NutritionCalX: A User-Centric Web Application for Nutritional Analysis and FoodRecommendations

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Abstract*: The growing awareness of nutrition and its impact on health has led to a demand for tools that enable individuals to make informed food choices This study uses NutritionCalX, an interactive web application for calculating the nutritional value of foods by consumers use the input to calculate and provide personalized meal recommendations based on their input The application is designed It provides a list of meals that consume whole serves to provide accurate nutritional information for a variety of foods, including macronutrients and micronutrients. Additionally, NutritionCalX uses a recommendation system to identify healthy food or supplement options that match users' needs and preferences. The approach includes developing a userfriendly method for simple data entry, robust backward integration for nutritional analysis, and proposing a recommendation algorithm using factors such as calorie restrictions will apply. The results of the usability test demonstrate the accuracy of the application in nutrient estimation and its ability to make meaningful recommendations. NutritionCalX has great potential to be adopted by health-conscious individuals, nutritionists and fitness enthusiasts. This study highlights the importance of combining technology and nutrition science to promote healthy eating habits and enhance the user experience.*

Keywords: Nutrition analysis, food choices, personalized meal recommendations, NutritionCalX, web application, healthy eating, recommendation system, calorie intake, dietary restrictions, nutrition science, fitness enthusiasts