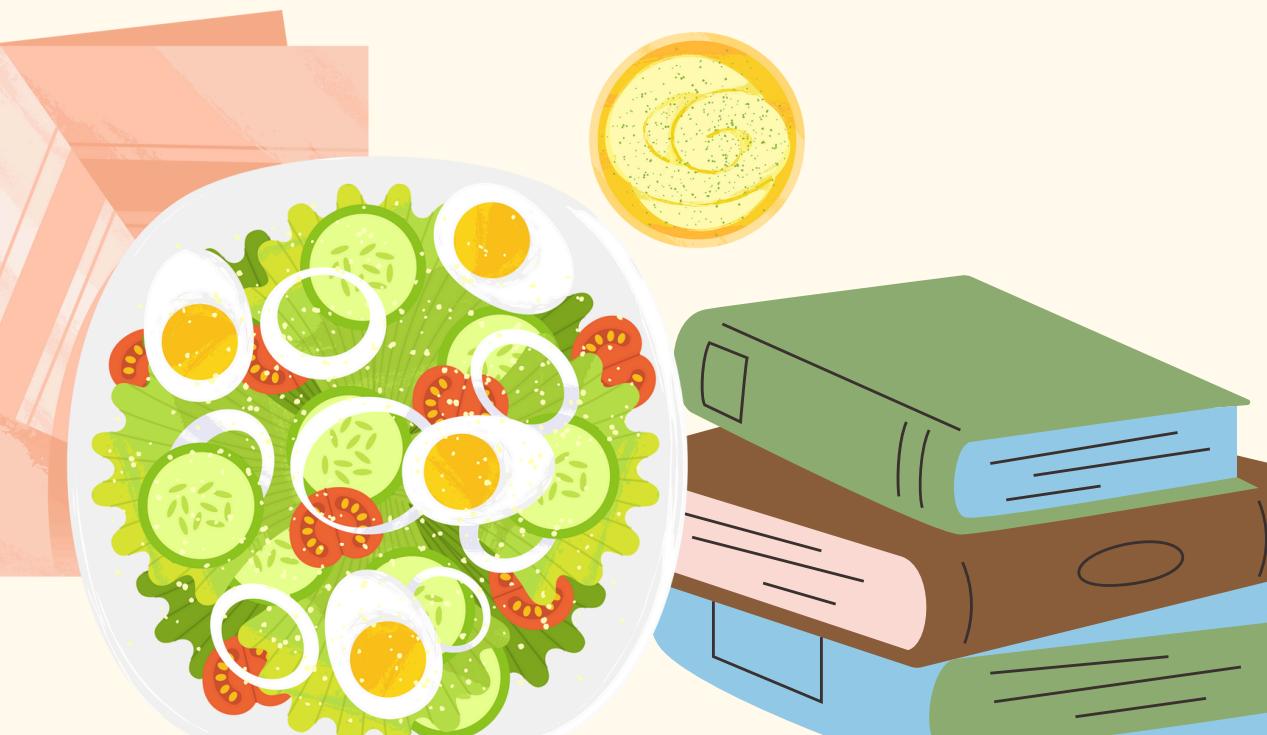




HabiTrack

Presented by Hareem Raza, Muhammed Qasim Khan



Before we begin



Why?

Several studies show that students who maintain balanced diets and engage in regular physical activity tend to **perform better academically**

Sources: [BMC Public Health](#), [Wilder.org](#)

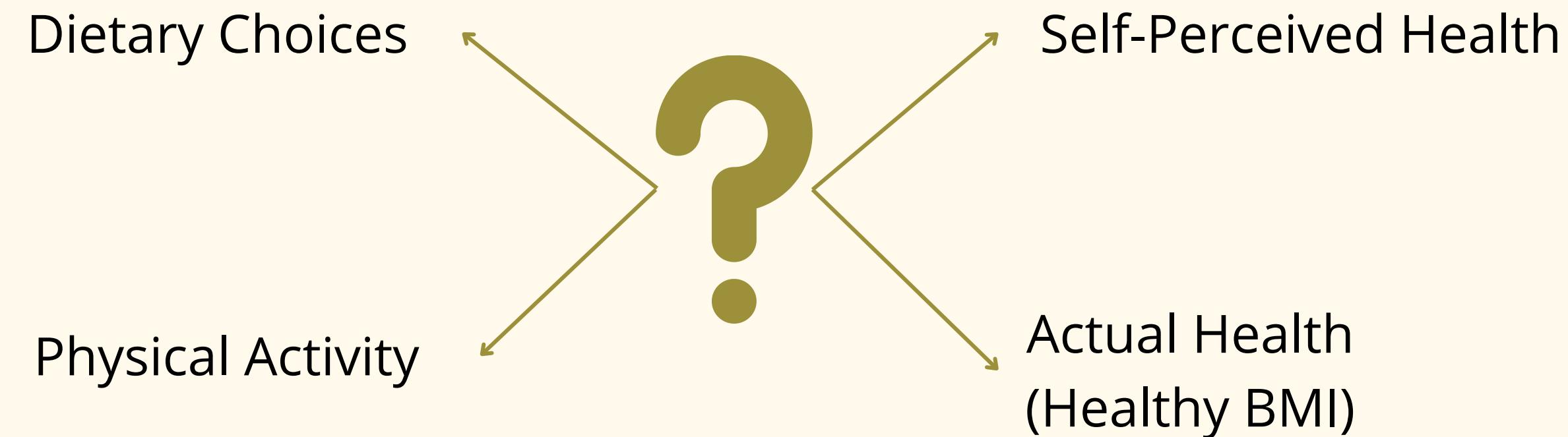
But

On average, 25% of individuals aged 18 to 24 in the EU are classified as 'unhealthy' based on being overweight or obese.

Source: [Eurostat](#)

So

Let's **explore the link** between students' lifestyles and health across years and countries
to see how their choices **impact their health**

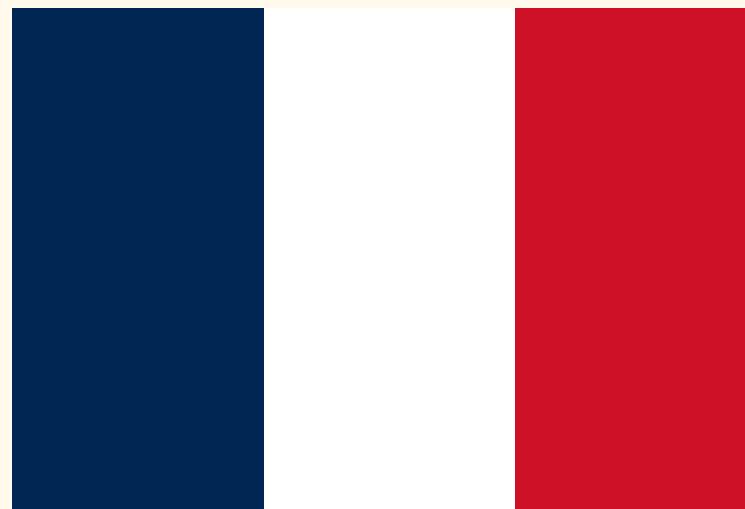


Research Question

How have **positive health habits**, specifically fruit and vegetable consumption and regular physical activity, impacted the **self-perceived and actual health outcomes** among students in **France, Italy, and the Netherlands** between 2019-2022?

Who?

Students aiming to study in



France



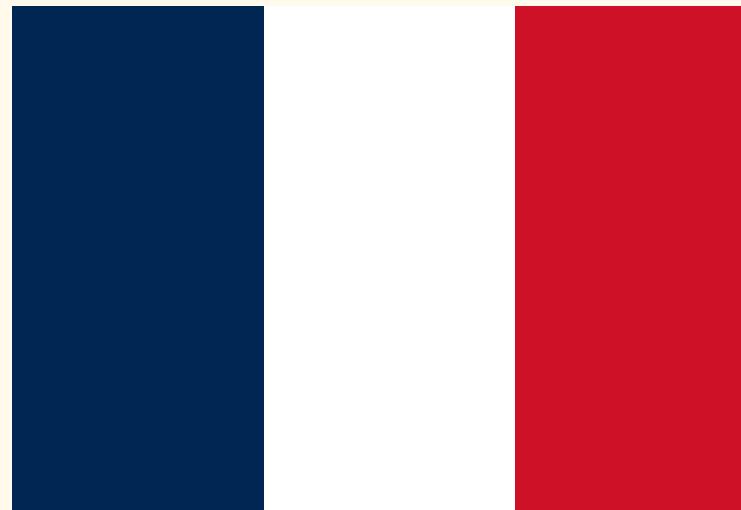
Italy



Netherlands

Who?

Students aiming to study in



France



Italy



Netherlands

e.g., BDMA students while choosing their specialization

Data Sources



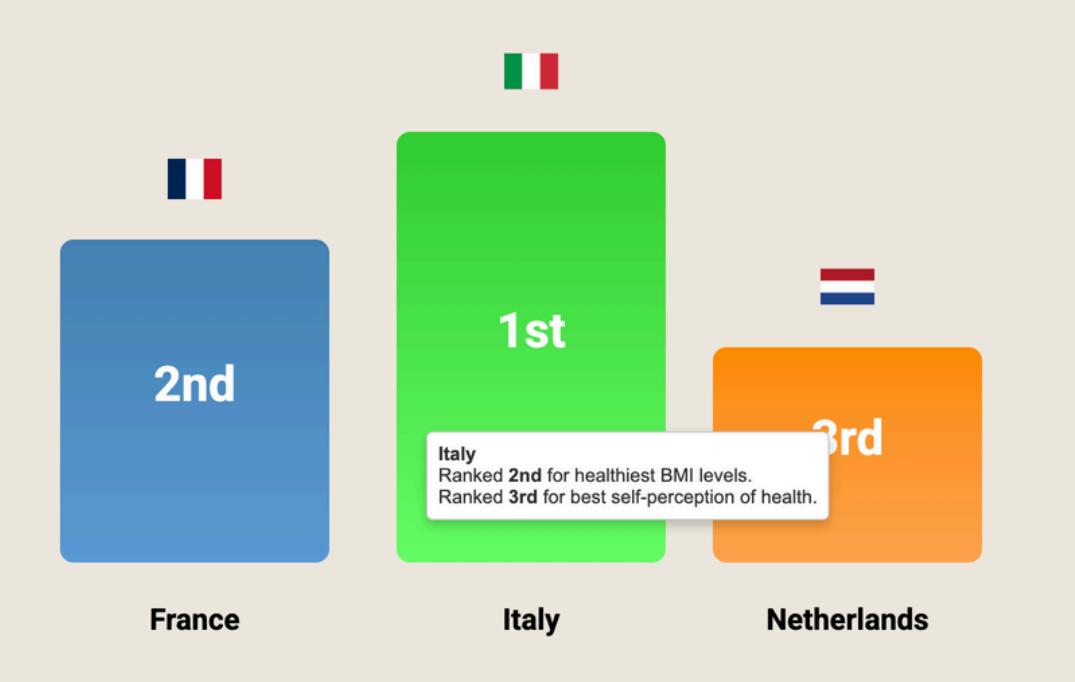
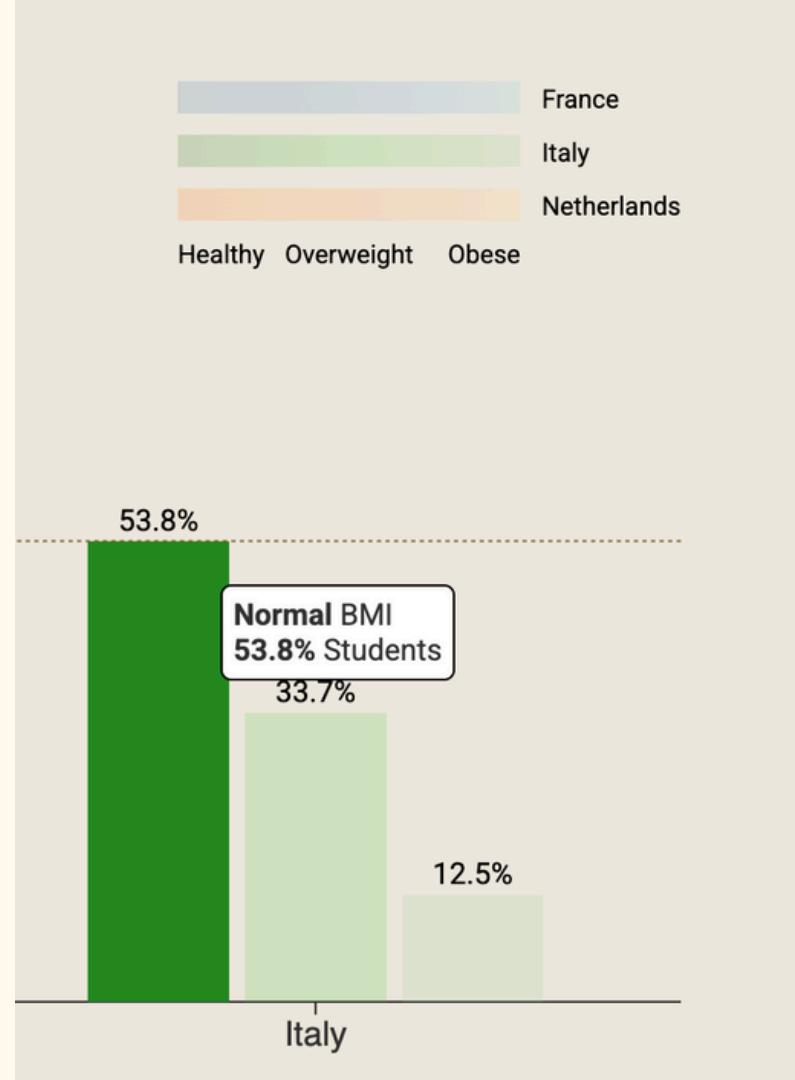
Dietary Habit Data



Health Metrics Data



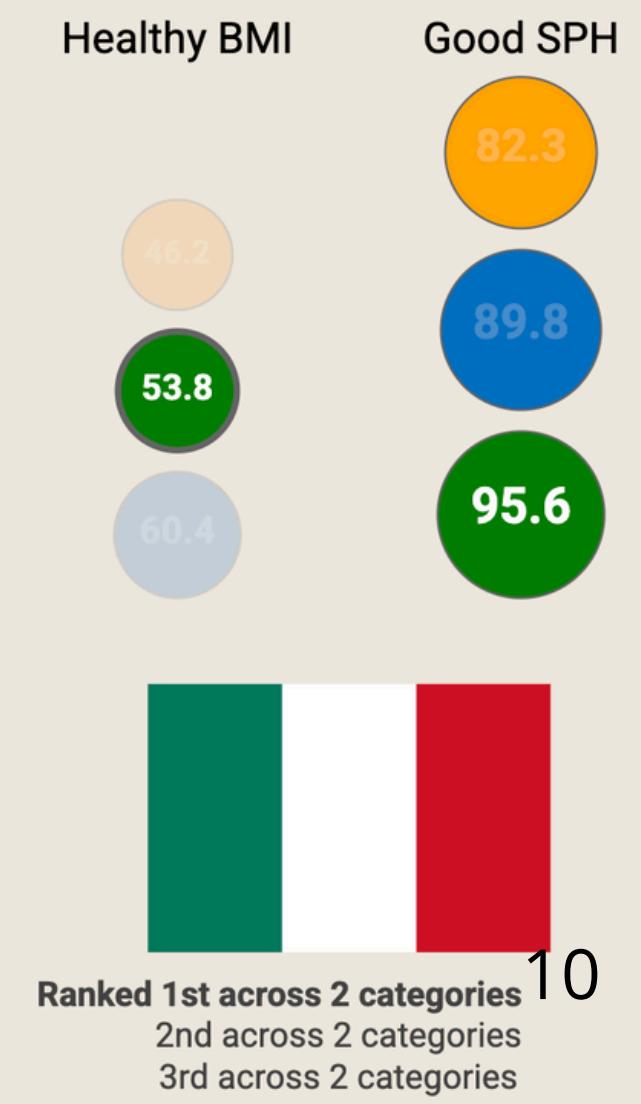
Physical Activity Data



Demo



Overall Health Outcomes



Limitations

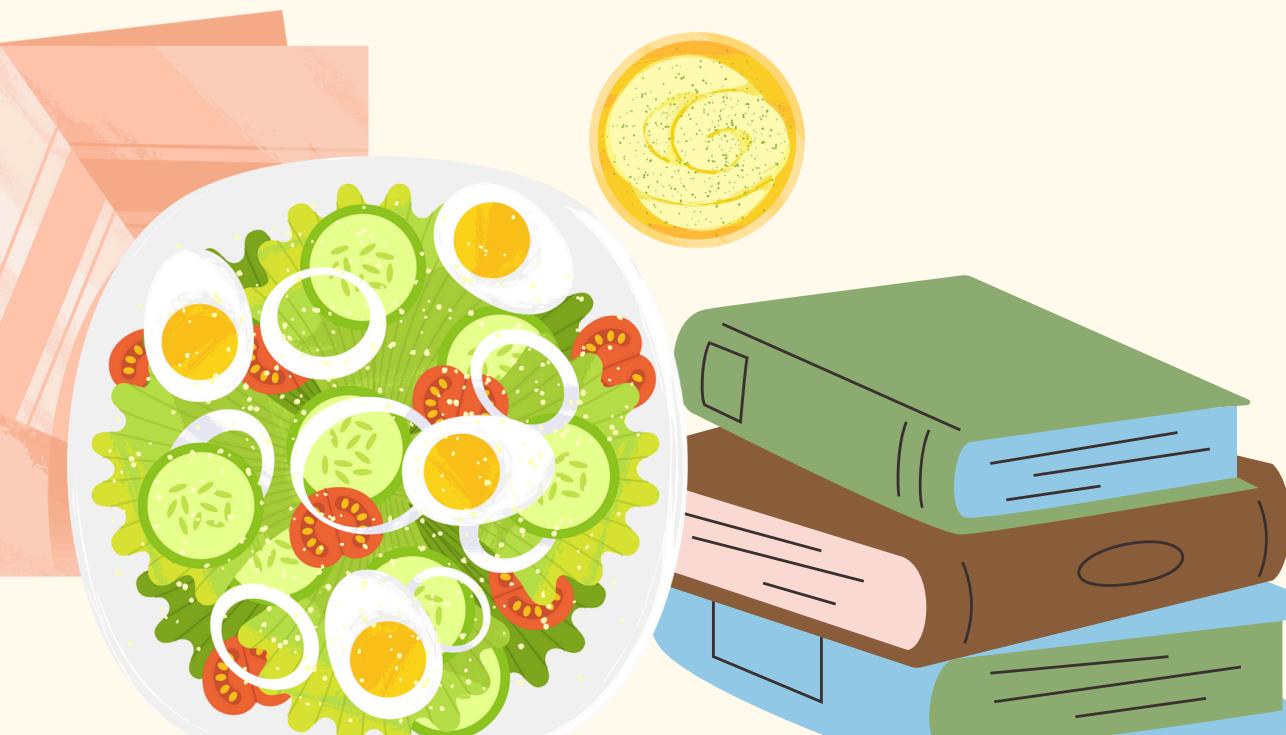
- **Minimal Temporal Variation**
 - Over four years, percentages across **metrics remained similar**
 - While our dashboard allows users to view yearly trends (e.g., Fig. 2), the lack of variation led us to focus primarily on single-year insights.
- **Limited Data Diversity**
 - We found several data sources & finalized three with comparable %-based metrics.
 - This constrained our ability to conduct analyses **beyond percentage comparisons**.

Contributions

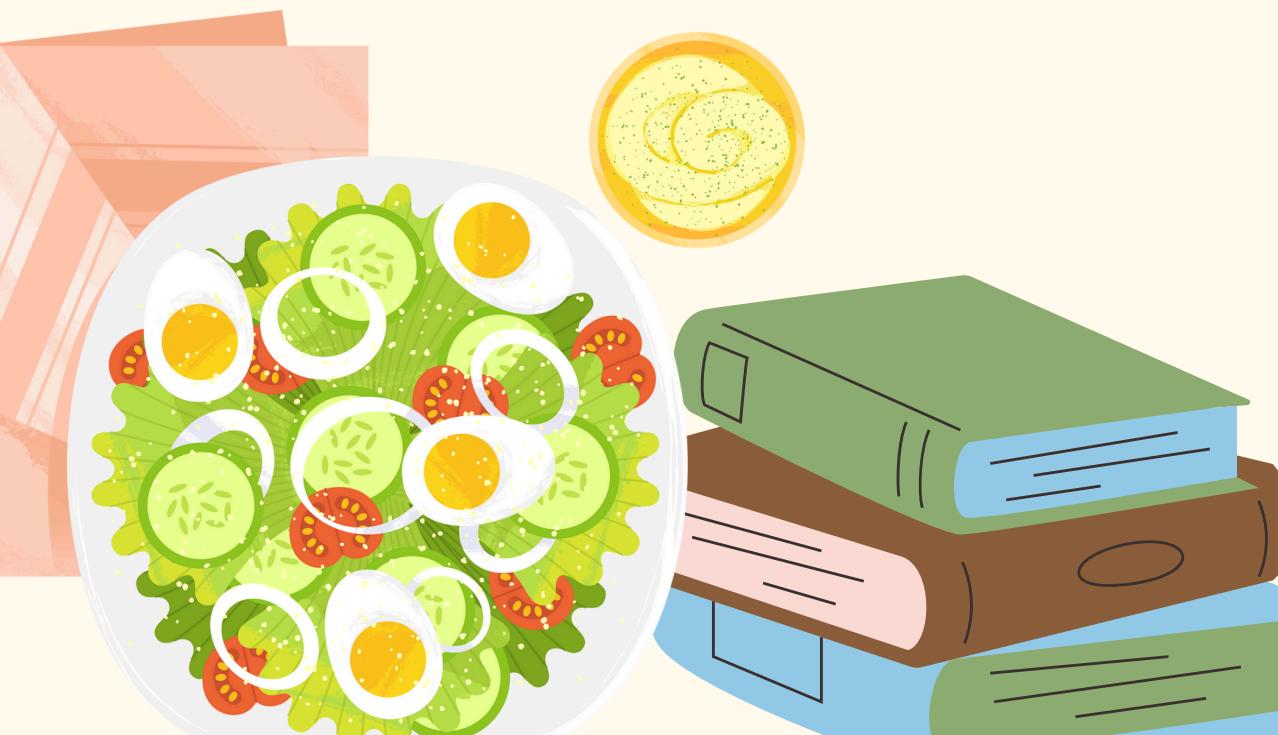
- **Hareem**
 - Initial data discovery
 - Exploratory data analysis
 - Designed figures 1, 3, and 4
 - Planned and implemented visual encodings for the tool
- **Qasim**
 - Data discovery and preprocessing
 - Designed figure 2 and helped design figure 1



Thank you. Questions?



Additional Slides



Data Description

Self Perceived Health

- Distribution of students who self-identify/self-perceive their health to be good or very good

BMI

- Distribution of body mass index (e.g., proportion of healthy, overweight and obese) among students in European countries

Food Supply and Consumption

- Information about daily fruits and vegetable consumption for European students

Sport and Physical Activity

- Questionnaire about performing sports and exercise activities given to European students

Data Description

| TIME | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|--------------|----------|----------|----------|----------|----------|----------|
| GEO | | | | | | | |
| Euro area (EA11-1999, EA12-2001, EA13-2007, ...) | (e) 19.0 (e) | 20.8 (e) | 21.1 (e) | 20.5 | 22.6 (e) | 22.8 | : |
| Euro area – 20 countries (from 2023) | 19.1 | 20.9 | 21.2 | 20.6 | 24.5 (e) | 22.9 | 21.8 |
| Euro area - 19 countries (2015-2022) | 19.0 | 20.8 | 21.1 | 20.5 | 22.6 (e) | 22.8 | : |
| Euro area - 18 countries (2014) | 19.1 | 20.9 | 21.2 | 20.6 | 22.7 (e) | : | : |
| Belgium | 29.8 | 30.6 | 28.4 | 27.7 (b) | 30.3 | 30.3 | 28.9 |
| Bulgaria | 19.1 (b) | 21.8 | 19.7 | 16.8 | 17.4 | 18.2 | 14.8 |
| Czechia | 18.6 | 20.3 | 19.9 | 20.1 | 21.3 | 26.8 | 26.1 |
| Denmark | 26.3 | 25.5 | 26.1 | 21.6 | 22.5 | 19.5 | 16.0 |
| Germany | 18.0 | 18.6 | 18.0 | 18.3 | 19.8 (b) | 19.8 | 20.9 |
| Estonia | 9.3 | 11.0 | 8.8 | 12.5 | 15.1 | 13.3 | 13.5 |
| Ireland | 42.1 | 44.7 | 45.7 | 44.6 (b) | 48.0 (b) | 46.2 | 43.3 |
| Greece | 45.0 | 45.2 | 46.3 | 46.7 | 46.5 | 46.9 | 47.8 |
| Spain | 15.6 | 19.1 | 22.6 | 18.7 | 19.6 | 17.8 | 17.7 |
| France | 21.9 | 24.3 | 23.0 | 21.4 | 25.8 (b) | 27.6 | 24.8 (b) |
| Croatia | 25.5 | 28.2 | 28.7 | 28.4 | 31.0 | 31.4 | 31.2 |
| Italy | 10.5 (b) | 13.6 | 15.0 | 15.9 | : | 18.7 | 18.0 |
| Cyprus | 44.1 | 49.8 | 46.7 | 46.8 | 45.3 | 46.1 | 47.6 |
| Latvia | 5.1 | 3.5 | 5.5 | 4.7 | 4.8 | 5.3 | 4.4 |
| Lithuania | 6.6 | 7.3 | 6.9 | 7.6 | 8.9 | 9.1 | 7.6 |
| Luxembourg | 23.1 | 23.2 | 23.2 | 23.8 | 24.7 (b) | 23.7 (b) | 31.8 (b) |
| Hungary | 17.6 | 17.1 | 16.3 | 16.4 | 17.7 | 17.9 | 17.4 |
| Malta | 22.3 | 28.7 | 24.4 | 21.1 | 23.2 | 22.1 | 24.1 |
| Netherlands | 22.6 (b) | 22.4 | 23.6 | 23.3 | 26.2 | 17.7 | 13.8 |
| Austria | 31.9 | 32.6 | 32.0 | 32.2 | 35.3 | 33.4 | 30.8 |
| Poland | 15.9 | 16.2 | 15.5 | 15.4 | 14.4 | 15.7 | 15.6 |

SPH Data from Eurostat