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Schema Mapping in a Food Composition Database

Proposal

In this paper, we dig into the design of a Food Composition Database (FCDB). An FCDB is a database in which the types and quantity of nutritional components in foods are recorded. Several health institutions are designing their own FCDB now to use it in the nutrition analysis of diets and recipes. We think such a database is beneficial, because it helps people control the input of calories and nutrition. It teaches people the strategy to healthy lives, giving a positive instruction to the society.

According to Carter and her coworkers, the power of an FCDB depends on its diversity. Researchers are working on increasing the kinds of foods and their ingredients into the database. However, a database with a huge amount of tuples will not work well when the connections between relations are messy. Indeed, in this paper we aim at finding techniques that help us in the arrangement of relations and schema/composition mapping. We hope to get a FCDB that not only contains incredible amount of data, but also can use all these information efficiently.

Reference

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