

FoodFinder Web-based Dietary Intake Analysis Software – A Demo

Malory Jumat, Joelaine Chetty, Averalda van Graan

South African Medical Research Council, Biostatistics Research Unit, SAFOODS Division, PO Box 19070, Tygerberg 7505., Cape Town, South Africa

Abstract

The South African Food Data System (SAFOODS) is the custodian of the South African food composition database from which various tools have been developed. FoodFinder is an innovative and uniquely South African dietary intake analysis software designed to convert food consumed to nutrient intake. The tool was initially developed in 1991 and has since undergone multiple redevelopments and data updates. The wide diffusion of the Internet has produced substantial growth in the demand for web-based applications with special considerations for layout, navigation, responsiveness, accessibility, and user interactions. Therefore, the web-based version of FoodFinder was launched in 2019 to ensure compatibility with various web browsers, operating systems, and devices.

Key features of the web based FoodFinder include:

1. **Rapid Order Processing:** Addition of an online payment gateway that ensures faster order processing and approvals.
2. **Extensive Food Database:** FoodFinder incorporates the latest South African Food Composition and Food Quantities Databases which includes a expansive array of local food items in household measures as well as commonly consumed processed food products. This large collection ensures more precise food item identification and facilitates easy data entry for users. Furthermore, any food item can be added to the user database effortlessly.
3. **Comprehensive Nutrient Analysis:** FoodFinder employs sophisticated algorithms to analyse dietary data and generate detailed nutrient breakdowns. Users can access comprehensive reports in various formats on macronutrients, micronutrients, vitamins, minerals, and other dietary components, that can be analysed against various dietary intake references based on age, gender, and life stage.
4. **Recipe Analysis:** FoodFinder users can create customised recipes and evaluate the nutritional content of these recipes, explore alternative ingredients to enhance their dietary choices and meet specific dietary goals. The FoodFinder recipe management function also incorporates the use of yield factors when using raw ingredients in a recipe.

The web based FoodFinder empowers students, individuals, nutritionists, researchers, healthcare professionals and the food industry at large with a comprehensive tool for assessing and optimizing nutritional intake and analysing recipes.

PRESENTER BIOGRAPHY: MALORY JUMAT

Malory Jumat is a chief research technologist at the South African Medical Research Council and works as a Food Composition Database Compiler within the Biostatistics Unit in the South African Food Data System (SAFOODS) division. She holds a BSc Food Science and Nutrition, Honours in Food Science and Nutrition and a MSc Nutrition which was obtained through the University of Pretoria. She is currently busy with her PhD in Nutrition also through the University of Pretoria. She is responsible for the client support and administrative functions of FoodFinder software and involved in updating, quality assurance and innovation of the South African Food Composition Tables and Food Quantities Manual. Her current research interest is on the development of databases that contain non-nutritive dietary compounds. She is a professional member of SAAFOST and Chair of the Cape Branch of the NSSA.