DSID Linking Code Schematic (DSID-4)

Segment information:

DSID 4 linking code contains four pieces of information and consists of four segments which adds up to 13 digits long (3-5-2-3): 111 22222 33 444

1. **Digits 1 through 3** (segment 111) represent USDA Standard Reference Nutrient number;
2. **Digits 4 through 8** (segment 22222) represent NHANES supplement label value per serving;
3. **Digits 9 through 10** (segment 33) represent the DSID study category code;
4. **Digits 11 through 13** (segment 444) represent DSID release;

The table below provides the key to ascertain where the decimal is inserted in the five digits for NHANES supplement label value, as well as the units per serving in which the nutrient amount is being measured

	DSID Ingredient Name	10^4	10^3	10^2	10^1	10^0	.	10^{-1}	10^{-2}	10^{-3}	10^{-4}	Unit
1	Calcium		x	x	x	x	.	x				mg
2	Copper					x	.	x	x	x	x	mg
3	Chromium			x	x	x	.	x	x			mcg
4	Folic Acid		x	x	x	x	.	x				mcg
5	Iodine			x	x	x	.	x	x			mcg
6	Iron			x	x	x	.	x	x			mg
7	Magnesium			x	x	x	.	x	x			mg
8	Manganese			x	x	.	x	x	x			mg
9	Niacin			x	x	x	.	x	x			mg
10	Phosphorus			x	x	x	.	x	x			mg
11	Potassium		x	x	x	x	.	x				mg
12	Riboflavin			x	x	x	.	x	x			mg
13	Selenium			x	x	x	.	x	x			mcg
14	Thiamin			x	x	x	.	x	x			mg
15	Vitamin A	x	x	x	x	x	.					IU
16	Vitamin B-6			x	x	x	.	x	x			mg
17	Vitamin B-12			x	x	x	.	x	x			mcg
18	Vitamin C		x	x	x	x	.	x				mg
19	Vitamin D		x	x	x	x	.	x				IU
20	Vitamin E		x	x	x	x	.	x				IU
21	Zinc			x	x	x	.	x	x			mg
22	Alpha-Linolenic Acid (ALA)		x	x	x	x	.	x				mg
23	Docosahexaenoic Acid (DHA)		x	x	x	x	.	x				mg
24	Eicosapentaenoic Acid (EPA)		x	x	x	x	.	x				mg

Example:

Referring to calcium as an example, the decimal would be inserted between the 4th and 5th digits of the linking code section for nutrient labeled amount (which are the 7h and 8th digits of the entire DSID linking code). Thus, 3010025001030 would refer to a 25 mg serving of calcium.

However, for copper, the linking code 312 00700 01030 would refer to a 0.07 mg serving of copper.

Determining the range of label values that a code could represent was determined by consulting the limits of the NHANES 2003 - 2014 products label range to determine what values would need to have linking values. For the ingredients, this schematic is applied regardless of the study.

Digits 9 and 10 represent the DSID study category code. There is no decimal insertion in these digits. In this release, the following values are used:

      01: Adult 1 MVMs
      02: Children's MVMs (4 and older)
      03: Non-prescription Prenatal MVMs
      04: Omega-3 Fatty Acid Dietary Supplement (per serving)
      05: Adult 2 MVMs

Digits 11 through 13 represent the DSID release. The decimal in the release version is inserted between digits 12 and 13. Thus, 3010200001040 refers to DSID release 4.0.

Special cases

In some cases, we needed to accommodate more than 5 decimal places for an ingredient (i.e.: 123.455 unit/serving). The decision was made to retain the five-digit system, assigning linking codes to these entries that would be based on rounding the labeled amounts to the nearest hundredth. After the label value was rounded, some rounded label values would share similar linking code with other label values. This will not impact the predicted value reported.