

Model Development Phase

Date	12 February 2026
Team ID	LTVIP2026TMIDS66312
Project Title	Advancing Nutrition Science through GeminiAI – NutriGen
Maximum Marks	5 Marks

Model Selection Report

In the **NutriGen** project, the focus is on selecting a pre-trained generative language model capable of generating personalized, structured, and nutritionally relevant diet recommendations in real time.

Unlike traditional machine learning projects that require training CNNs, RNNs, or custom health prediction models, NutriGen leverages an advanced Large Language Model (LLM) to:

- Analyze structured health inputs
- Interpret nutritional goals
- Generate personalized meal plans
- Provide condition-aware dietary guidance

Model Selection Report:

Model	Description
Gemini Flash Lite (models/gemini-flash-lite-latest)	A lightweight pre-trained generative language model optimized for fast and efficient text generation. It supports real-time personalized nutrition planning, structured diet recommendations, macro-calorie explanations

