**Appendix C (KNHANESⅣ\_2012)**

If your variable definitions differ from those suggested in Tables 2 and 3, please fill in the table below with as much information as possible for each variable to help us understand how your variable is defined/coded.

|  |  |  |
| --- | --- | --- |
| **Variable name** | **Definition** | **Unit** |
| **obs\_id** | Unique alphanumeric identifier for each observation | Combination an alphabet (A to P) with 9 digits (e.g. A000000000 ) |
| **year** | Year in which data collection was conducted | A four-digit number between 1998 and 2014 |
| **age** | This is a continuous variable that captures the age in years of the individual | Age in years. |
| **sex** | This is a dichotomous indicator variable that describes the gender of the individual. | 1=male  2=female |
| **residence** | This is a dichotomous indicator variable that describes whether the individual lives in urban (Seoul, Busan, Daegu, Incheon, Gwangju, Daejeon, and Ulsan) or rural area (Gyeonggi, Gangwon, Chungbuk, Chungnam, Jeonbuk, Jeonnam, Gyeongbuk, Gyeongnam, and Jeju) in Korea. | 1=urban  2=rural  -9=missing |
| **education** | This is an indicator variable that describes the individual's level of education. | 1=primary: 6 or fewer years of formal education  2=secondary: 7-12 years of formal education  3=tertiary: 13 or more years of formal education  -9 = missing |
| **preg\_lact** | This is a dichotomous variable that indicates whether an individual is pregnant or nursing mother. | 0= not pregnant or nursing  1 = pregnant  2 = nursing  -9= missing |
| **samp\_wt** | The sampling weight, calculated as the inverse of the probability of a participant being included in the sample in the survey sampling design, and then adjusted by population size. | A continuous positive non-zero numeric variable. |
| **psu** | The primary sampling unit (PSU) of the survey, i.e. the sampling unit selected in the primary stage of a multi-stage sample. | An indicator variable with integer values where each integer represents a level of the PSU. |
| **svy\_strata** | The mutually exclusive strata used in multi-stage stratified sampling. | An indicator variable with integer values where each integer represents a level of stratification. |
| **Fruit\_intake** | Total intake of Fruit, including fresh, canned, or dried fruit. This definition includes strawberry, oriental melon, water melon, peach, grape, apple, pear, persimmon, tangerine, banana, orange, and kiwi. This definition excludes fruit juices and salted or pickled fruits. | Individual intake in  g/day |
| **FruitJuice\_intake** | Total intake of fruit juice, including non-100% fruit juice and sugar-sweetened fruit juice. This definition excludes vegetable juice. | Individual intake in ml/day. |
| **NutsSeeds\_intake** | Total intake of peanuts. | Individual intake in  g/day |
| **NonStarchyVeg\_intake** | Total vegetable intake, including fresh, frozen, cooked (e.g. boiled, fried, boiled down, seasoned), or dried vegetables, vegetable juice and salted vegetables. This definition includes sprout, spinach, bellflower, pumpkin, other vegetable (e.g. namul), cucumber, radish, vegetable salad, green onion, pepper, broccoli, garlic, Kimchi (Korean cabbage), and root vegetables (e.g. lotus, burdock). This definition excludes starchy vegetables (e.g., potatoes, taro, cassava, manioc, yucca, corn, peas), and legumes (beans and lentils). | Individual intake in  g/day |
| **Potato\_intake** | Total intake of white potatoes, including cooked potatoes (e.g. stir-fried, boiled down, boiled, baked). This definition includes French fries, chips, and crisps. This definition excludes sweet potatoes and yams. | Individual intake in  g/day |
| **OtherStarchyVeg\_intake** | Total intake of non-potato starchy vegetables, including boiled or baked starchy vegetables. This definition includes sweet potatoes and corn, excluding white potatoes. | Individual intake in  g/day. |
| **BeansLegumes\_intake** | Total intake of beans, including fresh, cooked (e.g. boiled, fried, boiled down), or dried beans. This definition includes beans, bean curd, and bean paste. This definition excludes peanuts, peanut butter, soy milk and soy protein. | Individual intake in  g/day |
| **WholeGrain\_intake** | Total intake of whole grains. This definition includes barley and cereals. This definition excludes corn products including corn flour, corn meal, and popcorn. | Individual intake in g/day. |
| **RefinedGrain\_intake** | Total intake of refined grains, defined as grains which have been milled to remove the bran and germ. This definition includes polished rice (e.g. Bibim, stir-fried rice, Gimbab, curry rice), instant noodles (e.g. Ramen), noodles (e.g. Udon, JJamppong, Jajangmyeon, Kalguksu, Naengmyeon), bread (e.g. loaf bread, bean jam buns, steamed bun, cream bread, cakes, castellan, chocolate pie), rice cakes (e.g. stir-fried rice cake, rice cake soup, Baekseolgi, steamed rice cake, Injeolmi, Jeolpyeon), dumpling, pizza, hamburger and cracker. This definition excludes corn products including corn flour and corn meal. | Individual intake in g/day. |
| **UnprocessedRedMeat\_intake** | Total intake of meat, defined as beef, and pork that has not been chemically preserved. This definition includes cooked (e.g. boiled, roasted, stir-fried, fried) meat (including soup, stew and cutlet). This definition excludes poultry, fish, and eggs. | Individual intake in g/day. |
| **TotalProcessedMeat\_intake** | Total intake of processed meat, including chemically preserved or cured meat. This definition includes ham. This definition excludes fish and eggs. | Individual intake in  g/day. |
| **Seafood\_intake** | Total intake of fish and shellfish, including fresh, dried, or cooked (e.g. boiled, baked, boiled down, stir-fried, marinated). This definition includes loach, pollack, mackerel, mackerel pike, hairtail, yellow corvina , anchovy, squid, and crab. | Individual intake in g/day. |
| **Egg\_intake** | Total intake of eggs produced by poultry/birds, including chicken and quail. This definition excludes fish eggs. | Individual intake in g/day. |
| **Milk\_intake** | This definition includes whole-fat, reduced-fat, skim milk, and chemically processed milk. | Individual intake in  ml/day |
| **Yogurt\_intake** | Total intake of yogurt and fermented milk, including reduced-fat and full-fat yogurt.  This definition includes liquid or semi-solid yogurt. | Individual intake in g/day. |
| **Cheese\_intake** | This data was not available. |  |
| **SSB\_intake** | Total sugar-sweetened beverage intake, including commercial beverages, soft drinks, and fruit drinks. This definition includes Cola, sprite, and Fanta. This definition excludes 100% fruit and vegetable juices and non-caloric artificially-sweetened drinks. | Individual intake in  ml/day |
| **Coffee\_intake** | Total coffee intake including caffeinated, decaffeinated, sweetened, or unsweetened coffee. | Individual intake in  cups/day. (1 cup=8 oz) |
| **Tea\_intake** | Total green or black tea intake, including caffeinated, decaffeinated, sweetened or unsweetened tea. This definition excludes herbal tea. | Individual intake in cups/day. (1 cup=8 oz) |
| **AddedSugar\_intake** | This data was not available. |  |
| **Energy\_intake** | Total energy intake. | Individual intake in kcal/day. |
| **Carbohydrate\_intake** | Total carbohydrate intake | Individual intake in % of total kcal per day (energy contribution). |
| **TotalProtein\_intake** | Total protein intake from all sources. | Individual intake in g/day. |
| **AnimalProtein\_intake** | This data was not available. |  |
| **DairyProtein\_intake** | This data was not available. |  |
| **PlantProtein\_intake** | This data was not available. |  |
| **SaturatedFat\_intake** | This data was not available. |  |
| **Omega6FattyAcid\_intake** | This data was not available. |  |
| **Omega3FattyAcid\_intake** | This data was not available. |  |
| **MUFA\_intake** | This data was not available. |  |
| **TFA\_intake** | This data was not available. |  |
| **Cholesterol\_intake** | This data was not available. |  |
| **Fat\_intake** | Total fat intake from all sources. | Individual intake in % of total kcal per day (energy contribution). |
| **DietaryFiber\_intake** | Total dietary fiber intake from all sources (fruits, vegetables, grains, legumes, pulses), defined as the carbohydrate polymers which are not hydrolyzed by the endogenous enzymes in the small intestine of human beings. | Individual intake in g/day. |
| **Sodium\_intake** | Total intake of sodium from all sources. | Individual intake in mg/day. |
| **Potassium\_intake** | Total intake of potassium from all sources. This definition does not provide information on use of dietary supplements. | Individual intake in g/day. |
| **Calcium\_intake** | Total intake of calcium from all sources. This definition does not provide information on use of dietary supplements. | Individual intake in mg/day. |
| **Iron\_intake** | Total intake of heme and non-heme iron from all sources. This definition does not provide information on use of dietary supplements. | Individual intake in mg/day. |
| **Zinc\_intake** | This data was not available. |  |
| **Magnesium\_intake** | This data was not available. |  |
| **Selenium\_intake** | This data was not available. |  |
| **Iodine\_intake** | This data was not available. |  |
| **VitaminA\_intake** | Total intake of vitamin A and provitamin A (including retinol and carotene) from all sources.  This definition does not provide information on use of dietary supplements. | Individual intake in  μgRE/day. |
| **VitaminD\_intake** | This data was not available. |  |
| **VitaminE\_intake** | This data was not available. |  |
| **VitaminC\_intake** | Total intake of vitamin C from all sources. This definition does not provide information on use of dietary supplements. | Individual intake in mg/day. |
| **VitaminB1\_intake** | Total intake of thiamin from all sources. This definition does not provide information on use of dietary supplements. | Individual intake in mg/day. |
| **VitaminB2\_intake** | Total intake of vitamin B2 from all sources. This definition does not provide information on use of dietary supplements. | Individual intake in mg/day. |
| **VitaminB3\_intake** | Total intake of niacin from all sources. This definition does not provide information on use of dietary supplements. | Individual intake in mg/day. |
| **VitaminB6\_intake** | This data was not available. |  |
| **VitaminB9\_intake** | This data was not available. |  |
| **VitaminB12\_intake** | This data was not available. |  |
| **GlycemicIndex** | This data was not available. |  |
| **GlycemicLoad** | This data was not available. |  |