

**Food Patterns Equivalents Database for Use with  
WWEIA, NHANES 2017-March 2020 Prepandemic Documentation**  
*Addendum to FPED 2017-2018 Methodology and User Guide*

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## **Rationale**

The USDA's Food and Nutrient Database for Dietary Studies (FNDDS) is the basis for the Food Patterns Equivalents Database (FPED). FNDDS 2019-2020 was used to determine the nutrient values of foods/beverages reported by participants in 2019-March 2020 What We Eat in America (WWEIA), NHANES.<sup>1</sup> The NHANES program suspended field operations in March 2020 due to the coronavirus disease 2019 (COVID-19) pandemic, resulting in data that were not nationally representative. Thus, these data were combined with data from the NHANES 2017-2018 cycle to form a nationally representative sample of NHANES 2017-March 2020 Prepandemic data.<sup>1,2</sup> Because respondents and their intake records are not identified by each of these two survey cycles in the NHANES 2017-March 2020 Prepandemic data, to reduce disclosure risk an FPED developed specifically for FNDDS 2019-2020 is not feasible for analysis.

An FPED specifically for use with WWEIA, NHANES 2017-March 2020 data was therefore developed to assess dietary intakes based on food pattern (FP) equivalents. This approach required linking new foods from FNDDS 2019-2020 (hereafter referred to as "additional foods") to one or more foods in FPED 2017-2018.<sup>3</sup> Thus, all food pattern data for 2017-March 2020 are based on FPED 2017-2018. Minor inconsistencies in FPED 2017-2018 were addressed and adjusted in this release.

## **Methodology**

FPED assignments were made to the additional foods in WWEIA, NHANES 2017-March 2020 by linking to 1 (similar) or more (multiple) FNDDS 2017-2018 food codes. Assignments were made by analyzing both 2017-2018 and 2019-2020 FNDDS codes and aligning the assignments with the 2017-2018 methodology.

- **Similar item:** If an additional food matched an FNDDS 2017-2018 food description or was similar in nature with the same food types represented, they were given the same FPED characterization.
- **Multiple items:** For all others, 2 to 4 FNDDS 2017-2018 food codes that represent the components of the additional food were proportionally linked to closely match the FNDDS codes. The FPED characterizations were calculated based on these proportions.

Two FSRG nutritionists (AWW and RM) independently linked the 361 additional foods to FNDDS 2017-2018 food codes. A team of 5 FSRG researchers (all authors) resolved differences to reach consensus.

**Files Included in the Release** (available on FSRG website <https://www.ars.usda.gov/northeast-area/beltsville-md-bhnrc/beltsville-human-nutrition-research-center/food-surveys-research-group/docs/fped-overview/>)

- **Documentation**

- Food Patterns Equivalents Database for Use with  
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- Food Patterns Equivalents Database 2017-2018: Methodology and User Guide  
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- **Data files**

37 FP component amounts/100g of each food, WWEIA, NHANES 2017-March 2020 Prepandemic

37 FP component amounts/food reported/respondent, Day 1 and 2, demographics

37 FP component total amounts reported/respondent, Day 1 and 2, demographics

SAS program to create mean intake estimates of FP components, Day 1, by demographics

- **Related resources**

Three summarized data tables of FP equivalent intakes/individual for WWEIA, NHANES 2017-March 2020 Prepandemic are available on the FSRG website.

The Food Patterns Equivalents Ingredients Database (FPID) 2017-2018, found on the FSRG website, applies to this FPED.

### ***Literature Cited***

1. National Health and Nutrition Examination Survey, 2017-March 2020 Data Documentation, Codebook, and Frequencies, Dietary Interview - Individual Foods. Available at: [https://wwwn.cdc.gov/NCHS/nhanes/2017-2018/P\\_DR1IFF.htm](https://wwwn.cdc.gov/NCHS/nhanes/2017-2018/P_DR1IFF.htm)
2. Akinbami LJ, Chen TC, Davy O, Ogden CL, Fink S, Clark J, et al. National Health and Nutrition Examination Survey, 2017–March 2020 prepandemic file: Sample design, estimation, and analytic guidelines. National Center for Health Statistics. Vital Health Stat 2(190). 2022. DOI: <https://dx.doi.org/10.15620/cdc:115434>
3. Bowman SA, Clemens JC, Friday JE, and Moshfegh AJ. Food Patterns Equivalents Database 2017-2018: Methodology and User Guide [Online]. Food Surveys Research Group, Beltsville Human Nutrition Research Center, Agricultural Research Service, U.S. Department of Agriculture, Beltsville, Maryland. October 2020. Available at: <http://www.ars.usda.gov/nea/bhnrc/fsrg>

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