

Food Patterns Equivalents Database

Dietary databases house detailed information about the composition of various foods to assist researchers with assessing their nutritional value. Researchers use dietary databases to translate the consumption of foods and beverages reported in surveys into quantities of food components and nutrients to discover if people are meeting dietary recommendations.

MYPYRAMID EQUIVALENTS DATABASE → FPED

FPED is a dietary database that replaces the MyPyramid Equivalents Database (MPED). Its additions and modifications reflect changes to the USDA food groups stemming from evolution in dietary guidance from the 2005 and 2010 Dietary Guidelines for Americans.

LEVERAGING COLLECTIVE CAPITAL

The FPED project leverages NCCOR partners' "capital," i.e., time, resources, assets, and abilities to create high-value products. For FPED, financial capital was provided by the National Institutes of Health (NIH), the Centers for Disease Control and Prevention, and the Robert Wood Johnson Foundation. USDA collects all of the NHANES survey data and maintains the FPED database.

The Food Patterns Equivalents Database (FPED) is a tool that allows researchers to examine diets in a standardized way by characterizing ready-to-eat foods and beverages in terms of dietary guidance, such as the 2010 Dietary Guidelines for Americans.

FPED disaggregates foods into their component ingredients and then assigns those ingredients to predefined food groups such as fruits, vegetables, grains, meat, dairy, added sugars, and solid fats. This results in meaningful groupings for dietary analyses of all types.

The U.S. Department of Agriculture (USDA) originally developed FPED for use in analyzing dietary data from What We Eat In America (WWEIA), the dietary intake component of the National Health and Nutrition Examination Survey (NHANES).

However, this research tool is beginning to be used in many other types of dietary studies as well.

NCCOR Takes Action

In April 2011, NCCOR was asked to provide support to transform FPED. Recognizing the central role FPED plays in examining diets in relation to current dietary guidance, NCCOR members responded positively and rapidly to the request and provided financial capital so FPED could accommodate timely updates and include new food groups.

Additionally, NCCOR supported FPED because it aligns with the Collaborative's goal of increasing and improving national, state, and local surveillance of childhood obesity.

NCCOR funders contributed over \$400,000 to FPED. These contributions allowed USDA to conduct FPED data releases for the 2005-2006 and the 2009-2010 NHANES dietary data survey periods. NCCOR supported both releases because it facilitated trend analysis (such as tracking changes in the sugar content of breakfast cereals) and because the two survey periods related to other NHANES tools important in assessing childhood obesity (e.g., food frequency questionnaires and accelerometry data in NHANES 2005-2006 and screener data in NHANES 2009-2010).

“[We] now have food group intake data from 2009-2010 to contemplate because NCCOR supported this effort. Otherwise, we would have the 2007-2008 data but nothing more recent until the 2014 release of the 2011-2012 data! This is a great example of how the NCCOR partnership works best, with everyone bringing their contributions to the table.”

NIH Investigator

NCCOR Makes an Impact

With NCCOR's financial support, USDA released updates in September 2013 to cover the 2007-2008 and 2009-2010 NHANES survey cycles. The new updates, which researchers can use in analyses of data from the 2007-2008 and 2009-2010 WWEIA survey cycles, will greatly enhance research goals related to intervention, monitoring and surveillance, and other forms of nutrition research at the individual and community level. The update for the 2009-2010 NHANES survey cycle was particularly important because it contained tools like screeners, which are valuable for assessing childhood obesity beyond the principal dietary collection instrument.

What's Next

Though FPED has historically been used to assess how well Americans follow dietary guidance recommendations, it has a number of other potential applications. It can provide data to develop education and assessment tools; facilitate epidemiological research, nutrition monitoring, surveillance, and policy analysis; and develop education programs and messages. With continued promotion, NCCOR hopes that researchers will become increasingly aware of FPED and its potential applications to these projects.