



INFOSYS VIRTUAL INTERNSHIP 6.0

Food Trends Understanding Customer Preferences in Food and Beverage

GROUP - A

TEAM MEMBERS:

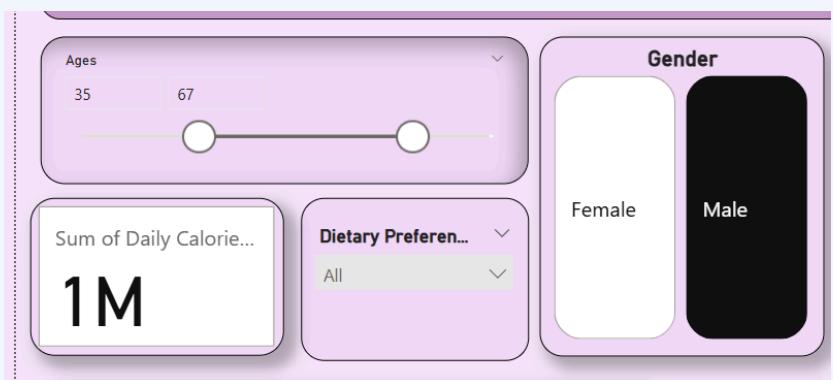
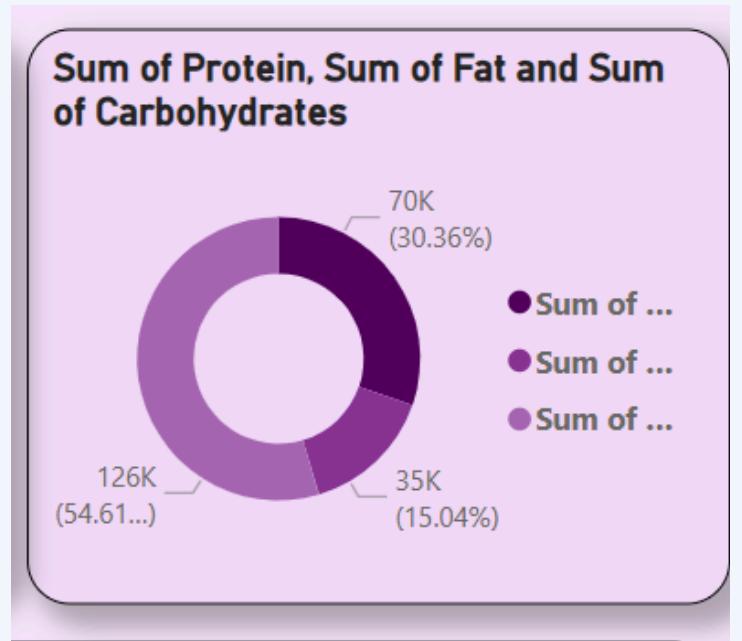
1. Tirumala Bekkam
2. Shivatharani
3. Kshitija
4. Parthiv
5. Maithili
5. Anjali
6. Anish mane

INTRODUCTION

- Food and beverage industries are rapidly evolving with consumer health awareness.
- Analyzing preferences helps identify market trends and public health priorities.
- Dataset covers aspects like diet, nutrients, breakfast habits, cost, and lifestyle.
- Visualized using Power BI dashboards to uncover insights interactively.

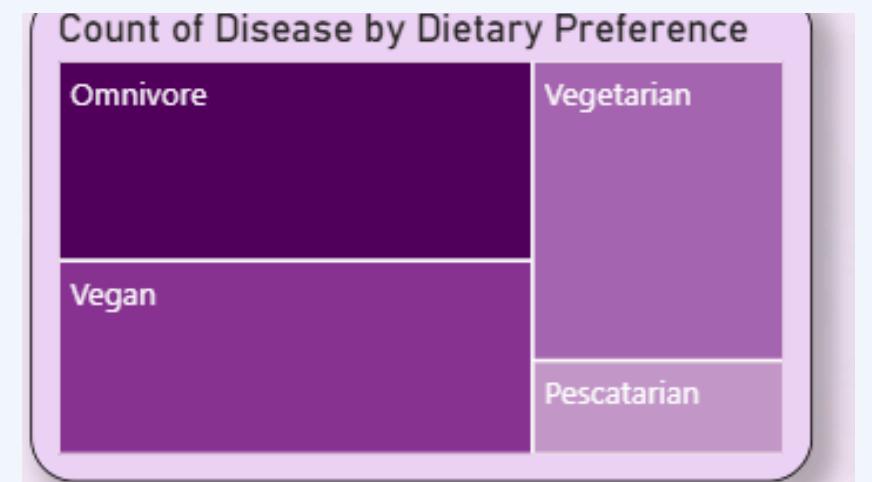
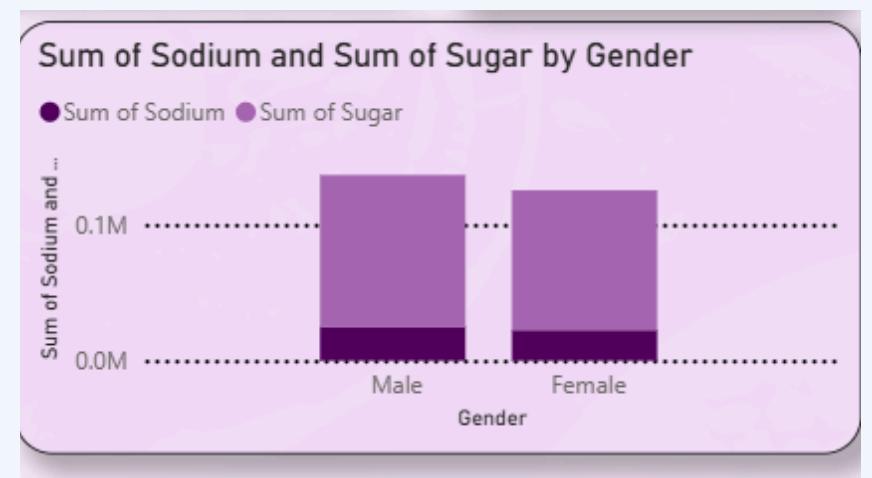
OVERVIEW DASHBOARD

- The dashboard visualizes customer food preferences by analyzing various nutrition statistics including protein, fat, carbohydrates, and daily calorie intake for different age and gender groups.
- Interactive slicers allow users to filter and compare insights based on age, gender, and dietary preference, enabling tailored nutritional trend analysis.
- Visualizations such as donut charts and numeric cards provide a clear breakdown of macronutrient sums, fiber, sugar, and sodium for selected demographic segments.
- Lunch and breakfast suggestions are ranked by user ratings, helping identify popular and nutritious meal options among surveyed participants.
- The dashboard integrates summary metrics, data filters, and meal recommendations to support data-driven decisions in food portfolio planning and health impact research.



DIETARY PREFERENCES

- Displays average age (2.20K), total sodium intake (238K), and total sugar intake (118K), offering a snapshot of dietary consumption patterns
- Bar chart compares sodium and sugar intake between males and females, highlighting gender-specific dietary trends.
- Tabular data links diseases (e.g., Diabetes, Hypertension, Obesity) with nutrient intake and calorie targets, useful for health risk analysis.
- Donut and pie charts visualize age, weight, and calorie targets across genders, aiding demographic segmentation.
- Slicers for Disease, Gender, and Region allow dynamic data exploration; tabs guide users through related dashboards.

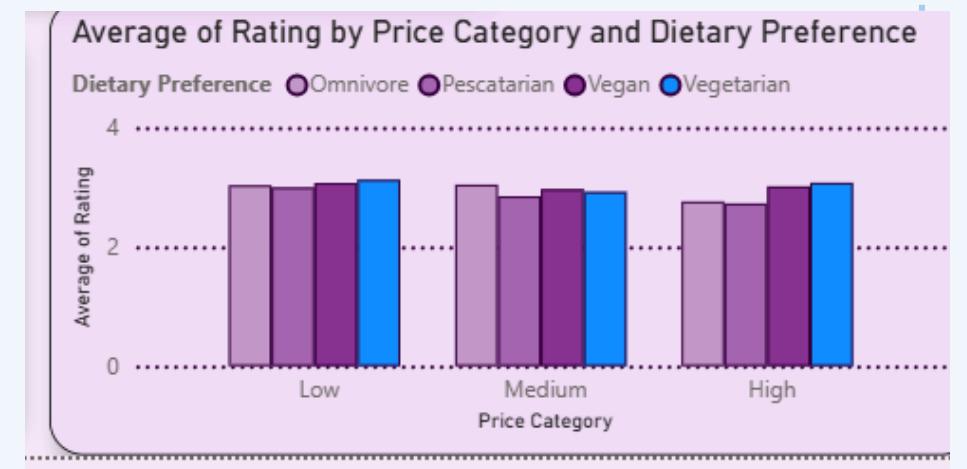
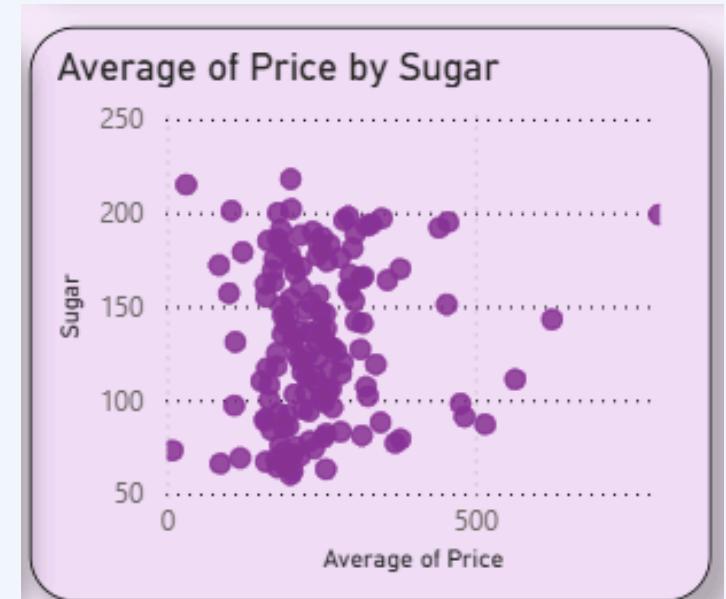


NUTRIENT AND DISEASES

- Table and bar chart show how protein, carbs, fat, fiber, sugar, and calories vary across activity levels (Sedentary to Very Active).
- Q/A panel identifies diseases linked to nutrient imbalance—Diabetes, Acne, Hypertension, Heart Disease—reinforcing dietary implications.
- Bar chart and checklist highlight disease prevalence, enabling targeted health interventions.
- Sum of Price (₹1.3M) and gauge charts for Height and Calories (3M) provide economic and physiological context.
- Tabs like “Awareness by Disease” and “Lifestyle & Nutrition Habits” support deeper exploration of health and nutrition trends.

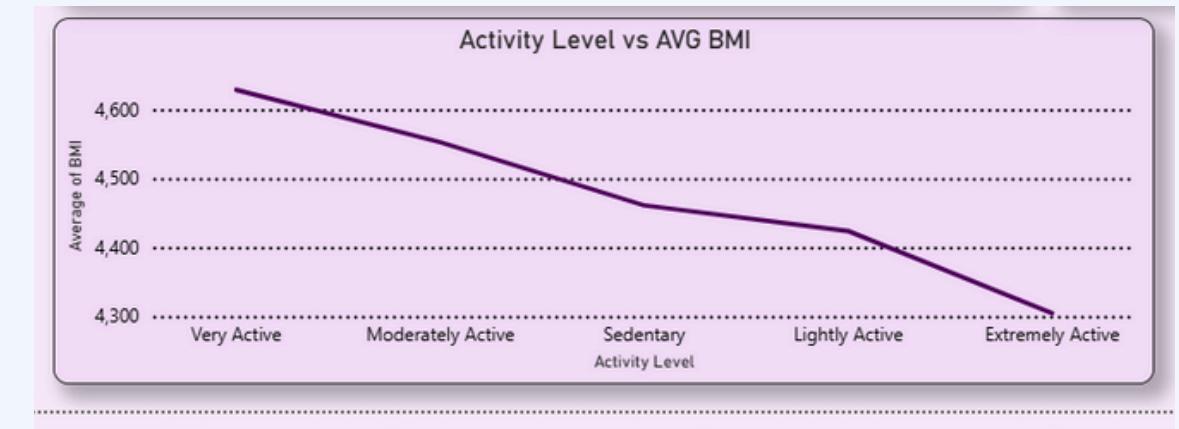
AVERAGES BY BREAKFAST

- Highlights average rating, price, and sugar content for popular breakfast items like Oatmeal, Pancakes, Smoothies, and Yogurt—useful for nutritional and consumer preference analysis.
- Bar charts show how different age groups prefer various breakfast options and price ranges, revealing demographic trends in dietary choices.
- Scatter plot visualizes how sugar content correlates with price, helping identify healthier yet affordable options.
- Table add bar chart compare average ratings across price categories and dietary preferences, guiding product development and marketing strategies.
- Visuals are designed for dynamic filtering and comparison, enabling deeper insights into breakfast habits and nutritional value.



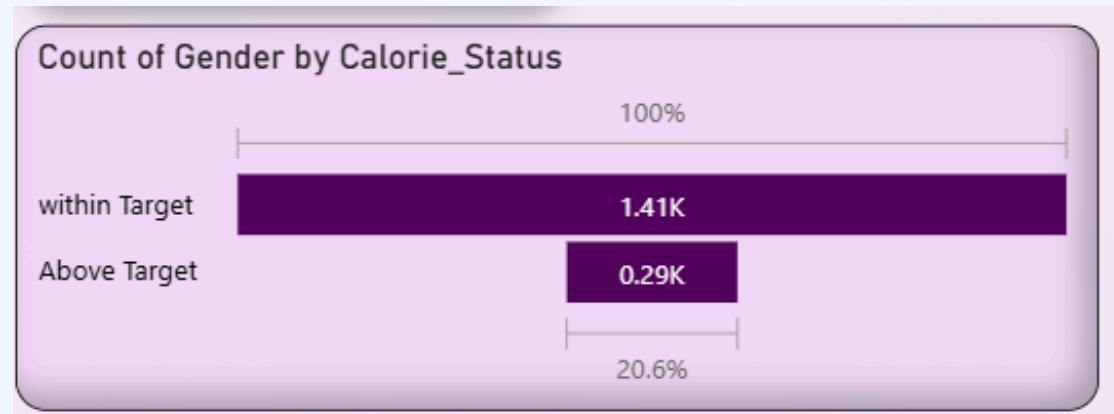
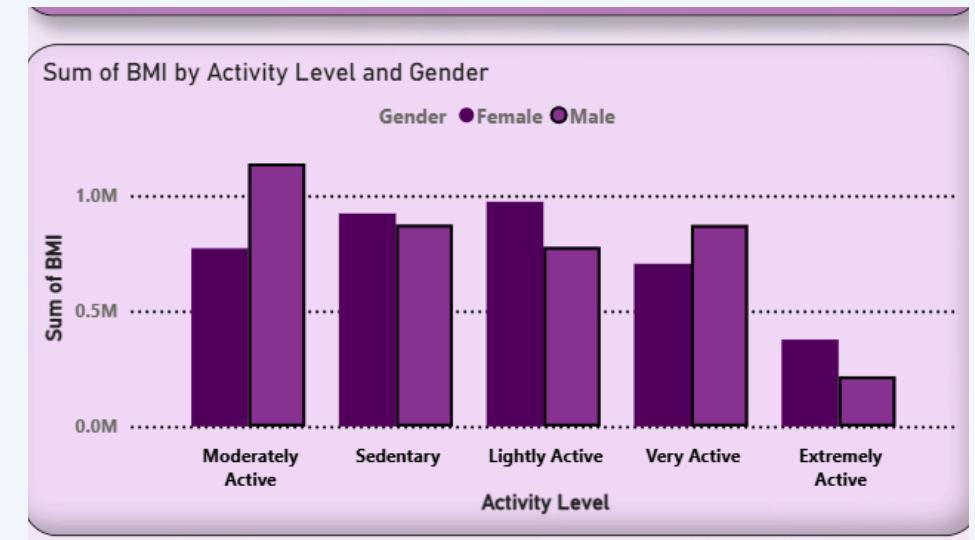
LIFESTYLE AND NUTRITION IMPACT

- Displays average BMI (4.50K), calorie intake (2.20K), and percentage within calorie target (82.9%), offering a snapshot of overall nutritional health.
- Bar and line charts show how calorie intake and BMI vary across activity levels—from sedentary to extra active—highlighting the impact of lifestyle on health.
- Bar chart compares protein consumption across dietary preferences (Omnivore, Vegetarian, Vegan, Pescatarian), useful for tailoring nutrition plans.
- Donut chart breaks down users into calorie deficit, surplus, and maintenance categories, aiding weight management strategies.
- Slicers for age group and gender allow personalized data views, making the dashboard adaptable for diverse health assessments.



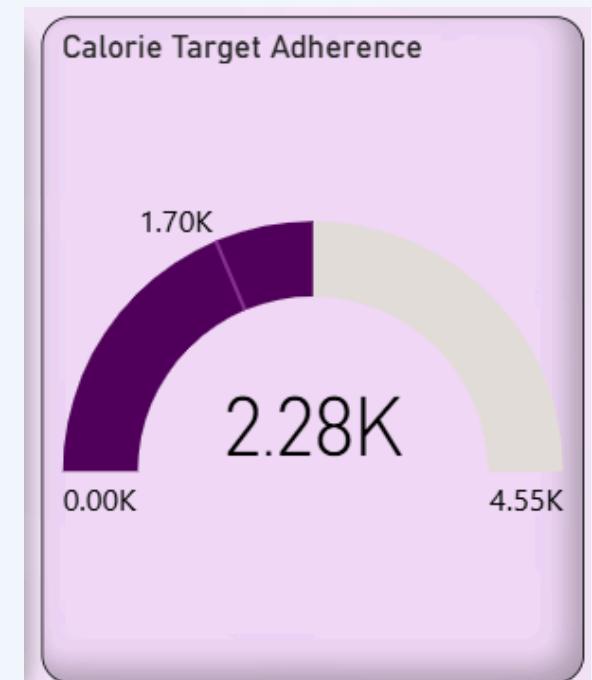
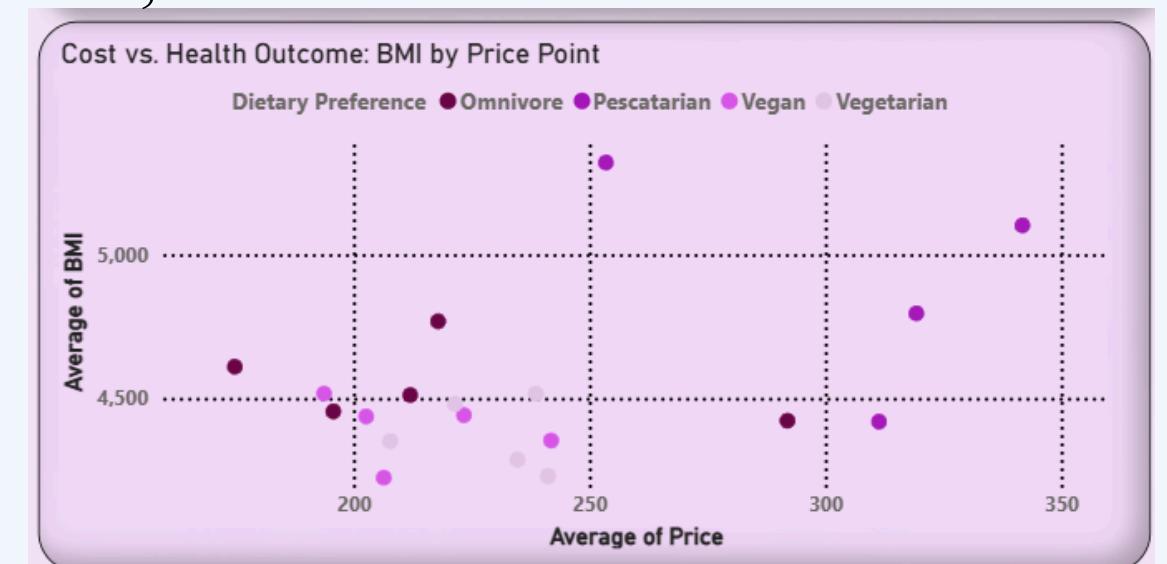
NUTRIENT AND HEALTH INSIGHTS

- Displays an average nutrition score of 0.83 and 82.9% adherence to calorie targets, offering a snapshot of overall nutritional alignment.
- Bar chart compares BMI across activity levels (Sedentary to Very Active), segmented by gender, revealing how lifestyle impacts body composition.
- Horizontal bar chart categorizes individuals as Under, Target, or Over calorie intake, helping identify nutritional imbalances across genders.
- Table shows intake of protein, fat, carbs, and fiber across meal types (Breakfast, Lunch, Dinner, Snacks), split by gender—ideal for meal planning insights.
- Pie chart visualizes gender split across dietary preferences, useful for tailoring nutrition programs and outreach strategies.



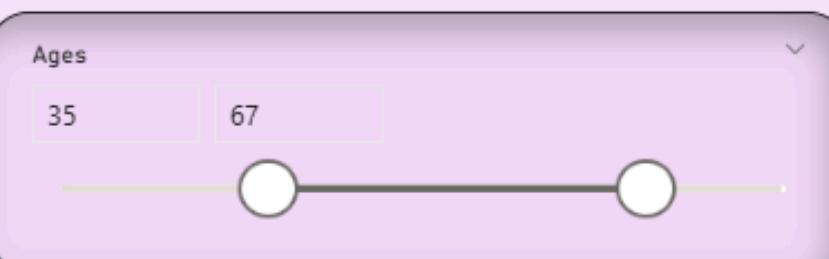
VALUE AND COST ANALYSIS

- Scatter plot maps total cost against average price for Fruits, Meats, and Vegetables, helping identify cost-effective nutrition sources.
- Stacked bar chart compares min, max, and total prices for Protein, Fat, and Sodium—useful for budget-conscious dietary planning.
- Bar chart shows how average ratings vary across price categories and dietary preferences (Vegetarian vs Non-Vegetarian), guiding consumer-focused product decisions.
- Gauge chart shows a value of 2.28K, indicating how closely users meet their calorie goals.
- Cards display total cost by meal type (\$1.00) and price per gram (\$0.90), offering quick insights into nutritional value per cost unit.



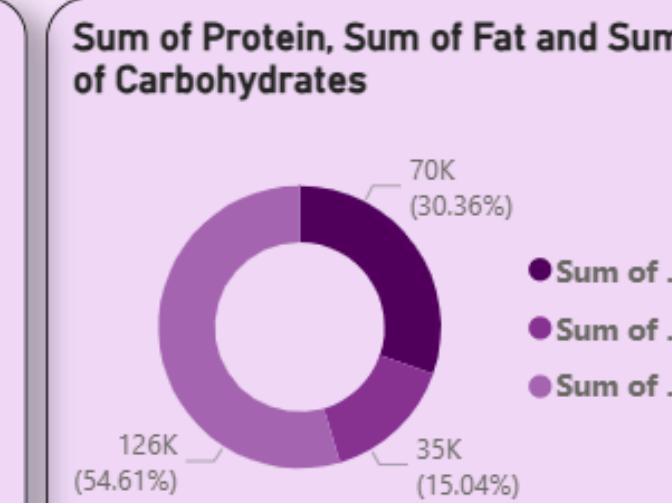
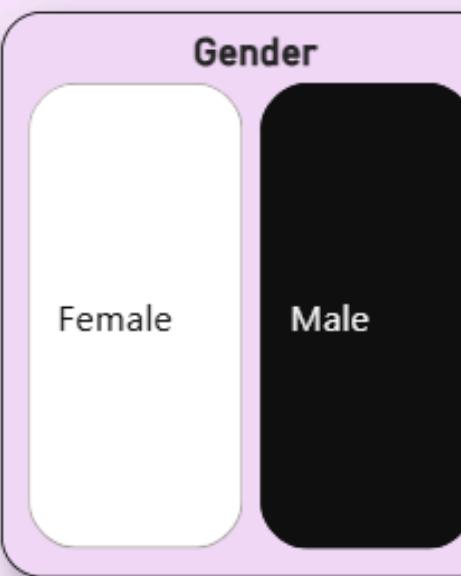
DASHBOARD

Food Trends Understanding Customer Preferences



Sum of Daily Calorie...
1M

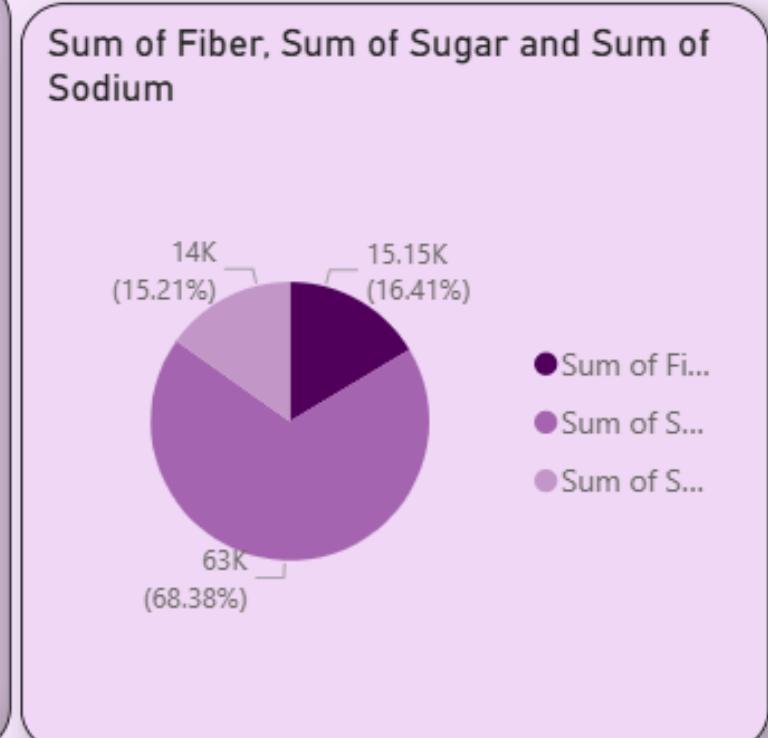
Dietary Preferen...
All



Lunch Suggestion

	Sum c
Veggie stir-fry	11.
Vegetarian pasta with marinara sauce	
Vegetarian chili with a side of whole-wheat bread	
Vegetarian burrito bowl with brown rice	
Vegan lentil stew with brown rice	
Turkey sandwich with whole-wheat bread	
Turkey sandwich on whole-wheat bread with vegetables	
Turkey sandwich on whole-wheat bread with salad	
Turkey sandwich on whole-wheat bread	
Turkey sandwich on whole wheat bread with vegetables	
Turkey sandwich on whole grain bread	
Turkey sandwich	7.
Total	**1,07,**

Breakfast Suggestion

	Sum of Rating
Yogurt with granola and fruit	6
Yogurt with fruit and granola	5
Whole-wheat toast with egg and avocado	3
Wholegrain toast with avocado	5
Vegan pancakes with syrup	99
Tofu scramble with whole-wheat toast	2
Tofu scramble with whole wheat toast and fruit	11
Tofu scramble with whole wheat toast	1
Tofu scramble with veggies and whole-wheat toast	6
Tofu scramble with veggies	134
Tofu scramble with vegetables and whole-wheat toast	9
Total	**1433**


2.20K

Average of Calories

238K

Sum of Protein

118K

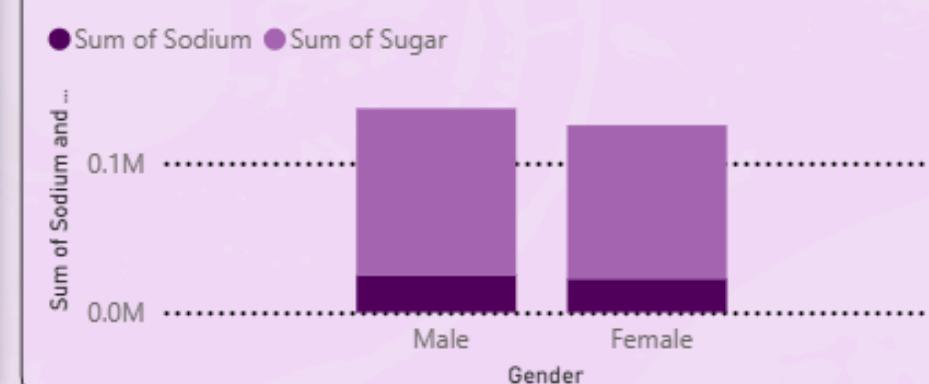
Sum of Fat

Dietary Preferences And Averages

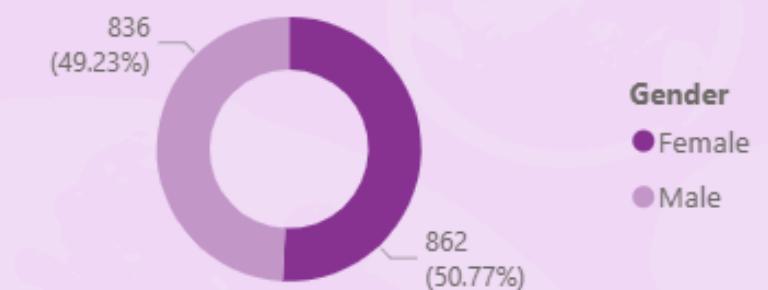
Count of Disease by Dietary Preference



Sum of Sodium and Sum of Sugar by Gender



Count of Gender, Sum of Daily Calorie Target, Sum of Rating and Sum of Price by Gender



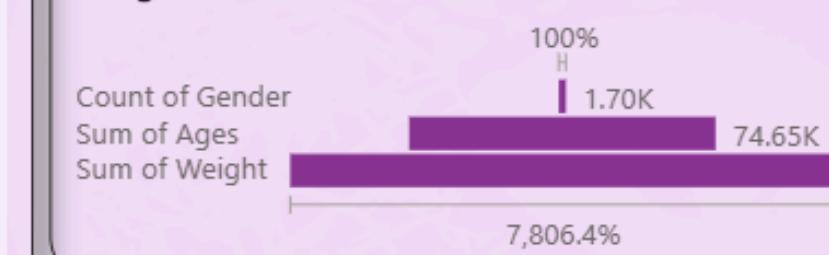
Dinner Suggesti...

- Vegetarian lasa...
- Vegetarian lasa...
- Vegetarian chili ...
- Vegetarian chili ...
- Vegetarian chili
- Vegetable stir-fr...
- Vegetable stir-fr...
- Vegetable stir-fr...
- Vegetable stir-fr...

Snack Suggestion

	Sum of Rating
Almond milk with banana and chia seeds	6
Almonds	16
Almonds with dried fruit	2
Apple slices with almond butter	48
Apple slices with peanut butter	46
Apple with almond butter	768
Apple with peanut butter	58
Banana	4
Banana with almond butter	63
Banana with peanut butter	404
Carrot sticks with hummus	3
Total	5045

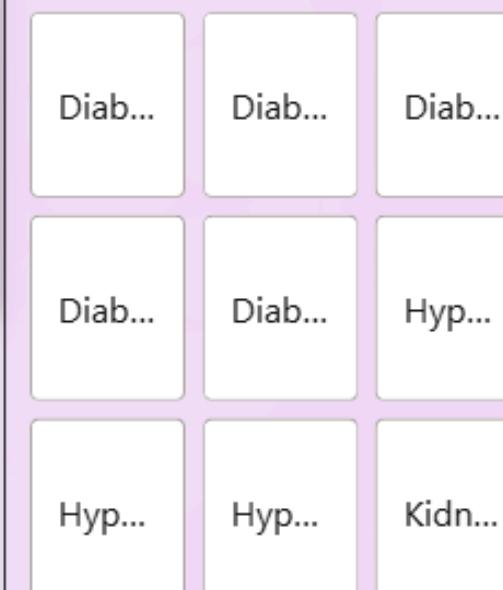
Count of Gender, Sum of Ages and Sum of Weight



Average of Rating

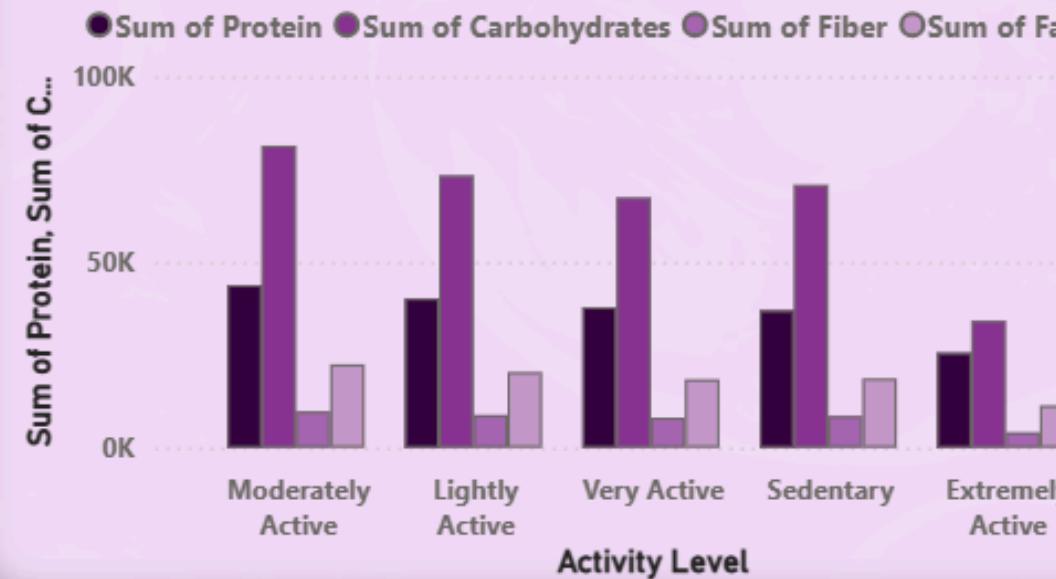


Disease



Nutrients And Diseases

Sum of Protein, Sum of Carbohydrates, Sum of Fiber and Sum of Fat by Activity Level



Sum of Price by Price Category



Dietary Preference and Activity Level

Vegan



Activity Level



Height

All

Disease

- Diabetes, Acne, Hypertension, Heart Disease
- Diabetes, Acne, Hypertension, Kidney Disease
- Diabetes, Acne, Weight Gain, Hypertension, Heart Disease
- Diabetes, Acne, Weight Gain, Hypertension, Heart Disease,...
- Diabetes, Acne, Weight Loss, Hypertension, Heart Disease,...

Q/A



Show lowest calorie food

Calories	Ages	Gender	Height	Weight	Activity Level	Dietary Preference
990	62	Female	155	55	Sedentary	Vegan

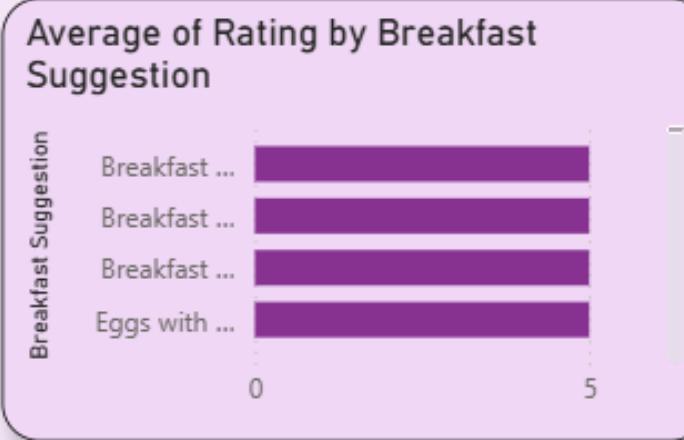
3M

Sum of Calories

Weight

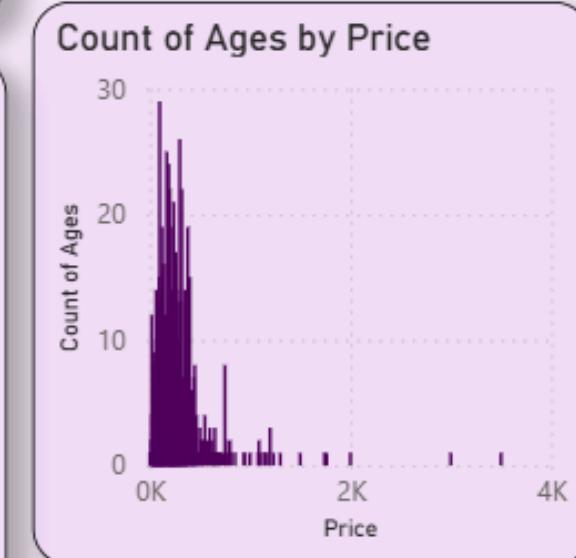
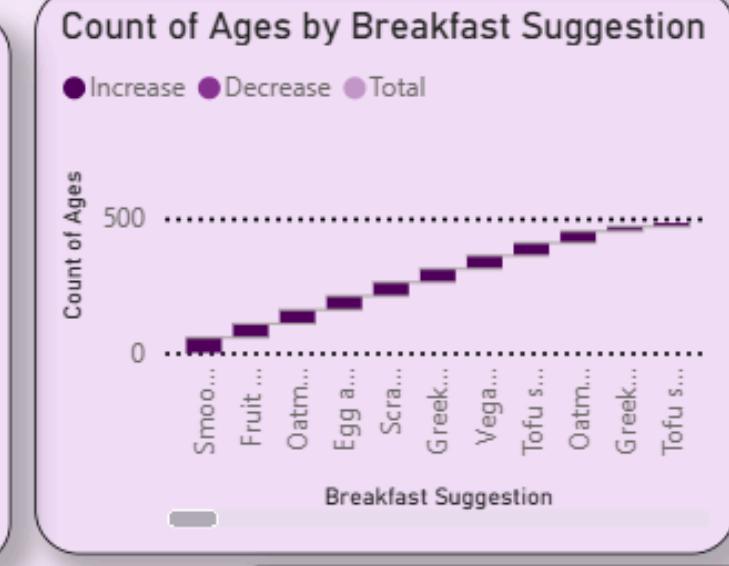
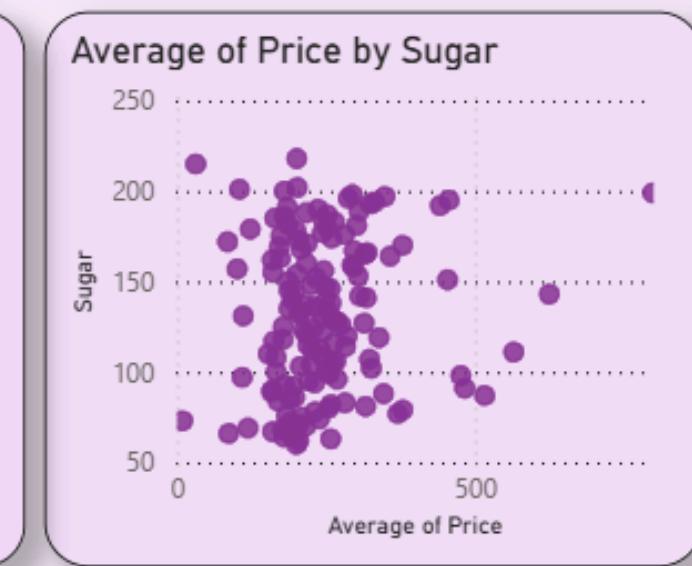
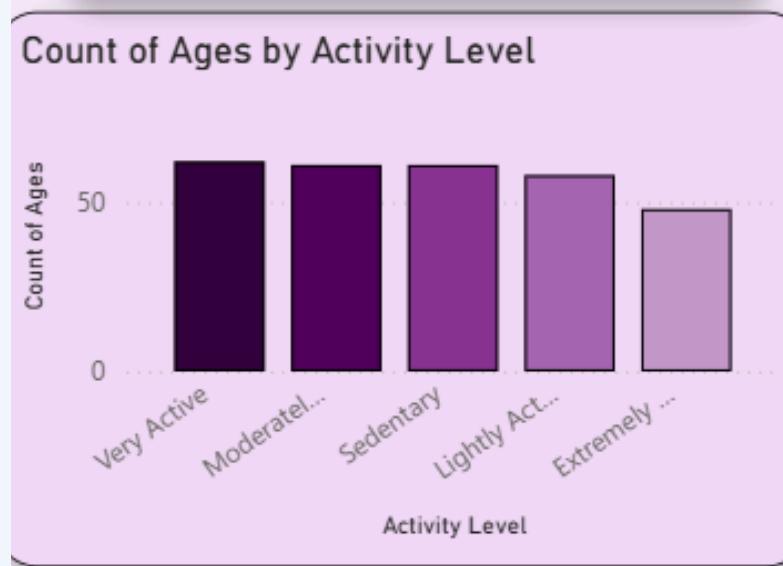
48 93

Averages By Breakfast Suggestions



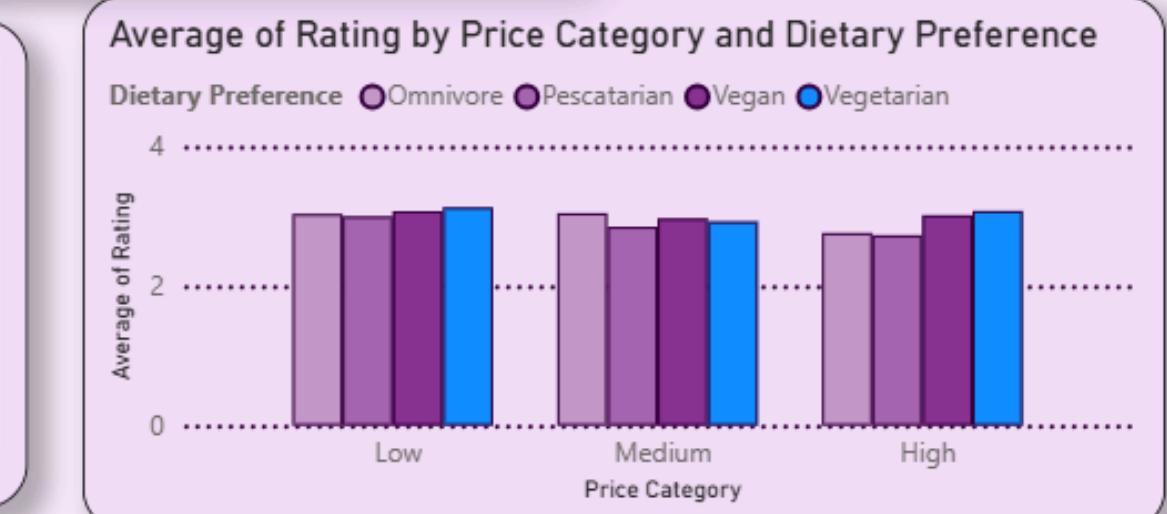
Breakfast Suggestion

	Average of Protein	Average of Calories
Breakfast burrito with beans and veggies	100.00	1740.00
Breakfast burrito with eggs and vegetables	95.00	1670.00
Total	81.50	1523.50



Breakfast Suggestion

Breakfast Suggestion	Average of Rating	Average of Price	Average of Sodium
3 eggs with whole-wheat toast and avocado	4.00	98.00	44.1
Scrambled eggs with whole-wheat toast and fruit	3.00	77.50	42.1
Scrambled eggs with whole wheat toast	2.88	222.53	36.1
Greek yogurt with granola and berries	4.00	57.50	36.1
Oatmeal with protein powder	3.00	95.00	36.1
Pancakes with fruit and nuts	1.00	169.00	36.1
Total	2.97	226.73	27.1

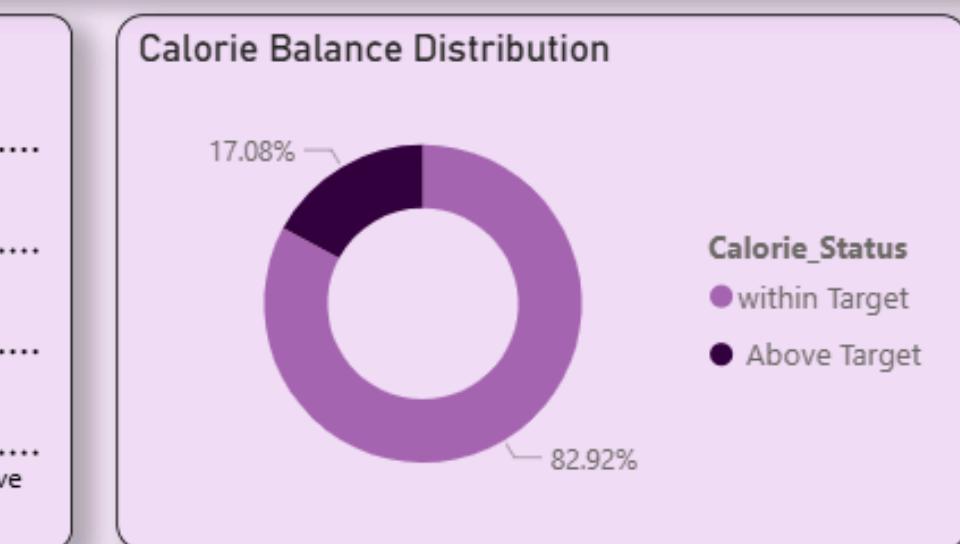
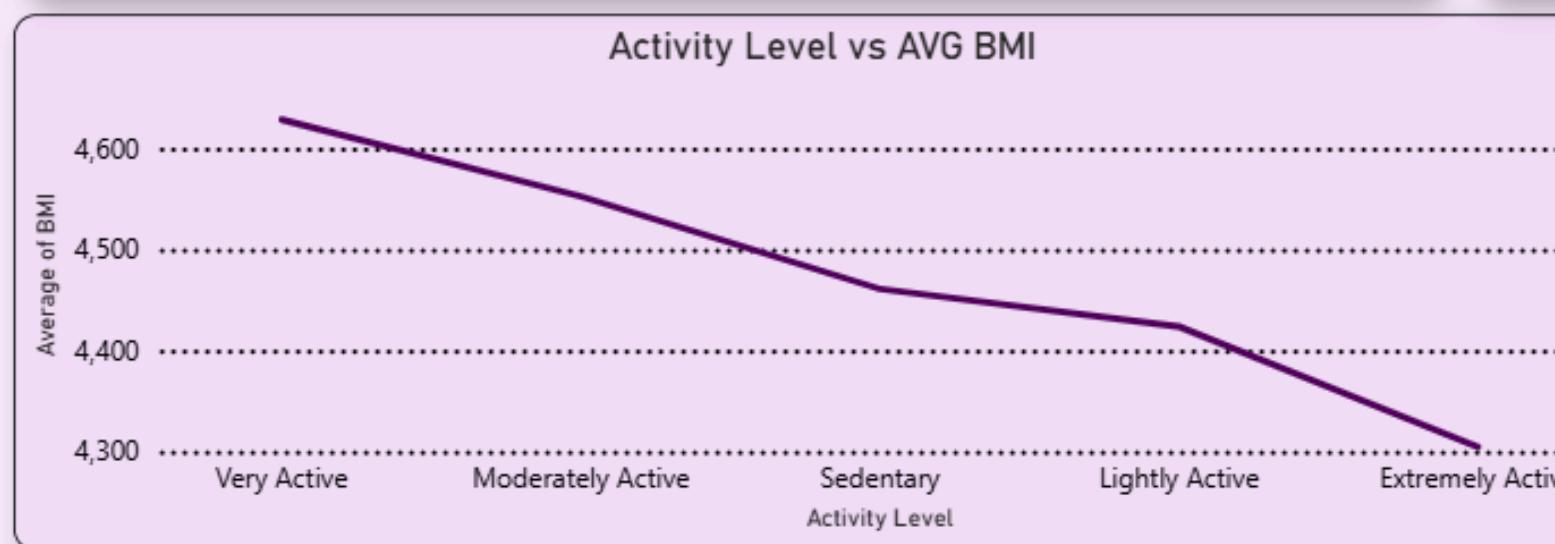
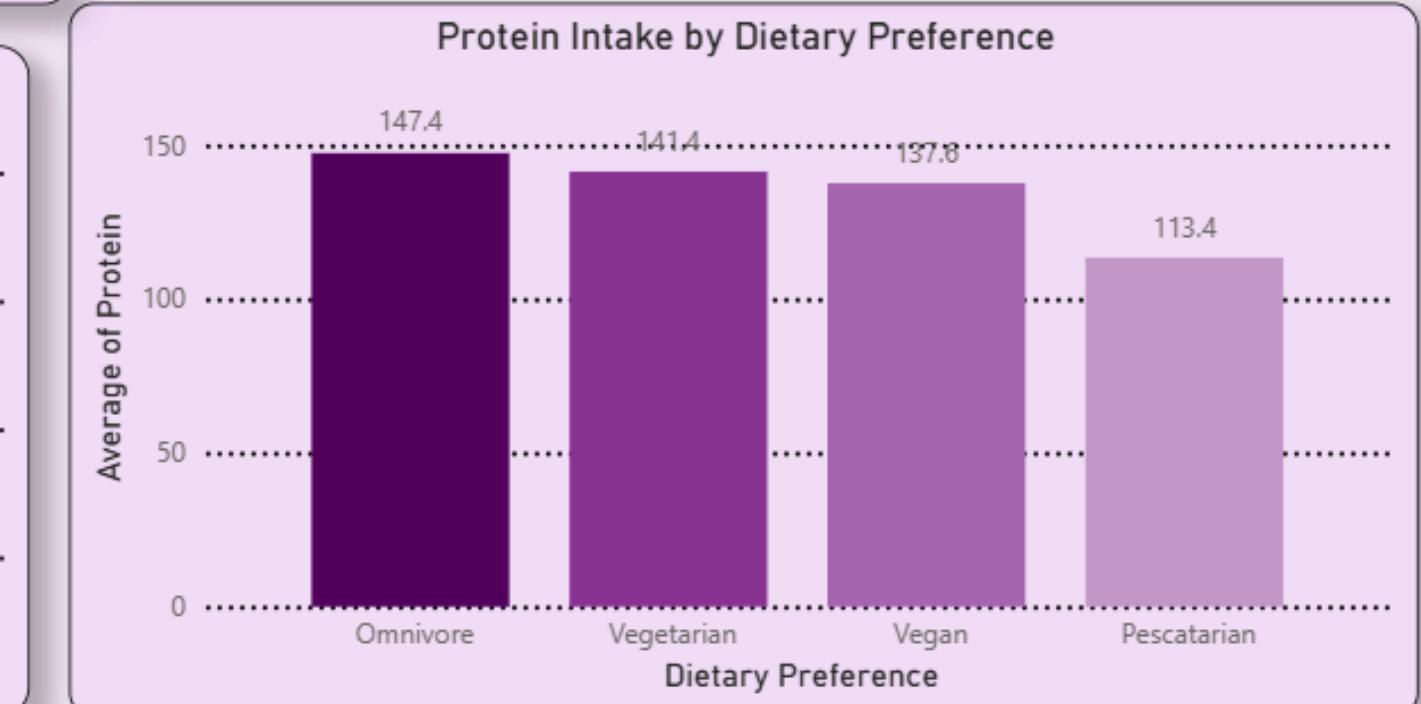
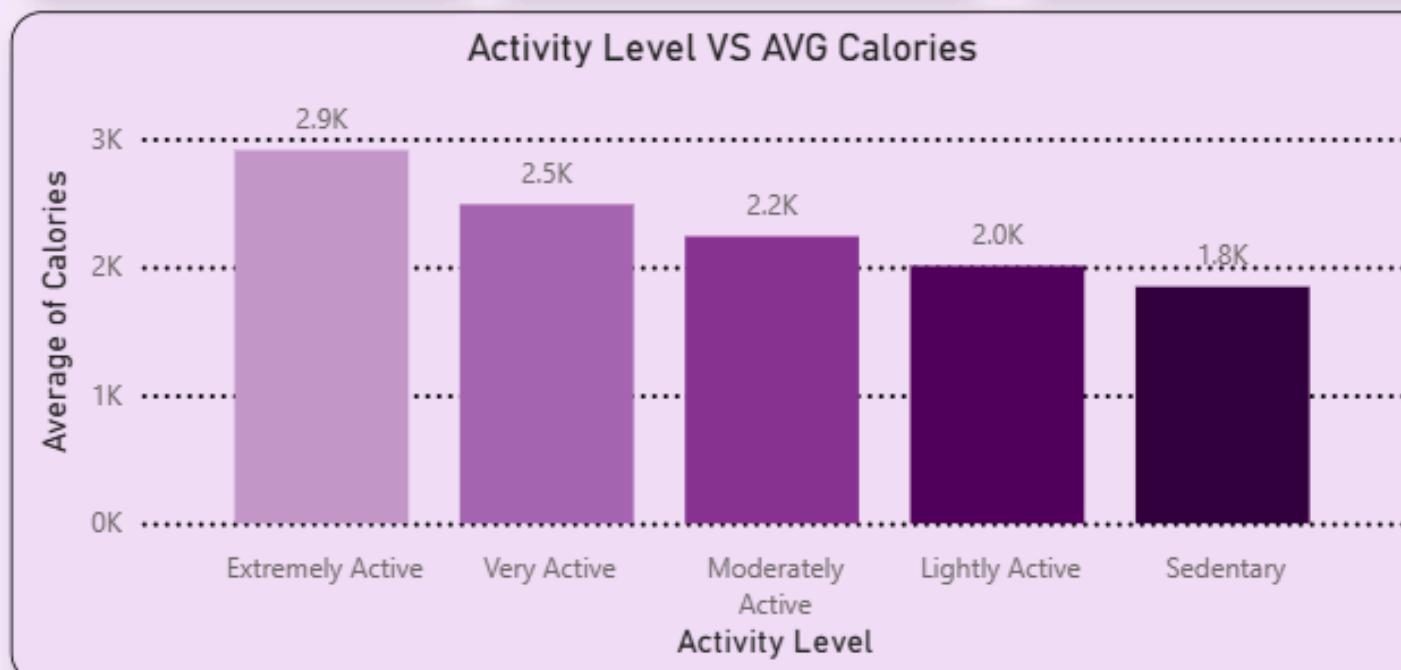


AVG BMI
4.50K

% Within Calorie Target
82.9%

AVG of Calories
2.20K

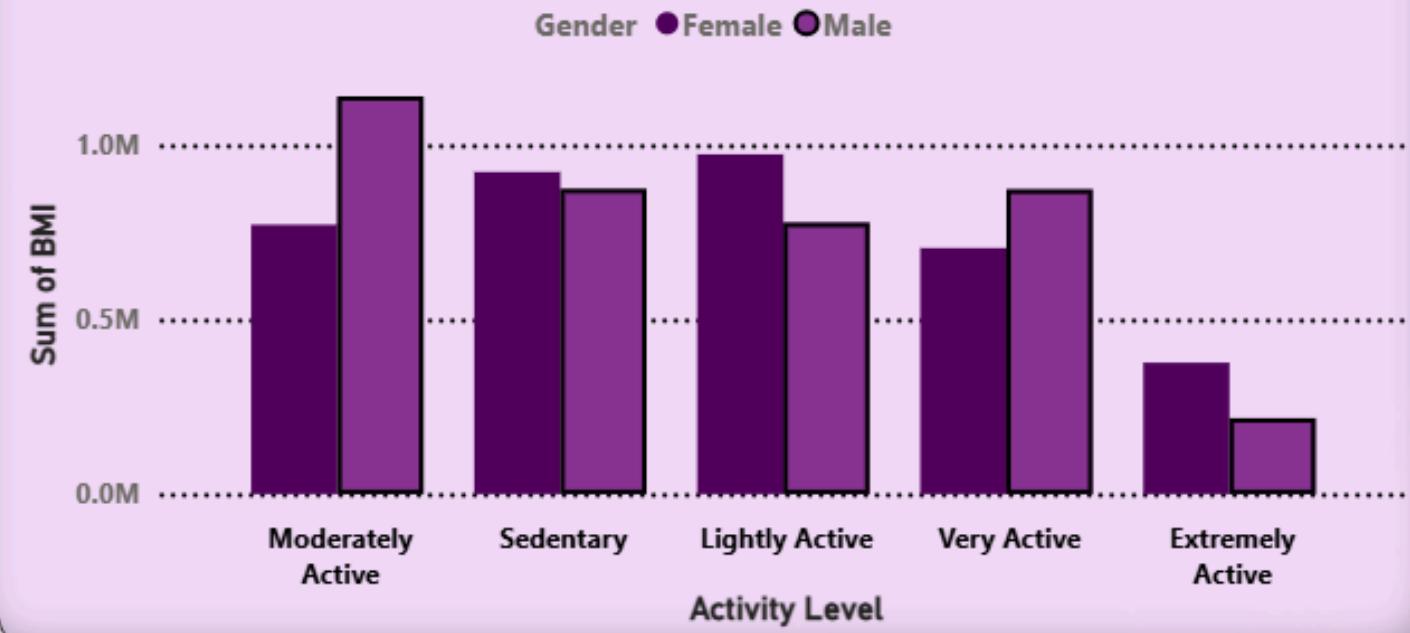
Lifestyle & Nutrition Impact



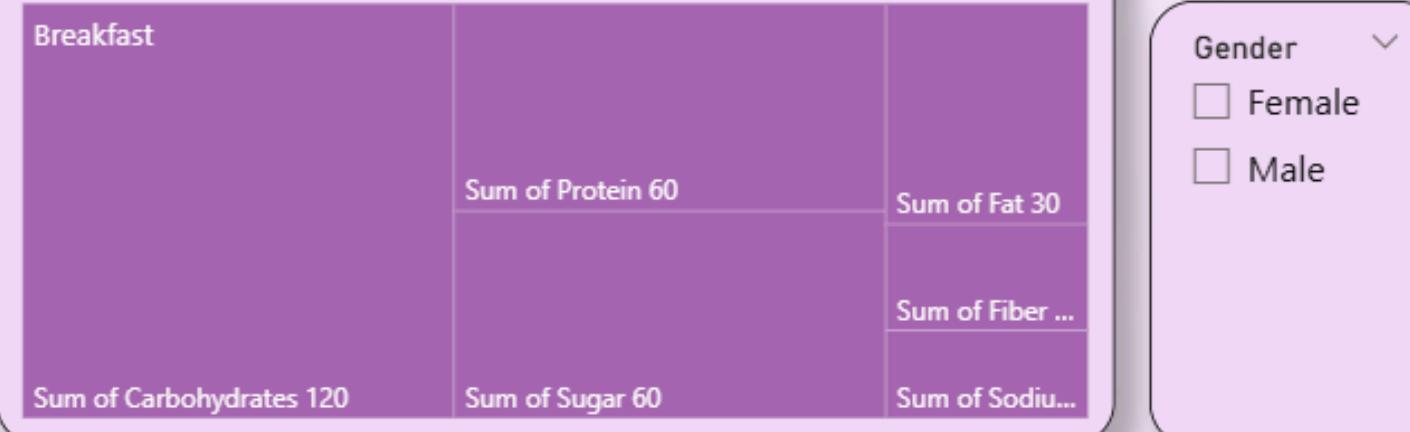
Female
Male

Nutrition And Health Insights

Sum of BMI by Activity Level and Gender



Nutrient Breakdown by Meal Type (Protein, Fat, Carbs, Fiber)



0.83

% Within Target

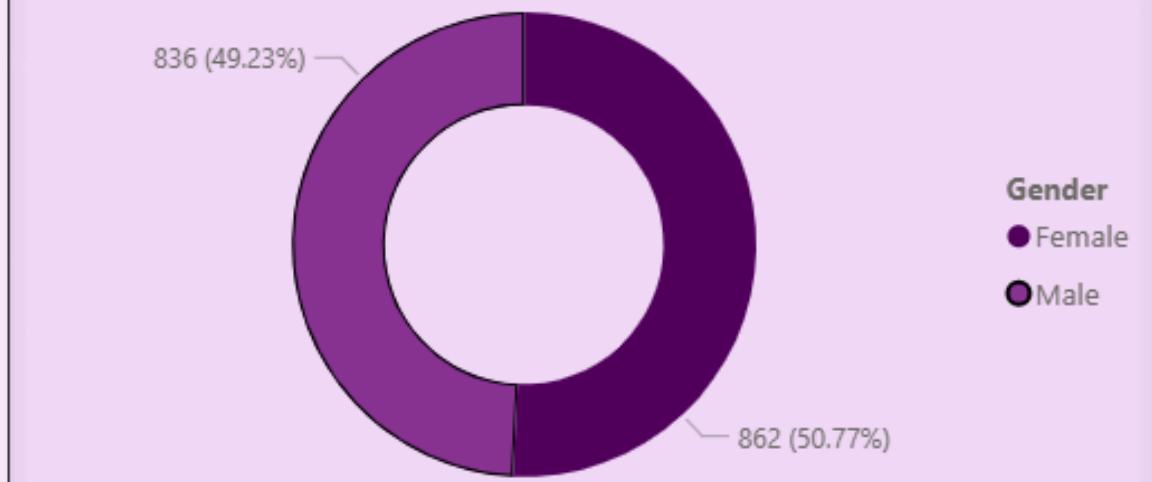
82.9%

% Within Calorie Target

Count of Gender by Calorie_Status

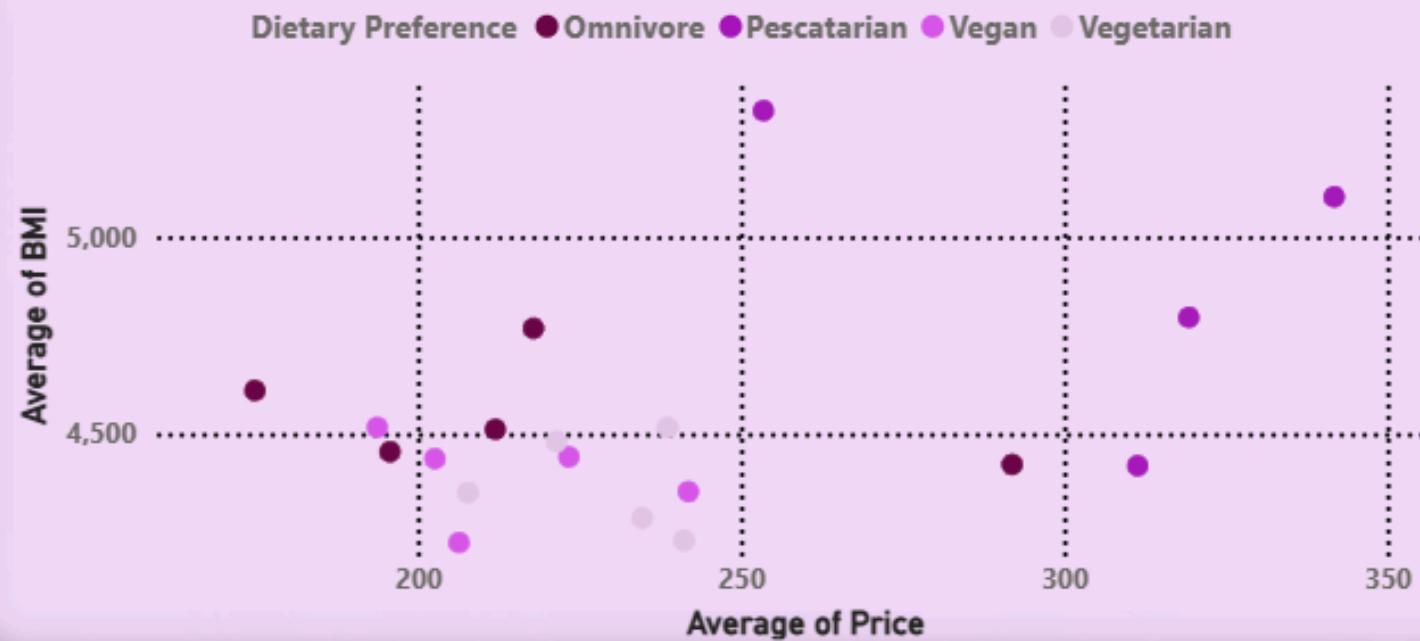


Count of Dietary Preference by Gender



Value & Cost Analysis

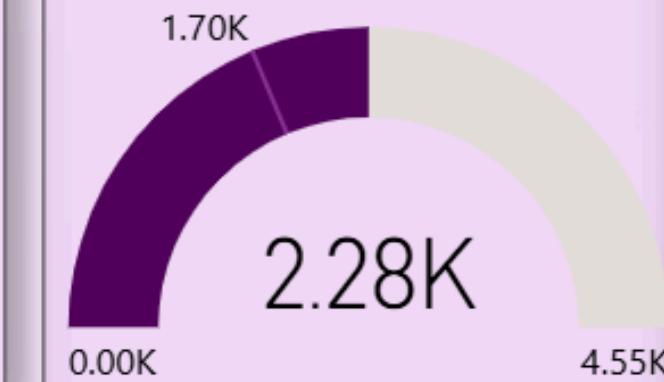
Cost vs. Health Outcome: BMI by Price Point



Itemized Price Comparison

Baked chicken with roast...	173.00
	Sum of Price
Baked chicken with sweet ...	424.00
	Sum of Price
Baked fish with steamed v...	179.00
	Sum of Price
Baked salmon with veggies	

Calorie Target Adherence



Total Cost Distribution by Meal Type

Breakfast

220.00

Carbohydrat...

Most Cost-Efficient Nutrient Name

Price Per Gram (\$)

0.90

Lowest Cost Per Gram Value

Average of Rating by Price Category and Dietary Preference

Dietary Preference ● Omnivore ● Pescatarian ● Vegan ● Vegetarian



FUTURE ENHANCEMENTS

- Integrate **real-time food tracking** and customer feedback analytics.
- Predict **personalized meal plans** using machine learning.
- Extend research to include **regional food preferences**.
- Develop a **mobile dashboard** for interactive health insights.
- Implement **AI-driven recommendations** for pricing and menu optimization.

CONCLUSION

This project offers a comprehensive analysis of dietary habits, nutritional intake, lifestyle factors, and cost-efficiency across diverse demographics. By integrating visual insights from multiple dashboards, it highlights key correlations between food choices, health outcomes, activity levels, and economic considerations. The findings support informed decision-making for personalized nutrition planning, public health strategies, and consumer education—ultimately promoting healthier and more cost-effective living.

THANK YOU!