Web Based Nutrition Management System

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Abstract:- One essential factor of a balanced diet to prevent morbidity and mortality, and promote a good nutritional status is the consumption of nutrient-dense foods with an appropriate macronutrients dispersal (carbohydrates, protein, fat) and the right amount of calories based on personal energy expenditure. Drawing from a parallel-iterative design methodology, this paper proposed the development of a web-based meal planner app called 'Plan-Cook-Eat' that can generate tailored diet plans according to individual's needs. Six Registered Nutritionists-Dietitians served as a panel of human expert validators and 24 regular users served as app testers for evaluation using mixed- methods approach .Study participants confirmed and concluded the potential of Plan-Cook-Eat web app as a personal meal planner to ensure the consumption of needed macronutrients. Suggestions and interpretations were made regarding the technical improvements that could be done to enhance the app as a complete virtual nutrition assistant.

I. INTRODUCTION

Starting with a parallel iterative design methodology, this paper proposed the development of a web-based meal planner app called "Plan-Cook-Eat" that can create customized meal plans according to individual needs. Six registered dietitians/nutritionists served as a panel of human expert validators, and 24 normal users served as app testers for mixed-method evaluation. A study participant confirmed and concluded the potential of his Plan-Cook-Eat web app as a personal meal planner to ensure the intake of required macronutrients. Suggestions and interpretations were made for possible technical improvements to make the app a complete virtual nutrition assistant

II. PROBLEM STATEMENT

This modern world we have to follow the diet for our health conscious. Further the pregnant women can able to follow the diet.in this thesis we will do how much carbohydrates, minerals, whole grains, fiber, B vitamins, protein and so on. For reducing the obesity we will follow diet. for that we have to reduce PLAN COOK EAT.For reducing the problem we have to do consumption of calories how much they have to take while pregnancy. The ratio of calories have to check whether the problem solving technique.

III. OBJECTIVES OF THE PROJECT

Nutritional assessment in clinical medicine has three primary goals: to identify the presence and type of malnutrition, to define health-threatening obesity, and to devise suitable diets as prophylaxis against disease later in life. The most common methods used in nutrition research are the diet record, 24HR, and FFQ. Each method has benefits and drawbacks; however, the 24HR is the most accurate means to assess food and nutrient intake at present.

IV. SCOPE OF THE STUDY

The scope of this project is to study how humans can eat healthily and maintain adequate body fat. In this modern world, you have to think about how to maintain your caloric intake - weight, BMI, all considered healthy.



Fig. 1: Calculation of BMI and Maintennance Calorie

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V. SYSTEM ANALYSIS



Fig. 2: System Analysis

VI. PROPOSED SYSTEM

The proposed system would allow users to track and manage their nutritional intake through a website. Usually includes features like food and calorie tracking, nutrition analysis, and meal times plan. Calculate user's her BMI. It also offers customized nutrition based on your fitness goals. It also offers nutrition plans for users with health issues. The proposed system would allow users to track and manage their nutritional intake through a website. Usually includes features like food and calorie tracking, nutrition analysis, and meal times

VII. ADVANTAGES

This system should use this problem statement to improve the system. From obesity in humans, it is possible to ingest calories at a constant rate with a calorie-balanced diet. Helps you consciously improve your body mass index.

VIII. WORK FLOW DIAGRAM:



Fig. 3: Work Flow Diagram

IX. HOME PAGE



Fig. 4: Home page

Learn how to track macros in your favorite food choices. We offer our clients a bespoke plan and this information has been approved by our top registered dietitians and nutritionists. To make the process more convenient, pre-recorded tutorial videos are available to help you. increase. Once you're ready to launch the program, you can start tracking right away.



X. CATEGORY PAGE

Fig. 5: Category Page

This is the page where the clients gets to Choose their preferred goals(such as muscle building, strength training, pregnant women). Before selecting the destination, clients are asked to enter their physical information like bodyweight and height.

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XI. READYMADE DIET PLAN

Fig. 6: Readymade Diet Plan

This page gives the client a basic ideas for the meal options and splitting their calories. These meal plans are available in multiple options (such as non-vegetarian, vegetarian, vegan) so that the clients would choose their type of meals with ease.

XII. BMI AND MAINTENANCE CALORIE CALCULATION

Once after the information is collected from the clients ,the webpage generates it and produces the results Appropriate to the individuals needs. When it comes to the nutrition aspect this particular webpage splits the macros (carbohydrate,protein,fats) within the allotted calories. This includes calorie split for pregnant women, high performing athletes,general clients,elderly persons.



Fig. 7: Customize diet plan for user based on health issues

This is one of the most important page where the user needs to state their physical and health condition, the used need to provide the information regarding their health issues if they have any (such a diabetics, high or low blood pressure, pcod/pcos, maternity etc).

XIII. RESULTS AND CONCLUSIONS

In this paper we have to exaggerate the problem of obesity, marasmus and weight improving using body mass index .In this modern world we have improvise and improve the awareness of obesity like etc...we have to modernized the world using the web based nutrition management system.

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