**ÇANKAYA UNIVERSITY**

**Diet Plan Builder and Nutritional Value Counter**

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November 7, 2018, version 0.1

**Abstract**

There is a major disease that affects all of us but specifically our children. This disease is obesity. Experts are trying to tell damage given by it and to make parents be aware of it. Also, in hospitals, dieticians are trying to give best diet for their patients. Of course, they are educated about calories of foods and nutrition values of food but they are only human beings so they cannot remember everything. In this paper, we study some researches about some specific food partition such as proteins also we study a research about nutrition of mushrooms and study nutritional value of some specific source of meat like goat, pig, etc.

**Introduction**

Most of people are afraid of hearing the word: diet. Because, they think diet restricts them. Actually, they are both right and wrong. According to oxford dictionary [1], diet has two meaning. First one is: A special course of food to which a person restricts themselves, either to lose weight or for medical reasons. But the second one is: The kinds of food that a person, animal, or community habitually eats. Doctors are generally say we try to make a habit for you not restrict you. Whatever you think, doctors should give you a list for either decide what should eat and what should not or how much can you eat anything. For second case, they need nutritional values of foods because people have limit for these values and if you cross the limit, it affects your health in bad way. Nutritional value is an indication of the contribution of a food to the nutrient content of the diet [2].

So if people are not going to doctors directly because nearly all people are not comfortable in office of doctor and they can choose what to eat and do not eat, these “diets” can be more easily be a habit but of course we still need an expert opinion.

Knowledge is clearly an important requirement for nutritional value counter because experts are changing their minds like changing their clothes. One day a thing is good for your health and other day is not or one day 5 of it is good for you and other day 5 is too much. Because of this dataset of nutritional value is key. Also trust between people who change their eating habit and experts that approve their lists is an important requirement.

Of course, a lot research in recent years has been directed at storing nutritional values of foods but generally they are focusing just one value like protein or some kind of food like mushrooms so there will lots of researches about this.

This paper surveys some researches about nutritional values of foods and making diet making.

**Calorie Analysis Based on Type**

This dataset provides nutritional value of cereals and calories of them. Cereals are important for diet because it is quick for breakfast. In morning, mostly, time is limited for people and this is very common problem so cereals are good choice. In this dataset, there are names and manufacturer of cereals, type of eating style like cereal with hot milk or cold milk and calories per serving, grams of protein, fat, dietary fiber, complex carbohydrates and sugar, milligrams of sodium and potassium, vitamins and minerals of cereal. [4]

**Nutrition Facts for McDonald’s Menu**

This dataset provides nutrition values of products that in McDonald’s menu but not only burgers but also breakfasts, sandwiches, fries, salads, coke, soda, coffee and tea, milkshakes and desserts. [5] According to research, these values are from McDonald’s official website.

**My Fitness Pal Calorie Tracker Usage in the Eating Disorders**

My Fitness Pal is an application that allows people who are using it track and input their daily food intake. In addition, with this application human beings that using this app can set weight and nutrition goals and recommends the amount of calories needed to reach such a goal. [6]

**Conclusion**

Obesity is one of the biggest causes of diseases in the world. The World Health Organization has done many studies on this subject. It is doing research in all countries. People spend money on health problems. However, many find it difficult to reach healthy data. We will make the data more healthy with the application and record the values of nutrients taken daily with data. Thus, it is easily reached by the application.

**References**

[1] <https://en.oxforddictionaries.com/definition/diet>

[2] <http://www.reference.md/files/D009/mD009753.html>

[3] <https://academic.oup.com/tbm/article-abstract/1/4/523/4562922>

[4] <https://www.kaggle.com/chandrabhatt/calorie-analysis-based-on-type/data>

[5] <https://www.kaggle.com/imarvind/calorie-intake-regression-model/data>

[6] <https://www.sciencedirect.com/science/article/pii/S1471015317301484>