PHILIPPINE FOOD COMPOSITION TABLES (PHILFCT®) ONLINE DATABASE: DATA UPDATES, FEATURES AND SECURITY ENHANCEMENT

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Background:
The Philippine Food Composition Tables Online Database (PhilFCT®) is the country’s web-based nutrition tool which provides detailed information on the chemical/nutritional composition of foods. Since 2015, the PhilFCT® is continuously reviewed and updated with nutrient data, photo documents and food items.

Objectives:
The project aimed to update the PhilFCT® Online Database with food data and to strengthen or enhance its security controls and features.

Materials and Methods:
Nutrient data and photo documents generated from the Food Composition Laboratory were thoroughly checked and encoded in the database. The encountered bugs and errors in the database were summarized for the creation of additional security functions and features. The database system programming and updating were done by the FNRI Management Information System Unit for an enhanced data entry which underwent a series of beta testing.

Results and Findings:
The PhilFCT® enhancement project collected and prepared an additional 106 photo documents of food items and encoded 1,802 nutrient data. As of December 2018, the project team monitored a total of 142,710 user hits. Security measures done by the programmer included SQL injection, XSS Filter, remote code execution, URL protection, confirm input data and hide your files. Beta-test showed that uploaded food data have duplicated entries. The programmer addressed the duplication of data entries by developing separate data entry for adding food data and updating food data.

Conclusion and Recommendations:
Updating food data and enhancement of security features help improve user experience. Continuous monitoring and checking of database system crash and errors are recommended to protect the Institute’s assets and to maintain the stability of the system. Hence, PhilFCT® should be regularly updated to cope with ICT innovation and to address current challenges in food and nutrition.