# **Literature Survey**

## **Nutrition Assistant Application**

## **INTRODUCTION:**

Due to the ignorance of healthy food habits, obesity rates are increasing at an alarming speed, and this is reflective of the risks to people's health. People need to control their daily calorie intake by eating healthier foods, which is the most basic method to avoid obesity. However, although food packaging comes with nutrition (and calorie) labels, it's still not very convenient for people to refer. So, App-based nutrient dashboard systems which can analyze real-time images of a meal and analyze it for nutritional content which can be very handy and improves the dietary habits, and therefore, helps in maintaining a healthy lifestyle.

## **EXISTING SOLUTIONS:**

## 1. MyFitnessPal

MyFitnessPal is a powerhouse app, with an enormous food database, barcode scanner, recipe importer, restaurant logger, food insights, <u>calorie counter</u>

## Methodology/Algorithm:

Food calorie value is calculated through proposed CNN (Convolutional Neural Network) Model

## 2. Lifesum: Healthy Eating

When signing up, the app collects information about your height, weight, age, and specific goals to provide a personalized plan based on your needs.

## Methodology/Algorithm:

The design of personalized mobile nutrition recommendations and plans by identifying important factors

#### 3. Foodzilla! Nutrition Assistant

The app helps to see nutrients, calories, vitamins and minerals by just taking pictures of your meals. Discover new healthy recipes and use filters to find the ones that fit your diet such as "Low Carb", "High Protein", "High Fat", "Low FODMAP" and more.

## Methodology/Algorithm:

The SSD (single Shot MultiBox Detector) for real-time processing of object detection and classification has been used.

## 4. MyNet Diary Calorie Counter

The app helps you set goals, monitor your weight trends, and track your intake based on the specific diet plan you select. It also offers detailed nutrient information for each ingredient in your food log and a daily analysis to help keep you on track.

## Methodology/Algorithm:

Food calorie value is calculated through proposed CNN (Convolutional Neural Network) Model

## **CONCLUSION:**

Primary motivation for this project is to make nutrition information available easily by using this application and it helps a lot in people's life to make decision of their daily intake and lead a healthy life.

#### **References:**

https://blog.myfitnesspal.com/

https://lifesum.com/

https://foodzilla.io/

https://www.mynetdiary.com/