



Estimated Daily Intake of Select Commodities

Consumption Data

- What We Eat in America (WWEIA) – dietary component of National Health and Nutrition Examination Survey (NHANES) conducted in 2011-2014
 - Provides nationally representative nutrition and health data and prevalence estimates for nutrition and health status measures of the civilian U.S. population
- Trained interviewers ask respondents to recall all foods consumed in previous 24 hours
 - A second dietary recall is administered by telephone 3 to 10 days after the first dietary interview, but not on the same day of the week as the first interview
- N=15,179 individuals in NHANES 2011-2014 provided 2 complete days of dietary recalls.

NHANES Food Selection

- Over 6,000 food codes were reported consumed in NHANES 2011-2014; those food codes that contain any of the following 16 commodities were identified by Exponent using NHANES and USDA databases:

Fruits	Vegetables, grains, nuts, other
Blueberries	Almonds
Cherries	Carrots
Citrus	Date Palm
Grapefruit	Garlic
Lemon/Lime	Oats
Oranges	Pistachios
Grapes	Potatoes
	Tomatoes
	Wheat

- Selection included all available food forms including whole fruit, juice, cooked, canned, frozen

NHANES Food Selection – all commodities

- USDA's Food and Nutrient Database for Dietary Studies (FNDDS) 2011-2012 and 2013-2014
 - Translates the NHANES food as consumed into its ingredients
 - Include primarily single component foods though some FNDDS codes represent mixtures
 - Single ingredients as well as ingredients representing mixtures that contain any of the commodities of interest (i.e., sugar-coated almonds, canned peas and carrots, grape and apple salad with yogurt and candied walnuts) were identified
 - FNDDS was supplemented with USDA's Food Patterns Equivalents Database (FPED) 2013-2014 and 2011-2012 as needed
 - Excluded:
 - NHANES food codes with <1% commodity of interest for most crops
 - Baby food

Analysis parameters

- NHANES 2011-2014
- Two-day average estimates
- Total U.S. population
- Mean and 90th percentiles of intake
 - Per capita
 - Per user
- Estimates in units of g/day and g/kg-bw/day (body-weight basis)

Results: Two-day Average Estimated Daily Intake of Select Fruit Crops; NHANES 2011-2014

Crop	N user*	% User	Per Capita		Per User		Per Capita		Per User	
			Mean	90th percentile	Mean	90th percentile	Mean	90th percentile	Mean	90th percentile
			--- g/day ---				--- g/kg bw/day ---			
Blueberries	1,251	10	3.1	0.6	30.6	64.6	0.05	0.02	0.54	1.16
Cherries	972	7	2.0	0	29.0	69.3	0.03	0	0.51	1.35
Citrus	6,711	44	48.1	169.7	108.9	260.3	0.86	2.71	1.94	4.51
Grapefruit	222	2	2.4	0	140.0	242.4	0.03	0	1.89	3.57
Lemon/lime	2,774	20	1.4	1.9	7.0	12.0	0.02	0.03	0.10	0.18
Oranges	4,905	30	44.3	163.4	145.5	289.6	0.80	2.59	2.64	5.46
Grapes	3,299	20	13.1	41.5	65.8	142.1	0.30	0.77	1.50	3.56

* Unweighted number of users; % user, per capita, and per user estimates for NHANES derived using the statistical weights provided by the National Center for Health Statistics (NCHS).

Results: Two-day Average Estimated Daily Intake of Select Vegetables, Grains, Nuts, Other Crops; NHANES 2011-2014

Crop	N user*	% User	Per Capita		Per User		Per Capita		Per User	
			Mean	90th percentile	Mean	90th percentile	Mean	90th percentile	Mean	90th percentile
			--- g/day ---						--- g/kg bw/day ---	
Almonds	1,375	11	1.4	1.2	12.5	30.3	0.02	0.02	0.18	0.40
Carrots	4,852	34	8.3	27.5	24.9	54.8	0.14	0.43	0.43	0.91
Date Palm	113	1	0.1	0	7.9	17.6	<0.005	0	0.11	0.25
Garlic	4,709	30	0.3	0.8	1.0	2.0	0.005	0.01	0.02	0.03
Oats	2,957	20	4.3	16.0	21.6	45.2	0.08	0.25	0.40	0.83
Pistachios	131	1	0.2	0	18.4	45.0	<0.005	0	0.28	0.69
Potatoes	9,465	64	41.1	113.1	64.0	137.5	0.65	1.73	1.01	2.18
Tomatoes	12,708	86	46.3	109.4	53.5	117.3	0.74	1.77	0.86	1.90
Wheat	14,720	99	96.4	167.8	97.9	168.8	1.67	3.36	1.70	3.38

* Unweighted number of users; % user, per capita, and per user estimates for NHANES derived using the statistical weights provided by the National Center for Health Statistics (NCHS).

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