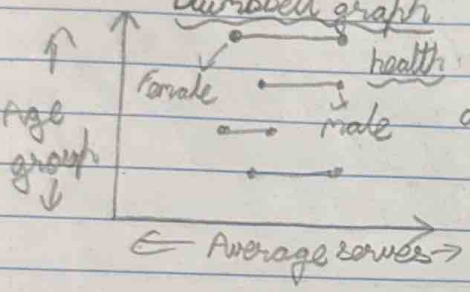
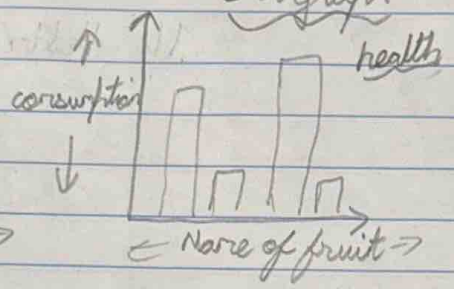
Five Design Sheet Methodology

IDEAS: ①

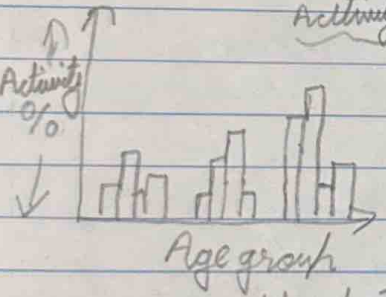
Dumbbell graph



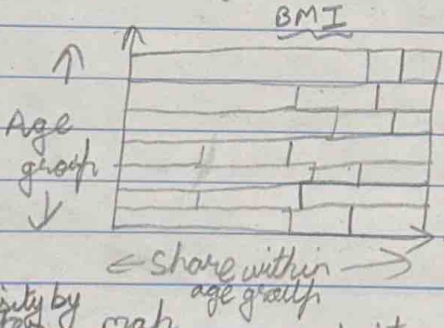
Bar graph



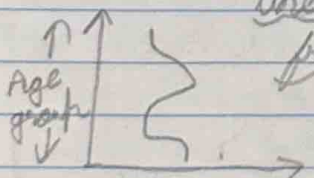
grouped bar chart



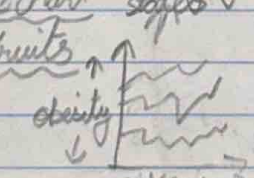
Stack graph



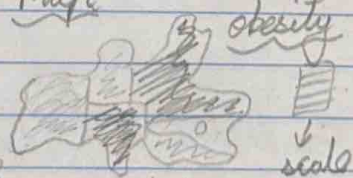
Linechart



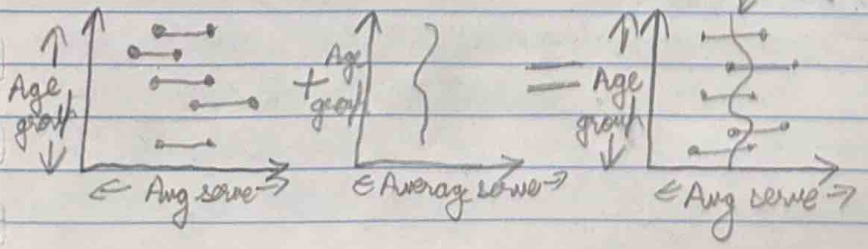
Obesity by states



map

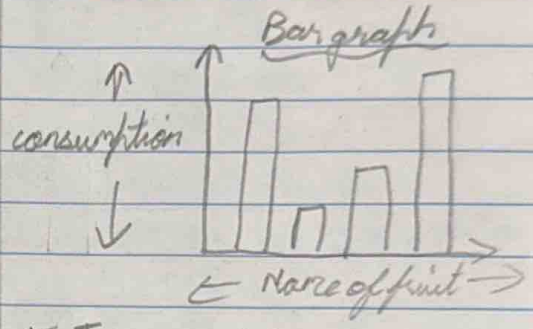


COMBINE:



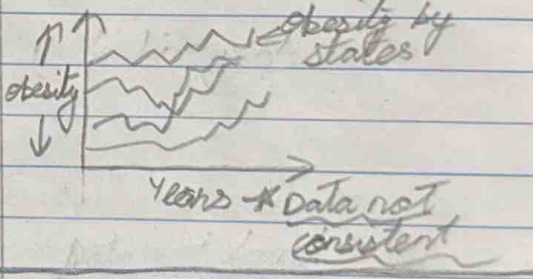
FILTER:

Bar graph



☆ Too vague

Obesity by states



CATEGORIZE:

Map-based (Geospatial)
↓
Behavioral (barchart)
↓
compositional (stacked Bar)
↓
comparative (Dumbbell)

Questions:

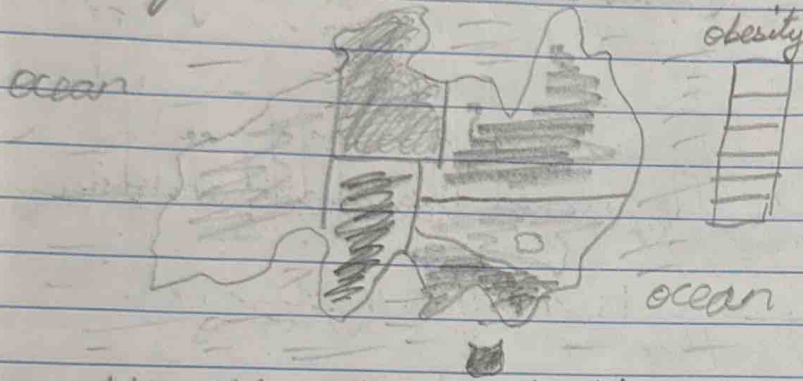
1) which state has highest obesity rate. 2) Do people meet daily fruit and veg consumption. 3) BMI ranges across age groups.

LAYOUT:

(2)

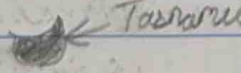
Obesity Rate by States (Australia)

definition: . . . . . .



- Choropleth map of Australia.
- Ocean + graticule for context and realism.
- Labels (NSW, VIC, QLD, etc) over states.
- Legend for the darkness of the colour and scale.

FOCUS:



- Identify which states have the highest obesity rates.
- Provide a national overview as the dashboard's entry point.

Title: Obesity Rate by States (Map)
Author: Adarsh Pahwa
Date: 21/09/2025
Sheet: 2
Task: Visualising obesity distribution across Australian states using a choropleth map to highlight regional health disparities.

OPERATIONS:

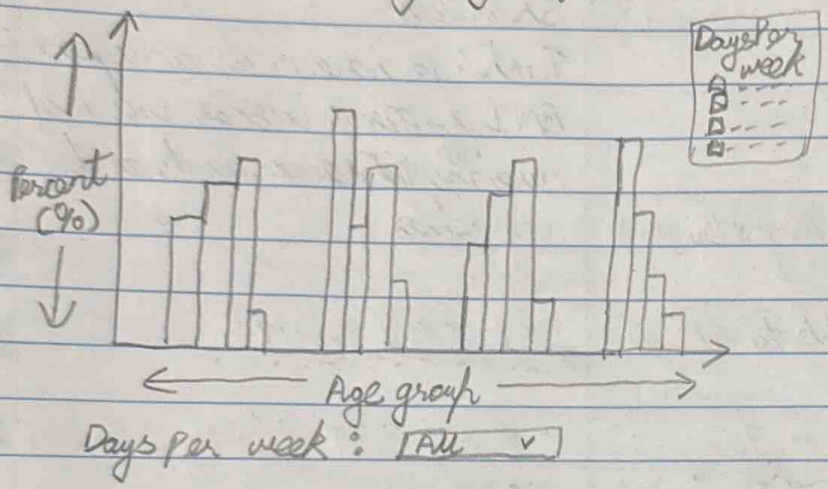
- Colour encodes obesity %
- Hover tooltip → shows state + % value.
- Legend on right with readable gradient.
- Filter out extra territories (Coral Sea, Jervis Bay)

DISCUSION:

- make colour contrast to distinguish states.
- Add map content (ocean, gridlines)
- Add abbreviations for labelling the states.

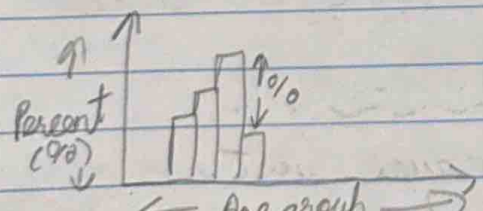
LAYOUT: (3)

Physical Activity by Age Group



- Grouped bar chart, X = Age groups (15-17 → 65+)
- Colour = Days of activity per week.
- Dropdown filter on bottom of the graph.

FOCUS:



- Compare activity patterns across age.
- Show which age groups are most physically active.

Title: Physical Activity by Age Group (Australia)
Author: Anansh Patwa
Date: 21/09/2025
Sheet: 3
Task: Comparing frequency of physical activity across age groups, exploring behavioural trends influencing health outcomes

OPERATIONS:

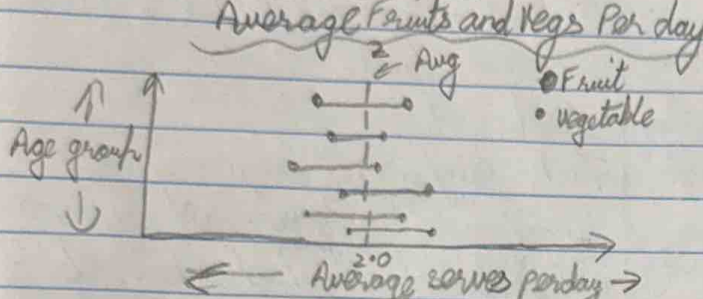
- Dropdown selection updates chart interactively.
- Tooltip displays % values.
- Legend placed top-left.
- 5 different bars for different days per week.

DISCUSSION:

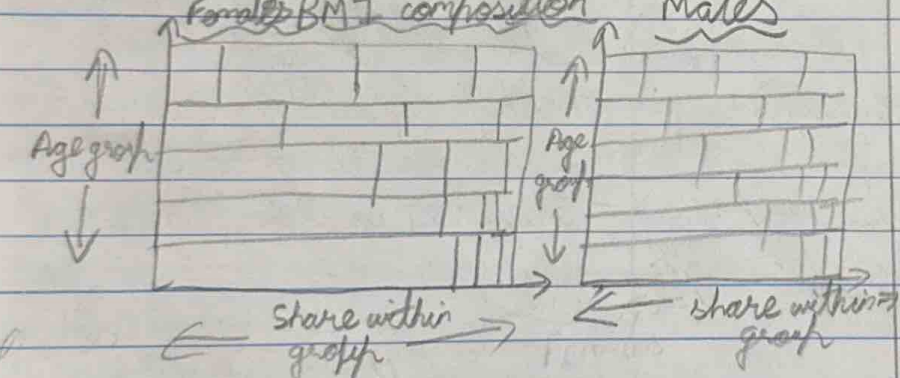
- Put contrast btw the bars.
- Compact legend for the days per week
- Display the key main findings: Younger groups more active, older less.

LAYOUT:

(4)



- Each age Group on y-axis, Avg serves on x-axis.
- Lines connect fruits and vegetables to show gap for age group.



- Faceted by Sex (Male | Female) for a side by side comparison.
- Horizontal legend below the graph.

FOCUS:

- Both visuals show composition and comparison.
- Together tell story about Australia's body weight patterns.

Title: BMI Distribution and gaps in Fruits and vegetable.
Author: Avansh Pahuja
Date: 21/09/2025
Sheet: 4
Task: Compare male and female BMI patterns across age and Average intake of fruits and vegetables.

OPERATIONS:

- Facet BMI data by sex and stack categories.
- Normalise each age group to 100% to show proportions.
- For dumbbell chart, match x-axis scale for both plots to enable visual comparison.
- Add tooltips and consistent typography for accessibility.

DISCUSSION:

- The dual layout enhances understanding by pairing composition
- The Dumbbell visual makes comparison btw fruit and veg.
- Both graph reduce cognitive load and strengthen comparative insights.

Based off of the sheets

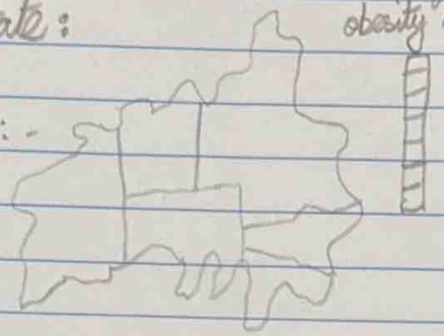
LAYOUT: ⑤

Title: Australia's Health and lifestyle Dashboard.
Author: Anansh Pahwa
Sheet: 5, Date: 21/09/2025
Task: Final Design

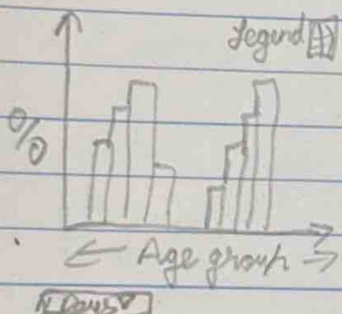
Australian Health Insights Dashboard

1. Obesity Rates by State:

Textual content here: - -



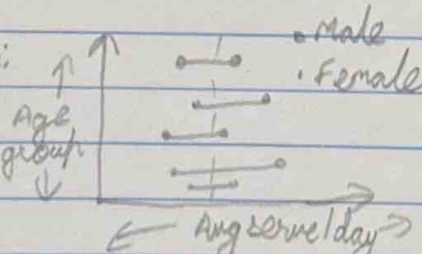
2. Physical Activity by Age



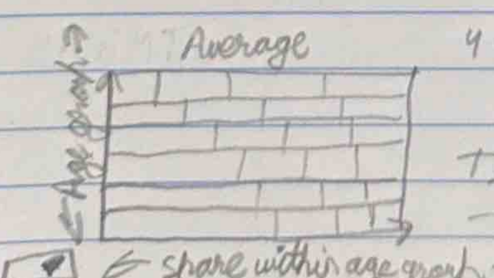
Textual content here: - -

3. Daily Fruit vs Vegetable Intake:

Textual content here:



4. BMI by Age and Sex:



Textual content here:

FOCUS:

- creating a cohesive data story connecting Physical, obesity, BMI distributions.
- Make Physical Activity and BMI visualisation interactive, so we can compare the trends.

OPERATIONS:

- Keep tooltips, colour scales, and fonts uniform across visuals.
- Add descriptive headings + brief captions for context.
- Ensure responsive resizing on smaller screens.

DISCUSSION:

- Consistent design improves flow and user comprehension.
- Interactive elements (like dropdowns) make exploration engaging without overwhelming the viewer.