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Food Recommendation System for Diabetic Patients

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Abstract

Diabetes is a disease that occurs when a person's blood glucose, also called blood sugar, is too high. The elevation of blood sugar level can cause short term and long term complications to patients, such as heart disease, stroke, kidney disease, eye problems, dental disease, nerve damage and foot problems. Blood glucose is a person's main source of energy and comes from the food he or she eat. Therefore, healthful eating is an important way of controlling blood sugar level. There are some food recommendation systems for diabetic patients to maintain their blood glucose level in a perfect manner. But the existing food recommendation systems are based on collaborative filtering technique or content based filtering technique and none of those systems use a hybrid approach for better performance and accuracy of the system. Therefore, this research is to explore existing food recommendation systems, including hybrid approach and then to propose and implement a food recommendation system based on hybrid approach that will give more accurate food recommendations in an efficient way to diabetic patients.

Key Words:

Diabetes, Recommendation System, Food, Filtering technique, blood glucose level, Insulin