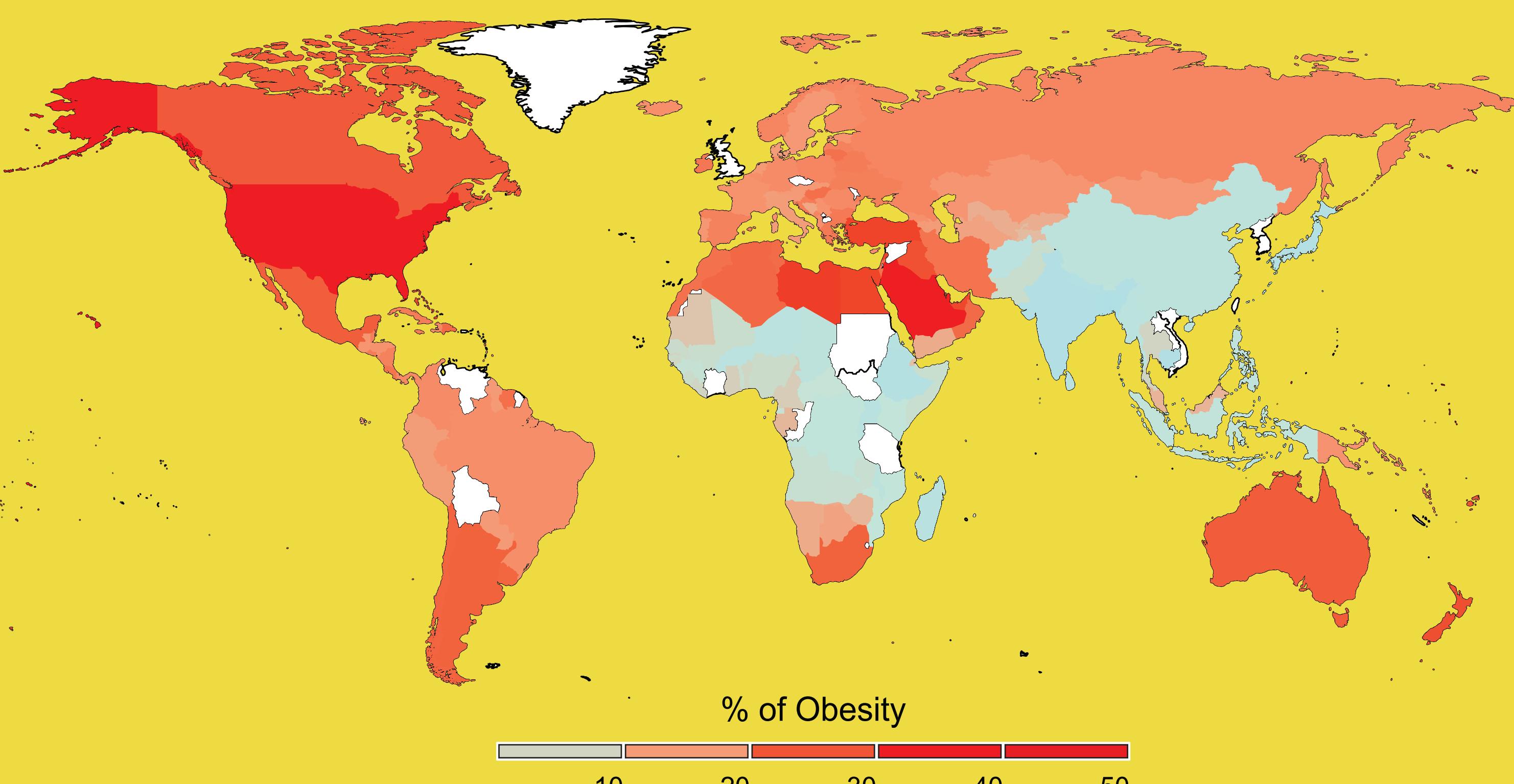


FIGHTING THE OBESITY EPIDEMIC

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Applied Data Science
IST 719 Information Visualization

Which Countries Have High Prevalence of Obesity in 2016?



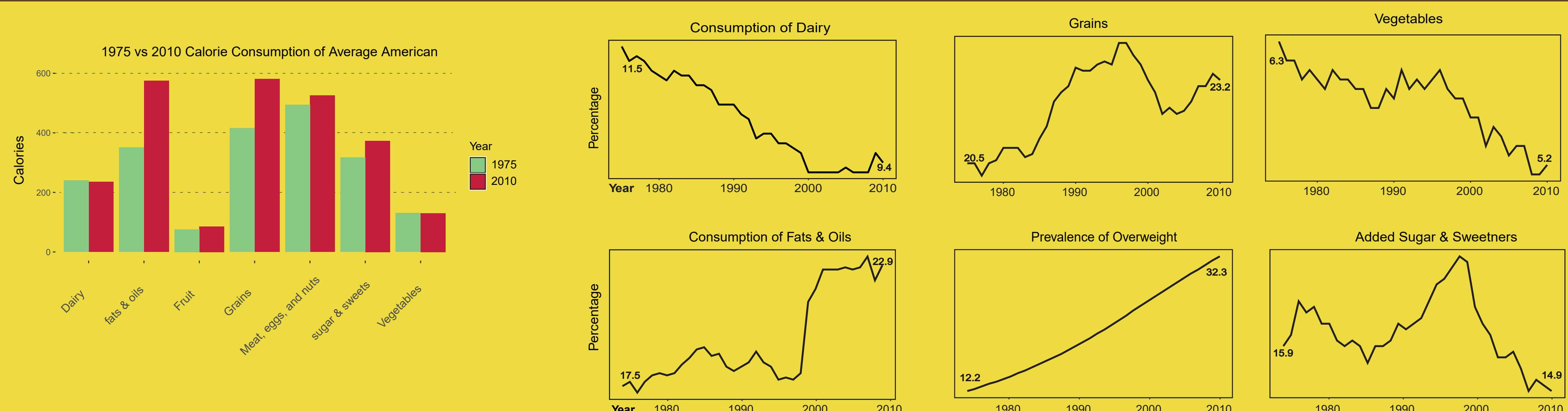
Worldwide obesity has nearly tripled since 1975. The epidemic is so serious in USA now that close to 40% of Americans are overweight. This poster aims to analyse the causes behind rise in obesity and provide recommendations to prevent obesity.

Audience:

The visualization is intended to mainly help:

- Students who want to make right dietary choices and maintain weight
- Parents, chefs or eatery managers who can make changes in their recipes to provide healthier offerings

What Has Changed in The Food Consumption Pattern of Americans Over Time?



What is The Nutrition Profile of Different Food Types?

Nutrition profile helps consumers identify nutrient-rich foods more easily. Food mainly comprises of macronutrients and micronutrients.

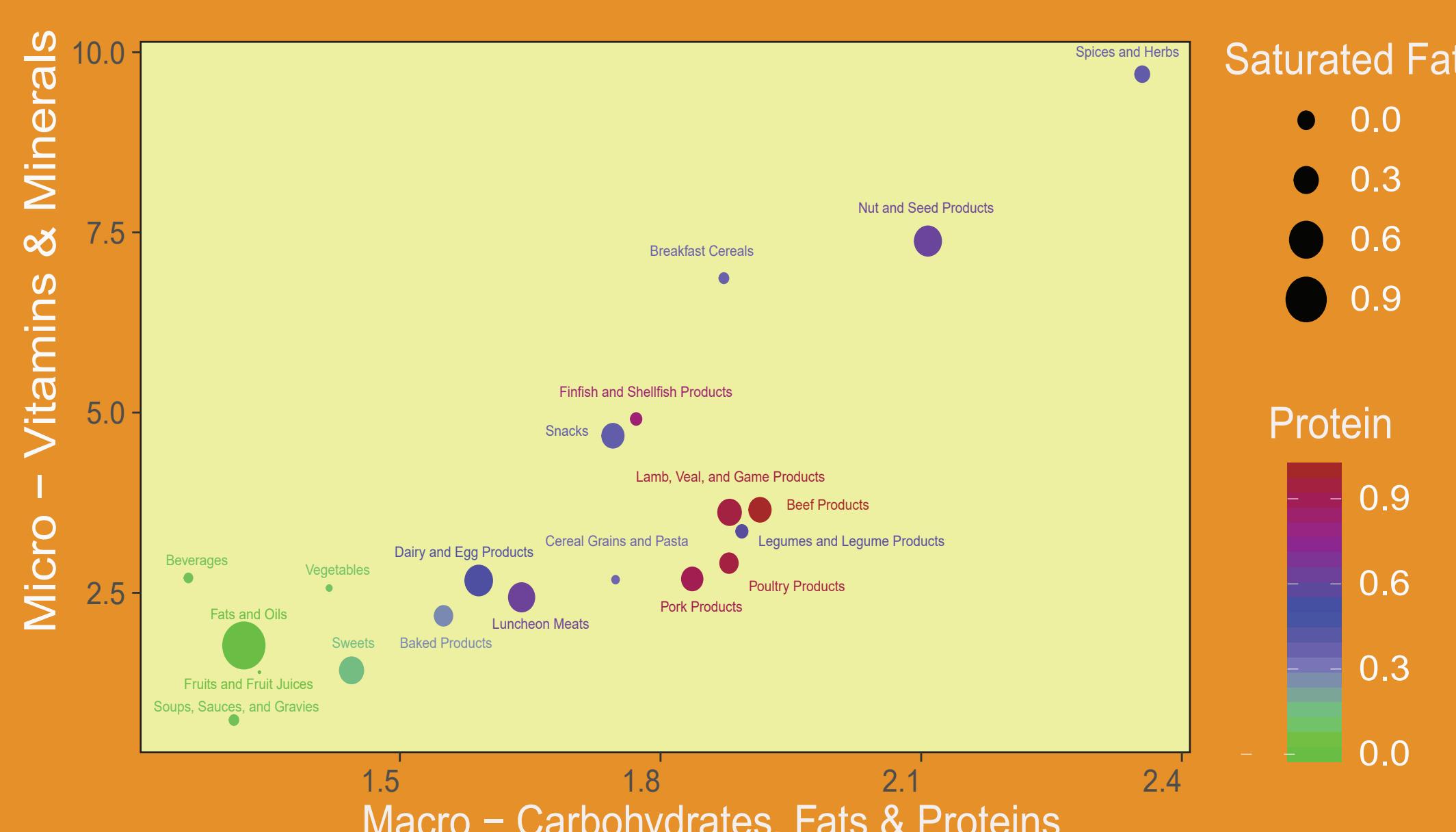
Macronutrients are nutrients that our body requires in large amounts to create energy to fuel our activities. They are broken into carbohydrates, protein and fat.

Micronutrients are comprised of vitamins and minerals which are required in small quantities to ensure normal metabolism, growth and physical well-being.

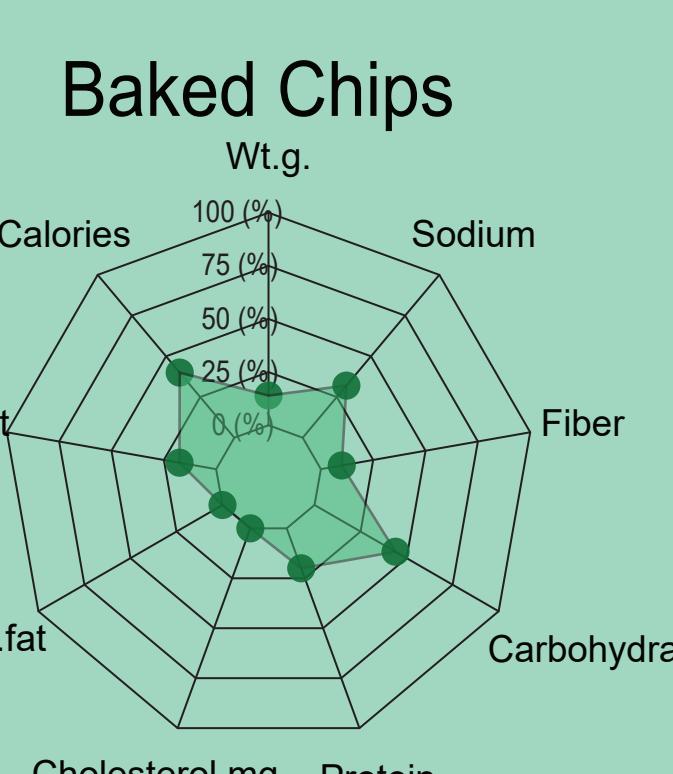
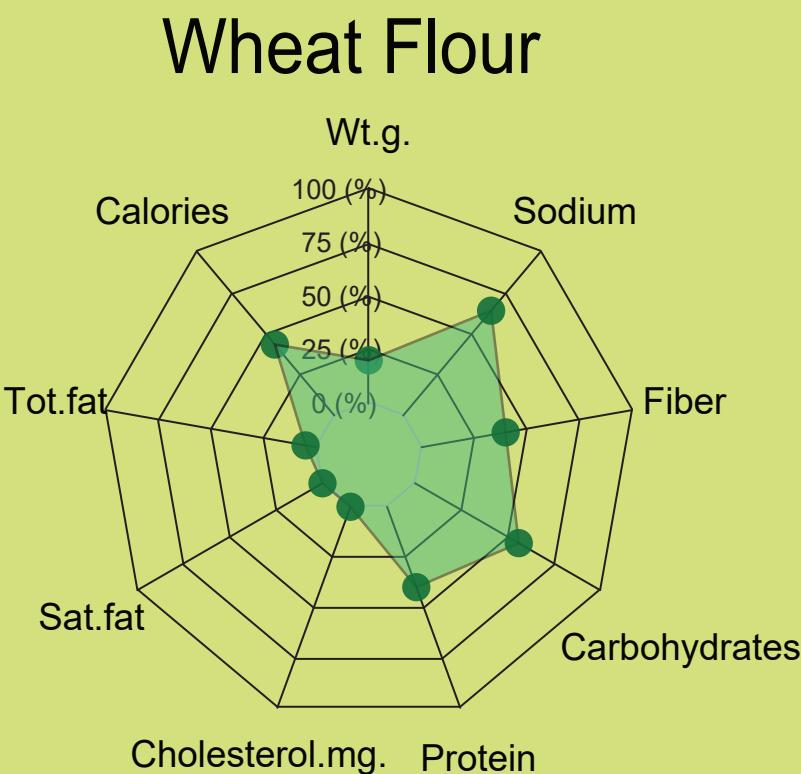
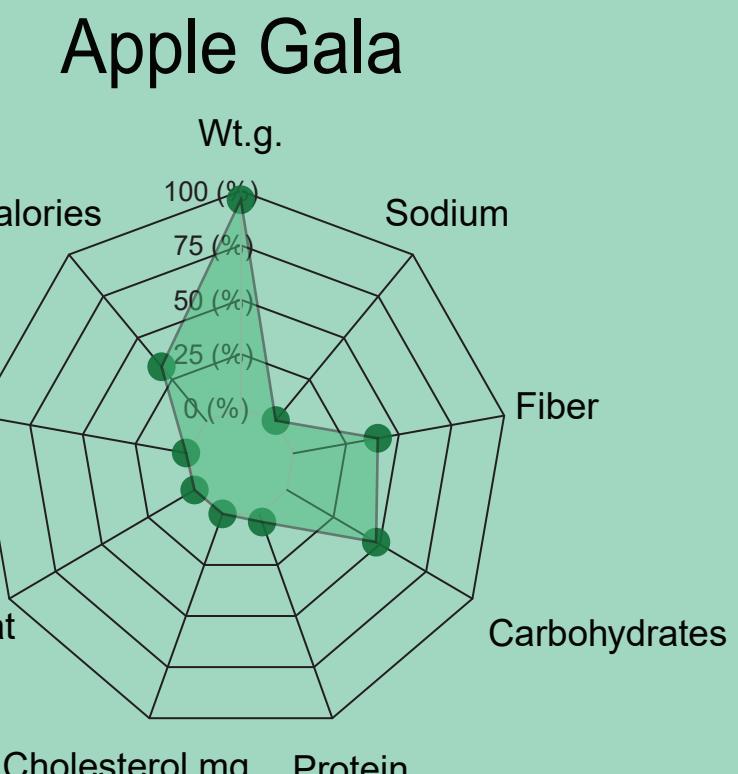
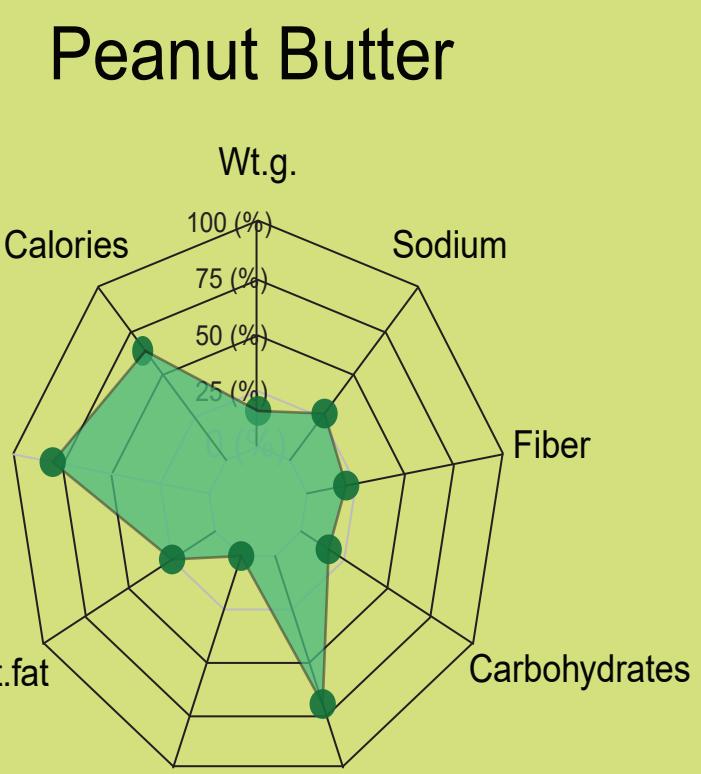
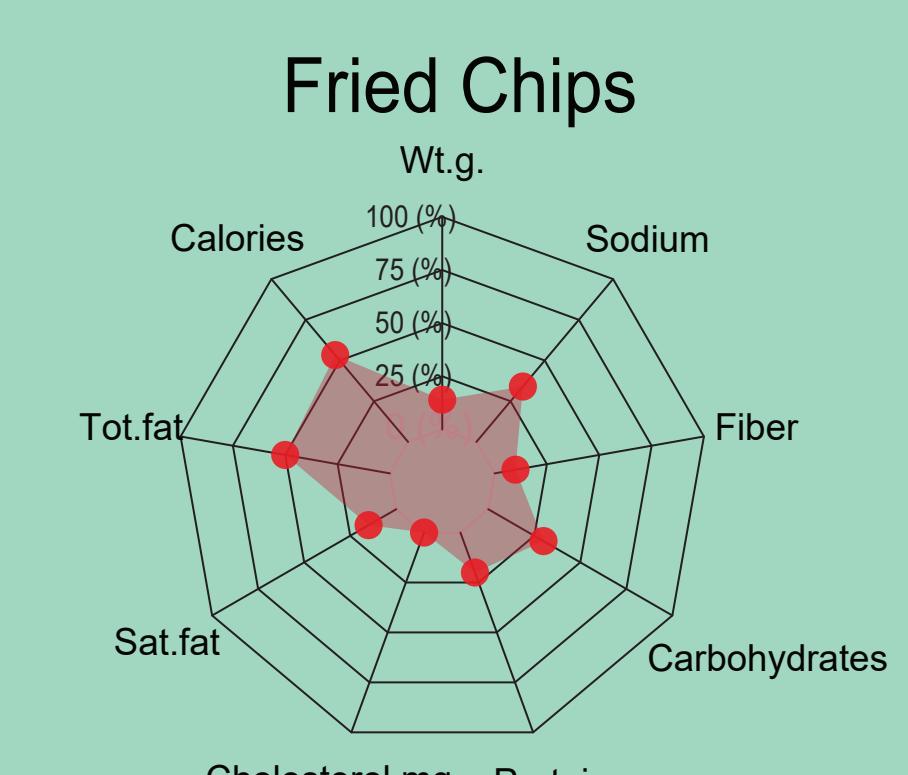
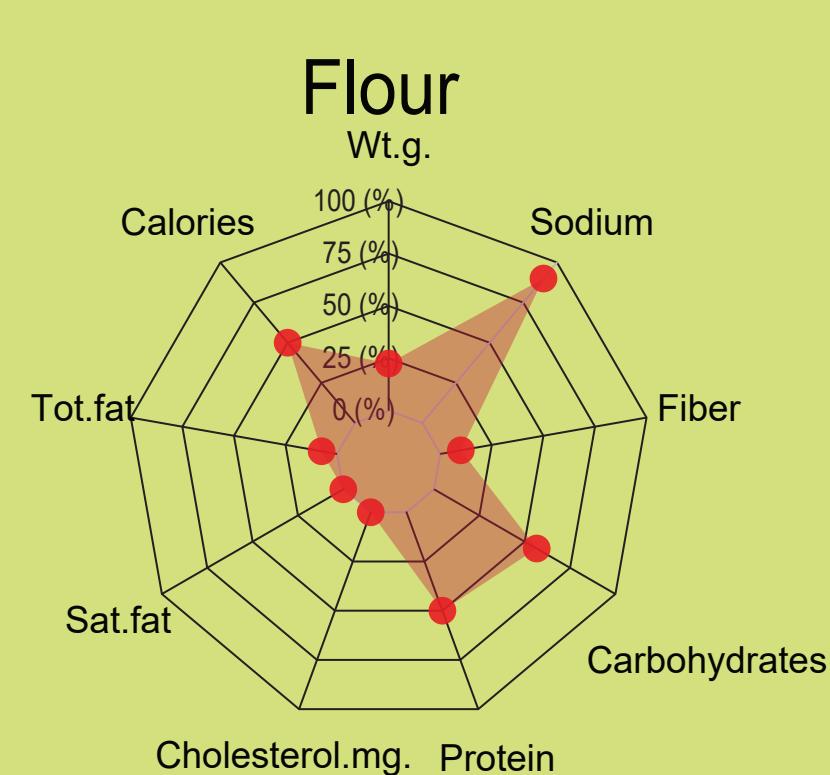
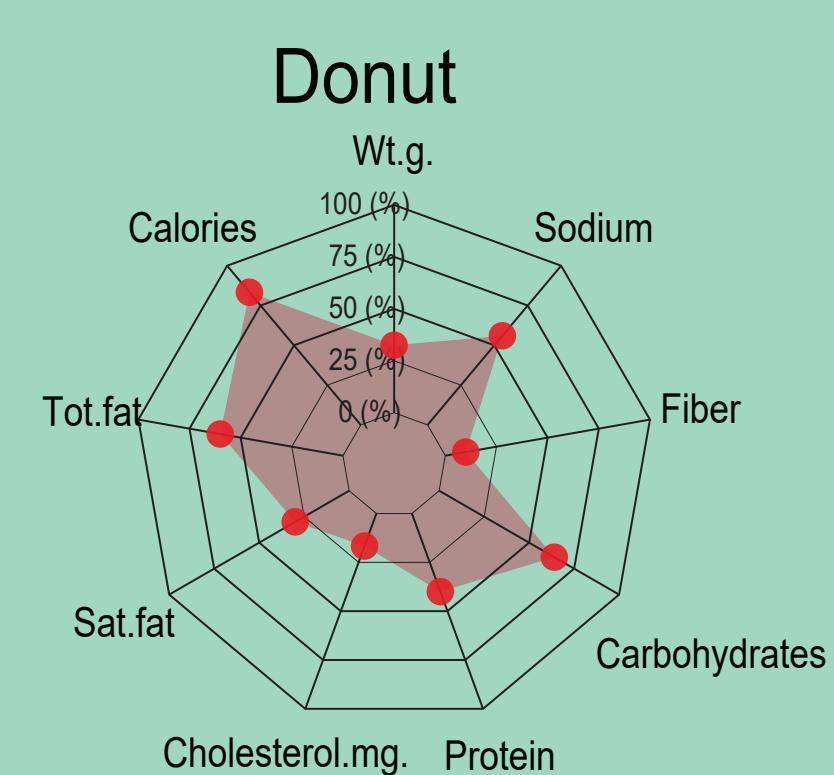
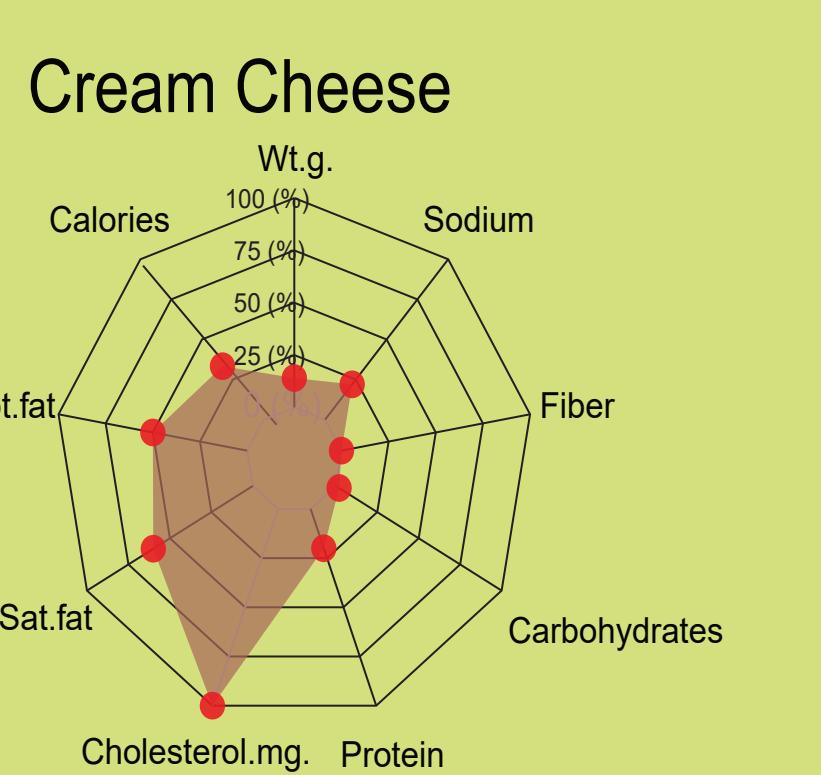
Beef, poultry and pork products although high in proteins, also contain lots of saturated fats. While fruits and vegetables are low in proteins but also have low saturated fats.

Spices and herbs have the highest nutrition profile, however nobody likes to have them in large quantities.

Nuts have a very nutrient dense profile excelling in both macro and micro nutrients, they should definitely be included in a healthy diet, however due to high calories it should be consumed in moderation.



How to Make Healthier Food Choices?



Dataset

The project uses 3 datasets so the total instances are 95,688 and the total attributes are 119

Design Process

Data was acquired in excel format. Obesity data was filtered from worldbank indicators. Data on consumption trends was aggregated from data obtained through <https://www.ers.usda.gov/data-products/data-visualizations/tableau-charts>.

Design Tools:

Plots were created in R using function ggplot, radar chart and barplot. Plots were later designed using Adobe illustrator

Data source:

<https://www.kaggle.com/the-worldbank/health-nutrition-and-population-statistics>
<https://tools.myfooddata.com/nutrition-facts-database-spreadsheet.php>
<https://public.tableau.com/views/DietaryRecommendationsandCalorieConsumption/DietaryRecomandCalorieCon>