

# LITERATURE SURVEY

## AI-POWERED NUTRITION ANALYZER FOR FITNESS ENTHUSIASTS

S.NO	TITLE AND PUBLICATION	AUTHOR NAME	OBJECTIVE
1	Measuring Calorie and Nutrition From Food Image Published in 2014	P.Pouladzadeh S. Shirmohammadi and R. Al-Maghrabi,	In this paper, we propose a food calorie and nutrition measurement system that can help patients and dietitians to measure and manage daily food intake. Our system is built on food image processing and uses nutritional fact tables.
2	The Design and Implementation of an Ingredient-Based Food Calorie Estimation System Using Nutrition Knowledge and Fusion of Brightness and Heat Information Published in 2018	S. Turmchokkasam and K. Chamnongthai	This paper proposes a method of ingredient-based food calorie estimation using nutrition knowledge and thermal information. In this method, an image of the food is first recognized as a type of food, and ingredients of the recognized food are retrieved from the database with their nutrition knowledge and pattern of brightness and thermal images.
3	FoodScan: Food Monitoring App by Scanning the Groceries Receipts Published in 2020	B. Sainz-De-Abajo, J. M. García-Alonso, J. J. Berrocal-Olmeda, S. Laso-Mangas and I. De La Torre-Díez,	This paper presents the work to develop and pilot test a new Android application, FoodScan, aimed at people over 70, specially those from rural environments or with limited technical knowledge, to manage their food from the items that appear on their grocery receipts, avoiding the obligation to introduce one by one those foods, and generating recommendations.

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4.	An Open-Source Approach to Solving the Problem of Accurate Food-Intake Monitoring. Published in 2021.	Anton Biasizzo, Barbara Koroušić Seljak, Eva Valenčič, Marko Pavlin, Marina Santo Zarnik, Bojan Blažica, Damian O'kelly, And Gregor Papa	An open-source solution to the problem of portion-size estimation consisting of a pocket-sized kitchen scale and a demo mobile application. It is implemented as a soft real-time, low-power consuming embedded system with a Bluetooth connection to the smartphone.
5.	Sports Nutrition Intervention for Athletes Based on Continuous Image Deep Learning. Published in 2022	Shengtao Yang	Aiming at the problems of weak anti-noise ability, incompatibility of signal size and insufficient feature extraction in athlete sports nutrition intervention based on deep learning, a recognition method based on continuous image deep learning is proposed.