# **Literature Survey on Nutrition Assistant Application**

## **Survey 1:**

Enhancing Cloud and healthy Food Nutrition Information Systems Practice-by Paul, PK and Aithal, PS and Bhuimali A.

**Year: 2017** 

### **Technology:**

Cloud computing and Mobile Computing.

### **Findings:**

Among the common mass food information systems are not yet popularized as a domain and thus there are huge potentialities to work on this.

#### **Pros and Cons:**

Regarding manpower development there are a lot of things are pending and possible to work with. Hence cloud will do an attention on skill and manpower development for sophisticated development of food information systems.

## **Survey 2:**

Mobile cloud based system recognizing nutrition and freshness of food image-by Kumbhar, Diptee and Patil, Sarita.

**Year: 2017** 

### **Technology:**

Cloud Computing, Image Segmentation.

### **Findings:**

Mobile cloud computing (MCC) has been introduced to be a potential paradigm for mobile health services to overcome the interoperability issues over distinctive information formats. In this, we propose a mobile cloud-based food calorie measurement framework.

#### **Pros and cons:**

- Multiple Platform Support Cost-Efficient .
- Connectivity and Performance Issues.

## **Survey 3:**

Predicting calorific value for mixed food using image processing-by Kohila, R and Meenakumari, R.

Year: 2017

### **Technology:**

Cloud Computing, Image Segmentation.

### **Findings:**

The objective of this paper is to predict and to fix diet control for various diseases by measuring the calorific value to help the patients and nutritionists. The image captured through a mobile phone/tablet camera will provide information concerning the calorie rate of the food.

#### **Pros and cons:**

- Increased security and reduced cost.
- Limited control and lacks support.
- A large amount of data is collected by these technologies.
- AI is not yet widely used in the areas of nutrition and fitness.

## **Survey 4:**

Use of artificial intelligence in precision nutrition and fitness-byde Moraes Lopes, Maria Helena Baena and Ferreira, Danton Diego and Ferreira, Ana Claudia Barbosa Honorio and da Silva, Giuliano Roberto and Caetano, Aletha Silva and Braz.

**Year: 2020** 

### **Technology:**

Artificial Intelligence, Nutritional surveillance.

### **Findings:**

Among the available computational tools, artificial intelligence (AI) has gained more and more attention recently, since it is able to learn and model linear and nonlinear relationships between variables by constructing an input-output mapping such that hidden and extremely useful information for decision-making is revealed and interpreted.

#### **Pros and cons:**

- A large amount of data is collected by these technologies.
- AI is not yet widely used in the areas of nutrition and fitness.