

Variable names	Variable names in DATA	Variable type	Variable description	Possible values	How variable treated in analysis	Variable names in NHANES/NDI/FPED	Table name that contain the variable	Occurrence in literature	Index in plot
Respondent sequence number	SEQN	Continuous	Respondent sequence number	41475-83723	Not included in analysis	SEQN	DEMO_*.xpt		
Years of entering cohort	COHORT_YEAR	Categorical	Data Release Number. 5:2007-2008; 6: 2009-2010; 7:2011-2012; 8:2013-2014	5,6,7,8	Optional adjusting variable	SDDSRVYR	DEMO_*.xpt	1	1
Mortality status	MORTSTAT	Categorical	The public-use LMF provide mortality follow-up data from the date of survey participation through December 31, 2019. The MORTSTAT variable is the final determination of vital status and should be used as an outcome variable to calculate survival. Each survey participant who is eligible for mortality follow-up is assigned a vital status code (0=Assumed alive, 1=Assumed deceased).	0,1	Outcome	MORTSTAT	NHANES_*.*_MORT_2019_PUBLIC.dat		
Eligibility Status for Mortality Follow-up	ELIGSTAT	Categorical	The public-use LMF provide mortality follow-up data from the date of survey participation through December 31, 2019. Survey participants are defined as ineligible for mortality linkage if they had insufficient identifying data. Please note that all survey participants from the survey files are included on the linked mortality files regardless of linkage eligibility. 1: Eligible; 2:Under age 18, not available for public release; 3: Ineligible	1,2,3	Used to subset data	ELIGSTAT	NHANES_*.*_MORT_2019_PUBLIC.dat		
Number of Person Months of Follow-up from NHANES interview date	PERMTH_INT	Continuous	Number of person-months of follow-up from NHANES interview date. Participants who are assumed alive are assigned the number of person months at the end of the mortality period, December 31, 2019. Only applicable for NHANES III and continuous NHANES (1999-2018)	2-159	Outcome	PERMTH_INT	NHANES_*.*_MORT_2019_PUBLIC.dat		
Age	AGE_CONTINUOUS	Continuous	Best age in years of the sample person at time of HH screening. 20-79 years old considered.	20-79	Mandatory adjusting variables	RIDAGEYR	DEMO_*.xpt	20	
Age groups	AGE_GROUP	Categorical	Use age in years to form 3 groups, 20-39 years old; 40-59 years old; 60-79 years old.	20-39 years old, 40-59 years old, 60-79 years old.	Used to subset data				
Gender	GENDER	Categorical	Gender of the sample person. 1: Male; 2: Female.	1, 2	Mandatory adjusting variables, used to subset data	RIAGENDR	DEMO_*.xpt	15	
Race/Ethnicity	RACE_ETHNICITY	Categorical	Recode of reported race and ethnicity information. 1: Mexican American; 2:Other Hispanic; 3:Non-Hispanic White; 4:Non-Hispanic Black; 5:Other Race - Including Multi-Racial (SP interview Version) What is the highest grade or level of school [you have/SP has] completed or the highest degree [you have/s/he has] received? 1: Less Than 9th Grade; 2: 9-11th Grade [Includes 12th grade with no diploma]; 3: High School Grad/GED or Equivalent; 4: Some College or AA degree; 5: College Graduate or above.	1,2,3,4,5	Optional adjusting variable	RIDRETH1	DEMO_*.xpt	6	2
Education Level	EDUCATION	Categorical		1,2,3,4,5	Optional adjusting variable	DMDDEDUC2	DEMO_*.xpt	14	3
Marital Status	MARITAL_STATUS	Categorical	Marital Status. 1: Married; 2: Widowed; 3:Divorced; 4:Separated; 5:Never married; 6: Living with partner.	1,2,3,4,5,6	Optional adjusting variable	DMDMARTL	DEMO_*.xpt	6	4
Alcohol drinking	ALCOHOL_CONTINUOUS	Continuous	In the past 12 months, on those days that [you/SP] drank alcoholic beverages, on the average, how many drinks did [you/he/she] have? For question ALQ120Q - How often drink alcohol over past 12 mos, people can answer 0 which means they never drink alcohol, and their corresponding information in ALQ130: Avg # alcoholic drinks/day -past 12 mos will be missing. We give these missing values a 0 in ALQ130.	0-32	Optional adjusting variable	ALQ120Q&ALQ130	ALQ_*.xpt	14	5
Alcohol drinking groups	ALCOHOL_GROUP	Categorical	Categorize alcohol drinks per day into 3 categories: Non-drinker: =0; Moderate drinker: <2 drinks per day; Heavy drinker>=2 drinks per day.	Non-drinker, Moderate drinker, Heavy drinker	Optional adjusting variable				6
Smoking	SMOKING	Categorical	People who answered they never smoked cigarettes regularly or not smoked at least 100 cigarettes in life or smoked at least 100 cigarettes in life but quit are categorized as non or light smoker. People who answered they smoked at least 100 cigarettes in life and continue smoking are categorized as follows: if >67 cigarettes per month (40 pack year) then heavily smoker, if <=67 cigarettes per month (40 pack year) then moderate smoker. For smoking, categorize as 3 groups: 0: Non or light smoker; 1: Moderate smoker; 2: Heavy smoker.	0,1,2	Mandatory adjusting variable	SMQ020&SMD030&SMQ040&SMD641&SMD650	SMQ_*.xpt	20	
Occupation	OCCUPATION	Categorical	How many hours did [you/SP] work last week at all jobs or businesses? If participants answered OCD150 - Type of work done last week to be not working at a job or business, their values in OCQ180 - Hours worked last week at all jobs will be missing. In this case, we give these missing values a 0 in OCQ180. For occupation, we categorized participants into 3 categories: 0: non-worker (0 hours a week); 1: Part time worker (1-30 hours a week); 2: Full time worker (>=31 hours a week).	0,1,2	Optional adjusting variable	OCD150&OCQ180	OCQ_*.xpt	1	7
Vigorous or moderate recreational activity	ACTIVITY	Categorical	The next questions exclude the work and transportation activities that you have already mentioned. Now I would like to ask you about sports, fitness and recreational activities. [Do you/Does SP] do any vigorous-intensity sports, fitness, or recreational activities that cause large increases in breathing or heart rate like running or basketball for at least 10 minutes continuously?(Do you/Does SP) do any moderate-intensity sports, fitness, or recreational activities that cause a small increase in breathing or heart rate such as brisk walking, bicycling, swimming, or golf for at least 10 minutes continuously?For physical activity, if the participants either do a vigorous recreational activity or a moderate recreational activity, then they are defined as they do physical activity. If they neither do a vigorous recreational activity and a moderate recreational activity, then they are defined as they don't do physical activity. If one is missing, the un-missing value will be used. If both missing, then missing. For physical activity, categorize it as 2 groups: 2: No activity; 1: Vigorous or moderate activity	1, 2	Optional adjusting variable	PAQ650&PAQ665	PAQ_*.xpt	18	8
Sedentary lifestyle	SEDENTARY_LIFESTYLE	Categorical	The following question is about sitting at work, at home, getting to and from places, or with friends, including time spent sitting at a desk, traveling in a car or bus, reading, playing cards, watching television, or using a computer. Do not include time spent sleeping. How much time (do you/does SP) usually spend sitting on a typical day? People whose sedentary lifestyle minutes answered >=1000 is treated as missing because they are probably including the time they sleep and that is not plausible. Categorize sedentary lifestyle as fifth. For sedentary lifestyle, categorize as 5 groups: 1: Low, 2: Lower-middle, 3:Middle, 4:Upper-middle, 5:High	1,2,3,4,5	Optional adjusting variable	PAD680	PAQ_*.xpt	1	9
Sleep	SLEEP	Categorical	The next set of questions is about your sleeping habits. How much sleep (do you/does SP) usually get at night on weekdays or workdays? Categorize sleep as 3 groups: <=4 hours, 5-8 hours, >=9 hours.	<=4 hours, 5-8 hours, >=9 hours	Optional adjusting variable	SLD010H	SLQ_*.xpt	1	10
Annual family income	FAMILY_INCOME	Categorical	Total family income (reported as a range value in dollars). For Annual Family Income, create 4 categories: 1: \$0-\$14,999; 2: \$15000-\$34999; 3: \$35000-\$64999; 4: Over \$65000. For Annual Family Income, subjects that answered over or under \$20000 but not as a specific range are treated as missing.	1,2,3,4	Optional adjusting variable	INDFMIN2	DEMO_*.xpt	1	11
Socioeconomic status	SOCIOECONOMIC_STATUS	Categorical	A ratio of family income to poverty threshold. We categorize ratio of family income to poverty (PIR) into fifth to denote their socioeconomic status. 5 groups are : 1:Low, 2:Lower-middle, 3:Middle, 4:Upper-middle, 5:High	1,2,3,4,5	Optional adjusting variable	INDFMPIR	DEMO_*.xpt	5	12
BMI	BMI_CONTINUOUS	Continuous	Body Mass Index (kg/m**2). Exclude Implausible BMI (<15 or >60 kg/m2)	15.2-59.7	Optional adjusting variable	BMXBMI	BMX_*.xpt	19	13
BMI group	BMI_GROUP	Categorical	Categorize BMI into 4 groups: Underweight (<18.5), Healthy weight (18.5<=25), Overweight (25<=30), Obesity (>=30), based on definition of CDC.	Underweight, Healthy weight, Overweight, Obesity	Optional adjusting variable				14
Systolic blood pressure	SYSTOLIC_BLOOD_PRESSURE	Categorical	Systolic: Blood pressure (1st, 2nd, 3rd, 4th reading) mm Hg. Systolic Blood pressure have 4 readings; we use the average of these four readings. Categorize systolic blood pressure into fifth. These groups are: 1:Low, 2: Lower-middle, 3: Middle, 4: Upper-middle, 5: High	1,2,3,4,5	Optional adjusting variable	BPXS1&BPXS2&BPXS3&BPXS4	BPX_*.xpt	1	15
Health condition	GENERAL_HEALTH_CONDITION	Categorical	{First/Next} I have some general questions about {your/SP's} health. Would you say {your/SP's} health in general is . . . For general health conditions, categorize as 5 groups: 5: Poor, 1: Excellent, 2:Very good, 3: Good, 4:Fair	1,2,3,4,5	Optional adjusting variable	HS0010	HSQ_*.xpt	2	16
History of hypercholesterolemia	HISTORY_OF_HYPERCHOLESTEROLEMIA	Categorical	{Have you/Has SP} ever been told by a doctor or other health professional that {your/his/her} blood cholesterol level was high? category as 2 groups: 1: Yes, 2: No	1,2	Optional adjusting variable	BPQ080	BPQ_*.xpt	7	17
History of hypetension	HISTORY_OF_HYPERTENSION	Categorical	{Have you/Has SP} ever been told by a doctor or other health professional that {you/s/he} had hypertension, also called high blood pressure? category as 2 groups: 1: Yes, 2: No	1,2	Optional adjusting variable	BPQ020	BPQ_*.xpt	7	18
History of diabetes	HISTORY_OF_DIABETES	Categorical	The next questions are about specific medical conditions. (Other than during pregnancy, {have you/has SP}/{Have you/Has SP}) ever been told by a doctor or health professional that {you have/{he/she/SP} has} diabetes or sugar diabetes? Borderline diabetes treated as no diabetes. category as 2 groups: 1: Yes, 2: No	1,2	Optional adjusting variable	DIQ010	DIQ_*.xpt	7	19
History of depression	HISTORY_OF_DEPRESSION	Categorical	[Over the last 2 weeks, how often have you been bothered by the following problems:] feeling down, depressed, or hopeless? For depression, DPQ020, we define subject that answers several days or more than half the days or nearly every day as having depression. category as 2 groups: 1: Yes, 2: No	1,2	Optional adjusting variable	DPQ020	DPQ_*.xpt	1	20

History of cardiovascular disease	HISTORY_OF_CARDIOVASCULAR_DISEASE	Categorical	Has a doctor or other health professional ever told {you/SP} that {you/s/he} ...had coronary heart disease? Has a doctor or other health professional ever told {you/SP} that {you/s/he} ...had a stroke? History of cardiovascular disease is defined as participants has history of coronary heart disease or history of stroke, if one of them is missing, its value defined as the un-missing value, if both are missing, then its value is missing. category as 2 groups: 1: Yes, 2: No	1,2	Optional adjusting variable	MCQ160C&MCQ160F	MCQ_*.xpt	2	21
History of cancer or malignancy	HISTORY_OF_CANCER_OR_MALIGNANCY	Categorical	{Have you/Has SP} ever been told by a doctor or other health professional that {you/s/he} had cancer or a malignancy of any kind? category as 2 groups: 1: Yes, 2: No	1,2	Optional adjusting variable	MCQ220	MCQ_*.xpt	2	22
Family history of diabetes	FAMILY_HISTORY_OF_DIABETES	Categorical	Including living and deceased, were any of {SP's/your} close biological that is, blood relatives including father, mother, sisters or brothers, ever told by a health professional that they had diabetes? category as 2 groups: 1: Yes, 2: No	1,2	Optional adjusting variable	MCQ300C	MCQ_*.xpt	1	23
Family history of myocardial infraction	FAMILY_HISTORY_OF_MYOCARDIAL_INFRACTION	Categorical	Including living and deceased, were any of {SP's/your} close biological that is, blood relatives including father, mother, sisters or brothers, ever told by a health professional that they had a heart attack or angina (an-gi-na) before the age of 50? category as 2 groups: 1: Yes, 2: No	1,2	Optional adjusting variable	MCQ300A	MCQ_*.xpt	1	24
Menopausal status (women)	MENOPAUSAL_STATUS	Categorical	Menopausal status: If RHQ060 - Age at last menstrual period has a value, then define it as Postmenopausal, If RHQ020 - Age range at first menstrual period has a value and RHQ060 - Age at last menstrual period is missing, then define it as premenopausal. Categorize menopausal status as 2 groups: 0:premenopausal, 1: postmenopausal	0,1	Mandatory adjusting variable	RHQ020&RHQ060	RHQ_*.xpt	2	
Hermone therapy use (women)	HERMONE_THERAPY_USE	Categorical	{Have you/Has SP} ever used female hormones such as estrogen and progesterone? Please include any forms of female hormones, such as pills, cream, patch, and injectables, but do not include birth control methods or use for infertility. 1:YES, 2:NO	1,2	Mandatory adjusting variable	RHQ540	RHQ_*.xpt	7	
Parity (women)	PARITY	Categorical	The next questions are about {your/SP's} pregnancy history. {Have you/Has SP ever been pregnant? Please include (current pregnancy,) live births, miscarriages, stillbirths, tubal pregnancies and abortions. categorize parity as two groups: 2:Nulliparous, 1:Parous	1,2	Mandatory adjusting variable	RHQ131	RHQ_*.xpt	1	
Oral contraceptive use (women)	ORAL_CONTRACEPTIVE_USE	Categorical	Now I am going to ask you about {your/SP's} birth control history. {Have you/Has SP} ever taken birth control pills for any reason? categorize oral contraceptive use as two groups: 1:Yes or 2:No	1,2	Mandatory adjusting variable	RHQ420	RHQ_*.xpt	1	
Pregnant at baseline (women)	RHD_143	Categorical	{Are you/Is SP} pregnant now? 1:Yes, 2:No, -:missing. Exclude Women pregnant at baseline, women missing pregnant information is treated as non-pregnant at baseline.	1,2, -	Used to subset data	RHD143	RHQ_*.xpt		
Use of Aspirin	ASPIRIN	Categorical	We searched records of prescription medication use and identified users of aspirin, atorvastatin, ibuprofen, opium, statin, valsartan users. If we did not find any record for a medication for a person, then it is treated as non-user. categorize as two groups: 1:Yes or 0:No	0,1	Optional adjusting variable	RXDDRUG	RXQ_RX_*.xpt	1	25
Use of Ibuprofen	IBUPROFEN	Categorical	We searched records of prescription medication use and identified users of aspirin, atorvastatin, ibuprofen, opium, statin, valsartan users. If we did not find any record for a medication for a person, then it is treated as non-user. categorize as two groups: 1:Yes or 0:No	0,1	Optional adjusting variable	RXDDRUG	RXQ_RX_*.xpt	1	26
Use of Opium	OPIUM	Categorical	We searched records of prescription medication use and identified users of aspirin, atorvastatin, ibuprofen, opium, statin, valsartan users. If we did not find any record for a medication for a person, then it is treated as non-user. categorize as two groups: 1:Yes or 0:No	0,1	Optional adjusting variable	RXDDRUG	RXQ_RX_*.xpt	1	27
Use of Statin	STATIN	Categorical	We searched records of prescription medication use and identified users of aspirin, atorvastatin, ibuprofen, opium, statin, valsartan users. If we did not find any record for a medication for a person, then it is treated as non-user. categorize as two groups: 1:Yes or 0:No	0,1	Optional adjusting variable	RXDDRUG	RXQ_RX_*.xpt	2	28
Use of Valsartan	VALSARTAN	Categorical	We searched records of prescription medication use and identified users of aspirin, atorvastatin, ibuprofen, opium, statin, valsartan users. If we did not find any record for a medication for a person, then it is treated as non-user. categorize as two groups: 1:Yes or 0:No	0,1	Optional adjusting variable	RXDDRUG	RXQ_RX_*.xpt	1	29
Special diet	ON_SPECIAL_DIET	Categorical	Are you currently on any kind of diet, either to lose weight or for some other health-related reason? For on special diet or not, categorize as 1:Yes or 2:No	1,2	Optional adjusting variable	DRQSDIET	DR1TOT_*.xpt	1	30
Use of dietary supplement	DIETARY_SUPPLEMENT	Categorical	Any Dietary Supplements taken in the past 24 hour? For dietary supplement use, if either day 1 or day 2 they used dietary supplement, then they are using dietary supplement overall. If neither day 1 and day 2 they used dietary supplement, they are not using dietary supplement. If one is missing, the un-missing value will be used. If both missing, then missing. For dietary supplement intake, categorize as 1:Yes or 2:No	1,2	Optional adjusting variable	DS1DS&DS2DS	DS1TOT_F.xpt&DS2TOT_F.xpt	7	31
Processed meat	PROCESSED_MEAT	Continuous	For individual food components, we averaged day 1 and day 2. If one is missing, then the un-missing value is used. If both missing, then missing. Processed meat defined as curved meat: Bacon, Beef sausage, Beef luncheon meat, Blood sausage, Bockwurst, Bologna, Bratwurst, Braunschweiler, Capicola, Cervelat, Chicken sticks, Chicken luncheon meat, Chicken or turkey loaf, Chorizo, Cold cut deli meat, Corned beef, Chipped beef, Dutch brand loaf, Frankfurters, Ham (cured, smoked, deli, deviled, loaf, luncheon meat, minced), Head cheese, Honey loaf, Hotdogs, Italian sausage, Jerky (all meats), Kielbasa, Knockwurst, Liverwurst, Meat spreads, Meat sticks, Mettwurst, Mortadella, Pastrami, Pepperoni, Pepper loaf, Polish sausage, Pork luncheon meat, Pork sausage, Potted meats, Salami, Sandwich loaf, Souse, Thuringer, Turkey luncheon meat, Turkey sausage, Turkey smoked, Turkey sticks, Veal loaf, Vienna sausage. gram.eq used.	0-567.42525	Optional adjusting variable	DR1T_PF_CUREDMEAT&DR2T_PF_CUREDMEAT	fped_dr1tot_*.sas7bdat&fped_dr1tot_*.sas7bdat	5	32
Unprocessed red meat	UNPROCESSED_RED_MEAT_STANDARD_CONTINUOUS	Continuous	For individual food components, we averaged day 1 and day 2. If one is missing, then the un-missing value is used. Unprocessed read meat defined as: Armadillo, Bacon (not cured), Bear, Beaver, Beef, Bison, Caribou, Game meat (other), Goat, Ground hog, Ham (not cured), Lamb, Moose, Opossum, Oxtail, Pork, Rabbit, Raccoon, Squirrel, Veal, Venison, Wild pig. If both missing, then missing. gram.eq used.	0-749.43225	Exposure variable	DR1T_PF_MEAT&DR2T_PF_MEAT	fped_dr1tot_*.sas7bdat&fped_dr1tot_*.sas7bdat	7	
Poultry	POULTRY	Continuous	For individual food components, we averaged day 1 and day 2. If one is missing, then the un-missing value is used. If both missing, then missing. Poultry defined as: Chicken, Cornish game hen, Dove, Duck, Goose, Ostrich, Pheasant, Quail, Turkey. gram.eq used.	0-783.594	Optional adjusting variable	DR1T_PF_POULT&DR2T_PF_POULT	fped_dr1tot_*.sas7bdat&fped_dr1tot_*.sas7bdat	8	33
Fruits	FRUITS	Continuous	For individual food components, we averaged day 1 and day 2. If one is missing, then the un-missing value is used. If both missing, then missing. Fruit defined as: Citrus, Melons, and Berries type+ Other Fruits type but exclude juice. Citrus, Melons, and Berries type: Blackberries, Blueberries, Boysenberries, Calamondin, Cantaloupe, Casaba, Cranberries, Dewberries, Grapefruit, Honeydew, Huckleberries, Juneberries, Kiwi fruit, Kumquats, Lemons, Limes, Loganberries, Mandarins, Mulberries, Oranges, Raspberries, Strawberries, Tangelos, Tangerines, Watermelon, Youngberries. Other Fruits type: Apples, Apricots, Bananas, Cherries, Currants, Dates, Figs, Grapes, Guava, Lychees, Mangoes, Nectarines, Papayas, Passion fruits, Peaches, Pears, Persimmons, Pineapple, Plums (Cruelas), Pomegranates, Prunes, Raisins, Rhubarb, Sourpou (Guanabana), Starfruit (Carambola), Tamarind. Cup.eq used.	0-19.64	Optional adjusting variable	DR1T_F_CITMLB&DR2T_F_CITMLB&DR1T_F_OTHER&DR2T_F_OTHER	fped_dr1tot_*.sas7bdat&fped_dr1tot_*.sas7bdat	15	34

			For individual food components, we averaged day 1 and day 2. If one is missing, then the un-missing value is used. Vegetables include: Dark Green Vegetables+ Total Red and Orange Vegetables+ Total Starchy Vegetables+ Other Vegetables. Dark Green vegetables include: Arugula Basil Beet greens Bitter melon leaves Broccoli Chinese Cabbage (pak-choi) Chrysanthemum garland Chard Chicory leaves Cilantro (Coriander) Collards Cress Dandelion greens Endive Escarole Greens Horseradish leaves Kale Lambsquarters Leaves of grapes, pumpkin, squash, sweet potato, swamp cabbage, taro, and thistle Lettuce (Boston, butterhead, green or red leaf, Cos or Romaine) Mustard cabbage Mustard greens Parsley Poke greens Spinach Turnip greens Watercress. Total red and orange vegetables include: Tomatoes (canned, cooked, raw, stewed) Tomatoes, dried Tomato juice Tomato paste Tomato puree Tomato sauce Calabaza (Spanish pumpkin) Carrots Carrot juice Red colored bell, and nonbell peppers Pimiento Pumpkin Squash (most winter varieties) Sweet potatoes. Total starchy vegetables include: White potatoes White potato flour White potato flakes Breadfruit Burdock Cassava (Yuca blanca) Corn, sweet (raw) Dasheen Green bananas Hominy Jicama (Yam beans) Lima beans, immature Lotus root Parsnips Immature peas (e.g., immature cowpeas, blackeye peas, green peas, pigeon peas) Plantains Salsify Tannier Tapioca Taro Water chestnuts Yams. Other vegetables include: Alfalfa sprouts Artichoke Asparagus Avocado Bamboo shoots Beans (green, yellow, snap, string) Bean sprouts Beets Bitter melon (bitter gourd, balsam pear) Broccoli Brussels sprouts Cabbage Cactus (Nopales) Capers Cauliflower Celeriac Celery Chayote (Christophine) Chinese cabbage (Pei-tsai) Chinese okra (Luffa) Chives Cucumber Eggplant Fennel bulb Fennel, edible Garlic Ginger root Horseradish pods Jute Kohlrabi Leeks Lettuce (varieties not in dark green category) Mushrooms Okra Olives Onions Palm hearts Peas, podded Peppers, bell and nonbell peppers (not red or orange in color) Pokeberry shoots Radicchio Radish Rutabaga Scallions Seaweed Snow peas Sprouted beans (e.g. mung, soybean) Squash (green, sequin, spaghetti, yellow, zucchini, most summer varieties) Tomatillos Tomatoes, green Turnips Winter melon (Wax gourd) If both missing, then missing. Cup.eq used.						
Vegetables	VEGETABLES	Continuous		0-29.835	Optional adjusting variable	DR1T_V_TOTAL&DR2T_V_TOTAL	fped_dr1tot_*.sas7bdat&fped_dr1tot_*.sas7bdat	14	35
Seafood	SEAFOOD	Continuous	For individual food components, we averaged day 1 and day 2. If one is missing, then the un-missing value is used. If both missing, then missing. Seafood defined as: Seafood High in n-3 Fatty Acids type+ Seafood Low in n-3 Fatty Acids type. Seafood High in n-3 Fatty Acids: Anchovy Barracuda Caviar (roe) Cisco Herring Mackerel Pompano Ray Salmon Sardine Sea bass Shark Shad Skink Squid Swordfish Trout Tuna (albacore and bluefin) Whitefish. Seafood Low in n-3 Fatty Acids type: Abalone Carp Catfish Clams Cod Crab Crayfish Croaker Eel Flounder Frog legs Haddock Halibut Lobster Mullet Mussels Ocean perch Octopus Oyster Perch Pike Pollock Porgy Scallop Scup Shrimp Snail Snapper Sole Sturgeon Tilapia Tuna (except albacore and bluefin) Turtle Whiting. gram.eq used.	0-750.141	Optional adjusting variable	DR1T_PF_SEAFD_HI&DR1T_PF_SEAFD_LOW&DR2T_PF_SEAFD_HI&DR2T_P_F_SEAFD_LOW	fped_dr1tot_*.sas7bdat&fped_dr1tot_*.sas7bdat	11	36
Whole grain	WHOLE_GRAIN	Continuous	For individual food components, we averaged day 1 and day 2. If one is missing, then the un-missing value is used. If both missing, then missing. Whole grain defined as: Amaranth Barley, whole Barley flour (whole barley) Barley meal Brown rice Brown rice flour Buckwheat groats Bulgur Corn, whole grain Corn meal or flour (whole grain) Millet Oats Oat flour Oatmeal Popcorn Quinoa Rye, whole grain Rye flour (dark) Triticale Wheat Whole wheat flour Wild rice. gram.eq used.	0-515.97	Optional adjusting variable	DR1T_G_WHOLE&DR2T_G_WHOLE	fped_dr1tot_*.sas7bdat&fped_dr1tot_*.sas7bdat	4	37
Eggs	EGGS	Continuous	For individual food components, we averaged day 1 and day 2. If one is missing, then the un-missing value is used. If both missing, then missing. Egg defined as: Eggs, whole (chicken, duck, goose, quail, and other birds) Egg white Egg yolk Egg substitute Egg, dried. gram.eq used.	0-678.699	Optional adjusting variable	DR1T_PF_EGGS&DR2T_PF_EGGS	fped_dr1tot_*.sas7bdat&fped_dr1tot_*.sas7bdat	5	38
Nuts and seeds	NUTS_SEEDS	Continuous	For individual food components, we averaged day 1 and day 2. If one is missing, then the un-missing value is used. If both missing, then missing. Nuts and seeds defined as: Almonds Almond butter Almond paste Brazil nuts Cashew Cashew butter Chestnuts Flax seeds Hazelnuts Macadamia nuts Peanuts Peanut butter Peanut flour Pecans Pine nuts Pistachios Pumpkin seeds Squash seeds Sesame butter (tahini) Sesame seeds Sesame paste Sunflower seeds Walnuts. gram.eq used.	0-680.4	Optional adjusting variable	DR1T_PF_NUTSDS&DR2T_PF_NUTSDS	fped_dr1tot_*.sas7bdat&fped_dr1tot_*.sas7bdat	5	39
Legumes	LEGUMES	Continuous	For individual food components, we averaged day 1 and day 2. If one is missing, then the un-missing value is used. If both missing, then missing. Legume defined as: Black beans Blackeye peas Brown beans Bayo beans Calico beans Carob Chickpeas (Garbanzo beans) Cowpeas Fava beans Kidney beans Lentils Mature lima beans Mung beans Navy beans Pink beans Pinto beans Red Mexican beans Soybeans (raw) Split peas White beans. gram.eq used.	0-578.907	Optional adjusting variable	DR1T_PF_LEGUMES&DR2T_PF_LEGUMES	fped_dr1tot_*.sas7bdat&fped_dr1tot_*.sas7bdat	6	40
Total dairy	TOTAL_DIARY	Continuous	For individual food components, we averaged day 1 and day 2. If one is missing, then the un-missing value is used. If both missing, then missing. Total dairy defined as: Milk type+ Yogurt type + Cheese type. Milk type: Buttermilk Evaporated milk Filled milk Milk, dry Milk, evaporated Milk, fluid Goat milk, fluid Soy milk, calcium added. Yogurt type: Includes yogurt of all fat-types and yogurt present in flavored and frozen yogurt. Cheese type: American cheese Blue cheese Brick cheese Brie cheese Camembert cheese Cheddar cheese Colby cheese Colby Jack cheese Cottage cheese Cream cheese, fat free Edam cheese Feta cheese Fontina cheese Goat cheese Gouda cheese Gruyere cheese Limburger cheese Mexican blend Monterey cheese Mozzarella cheese Muenster cheese Parmesan cheese Pasteurized cheese Port de salut cheese Provolone cheese Ricotta cheese Romano cheese Roquefort Swiss cheese Queso anejo Queso asadero Queso Chihuahua Queso del pais, blanco Queso fresco. Cup.eq used.	0-16.83	Optional adjusting variable	DR1T_D_TOTAL&DR2T_D_TOTAL	fped_dr1tot_*.sas7bdat&fped_dr1tot_*.sas7bdat	6	41
Total energy	TOTAL_ENERGY	Continuous	For total nutrition intake variables (TCAL, TCARB ...), we averaged day 1 and day 2. If one is missing, then the un-missing value is used. If both missing, then missing. Energy (kcal/d). exclude Extreme value of total energy intake (<500kcal/d or >4500kcal/d)	500-4494	Mandatory adjusting variable	DR1TKCAL&DR2TKCAL	DR1TOT_*.xpt&DR2TOT_*.xpt	14	
Carbohydrates	CARBONHYDRATES	Continuous	For total nutrition intake variables (TCAL, TCARB ...), we averaged day 1 and day 2. If one is missing, then the un-missing value is used. If both missing, then missing. Carbohydrate (gm/d)	17.605-811.114	Optional adjusting variable	DR1TCARB&DR2TCARB	DR1TOT_*.xpt&DR2TOT_*.xpt	4	42
Dietary fiber	DIETARY_FIBER	Continuous	For total nutrition intake variables (TCAL, TCARB ...), we averaged day 1 and day 2. If one is missing, then the un-missing value is used. If both missing, then missing. Dietary fiber (gm/d)	0-128.6	Optional adjusting variable	DR1TFIB&DR2TFIB	DR1TOT_*.xpt&DR2TOT_*.xpt	4	43
Saturated fatty acid	SATURATED_FAT	Continuous	For total nutrition intake variables (TCAL, TCARB ...), we averaged day 1 and day 2. If one is missing, then the un-missing value is used. If both missing, then missing. Total saturated fatty acids (gm/d)	0-104.155	Optional adjusting variable	DR1TSFAT&DR2TSFAT	DR1TOT_*.xpt&DR2TOT_*.xpt	3	44
Monounsaturated fatty acid	MONOUNSATURATED_FATTY_ACID	Continuous	For total nutrition intake variables (TCAL, TCARB ...), we averaged day 1 and day 2. If one is missing, then the un-missing value is used. If both missing, then missing. Total monounsaturated fatty acids (gm/d)	0-117.202	Optional adjusting variable	DR1TMFAT&DR2TMFAT	DR1TOT_*.xpt&DR2TOT_*.xpt	2	45
Polyunsaturated fatty acid	POLYUNSATURATED_FATTY_ACID	Continuous	For total nutrition intake variables (TCAL, TCARB ...), we averaged day 1 and day 2. If one is missing, then the un-missing value is used. If both missing, then missing. Total polyunsaturated fatty acids (gm/d)	0-102.639	Optional adjusting variable	DR1TPFAT&DR2TPFAT	DR1TOT_*.xpt&DR2TOT_*.xpt	2	46
Cholesterol	CHOLESTEROL	Continuous	For total nutrition intake variables (TCAL, TCARB ...), we averaged day 1 and day 2. If one is missing, then the un-missing value is used. If both missing, then missing. Cholesterol (mg/d)	0-1740	Optional adjusting variable	DR1TCHOL&DR2TCHOL	DR1TOT_*.xpt&DR2TOT_*.xpt	1	47
Magnesium	MAGNESIUM	Continuous	For total nutrition intake variables (TCAL, TCARB ...), we averaged day 1 and day 2. If one is missing, then the un-missing value is used. If both missing, then missing. Magnesium (mg/d)	29.5-1721	Optional adjusting variable	DR1TMAGN&DR2TMAGN	DR1TOT_*.xpt&DR2TOT_*.xpt	1	48