#### Overview

NutriAPI is a powerful and versatile nutrition API that provides a range of features to help users make informed decisions about their dietary habits and overall health. With NutriAPI, you can easily calculate important health statistics, body fat percentage, perform unit conversions, generate meal plans using AI, and obtain detailed nutrition information about various foods.

#### **Benefits**

- Accurate health statistics and body fat percentage calculations
- Seamless unit conversions for kilojoules, kilocalories, sodium, and salt
- Al-powered meal planning tailored to individual preferences and dietary requirements
- Comprehensive nutrition information for a wide variety of foods
- Simple and intuitive API endpoints for easy integration

### **Endpoints**

#### 1. Health Statistics

- Endpoint: `POST /health-stats`
- Description: Calculates important health statistics such as ideal weight, BMI, and macronutrient requirements based on user input (gender, age, height, weight, and activity level).
- Example Request Body:

```
"unit": "metric",
    "gender": "male",
    "activity": "sedentary",
    "age": 30,
    "weight": 75.0,
    "height": 175
}
```

## 2. Body Fat Percentage

- Endpoint: `POST /body-fat-percentage`
- Description: Calculates the body fat percentage based on user input (gender, weight, neck, waist, and hip measurements).
- Example Request Body:

{

```
"gender": "female",
    "weight": 65.0,
    "neck": 32.5,
    "waist": 28.0,
    "height": 165,
    "hip": 38.5
}
```

### 3. Kilojoules to Kilocalories Conversion

- Endpoint: `GET /unit-conversion/kj-to-kcal`
- Description: Converts a kilojoule value to its equivalent in kilocalories.
- Example Request: `GET /unit-conversion/kj-to-kcal?value=1000`

# 4. Sodium to Salt Conversion

- Endpoint: `GET /unit-conversion/sodium-to-salt`
- o **Description**: Converts a sodium value to its equivalent in salt.
- Example Request: `GET /unit-conversion/sodium-to-salt?value=2300`

### 5. Al Meal Planner

- o **Endpoint**: `POST /ai-meal-planner`
- Description: Generates a meal plan using Al based on user input (calories, macros, intolerances, diet type, and meal count).

### Example Request Body:

```
{
    "calories": 2000,
    "macros": {
        "protein": 150,
        "carbs": 200,
        "fat": 60
    },
    "intolerances": ["dairy", "gluten"], //or none
    "diet_type": "vegetarian",
    "meal_count": 3
}
```

#### 6. Food Nutrition Information

- o Endpoint: `GET /food-info/{food\_name}`
- o **Description**: Retrieves detailed nutrition information about a specific food.
- o **Example Request**: GET /food-info/apple