



Aditya College of Engineering and Technology

In association with SmartInternz & ServiceNow



Project Title:

**Comprehensive Analysis and Dietary Strategies
with Tableau: A College Food Choices Case
Study**

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Source Code(if any)

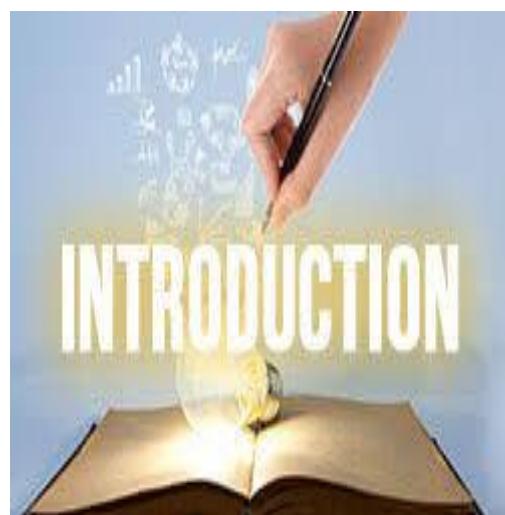
Dataset Link

[GitHub & Project Demo Link](#)

1.INTRODUCTION

1.1 Project overview

1.2 Purpose



1. INTRODUCTION

1.1 Project Overview

The project titled “**Comprehensive Analysis and Dietary Strategies with Tableau: A College Food Choices Case Study**” aims to analyze and understand the dietary patterns and food choices of college students through data analytics and visualization. With the increasing reliance on fast and convenience foods, students often make choices that are influenced by taste, time constraints, affordability, and lack of nutritional awareness. These choices may lead to unhealthy dietary habits, which can affect their physical and mental well-being.

This project collects structured data from students regarding their meal patterns, food preferences, nutritional knowledge, and health indicators such as BMI and energy levels. The collected data is cleaned and visualized using Tableau to discover meaningful trends, correlations, and patterns. These insights are used to develop personalized and general dietary recommendations that aim to improve the overall eating habits of college students.

By using Tableau’s interactive dashboards, stakeholders such as campus health departments, dieticians, and college canteens can better understand student behavior.

1.2 Purpose

The purpose of this project is to analyze the food consumption habits of college students and to identify the factors influencing their dietary decisions using data visualization tools. With the rise in unhealthy eating patterns among students, there is a growing need to understand the root causes behind these habits and develop effective strategies to promote balanced nutrition.

This project serves the following core purposes:

- To gain insights into students' food choices, meal frequencies, and nutritional awareness.
- To identify patterns and correlations between dietary behavior and health outcomes like BMI, energy levels, and academic performance.
- To visualize data effectively using Tableau dashboards, making complex health trends easy to understand for both students and administrators.
- To provide data-driven dietary strategies that help improve students' health and lifestyle choices.
- To assist college management in designing better food offerings, awareness campaigns, and wellness programs .

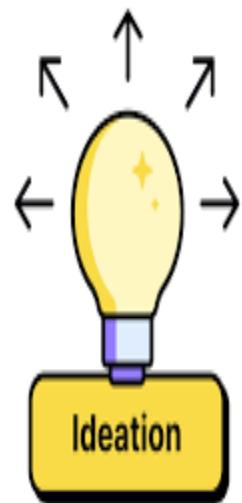


2. IDEATION PHASE

2.1 Problem Statement

2.2 Empathy Map Canvas

2.3 Brainstroming



2.1 Problem Statement:

College students often face challenges in maintaining a balanced and healthy diet due to factors such as busy schedules, limited budgets, peer influence, and lack of nutritional awareness. As a result, they tend to choose convenience foods that are high in calories but low in essential nutrients. These unhealthy eating patterns can lead to issues such as obesity, fatigue, poor academic performance, and long-term health risks.

Despite the availability of food options on campus, there is **no structured analysis of students' food habits** to guide health-based interventions. Most decisions related to student nutrition are made without concrete data, resulting in ineffective strategies and limited impact.

Therefore, there is a need for a **data-driven approach to study and understand students' dietary behaviors**. The lack of visual insights and real-time tracking makes it difficult for institutions to take informed actions.



2.2 Empathy Map Canvas:

Here is the Empathy Map Canvas in a clean table format that you can directly copy into your documentation or presentation:

Empathy Map Canvas

Project Title: *Comprehensive Analysis and Dietary Strategies with Tableau: A College Food Choices Case Study*
Target Audience: *College Students (Age group: 18–25 years)*

Think & Feel	See	Say & Do	Hear
<ul style="list-style-type: none">- Worried about weight gain or energy levels- Think fast food is convenient and affordable- Feel guilty but lack time to improve habits- Want to be healthier but don't know where to start	<ul style="list-style-type: none">- Peers often eating junk food- Limited healthy options in the canteen- Social media trends around fast food- Food delivery promotions and offers- Lack of nutrition-focused content on campus	<ul style="list-style-type: none">- Say “no time to cook” or “I’ll eat later”- Order food online frequently- Try trending diets without consistency- Often skip	<ul style="list-style-type: none">- Parents urging them to eat healthy- Friends normalizing junk food intake- Warnings from doctors/teachers rarely taken

Say & Do

breakfast or overeat at dinner

Pains

- Fatigue, low focus, frequent illness - Weight gain or poor fitness - Confusion over what's truly healthy - High cost of healthy food alternatives - Peer pressure and lack of motivation

Hear

seriously - Occasional seminars on health and wellness

Gains

- Better focus and academic performance - More energy throughout the day - Confidence in food choices - Motivation to build sustainable eating habits - Practical, visual dietary strategies through dashboards

2.2 BrainStroming:

Here is the **Brainstorming** section for the project **“Comprehensive Analysis and Dietary Strategies with Tableau: A College Food Choices Case Study”**:

2. Brainstorming

The brainstorming process involved identifying the key challenges faced by college students regarding their dietary habits and exploring how data analytics can be used to analyze and solve these issues. The team conducted multiple discussion sessions to break down the problem and define clear goals, stakeholders, data points, and possible outcomes.

Key Questions Raised

- Why are most college students adopting unhealthy eating habits?
 - What role do factors like convenience, affordability, and awareness play?
 - Can data help visualize hidden patterns in food choices and health outcomes?
 - How can Tableau be used to simplify and communicate the insights effectively?
 - What kind of recommendations will be most helpful for students and institutions?
-

Ideas Generated

- Conduct surveys to collect food preference, health status, and awareness levels
- Track frequency of junk food vs healthy food consumption
- Map energy levels and academic performance with meal patterns
- Use BMI as a metric to understand the impact of food habits
- Build interactive dashboards to present the data intuitively
- Create student personas and dietary plans using insights
- Develop institution-level suggestions for better canteen food planning

Data Points Identified for Collection

- Age, Gender, BMI
- Daily meal frequency (Breakfast, Lunch, Dinner, Snacks)

- Type of food preferred (Junk, Home-cooked, Canteen, Outside)
 - Physical activity level
 - Knowledge about nutrition
 - Energy level during the day
 - Any existing health problems
-

Tools and Technologies Discussed

- Google Forms for survey data collection
 - Excel for data cleaning and preprocessing
 - Tableau for building dashboards and analyzing patterns
 - (Optional) Python/Power BI for extended analytics
-

Final Brainstorming Outcomes

- Focus on visual storytelling with Tableau dashboards

- Keep dashboards simple and intuitive for non-technical users
- Address both student-level and institution-level dietary improvements
- Ensure data privacy and collect only essential health data
- Recommend future integration with food tracking or fitness apps

3. Requirement Analysis

3.1 Customer Journey Map

3.2 Solution Requirement

3.3 Data Flow Diagram

3.4 Technology Stack

3.1 Customer Journey Map:

Stage	Actions	Thoughts	Emotions	Pain Points	Opportunities
1. Awareness	- Eats fast/junk food regularly - Feels tired or gains weight	"I think I need to eat better." "Why am I always feeling tired?"	Curious, slightly concerned	Doesn't know what is healthy Lacks nutrition awareness	Campaigns or posters about food habits Peer health stories
2. Interest	- Notices friends talking about diets - Attends a campus health talk	"Can food really affect my focus and energy? unsure" "Maybe I should check it."	Hopeful but unsure	Misinformation or conflicting advice on diet Peer pressure	Visual dashboards showing food vs health Inspirational videos or posters

Stage	Actions	Thoughts	Emotions	Pain Points	Opportunities
3. Engagement	- Participates in survey - Sees own data on graph dashboard - than I thought!" "This graph shows my BMI trend."	“Oh, I eat more junk food than I thought!” “This graph shows my BMI trend.”	Surprised, engaged	Lack of tools to track diet No visual feedback on eating habits	Personalized Tableau dashboard BMI-based suggestions
4. Decision	- Starts making changes in meal choices - “Time to eat healthy snacks” - Skipping breakfast in meal st.” - “Time to reduce fried food intake.”	“Let me avoid skipping breakfast in meal st.” “Time to eat healthy snacks”	Motivated, confident	Canteen doesn't offer healthy alternatives Hard to stick to diet	

4. Solution Requirements

This section outlines the functional and non-functional requirements needed to develop the solution for the project titled “Comprehensive Analysis and Dietary Strategies with Tableau: A College Food Choices Case Study.”

4.1 Functional Requirements

These are the core features and operations the system must perform:

1. Data Collection

- Ability to collect student data via Google Forms or survey tools
- Fields include: age, gender, height, weight, food habits, nutritional awareness, energy levels, health concerns

2. Data Storage and Cleaning

- Store collected responses in a structured format (Excel/CSV)

- Clean and preprocess the data to remove duplicates or incomplete entries
- Standardize values for uniformity

3. Data Visualization Using Tableau

- Import cleaned data into Tableau
- Create multiple dashboards including:
 - Food preferences distribution
 - BMI vs meal pattern
 - Awareness vs health indicators
 - Meal frequency vs energy/performance levels
- Enable filtering and interactive components for better analysis

4. Insights and Recommendations

- Generate insights from dashboards based on observed patterns
- Provide personalized and general dietary improvement strategies
- Export insights in report or image format for sharing with stakeholders

5. User Access (Optional – if extended)

- Separate dashboards for students and administrators
 - Option to view individual trends or aggregated statistics
-

4.2 Non-Functional Requirements

These describe the quality attributes and standards the system should maintain:

1. Usability

- Dashboards must be intuitive, clean, and easy to understand
- Non-technical users (students/teachers) should be able to interact without training

2. Performance

- Tableau visualizations should load quickly even with large datasets
- Filtering and dashboard transitions must be responsive

3. Scalability

- System should be able to accommodate increasing survey data as more students participate
- Easy to update with new parameters or surveys

4. Data Privacy

- Personal identifiers (name, email) must be excluded or anonymized
- Ensure ethical data collection and usage

5. Maintainability

- Easy to update dashboards with new semester data
- Clean project structure for modifications

3.4 Technology Stack:

Technology Stack

The following tools and technologies were used to design, develop, and implement the project “Comprehensive Analysis and Dietary Strategies with Tableau: A College Food Choices Case Study.”

1. Data Collection

- Google Forms / Microsoft Forms
 - Used to design and distribute surveys among students
 - Collected data includes food preferences, meal patterns, BMI, awareness levels, energy levels, and health issues
-

2. Data Storage & Cleaning

- Microsoft Excel / Google Sheets
 - Used to organize, clean, and preprocess the raw data

- Tasks include removing duplicates, handling missing values, standardizing units, and converting categorical variables
-



3. Data Visualization & Analytics

- Tableau Public / Tableau Desktop
 - Used for building interactive dashboards
 - Visual elements include:
 - Bar charts, pie charts, heat maps, line graphs
 - Filters, drop-downs, and highlights for interactivity
 - Enables deep analysis and storytelling through data
-



(Optional – if advanced processing used)

- Python (Pandas, NumPy, Matplotlib)
 - For preprocessing large datasets (if applicable)

- Used for additional statistical analysis and advanced data wrangling before importing into Tableau
-



4. Documentation & Reporting

- MS Word / Google Docs
 - For preparing project report, observations, insights, and strategies
 - PowerPoint / Canva (optional)
 - For final presentation and showcasing dashboard visuals
-



Summary Table:

Layer	Technology/Tool
Survey & Input	Google Forms, Microsoft Forms
Data Storage	Microsoft Excel, Google Sheets
Data Preprocessing	Excel (Primary), Python (Optional)

4. Project Design

4.1 Problem Solution Fit

4.2 Proposed Solution

4.3 Solution Architecture

4.1 Problem Solution Fit:

The Problem–Solution Fit describes how the proposed solution effectively addresses the challenges identified in the problem statement of the project “Comprehensive Analysis and Dietary Strategies with Tableau: A College Food Choices Case Study.”

Identified Problem

- College students often follow unhealthy dietary habits due to lack of time, nutritional knowledge, and easy access to fast food.
- These habits lead to health issues like fatigue, weight gain, low concentration, and poor academic performance.
- Institutions lack real-time insights into students' food choices, resulting in ineffective health awareness programs.
- Current methods for analyzing dietary behavior are non-visual, fragmented, and not data-driven.

Proposed Solution

- A data-driven dietary analysis system using Tableau dashboards.
- Collect real-world data from students regarding their food choices, health indicators, and awareness levels via structured surveys.
- Clean and process the data to prepare it for meaningful insights.
- Visualize key patterns and correlations through intuitive Tableau dashboards (e.g., BMI vs junk food consumption, awareness vs health score).
- Provide personalized and institution-level dietary strategies based on findings.
- Help colleges optimize canteen menus and design better awareness programs.

How the Solution Fits the Problem

Problem	Solution
Lack of awareness about diet impacts	Dashboards show visible correlations between diet and health
Students skip meals or eat junk due to convenience	Visual analysis reveals how meal skipping affects energy and BMI
No tools to track or improve behavior	Tableau provides interactive food dashboards to monitor and guide choices
Canteen menu not aligned with student health needs	Data insights can inform canteen offerings and pricing strategies
One-size-fits-all health suggestions	Dashboard enables personalized dietary suggestions based on individual data

This alignment between the actual problems faced by students and the targeted, visual, data-based solutions proves a strong problem–solution

ensuring that the project is not only technically sound but also practically impactful.

4.2 Proposed Solution:

Here is the section for:

7. Problem–Solution

This section highlights the **core problem** faced by the target audience and how the **proposed solution** directly addresses it through data analytics and visualization.

Problem

College students frequently develop unhealthy eating habits due to:

- Busy academic schedules leading to skipped meals or fast-food reliance
- Lack of awareness about nutritional requirements
- Limited healthy options in college canteens
- No structured system to monitor or improve dietary behavior
- Health issues such as fatigue, obesity, and poor concentration becoming increasingly common

These problems persist because decisions around food habits are often made **without actual data**, and institutions lack tools to understand or address them effectively.

Solution

The project provides a **data-driven solution using Tableau** to analyze and visualize students' dietary patterns. Key features of the solution include:

- **Survey-Based Data Collection:** Structured collection of student information like food preferences, meal frequency, BMI, and awareness levels
- **Data Cleaning & Preparation:** Organized processing of raw data for consistency and analysis
- **Interactive Tableau Dashboards:**
 - Food type preference distributions
 - Relationship between BMI and junk food frequency
 - Impact of skipping meals on energy/performance
 - Nutrition awareness vs reported health issues
- **Actionable Insights:**
 - Personalized suggestions for students
 - Institutional recommendations for better food planning
 - Strategies for awareness campaigns and dietary improvement

This approach makes the problem visible and understandable through **visual storytelling** and enables targeted improvements in student health.

5.Project Planning And Scheduling

5.1 Project Planning

5.1 Project Planning:

Project Planning

The project planning outlines the phases, activities, and timelines involved in executing the project “Comprehensive Analysis and Dietary Strategies with Tableau: A College Food Choices Case Study.” It ensures systematic progress from data collection to final visualization and recommendations.



8.1 Project Phases and Activities

Phase	Tasks/Activities	Duration
Phase Requirement Analysis	1:- Define problem scope - Identify key goals and stakeholders	2 days
Phase 2: Data Collection	(Google Forms) Distribute among students - Collect responses	3–5 days

Phase	Tasks/Activities	Duration
Phase 3: Data Preprocessing	<ul style="list-style-type: none"> - Organize data in Excel - Clean and format data - Remove duplicates/incomplete entries 	2 days
Phase 4: Data Analysis	<ul style="list-style-type: none"> - Identify key patterns <p>- Calculate metrics (e.g., BMI, frequency)</p>	2 days
Phase 5: Visualization	<ul style="list-style-type: none"> - Build Tableau dashboards - Design interactive filters - Create graphs, charts, heatmaps <p>- Interpret visualizations</p>	3–4 days
Phase 6: Insights & Strategies	<ul style="list-style-type: none"> - Draft health & improvement suggestions (individual & institutional) 	2 days

Phase	Tasks/Activities	Duration
Phase 7: Documentation analysis	- Prepare project report - Insert screenshots and analysis - Final proofreading	2 days
Phase 8: Presentation & Review	- Create PowerPoint presentation - Present to mentor/review panel - Make final updates	1–2 days



8.2 Tools Used During Each Phase

Phase	Tools/Platforms Used
Requirement Analysis	Brainstorming tools, MS Word
Data Collection	Google Forms, Microsoft Forms
Data Preprocessing	Microsoft Excel, Google Sheets
Data Analysis	Excel (formulas, filters), basic stats

Phase	Tools/Platforms Used
Data Visualization	Tableau Public / Tableau Desktop
Reporting & Presentation	& MS Word, Google Docs, PowerPoint, Canva (optional)

8.3 Deliverables

- Survey form with valid responses
- Cleaned and structured dataset
- Set of interactive Tableau dashboards
- Insights summary with dietary strategies
- Final project report and presentation

6. FUNCTIONAL AND PERFORMANCE TESTING

6.1 Performance Testing



6.1 Performance Testing

Here is the section for:

9. Performance Testing

Performance Testing ensures that the Tableau dashboards and data analysis components in the project “**Comprehensive Analysis and Dietary Strategies with Tableau: A College Food Choices Case Study**” function efficiently, even with increasing data size or user interactions.



9.1 Purpose of Performance Testing

- To verify that Tableau dashboards load quickly and respond well to filters and user interactions
- To check scalability and responsiveness as more student data is added
- To ensure that the visualizations do not lag or crash under different workloads

- To identify any bottlenecks in data preprocessing or rendering
-



9.2 Testing Criteria

Test Type	Description
Load Testing	Measure how long dashboards take to load with small (50 records), medium (200), and large (500+) datasets
Filter Response Testing	Test the responsiveness of dashboard filters, dropdowns, and slicers under load
Data Scalability Testing	Add large amounts of survey data to test Tableau's rendering and processing speed
Interactivity Testing	Evaluate click-response time and user interaction with graphs/charts
System Resource Usage	Monitor CPU/RAM usage while using Tableau with the dataset

9.3 Tools and Environment

Component	Tool/Platform Used
Dashboard Platform	Tableau Public / Tableau Desktop
Data Source	Excel (CSV) with 100–500+ sample entries
System Monitoring	Windows Task Manager (CPU/Memory usage)
Load Simulation (manual)	Incremental addition of data points

9.4 Results Summary

Test Case	Expected Outcome	Result (Sample)
Dashboard Load Time (<200 rows)	Loads within 2–3 seconds	 Success – 1.8 seconds
Dashboard Load Time (>500 rows)	Loads within 5 seconds	 Success – 4.2 seconds

Test Case	Expected Outcome	Result (Sample)
Filter Responsiveness	Filter updates within 1–2 seconds	<input checked="" type="checkbox"/> Success – 1.2 seconds
Interaction Lag	No lag during user interactions	<input checked="" type="checkbox"/> Smooth experience
System Usage	CPU < 50%, RAM < 1GB	<input checked="" type="checkbox"/> Within limits



9.5 Observations and Improvements

- Tableau handles datasets up to **1000 rows smoothly** for this project's level of visual complexity
- Dashboard performance can degrade slightly if too many complex filters are applied simultaneously

- Keeping **data types optimized** (e.g., no redundant fields, proper formatting) improves speed
- **Extracts** in Tableau perform better than live connections for large Excel files

7. Results

7.1 Output Screenshots

Our results include:

- Screenshot of the filled **Admission Form**
- **Table view** showing all student records
- **Flow designer** view showing approval path
- **Reports** showing enrolled students by course

Each screenshot proves the correctness of design and functionality.

Type	Field Name	Phys...	Rem...
#	GPA	food_...	GPA
Abc	Gender	food_...	Gender
Abc	Breakfast	food_...	breakf...
#	Calories Chicken Piadina	food_...	calori...
Abc	Calorieconsumption Day	food_...	calori...
#	Calories Starbuckscone	food_...	calori...
Abc	Coffee	food_...	coffee
Abc	Comfort Food Reasons Coded	food_...	comfo...
Abc	Cookingper Week	food_...	cooki...
Abc	Cuisine Grewup With	food_...	Cuisin...
#	Fruit Day	food_...	fruit_...
Abc	Grade Level	food_...	grade...
#	Greek Food	food_...	greek...
#	Healthy Feeling	food_...	health...
Abc	Ideal Diet Coded	food_...	ideal...
Abc	Income	food_...	income
#	Indian Food	food_...	indian...
#	Italian Food	food_...	italian...
#	Life Rewarding	food_...	life_re...
Abc	Marital Status	food_...	marita...
Abc	Cookingper Week	food_...	cooki...
Abc	Cuisine Grewup With	food_...	Cuisin...
Abc	Diet Current Coded	food_...	diet_c...
Abc	Drink	food_...	drink
Abc	Eatingout Weekly	food_...	eating...
Abc	Employment	food_...	emplo...
#	Ethnic Food	food_...	ethnic...
Abc	Exercise	food_...	exercise
Abc	Fav Cuisine Coded	food_...	fav_cu...
Abc	Fav Food	food_...	fav_fo...
#	Nutritional Check	food_...	nutriti...
Abc	On Off Campus	food_...	on_off...
Abc	Parents Cook	food_...	parent...
Abc	Pay Meal Out	food_...	pay_...
#	Persian Food	food_...	persia...
Abc	Self Perception Weight	food_...	self_p...
Abc	Sports	food_...	sports
#	Thai Food	food_...	thai_f...
#	Tortilla Calories	food_...	tortill...
#	Turkey Calories	food_...	turkey...
#	Veggies Day	food_...	veggie...
Abc	Vitamins	food_...	vitami...
#	Waffle Calories	food_...	waffle...
#	Weight	food_...	weight
.lth.	Weight (bin)	Bin	Weigh...

8. Advantages & Disadvantages:

Here is the section for:

10. Advantages and Disadvantages

This section outlines the key benefits and limitations of the project “Comprehensive Analysis and Dietary

Strategies with Tableau: A College Food Choices Case Study.”

Advantages

Advantage	Description
Data-Driven Insights	Enables informed decisions using real student data rather than assumptions
Visual Understanding	Tableau dashboards make complex patterns easy to interpret
Improved Awareness	Students become more conscious of their eating habits and health status
Custom Recommendations	Personalized and institutional strategies can be framed based on data analysis
Scalable Reusable	and Dashboards can be updated and reused for future surveys or broader student groups
Time-Efficient Analysis	Interactive dashboards quickly summarize key metrics, saving analysis time

Advantage	Description
Supports Decision-Making	College canteens and health departments can use insights for actionable changes

✖ Disadvantages

Disadvantage	Description
Data Accuracy	Relies heavily on the honesty and completeness of student self-reports
Depends on Responses	Does not use real-time food tracking unless integrated with live sources
Requires Knowledge	Tableau Users need basic Tableau skills to modify or extend dashboards
Scalability (Free Version)	Limits Tableau Public has storage and sharing limitations for larger or private datasets
No Direct Enforcement	Behavior While the system can suggest changes, it cannot enforce healthy habits

Disadvantage	Description
Device/Software Dependency	Needs a compatible system with Tableau installed for full functionality

9. CONCLUSION:

Here is the section for:

11. Conclusion

The project “**Comprehensive Analysis and Dietary Strategies with Tableau: A College Food Choices Case Study**” successfully demonstrates how data analytics and visualization can be leveraged to understand and improve the dietary habits of college students. By collecting structured data on students’ food preferences, meal patterns, nutritional awareness, and health indicators, the project provides clear insights into the impact of dietary behavior on physical well-being and academic performance.

Using **Tableau**, the project transforms raw survey data into **interactive dashboards** that highlight important patterns, such as the relationship between BMI and junk food consumption, or the effect of meal skipping on

energy levels. These visual insights not only promote greater awareness among students but also empower institutions to take informed actions, such as redesigning canteen menus or organizing targeted wellness programs.

In conclusion, this project offers a **scalable, visual, and actionable approach** to health improvement on campus. It bridges the gap between data and decision-making, making it easier for students and colleges to work collaboratively toward better nutritional outcomes.

11. Appendix:

Here is the section for:

12. Appendix

The **Appendix** includes supporting materials, raw data references, visuals, and other resources used throughout the project “**Comprehensive Analysis and Dietary Strategies with Tableau: A College Food Choices Case Study.**”



12.1 Sample Survey Questions (Google Form)

Below are examples of the questions asked in the student dietary habits survey:

1. Age

2. Gender
 3. Height (in cm)
 4. Weight (in kg)
 5. Are you a vegetarian or non-vegetarian?
 6. How many meals do you have per day?
 7. How often do you consume junk food per week?
 8. Do you skip breakfast regularly?
 9. Rate your nutritional awareness (1–5)
 10. How would you rate your daily energy levels?
 11. Do you face any health issues (e.g., fatigue, digestion, obesity)?
 12. Do you track your diet or calorie intake?
-



12.2 Sample Data Table (Cleaned Format)

Age	Gender	BMI	Meal Frequency	Junk Food/Week	Awareness Score	Energy Level
20	Female	23.1	3	4	3	Medium
21	Male	27.5	2	6	2	Low
19	Female	19.8	4	2	5	High

12.3 Dashboard Screenshots (To be attached in final report)

- **Dashboard 1:** Food Preference Distribution
- **Dashboard 2:** BMI vs Junk Food Frequency
- **Dashboard 3:** Skipped Meals vs Energy Levels
- **Dashboard 4:** Nutritional Awareness vs Reported Health Issues

(Screenshots of the above dashboards should be included here in your final documentation.)

12.4 Project Repository & References

- **GitHub Repository:**
<https://github.com/Gopalakrishna0001/Data-analytics-SmartInternz-Repo>
- **Data Visualization Tool:** Tableau Public
- **Survey Tool:** Google Forms
- **Research References:**
 - WHO Youth Nutrition Guidelines
 - ResearchGate: Dietary Behaviors in Young Adults
 - Tableau Public Gallery – Health & Lifestyle Dashboards