – ‘Vegan’ which has been a hot topic of discussion since last one or two years. Those who have not heard about it, the word vegan is related to a diet that humans take each day to survive and stay healthy. The meaning of the word vegan is someone who does not consume or use any kind of animal products directly or indirectly both.

The obvious question that comes to mind is that, why do people not consume animal products? The answer to this is basically classified into three types, one is, their love for the animals. Secondly, for the betterment of personal health and thirdly, for the environment.

Before moving any further into the details, let us have a look on the list of celebrities who have recently adapted the Vegan/vegetarian lifestyles, and are influencing more people!

Awarded as the most beautiful Vegan for the year 2018 by PETA, **Benedict Cumberbatch** disclosed about his plant-based diet at the time of promotions for Avengers Endgames movie.

Americas 42nd President – **Bill Clinton**, after having a heart surgery (in 2010) turned Vegan in order to live healthier and longer!

Celebrities from music industry – **Jay Sean, Beyonce, Jason Mraz, Ellie Goulding, Madonna, Ariana Grande, Miley Cyrus** have turned Vegan and they feel that being a Vegan has helped a lot in staying fit and the body metabolism has improved since the switch.

Celebrity Actors like **Peter Dinklage** (Game of Thrones), **Liam Hemsworth, Mayim Bialik, Jessica Chastain** etc have also turned Vegan and many of these

actors feel that they have lesser skin problems now.

Celebrities from sports industry – **Virat Kohli, Venus Williams** have recently shifted to Vegan diet and have continued to give their top performances

The list is very long and is continuously increasing in size day by day as people are growing more aware! Let’s study about why people are shifting towards a plant-based diet.

Why are people adapting plant-based diet?

One of the main reasons, why people are shifting towards a plant-based diet is because of their love for animals. Be it dogs, cats, pigs, birds, etc, people are having a high attachment to their pets. The organization named IFS in The United States published an article in 2017 which says that the number of pets being raised by the Americans’ have risen greatly in last few years and people have started spending a huge part of their incomes on the fulfilment of the pets’ needs (which includes health insurance too).

A survey done for the pets in US shows that there has been a significant increase in the number of fostered pets between the years 2016 – 2018. The visualization is given below in Figure 1.

Fact 1: In an article published in March 2016, there are 32 verified Vegan celebrities in USA.



Image 1 source -
forksoverknives

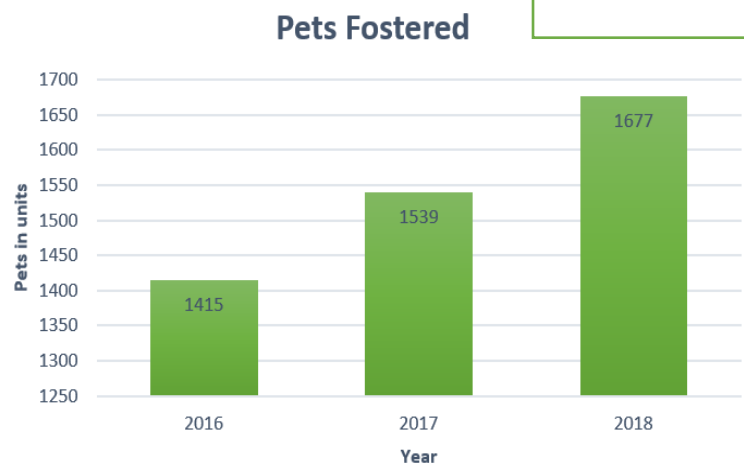


Figure 1: Number of pets fostered, Tool: MS Excel

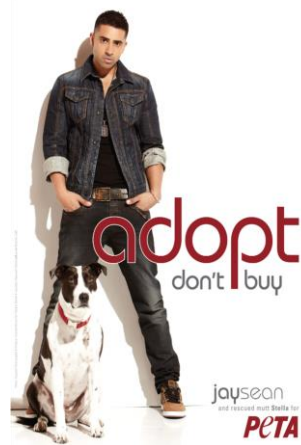


Image 2 source - PETA

This shows that the people have started loving animals more now-a-days. Also, PETA is making efforts in this area to minimize the animal sufferings and almost all the people are aware of the steps the organization is taking towards the betterment of the animals.

The second reason is for the betterment of personal health which is a reason big enough for making the switch towards being vegan. There are so many diseases like Diabetes, heart diseases, cancer, arthritis, etc which are affecting peoples' life. Many of these diseases are because of the unhealthy food eating habits and due to high fat content in food. As the result of this, people are increasingly becoming prone to all such diseases.

The figure below shows that Diabetes in America has been a serious problem and the number of adults with diabetes has gone to a very high level in almost all the states.

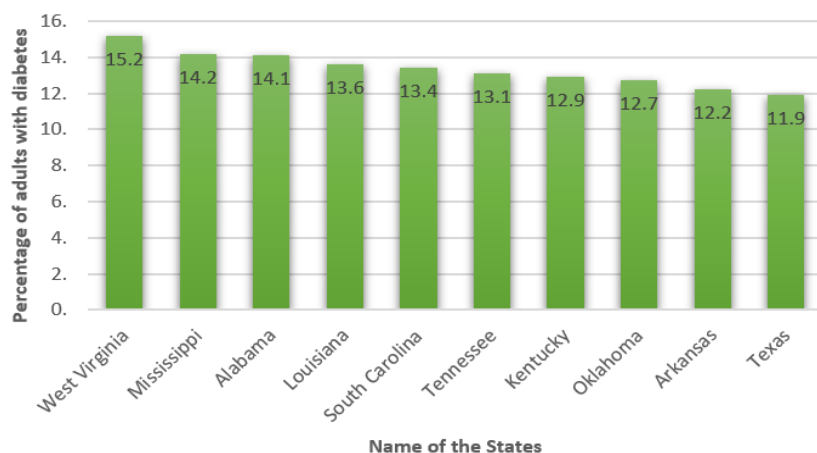


Figure 2: Adults in USA with Diabetes, Tool: MS Excel

Fact 2: In 2015, Diabetes was listed as direct or indirect reason of 252,806 deaths in USA.

As per a research, Diabetes has been found to be the seventh major disease as a cause to death. This has raised severe concerns in Americans', and they are much more cautious with the eating habits.

The next visualization shows that the number of deaths due to heart diseases

in US is significantly high. Although it appears from the visualization that the death rate has decreased over last 50 years or so, it is merely due to the fact that the medical industry has evolved since then.

Number of deaths per year due to heart diseases

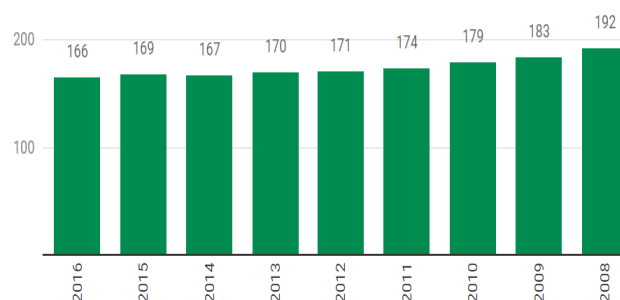


Figure 3: Deaths in USA due to heart diseases, Tool: Datawrapper

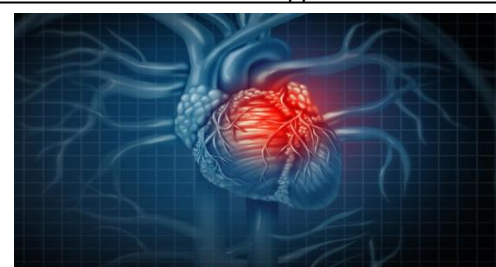
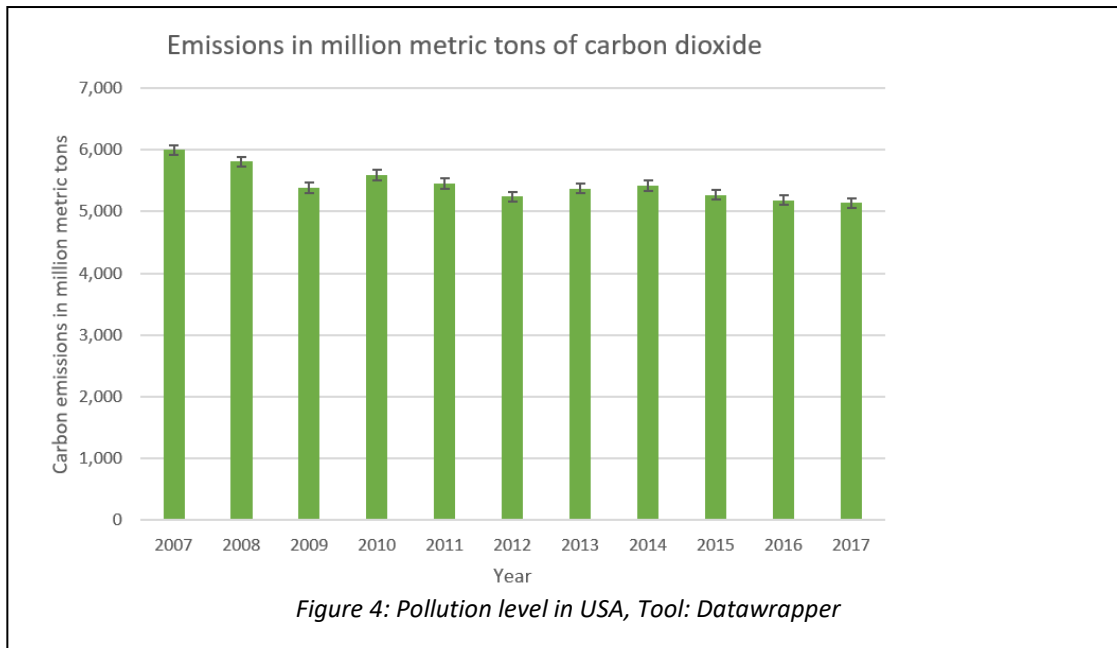


Image 3

The third reason is for the betterment of the planet's environment. There have been researches done in the field of vegetables and their agriculture patterns which reveals that raising vegetables and green plants has infinitely smaller carbon footprint left behind as compared to raising livestock and other animals used for producing meat.

As per the case study, done on the Emissions of carbon dioxide in America, the pollution level has been consistently high in past few years. Higher levels of carbon emissions lead to global warming. This is a major concern and countries across the globe are facing this issue. The figure below shows the levels of pollution by projecting the emissions of carbon dioxide each year in the units of million metrics tons. The X-axis represents the year and Y-axis represents carbon emissions.



The next question that is raised is whether or not are the Americans' concerned about the rising levels of pollution. The pollution adds significantly towards global warming.

As per the survey done by Gallup, which was targeted for Americans' who were 18 years and old, a few questions were asked on telephonic interviews to know the concerns about the global warming. The area chart (figure 5) below is the

statistic of the response given by the Americans'.

The statistics clearly show that the concerns of the Americans have increased with time with regards to the Global Warming. Recent studies done in agricultural departments have revealed facts that vegan or plant-based diet is very effective in reducing the carbon footprint. This actually has tempted people from adapting this lifestyle.

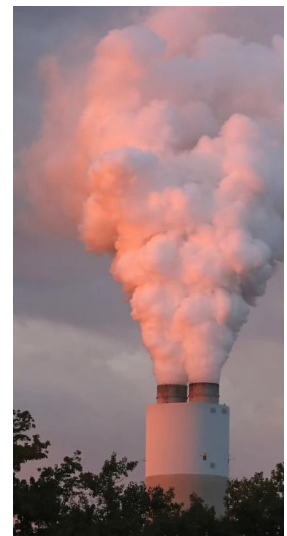
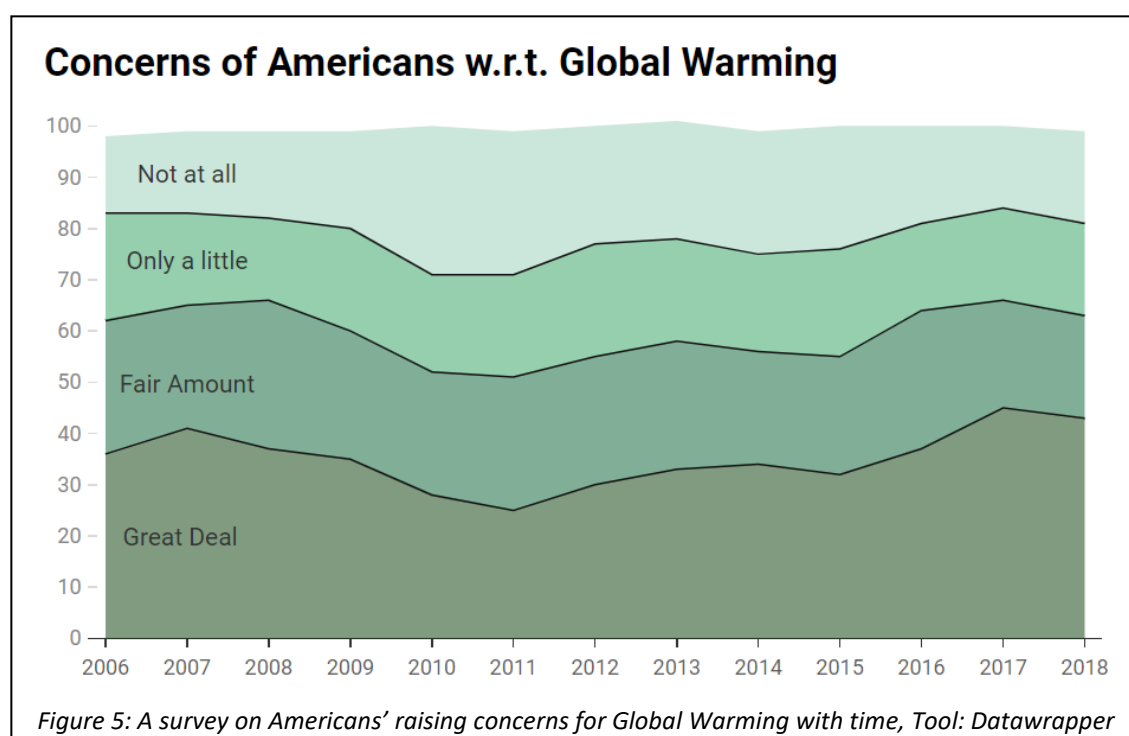


Image 4



Image 5

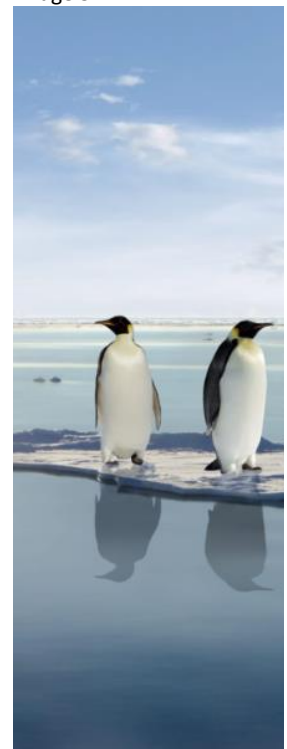


Image 6



Image 7

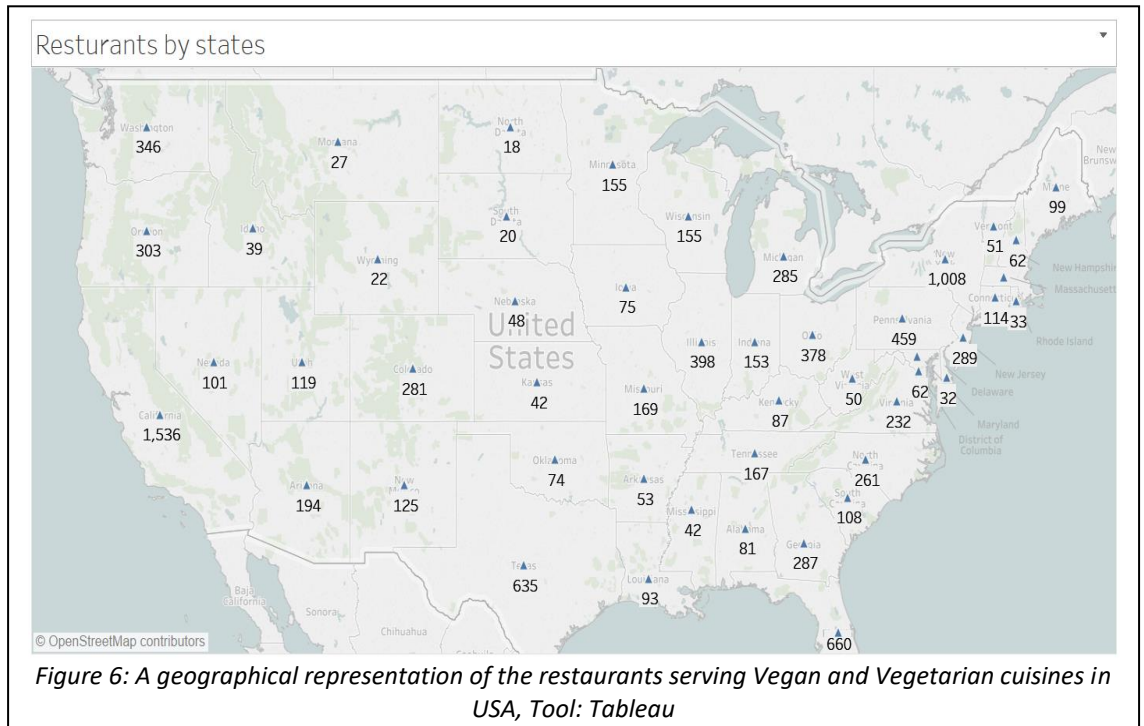
As compared to 2014, the number of vegans in USA has increased 6 times in 2017.

A case study on American restaurants.

So, till now we have seen that there are many reasons why there is an increase in the number of vegans and vegetarians in American population. Now let's analyse how many vegetarian or vegan restaurants are available for people in United States.

states in United States, so here in the map (Figure 6), we can see that there are a number of restaurants serving vegetarian and vegan dishes across the country.

California is having maximum number of restaurants serving vegetarian and vegan foods (1500 and above). And New York is having the second highest

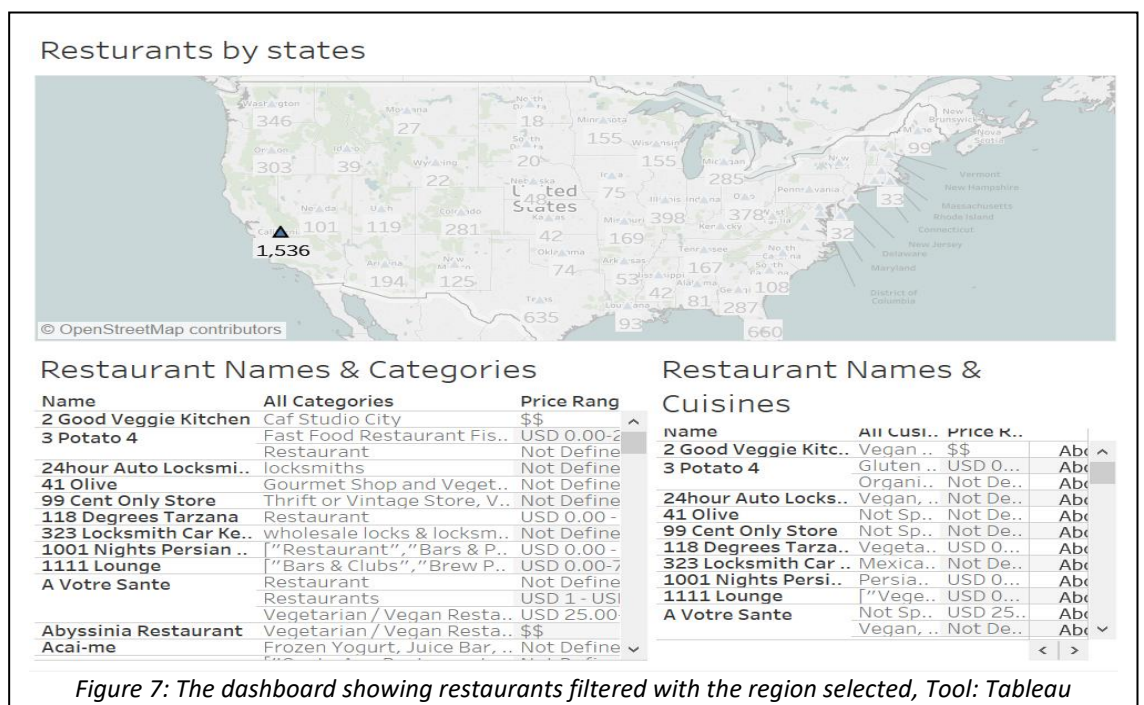


As per the dataset, there are about 18000+ records which are scattered all over the United States. There are 50

number of restaurants in the same category (1000 and above). To check how many restaurants are serving in a region, along with cuisine



Image 8



details, I've added a dashboard below. Once a state is selected, the restaurants with the category and cuisines gets updated in the list below the map.

A case study on search trends in United States of America

To analyse the Veganism and Vegetarianism trend in USA, we need to have a look on the search trends that people, who follow Vegan or vegetarian diet, search on google.

People who are interested in Vegan food, they do search about Vegan recipes. The search trend from year 2004 to 2018 have been taken into consideration which shows peoples' interest towards Vegan food.

Number of searches for Vegan Recipes



Figure 8: Interest of people towards Vegan Recipes, Tool: Tableau

As per the data gathered from google trends, it is very clear that the peoples' interest over the time has increased towards the vegan recipes. As compared to the past, the number of searches per month have almost become four times in 2018 compared to what it was in 2004. The graph is depicted below.

The people have also started searching more about the vegan restaurants which can be clearly seen from the graph below (Figure 9).

Number of searches for Vegetarian Restaurants

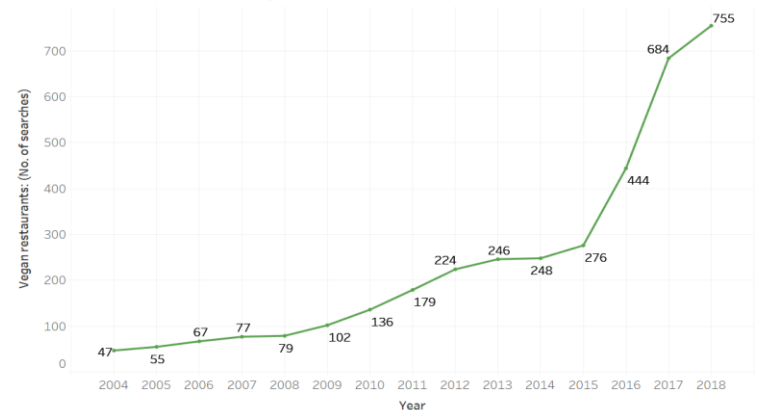


Figure 9: Interest of people towards Vegetarian Restaurant, Tool: Tableau

The line chart above also shows an interesting fact that the number of restaurants has increased in the past 10 decades.

About the eating habits of the people, the search trends reflect another beautiful insight.

percentage of searches for Vegan recipes vs Vegan Restaurants

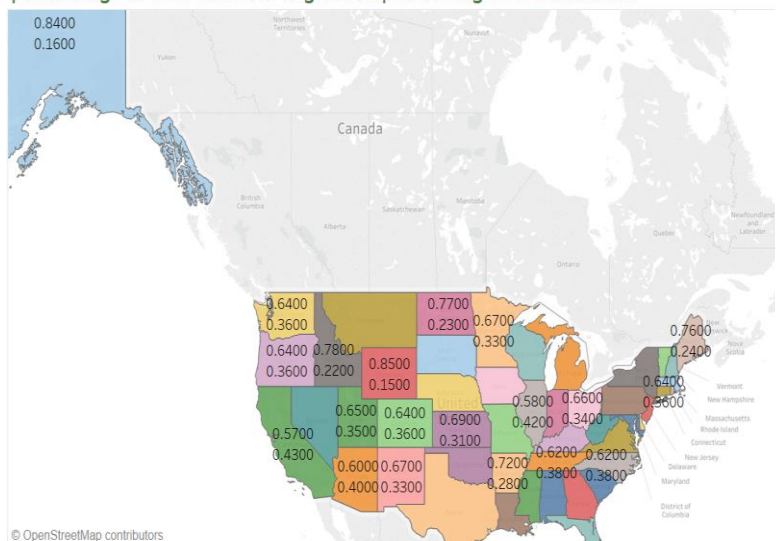


Figure 10: Searches for Vegan recipes vs Vegetarian restaurants, Tool: Tableau

This comparison (Figure 10) reflects the interest of people who search for online vegan recipes vs the people who search for vegan restaurants and the comparison is broken down area wise. This tells us in which area people prefer to eat outside compared to making vegan dishes on their own.

Now let's see another interesting fact-which state is searching more about the vegan recipes. Figure 11 shows the top 5 states in which searches related to vegan recipes have been done.

The word cloud (Figure 12) above shows that people search a lot about vegan recipes. Most trending recipes include - vegan potato recipes, quinoa recipes, zucchini recipes etc.

Coming to the restaurants business in America, figure 13 below shows region wise interest of the people of The United States in searching for vegan restaurants.

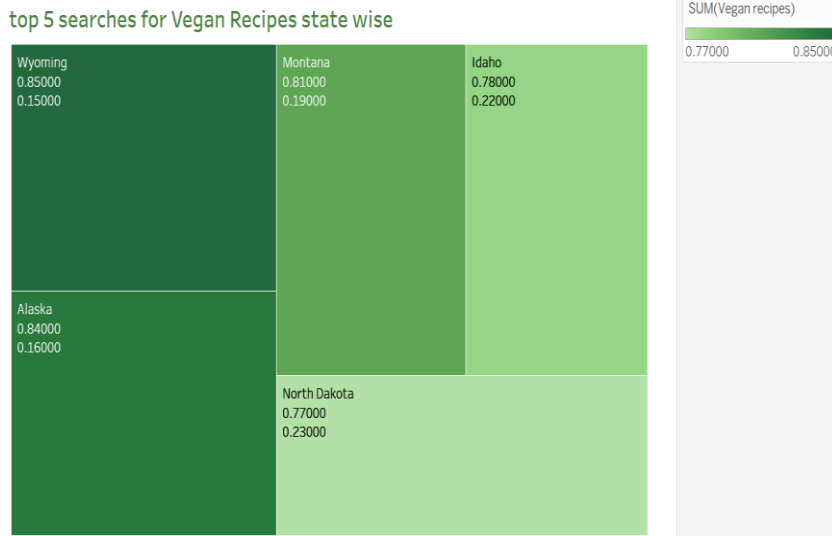


Figure 11: Top 5 states for searches related to vegan recipe searches, Tool: Tableau

Another interesting fact to be noticed is, how much are the vegan recipes searched on internet in united states. The word cloud below shows the search pattern. The words in bigger size and darker in colour are the most searched words.

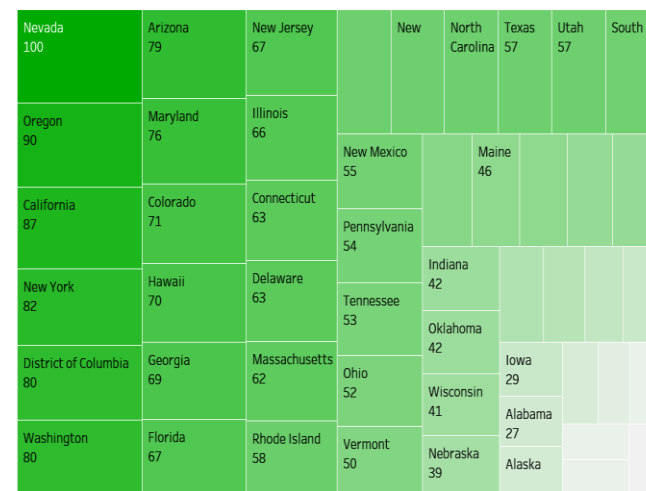


Figure 13: A tree map showing search pattern for vegetarian restaurants in each region, Tool: Tableau

There is a direct implication of the data showcased in the above visualization. The number of searches for vegetarian restaurants are higher in the areas which are having more vegetarian restaurants.



Figure 12: A word cloud showing search pattern for vegan recipes, Tool: Tableau



Image 9

The graph below shows how many searches have been done for vegan restaurants. Number of search hits for these strings have been noticed to be increasing day by day and there is no doubt that people are looking for vegan or vegetarian options not only in home but also when they go and dine out.

Search pattern for Vegan Restaurants

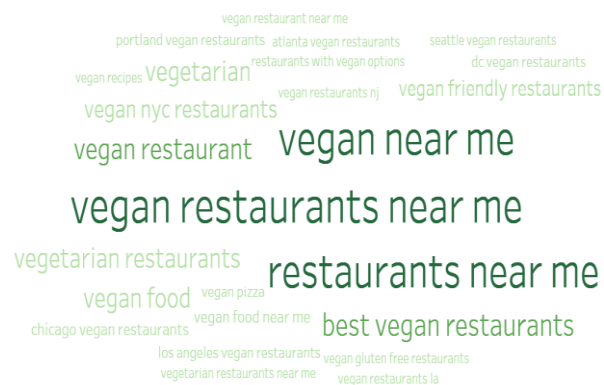


Figure 14: A word cloud showing search pattern for vegan restaurants, Tool: Tableau

Conclusion:

This report shows how the Americans accepted veganism and vegetarianism and how the numbers have started getting bigger with time. The report does not claim to say that the vegan or vegetarian food eating habits is the only better way to lead a healthy life. In this report, the observations have been made based on the data found online. The acceptance of vegan culture is not just because it is a buzz word these days, but there are factors which have been discussed in this report, which prove that people are actually accepting and making a switch towards veganism because they love animals, they are becoming more inclined towards leading a healthier life and they are concerned with the increasing level of global warming. Hence, by studying the facts and by visualizing them using different tools, we can conclude that veganism and vegetarianism is not just a

fad, instead it is a trend and we can expect this trend to grow in fore-coming future.

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Appendix:

Figure	Description	Visualization
1	Pets fostered	This is a bar chart representation of the number of pets fostered for the years 2016, 2017 and 2018. This Visualization has been chosen because we need to show a comparison of the number of pets fostered per year.
2	Diabetes in America	This bar chart represents the percentage of adults with diabetes disease in the given 10 states. I have used this visualization to compare the percentage of adults suffering the diabetes disease in 10 different states.
3	Deaths due to heart diseases	This bar chart represents the number of deaths happened in USA due to heart diseases from the year 2008 to 2016. This Visualization has been chosen because we have to show a comparison of the number of deaths in USA happened due to heart diseases.
4	Pollution levels in USA	This bar chart represents the carbon emissions in USA for a time period of 10 years. This Visualization has been chosen because we have to show a comparison of the carbon emissions per year.
5	Concerns of Americans w.r.t global warming	This area chart shows the concerns of Americans' towards global warming. This visualization has been chosen because it is best to describe the change of people's concerns over the time.
6	Restaurants by state	This map visualization has been used to display the number of restaurants which are serving vegetarian and vegan food options in the USA. This visualization type has been chosen because it is the best to represent geographical data.
7	Restaurant by states (dashboard)	This map visualization has been used to display the number of restaurants in a region. This visualization is a dashboard which is made up of 3 different sheets.
8	Interest of people towards Vegan recipes	This line chart is showing the interest of the people towards the vegan recipes. This visualization has been used because it is the best option to display the trend of the search patterns that people are searching.
9	Number of searches for vegetarian restaurants	This line chart is showing the interest of people in searching for vegetarian restaurants. This visualization has been used because it is the best option to display the trend of the search patterns that people are searching.
10	Vegan recipes vs vegetarian restaurants search trends	This map visualization shows the percentage of people who are searching for vegan recipes vs people who are searching for vegetarian restaurants. This visualization has been used because it precisely shows people of which area are searching for which type of option.
11	Top 5 states related to vegan recipe searches	This tree map shows the top 5 states which have the most searches for vegan recipes. This visualization has been chosen because it is perfect for showing the hierarchical data and the bigger rectangles denotes the higher number of searches.
12	word cloud for vegan recipes	This word cloud shows what are the most searched strings for vegan recipes in USA. This visualization has been chosen because it is best to display the number of searches and the bigger font relates to the most searched strings.
13	Number of searches for vegetarian restaurants	This tree map shows the strings that are most searched for in the USA. This visualization has been chosen because it is perfect for showing the hierarchical data and the bigger rectangles denotes the higher number of searches.
14	Word cloud for vegetarian restaurant searches	This word cloud shows what are the most searched strings for vegetarian restaurants in the USA. This visualization has been chosen because it is best to display the number of searches and the bigger font relates to the most searched strings.