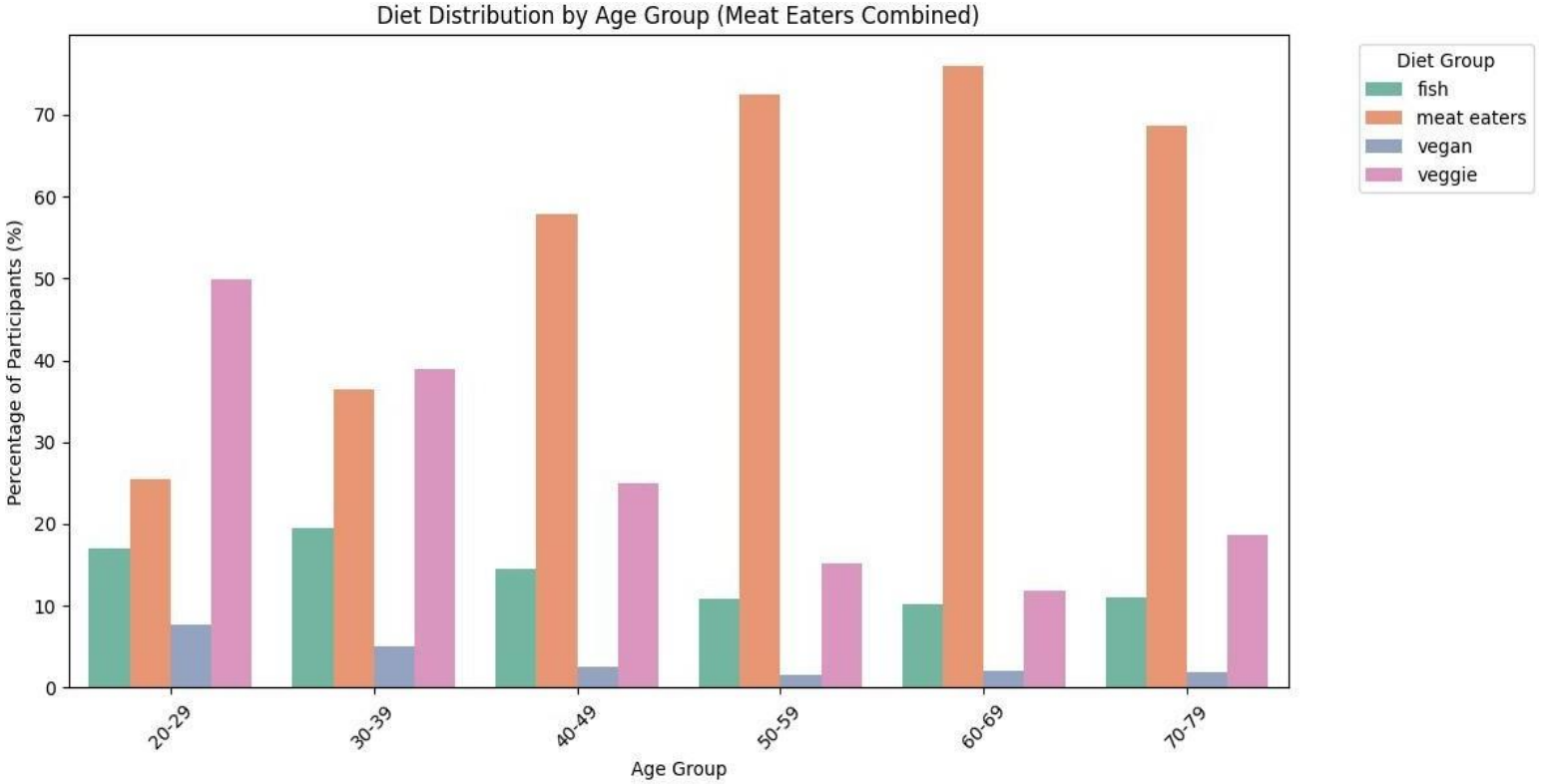
Treemap of Mean GHG Emissions by Diet Group, Sex, and Age Group



- **Visual Design Type:** Treemap, Bar chart
- **Name of Tool:** Python
- **Country:** United Kingdom
- Dataset: The Environmental Impact of Vegans, Vegetarians, Fish-eaters, and Meat eaters in the UK
- **Year:** 2022 • **Visual Mappings:**

  - **Colours:** All colours are mapped to the mean greenhouse gas emissions (mean_ghgs) for each group (treemap) and diet group categories (bar chart).
  - **Shape:** each bottom-level rectangle (treemap) and each bar (bar chart) illustrate a combination of diet group, sex, and age group
  - **Size:** Size of each rectangle (treemap) and the height of each bar (bar chart) is proportional to the mean GHG emissions (treemap) or percentage of participants (bar chart).
  - **Position:** rectangles in the treemap are located according to hierarchical structure, bars are grouped by age group on the x-axis and by diet group side-by-side. o **Hierarchy:**
    Diet Group → Sex → Age Group.

- **Unique Observations:**

  - Meat eaters show the highest greenhouse gas emissions, while vegans have the lowest.
  - Younger people have a higher proportion of vegans and vegetarians compared to older groups.
  - Meat eaters remain the majority diet group across all ages.

- **Data Preparation:**

  Related diet groups (meat, meat50, and meat100) were merged into a single group to simplify the categories. Afterwards, the data was grouped by diet group, sex, and age group to evaluate mean greenhouse gas emissions for each combination. Another grouping was done to calculate the percentage of participants in each diet group within each age group. Then, a hierarchy was created for the treemap and mean GHG values were aggregated for visualization.

  URL to source code: https://colab.research.google.com/drive/17pH-On47ulMhHfv_sHSSJr5hMuzvWDOT?usp=sharing

  URL to screen-capture: https://colab.research.google.com/drive/17pHOn47ulMhHfv_sHSSJr5hMuzvWDOT#scrollTo=e852ee40