

Introduction

In the last few years, we have seen and heard of many new lifestyle trends/practices such as **paleo diet**, **veganism**, **intermittent fasting** and **meditation** that completely changed the life of the people advocating them.

Some examples of this are Hollywood actor Terry Crews who said that ever since he started practicing intermittent fasting he looks and feels better than he did when he was 22 years old, or Janette Murray who miraculously cured her cancer by going on a raw vegan diet and ran a marathon everyday in 2013 at 64.

However, everyone's body and mind are different, so the question is :

**Does the general public respond well to these practices too?
Or do they mostly suffer from negative effects?**

In our project, we decided to put that to the test. We extracted tweets talking about trends/practices of our choice and performed sentiment analysis on them to get an idea about how they are perceived and compared them to each other to understand which practice has impacted people lives for the better the most, as well as, some additional analysis.

Datasets :

- **Swiss tweet** : Contains tweets posted in Switzerland.
- **Tweets leon** : Contains tweets from around the world.

- **Information used in datasets :**
- Tweet text
 - Language of the tweet
 - Date of post
 - Sentiment (Only for SwissTweet).
 - Gender (Only for SwissTweet).

Trends Analyzed :

- Meditation
- Paleo Diet
- Veganism
- Intermittent Fasting

Extracting Tweets :

Using Keywords:

- Extracting target tweets was done by creating a list of keywords for each trend in English, and in the three main languages in Switzerland : French, Italian, German.

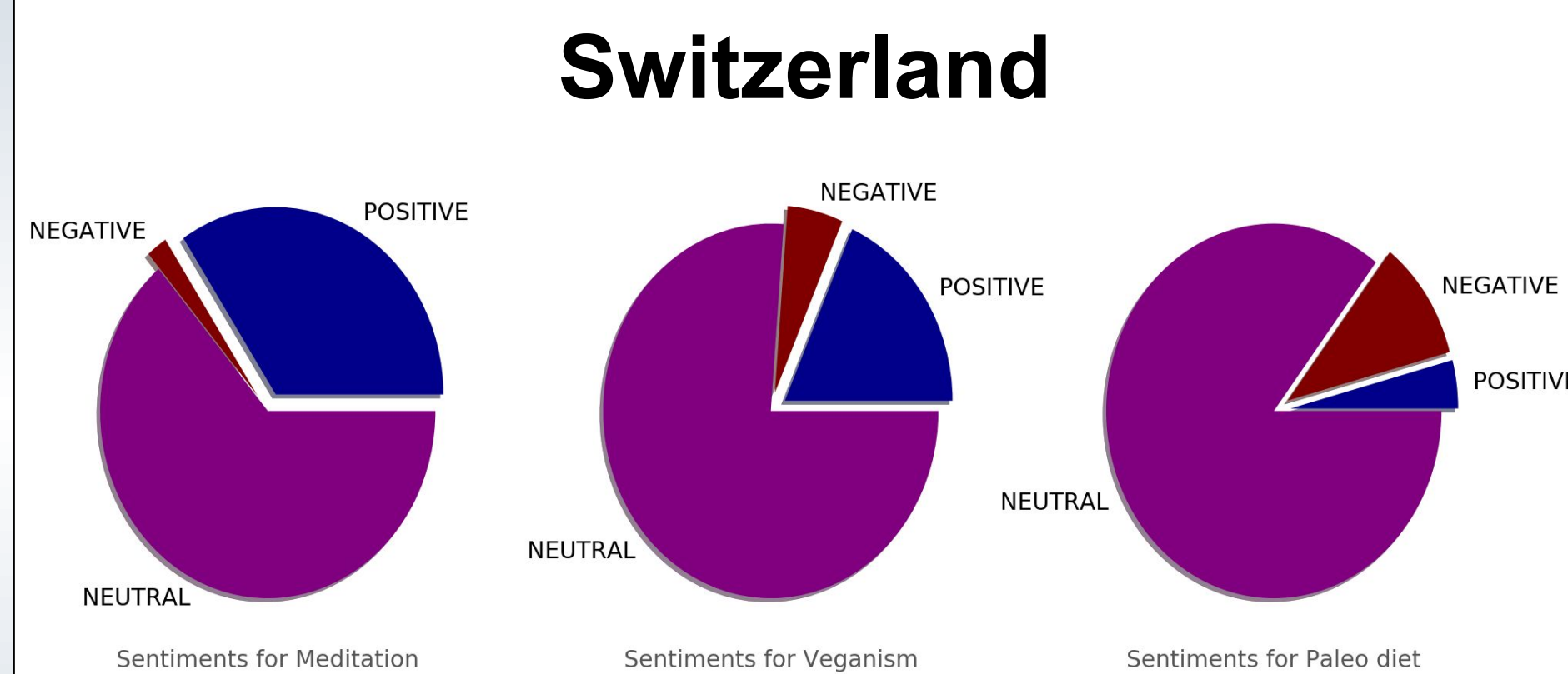
Filtering Bad Results :

- Look at recurring bad results (e.g Results for Paleo diet containing tweets about the paleo festival)
- Create a list of negative keywords (e.g paleo festival)
- Filter out all tweets containing negative keywords

Sentiment Analysis :

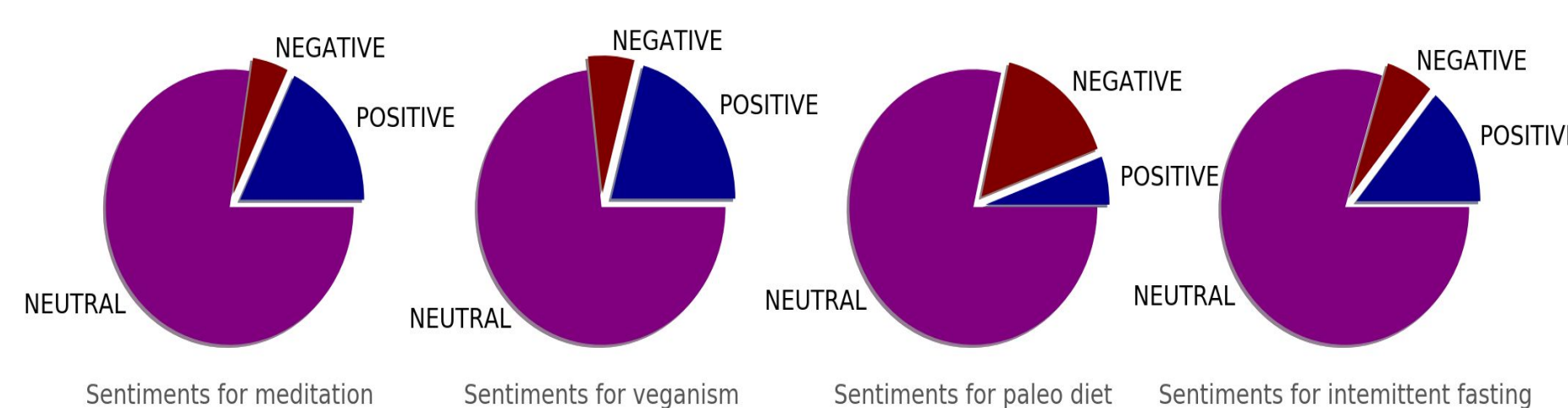
- **Preprocessing** : All texts are translated to English using Googletrans API.
- **Predicting Sentiments** : Use nltk.sentiments.vader to predict probability of sentiments.
- **Assigning Sentiments** :
 - Probability of Neutral > 70 % → Neutral
 - Otherwise → Select the sentiment with highest probability among Positive or Negative.

Sentiments Results :



- Non-neutral Sentiments about **Meditation** and **Veganism** are very **Positive**.
- Non-neutral sentiments about the **Paleo diet** are mostly **Negative**.

Globally :

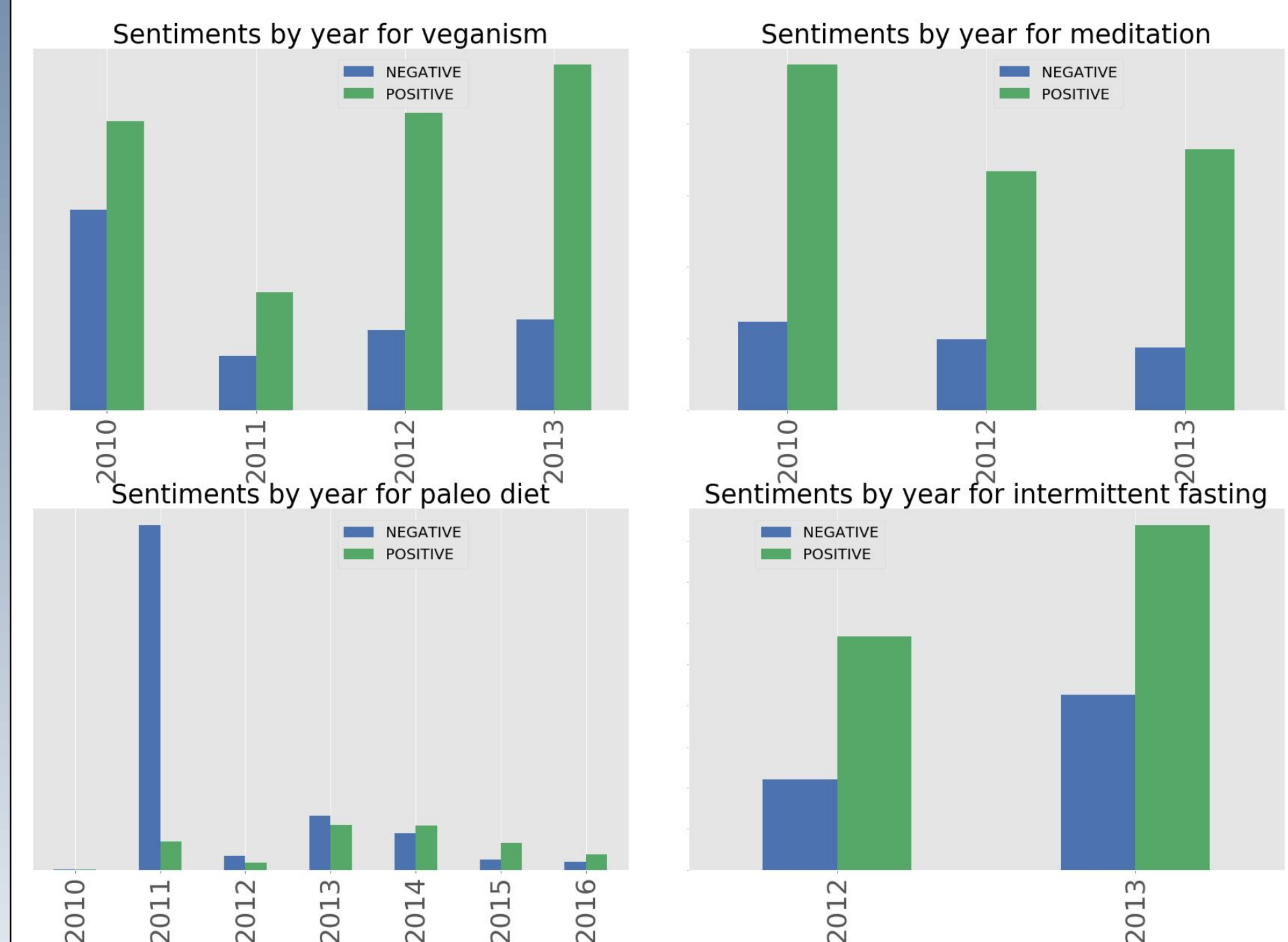


- Non-neutral sentiments about **Veganism**, **Meditation** and **Intermittent Fasting** are **Positive**.
- Non-neutral sentiments about the **Paleo Diet** are mostly **Negative**.

Comparison of Sentiments

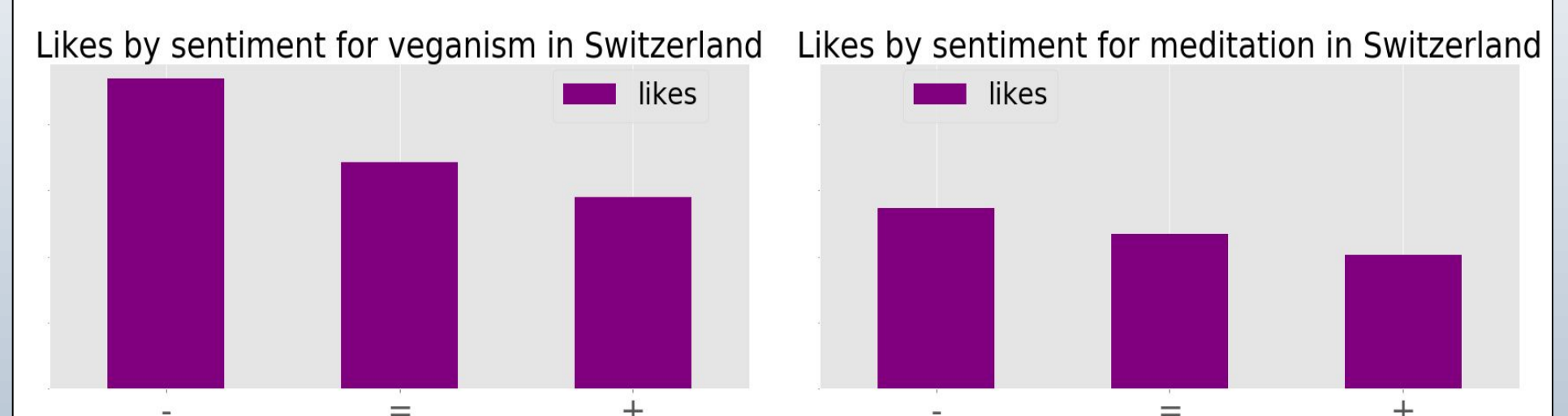
- The **Paleo Diet** is not very liked both in Switzerland and the world.
- **Veganism** is popular both in Switzerland and in the world.
- There are more Positive sentiments about **Meditation** in Switzerland than in the rest of the world.

Evolution By Year :



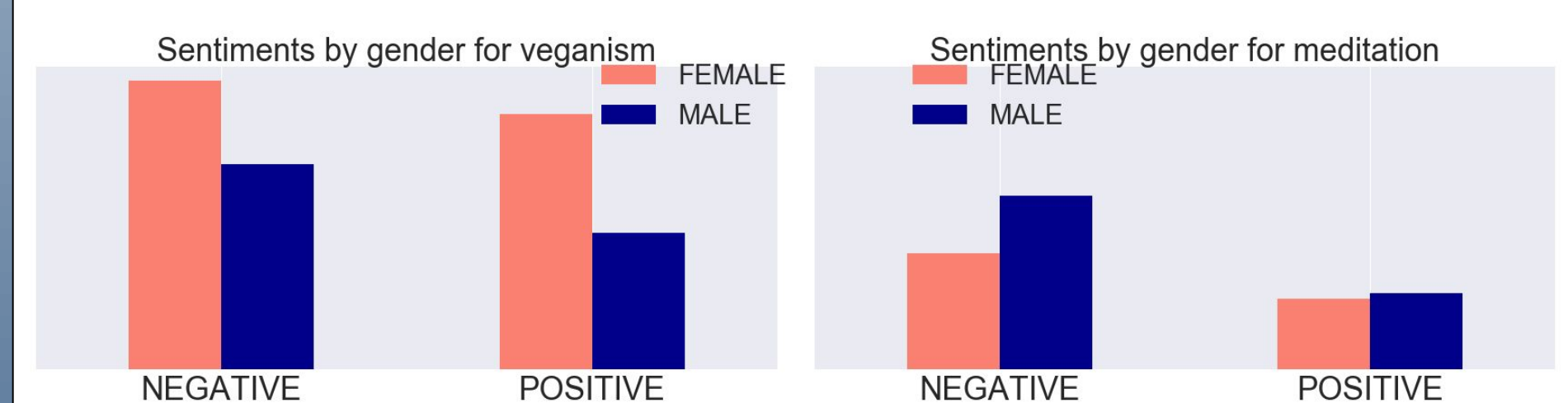
- The **Paleo Diet** was talked about negatively a lot in 2011.
- Most sentiments about the **Paleo Diet** are neutral from 2012 to 2016
- No significant change for **Veganism**, **Intermittent Fasting** and **Meditation** through the year.

Grouping by Likes :



- **Veganism** gets significantly more reaction from users.
- Negative tweets get a lot more likes.
→ Users on the internet love to hate on these practices.

Grouping by Gender :



- **Veganism**, is more talked about amongst female users As
- For **Meditation** the ratio is much closer.

Conclusions :

- The **Paleo diet** is not popular at all in Switzerland and worldwide.
- **Veganism**, **Intermittent Fasting** and **Meditation** get fairly positive sentiments in general. They are all associated with increased energy, euphoria according to some tweets we found.