

## Project Development Phase

### Model Performance Test

Date	30 June 2025
Team ID	LTVIP2025TMID59682
Project Name	Comprehensive Analysis and Dietary Strategies with Tableau – A College Food Choices Case Study
Maximum Marks	

#### Model Performance Testing:

S. No.	Parameter	Screenshot / Values
1	Data Rendered	Rendered from cleaned CSV files with college student food choice data including GPA, Gender, dietary habits, comfort food preference, nutritional intake, and lifestyle factors. ✓ Loaded <b>500+ student records</b> with <b>50+ variables</b> covering demographics, academic performance, eating patterns, and food preferences.
2	Data Preprocessing	- Missing values handled using appropriate imputation methods – Categorical variables encoded (comfort_food_reasons_coded, diet_current_coded, fav_cuisine_coded) - Numerical variables standardized (GPA, calories_day, income) - Data type conversions applied for proper analysis - Outlier detection and treatment (GPA, caloric intake)
3	Utilization of Filters	Tableau filters applied for: - Gender (Male/Female) - Grade Level (Undergraduate/Graduate) - Employment Status - Diet Type (Current vs Ideal) - Cuisine Preferences (Greek, Indian, Italian, Persian, Thai) - GPA Ranges - Income Brackets - Exercise/Sports Participation ✓ Filter response time: <b>2–3 seconds</b>
4	Calculation Fields	Created calculated fields for: - Average Daily Caloric Intake by Demographics - GPA vs Dietary Habits Correlation - Comfort

S. No.	Parameter	Screenshot / Values
		Food Preference Percentage - Nutritional Balance Score - Exercise vs Eating Pattern Index - Cuisine Diversity Metric - Healthy Eating Score - Academic Stress vs Food Choice Indicator
5	Dashboard Design	<b>Total Dashboards: 5</b> 1. <i>Student Demographics Overview</i> (4 visualizations) 2. <i>Dietary Habits &amp; Preferences Analysis</i> (5 visualizations) 3. <i>Academic Performance vs Food Choices</i> (4 visualizations) 4. <i>Nutritional Intake &amp; Health Metrics</i> (6 visualizations) 5. <i>Lifestyle &amp; Food Behavior Insights</i> (4 visualizations) <b>✓ Total Visualizations: 23</b>
6	Story Design	<b>Total Stories: 3</b> 1. <b>"The College Student Food Journey" (5 story points)</b> - Demographics introduction - Food preference evolution - Academic pressure impact - Nutritional awareness - Lifestyle influences 2. <b>"Dietary Strategies for Academic Success" (4 story points)</b> - GPA correlation analysis - Optimal eating patterns - Comfort food insights – Recommendations 3. <b>"Campus Food Culture Analysis" (3 story points)</b> - Cultural cuisine behaviors - Future dietary aspirations