

Getting Started

Step 1: Opening the Calculator

From <http://fcid.foodrisk.org/>, open the FCID Consumption Calculator by clicking on the orange tab that says “FCID Food Consumption Calculator.” This selection will allow users to search by either: FCID Food Commodity or EPA’s Exposure Factors Handbook Water/Food Groups.

Food Commodity Intake Database
What We Eat in America

Welcome

FCID 2005-10

Welcome to the U.S. EPA's What We Eat in America - Food Commodity Intake Database, 2005-2010 (WWEIA-FCID 2005-10)

National Health and Nutrition Examination Survey (NHANES) is conducted by Department of Health and Human Services (DHHS) to assess the health and nutritional status of a nationally representative sample of children and adults in the United States. The data are representative of the civilian, non-institutionalized U.S. population. What We Eat in America (WWEIA) and its predecessor the Continuing Survey of Food Intake by Individuals (CSFII) is the dietary intake interview component of the National Health and Nutrition Examination Survey (NHANES). It is conducted as a partnership between the U.S. Department of Agriculture (USDA) and the U.S. Department of Health and Human Services (DHHS). WWEIA consists of two non-consecutive days of 24-hour dietary recall data.

WWEIA-Food Commodity Intake Database (FCID) 2005-10 was developed by U.S. EPA's Office of Pesticide Programs (OPP) to improve the utility of the WWEIA food consumption survey for pesticide dietary exposure assessment. These data are also used by U.S. EPA's Office of Research and Development to update food consumption rates presented in EPA's Exposure Factors Handbook. WWEIA-FCID 2005-10 translates food consumption as reported eaten in WWEIA (2005-2010 survey cycles) into consumption of U.S. EPA-defined food commodities. Such food commodity intakes are expressed as grams of food commodity consumed per day or per kg bodyweight per day for over 500 commodities derived from more than 7000 different foods and beverages reported in the two surveys. WWEIA-FCID 2005-10 is intended to complement the CSFII and NHANES/WWEIA databases in that it provides estimates of food consumption expressed as food commodities as opposed to foods per se (i.e., "as eaten") which can in some exposure and other situations be of more utility. The database also includes [WWEIA 2005-10 food consumption and demographic data](#) that is available through

FCID Tools

FCID Recipes

The Food Commodity Intake Database (FCID) Recipes application provides a form that can be used to search FCID recipes and generate a printer-friendly report.

> RECIPES

FCID Consumption Calculator

The FCID Consumption Calculator is an application that uses National Health and Nutrition Examination Survey/What We Eat in America (NHANES/WWEIA) food intake and FCID recipes to estimate food commodity consumption for the purposes of pesticide dietary exposure assessment, as well as consumption estimates for EPA's Exposure Factors Handbook (EFH) users.

> CONSUMPTION CALCULATOR

To learn more about this tool, download the guide:

[Getting Started Guide](#)

More Information

Database Contents

Frequently Asked Questions (FAQ)

Step 1a: FCID Food Commodity

When FCID Food Commodity is selected, the user can select to search for Commodity by text or FCID Food Code or by FCID Commodity Food Group. The FCID Commodity Food Group uses a drop down menu to select food groups. The search commodities will appear in the box on the left hand side of the screen. These can be highlighted and selected individually (i.e., add selected), or can all be added to the user selection for further analysis (i.e., add all). The selected commodities will appear in the box on the right hand side of the screen, where the user can choose to “remove selected” or “remove all” if he/she changes his/her mind. The list of foods for which percentiles will be generated by the tool will appear on the bottom of the screen once the selections are made. After selections are made, the user will proceed to filters by clicking on the green button on the bottom of the screen.

The progress bar on the top of the screen will let the user know where he/she is in the tool. Clicking the numbers on the progress tool bar will allow the user to go back to the previous screen/step or to move forward.

Progress

1 FOOD COMMODITY 2 FILTERS 3 REPORT OPTIONS 4 COMPLETE

Commodity Consumption Calculator Caveats re: Use of the Percentile Calculator

Search by

FCID Food Commodity EPA-Exposure Factors Handbook Water/Food Groups

Search Commodity by Text or FCID Code Search Commodity by FCID Group

apple

Searched Commodities

- 1100008000 | Apple, peeled fruit
- 1100008001 | Apple, peeled fruit-babyfood
- 1100009000 | Apple, dried
- 1100009001 | Apple, dried-babyfood
- 1100010000 | Apple, juice
- 1100010001 | Apple, juice-babyfood
- 1100011000 | Apple, sauce

Selected Commodities

- 110007000 | Apple, fruit with peel

Add Selected Add All Remove Selected Remove All

Percentiles will be generated for: Apple, fruit with peel

CLEAR FIELDS **PROCEED TO FILTERS**

Step 1b: EPA's Exposure Factors Handbook Water/Food Groups

When Exposure Factors Handbook Water/Food Groups is selected, the box on the left hand side of the screen will populate with the list of water categories and food groups for which data are available. The user can select those foods or water categories of interest and either “add selected” or “add all.” The selected foods or water will appear in the box on the right hand side of the screen, where the user can choose to “remove selected” or “remove all” if he/she changes his/her mind. The list of foods included in the food group selected will appear on the bottom of the screen once the selections are made. After selections are made, the user will proceed to filters by clicking on the green button on the bottom of the screen.

The progress bar on the top of the screen will let the user know where he/she is in the tool. Clicking the numbers on the progress tool bar will allow the user to go back to the previous screen/step.

Progress

1 FOOD COMMODITY 2 FILTERS 3 REPORT OPTIONS 4 COMPLETE

Commodity Consumption Calculator Caveats re: Use of the Percentile Calculator

Search by

FCID Food Commodity | EPA-Exposure Factors Handbook Water/Food Groups

EPA-EFH Water/Food Groups

- Water - All Sources
- Water - Community Water
- Water - Bottled Water
- Water - Other Sources
- Total Vegetables
- Total Meat
- Total Fish

Selected EPA-EFH Water/Food Groups

Total Fruits

Add Selected Add All Remove Selected Remove All

Percentiles will be generated for: Total Fruits

Total Fruits: Acerola | Apple, dried | Apple, dried-babyfood | Apple, fruit with peel | Apple, peeled fruit | Apple, peeled fruit-babyfood | Apple, sauce | Apple, sauce-babyfood | Apricot | Apricot, dried | Apricot-babyfood | Avocado | Banana | Banana, dried | Banana, dried-babyfood | Banana-babyfood | Blackberry | Blueberry | Blueberry-babyfood | Boysenberry | Breadfruit | Canistel | Cherimoya | Cherry | Cherry-babyfood | Citrus hybrids | Crabapple | Cranberry | Cranberry, dried | Cranberry-babyfood | Currant, dried | Date | Dragon fruit | Eggplant | Elderberry | Feijoa | Fig | Fig, dried | Gooseberry | Grape | Grape, raisin | Guava | Guava-babyfood | Huckleberry | Jackfruit | Kiwifruit, fuzzy | Kumquat | Lemon | Lemon, peel | Lime | Loganberry | Longan | Loquat | Lychee | Lychee, dried | Mamey apple | Mango | Mango, dried | Mango-babyfood | Nectarine | Orange | Orange, peel | Papaya | Papaya, dried | Papaya-babyfood | Passionfruit | Passionfruit-babyfood | Pawpaw | Peach | Peach, dried | Peach, dried-babyfood | Peach-babyfood | Pear | Pear, dried | Pear-babyfood | Persimmon | Pineapple | Pineapple, dried | Pineapple-babyfood | Plantain | Plantain, dried | Plum | Plum, prune, dried | Plum, prune, dried-babyfood | Plum, prune, fresh | Plum, prune, fresh-babyfood | Plum-babyfood | Pomegranate | Prickly pear fruit | Pummelo | Quince | Raspberry | Raspberry-babyfood | Sapote, Mamey | Soursop | Spanish lime | Starfruit | Strawberry | Strawberry-babyfood | Sugar apple | Tamarind | Tangerine

CLEAR FIELDS **PROCEED TO FILTERS**

Step 2: Proceed to Filters

When the user proceeds to filters, the “Filter” screen will appear. On this screen is where the user selects the age groups and population groups of interest. The user can select to use the EPA EFH Default or the EPA Pesticide Default age/population groups. “EFH default” population groups are more general and are used in different program offices within EPA. EPA “Pesticide default” population group is more specific and used within the Office of Pesticide program for pesticide regulation purpose. The “EFH default” age groups are more finely defined and may have smaller sample sizes than the “Pesticide default” age groups in general. The tool default is all ages, both genders, and all races combined. If one of the selections is made (i.e., EFH default or Pesticide default), the bottom of the screen will populate with a list of standard age groups. The groups can be deleted or edited to fit the user’s needs. The edit button allows the user to change the age range, select male or female, pregnant or breastfeeding, and various races.

Once edited, the user saves the changes and clicks the “Submit” button in green on the bottom of the screen.

Progress (Click on the Number to go back)

1 — 2 — 3 — 4

FOOD COMMODITY — FILTERS — REPORT OPTIONS — COMPLETE

FILTERS

EPA-EFH DEFAULT EPA-PESTICIDES DEFAULT ADD FILTER

Filter	Age Range	Gender	Race		
1	All ages	All	All	Edit	Delete
2	Birth to < 1 month	All	All	Edit	Delete
3	1 to < 3 months	All	All	Edit	Delete
4	3 to < 6 months	All	All	Edit	Delete
5	6 to < 12 months	All	All	Edit	Delete
6	1 to < 2 years	All	All	Edit	Delete
7	2 to < 3 years	All	All	Edit	Delete
8	3 to < 6 years	All	All	Edit	Delete
9	6 to < 11 years	All	All	Edit	Delete
10	11 to < 16 years	All	All	Edit	Delete
11	16 to < 21 years	All	All	Edit	Delete

SUBMIT

Step 3: Report Selection

The Report Selection screen allows the user to select the “Report Type” and the “Report Options.”

The Report Type has three options:

- Detailed Percentiles – Provides the Ns, Means, Standard Error (SE), and percentiles from the 1 percentile through the maximum value in increments of 5, but also including the 97.5 and the 99th percentiles.
- EFH Percentiles – Provides the Ns, Means, Standard Error (SE), and a selected number of percentiles as presented in the Exposure Factors Handbook including: 1, 5, 10, 25, 50, 75, 95, 99, and maximum.
- Summary Statistics – Provides the Ns, Means, and the Standard Error (SE).

In the calculator output SE refers to Standard Error of Mean and it is calculated by accounting survey design variables (i.e. cluster, strata, sampling weight).

The Report Option has three main categories:

- Population Selection
 - Eaters only – includes individuals who ate the food item of interest during the survey period
 - Per capita – includes individuals who ate the food item of interest during the survey period and those who did not
 - Both – report will include both the eaters only and per capita results
- Consumption Selection
 - Two-day average – refers to the average consumption during the two-day survey period
 - Single-day consumption – refers to one-day consumption
 - Both – report will include both two-day averages and single-day consumption
- Mass Selection
 - Commodity mass – intake rate in units of mass/day (g/day)
 - Commodity mass per body mass – intake rate in units of mass/body mass-day (g/kg-day)
 - Both – report will include both selections (i.e., g/day and g/kg-day)

Once the user makes the selection for report type and report options, he/she clicks on the “Submit” green button at the bottom of the screen to produce the report. Note that the tool gives the user a generic graphical preview of the results table on the bottom of the screen once the selections are made.

REPORT SELECTION

REPORT TYPE

View

- Detailed Percentiles
- EPA-EFH Percentiles
- Summary Statistics

REPORT OPTIONS

Population Selection

- Eaters Only Population
- Per Capita
- Both

Consumption Selection

- Two-Day Average Consumption
- Single Day Consumption
- Both

Mass Selection

- Commodity Mass
- Commodity Mass per Body Mass
- Both

EXAMPLE OUTPUT FORMAT

			PERCENTILES										
			N	Mean	SE	1%	5%	10%	...	95%	97.5%	99%	Max
Commodity 1													
AGE	GENDER	RACE							...				
Filter 1									...				
Filter 2									...				
Filter 3									...				
Commodity N													
AGE	GENDER	RACE							...				
Filter 1									...				
Filter 2									...				
Filter 3									...				

SUBMIT

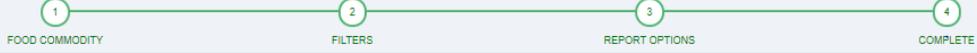
Step 4: Viewing the Report

The report screen allows the user to view the report for the selections made and export into Excel or Word format. The user can also go back to the first screen of the tool to start a new search. Note that statistical estimates based on a small number of survey respondents may be less statistically reliable than estimates based on larger numbers of respondents. These are identified with a "+". "+" indicates that the estimates are less statistically reliable based on the $np < 8 * \text{'Design Effect'}$ reporting [guidance published for NHANES III](#). Further information on sample size considerations is provided in FAQ 28.

Food Commodity Intake Database

What We Eat in America

Progress (Click on the Numbers to go back)



Per Capita

Two-Day Average Consumption Commodity Mass(g) per Body Mass(kg)

Age Range	Gender	Race	N	Percent Consuming	Mean	SE	Percentiles																								
							1%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	97.5%	99%	Max		
Total Fruits																															
All ages	All	All	24,673	86	1.77	0.05	0	0	0	0.0	0.0	0.1	0.2	0.4	0.6	0.8	1.0	1.3	1.5	1.8	2.2	2.7	3.3	4.3	6.7	10.1	15.4	65.5 ^T			
Birth to < 1 month	All	All	87	0	0	0	0 ^T	0 ^T	0 ^T	0 ^T																					
1 to < 3 months	All	All	233	7	0.32	0.10	0 ^T	0 ^T	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.4 ^T	4.2 ^T	7.2 ^T	19.7 ^T
3 to < 6 months	All	All	282	50	4.39	0.56	0 ^T	0 ^T	0	0	0	0	0	0	0	0	0.1	0.8	1.9	3.3	4.7	7.4	9.3	10.5	13.3	19.2 ^T	26.9 ^T	33.3 ^T	60.3 ^T		
6 to < 12 months	All	All	588	91	9.36	0.57	0 ^T	0	0.0	0.7	1.6	2.7	3.6	5.2	6.2	7.2	8.1	8.4	9.2	10.5	11.6	14.0	15.3	16.9	20.6	26.5	31.3 ^T	32.7 ^T	43.7 ^T		

Notes: ^T indicates estimates are less statistically reliable based on np < 8 * Design Effect[†] guidance published in the Joint Policy on Variance Estimation and Statistical Reporting Standards on NHANES II and CSII

Zero Values: ^T reflects a true zero value, ^D reflects a consumption value that is less than -0.1 grams (or 0.1 grams/kg body weight).

[†] Total Fruits: Acerola | Apple, dried | Apple, dried-babyfood | Apple, fruit with peel | Apple, peeled fruit | Apple, peeled fruit-babyfood | Apple, sauce | Apple, sauce-babyfood | Apricot | Apricot, dried | Apricot-babyfood | Avocado | Banana | Banana, dried | Banana, dried-babyfood | Banana-babyfood | Blackberry | Blueberry | Blueberry-babyfood | Boysenberry | Breadfruit | Canistel | Cherimoya | Cherry | Cherry-babyfood | Citrus hybrids | Crabapple | Cranberry | Cranberry, dried | Cranberry-babyfood | Currant | Currant, dried | Date | Dragon fruit | Eggplant | Elderberry | Feijoa | Fig | Fig, dried | Gooseberry | Grape | Grape, raisin | Guava | Guava-babyfood | Huckleberry | Jackfruit | Kiwifruit, fuzzy | Kumquat | Lemon | Lemon, peel | Lime | Loganberry | Longan | Loquat | Lychee | Lychee, dried | Mamey apple | Mango | Mango, dried | Mango-babyfood | Nectarine | Orange | Orange, peel | Papaya | Papaya, dried | Papaya-babyfood | Passionfruit | Passionfruit-babyfood | Pawpaw | Peach | Peach, dried | Peach, dried-babyfood | Peach-babyfood | Pear | Pear, dried | Pear-babyfood | Persimmon | Pineapple | Pineapple, dried | Pineapple-babyfood | Plantain | Plantain, dried | Plum | Plum, prune, dried | Plum, prune, dried-babyfood | Plum, prune, fresh | Plum, prune, fresh-babyfood | Plum-babyfood | Pomegranate | Prickly pear fruit | Pummelo | Quince | Raspberry | Raspberry-babyfood | Sapote, Mamey | Soursop | Spanish lime | Starfruit | Strawberry | Strawberry-babyfood | Sugar apple | Tamarind | Tangerine

