National Institute of Standards & Technology (NIST)

SRM Customer Questionnaire

<SRM 1849a Infant/Adult Nutritional Formula>

NIST is conducting this survey of recent customers to better design SRM products in the future. You are receiving this questionnaire as a customer of NIST who has purchased at least one unit of <SRM 1849a Infant/Adult Nutritional Formula> in the past 5 years.

Customer Information

Laboratory Name: Click here to enter text.
Laboratory Location: Click here to enter text.
Respondent Name: Click here to enter text.
Respondent Email: Click here to enter text.
Respondent Phone: Click here to enter text.

- ☐ I am willing to be contacted by NIST staff via email and/or phone to provide additional information.

Which of the following best describe(s) your laboratory? Check all that apply.

- ☐ Academic laboratory
- ☐ Government laboratory
- ☐ Food manufacturer (QA/QC) laboratory
- ☐ Third-party testing laboratory
- ☐ Research and development
- ☐ Other (please describe): Click here to enter text.

Which of the following best describe(s) your general research area or interests? Check all that apply.

- ☐ Nutrition labeling
- ☐ Food safety/contaminants
- ☐ Food research (general)
- ☐ Dietary supplements research (general)
- ☐ Other (please describe): Click here to enter text.

OMB Control #0693-0033
Expiration Date 03/31/2016

Use of <SRM 1849a Infant/Adult Nutritional Formula>

1. For which of the following analytes or groups of analytes has your laboratory used <SRM 1849a Infant/Adult Nutritional Formula>? This is an all-inclusive list. Some categories may be removed if there are no assigned values in the SRM being queried.
   - ☐ Cholesterol
   - ☐ Elements
   - ☐ Toxic Elements/Contaminants
   - ☐ Water-Soluble Vitamins
   - ☐ Fat-Soluble Vitamins
   - ☐ Carotenoids
   - ☐ Proximates
   - ☐ Fatty Acids
   - ☐ Amino Acids
   - ☐ Sugars
   - ☐ Other (e.g., cholesterol, catechins, xanthines, flavonoids)

For every box selected in response to question 1, up to ten follow-up questions will be generated as described below.

a. For which of the following elements has your laboratory used <SRM 1849a Infant/Adult Nutritional Formula>? This is an all-inclusive list. Some may be removed if there are no assigned values in the SRM being queried.

Nutritional Elements
- ☐ Calcium
- ☐ Copper
- ☐ Iron
- ☐ Magnesium
- ☐ Manganese
- ☐ Phosphorus
- ☐ Potassium
- ☐ Sodium
- ☐ Zinc

Trace Minerals
- ☐ Chromium
- ☐ Molybdenum
- ☐ Selenium

Other Elements
- ☐ Aluminum
- ☐ Antimony
- ☐ Barium
- ☐ Boron
- ☐ Bromine
- ☐ Cerium
- ☐ Cesium
- ☐ Chlorine
- ☐ Cobalt
- ☐ Europium
- ☐ Fluoride
- ☐ Gadolinium
- ☐ Gold
- ☐ Hafnium
- ☐ Hydrogen
- ☐ Iodine
- ☐ Lanthanum
- ☐ Lithium
- ☐ Neodymium
- ☐ Nickel
- ☐ Nitrogen
- ☐ Rubidium
- ☐ Samarium
- ☐ Scandium
- ☐ Silicon
- ☐ Silver
- ☐ Strontium
- ☐ Sulfur
- ☐ Terbium
- ☐ Thorium
- ☐ Tin
- ☐ Titanium
- ☐ Tungsten
- ☐ Uranium
- ☐ Vanadium
- ☐ Ytterbium

OMB Control #0693-0033
Expiration Date 03/31/2016

b. For which of the following toxic elements/contaminants has your laboratory used <SRM 1849a Infant/Adult Nutritional Formula>? This is an all-inclusive list. Some may be removed if there are no assigned values in the SRM being queried.

- ☐ Arsenic
- ☐ Cadmium
- ☐ Lead
- ☐ Mercury
- ☐ Dimethylarsinic acid (DMA)
- ☐ Inorganic arsenic (iAs)
- ☐ Monomethylarsonic acid (MMA)
- ☐ Methylmercury
- ☐ Acrylamide
- ☐ Aflatoxin B1
- ☐ Aflatoxin B2
- ☐ Total Aflatoxins

c. For which of the following water-soluble vitamins has your laboratory used <SRM 1849a Infant/Adult Nutritional Formula>? This is an all-inclusive list. Some may be removed if there are no assigned values in the SRM being queried.

- ☐ Ascorbic Acid (Vitamin C)
- ☐ Biotin
  - ☐ Biotin
  - ☐ Total Biotin by Microbiological Assay
- ☐ Carnitine
- ☐ Choline
- ☐ Choline Ion
- ☐ Folates
  - ☐ Folic Acid
  - ☐ 5-Methyltetrahydrofolate
  - ☐ Total Folate by Microbiological Assay
- ☐ Myo-inositol
- ☐ Riboflavin (Vitamin B_2)
- ☐ Thiamine/Thiamine Hydrochloride (Vitamin B_1)
- ☐ Vitamin B_3
  - ☐ Niacin
  - ☐ Niacinamide
  - ☐ Total Vitamin B_3
  - ☐ Total Vitamin B_3 by Microbiological Assay
- ☐ Vitamin B_5
  - ☐ Pantothenic Acid
  - ☐ Total Vitamin B_5 by Microbiological Assay
- ☐ Vitamin B_6
  - ☐ Pyridoxal/Pyridoxal Hydrochloride
  - ☐ Pyridoxamine/Pyridoxamine Dihydrochloride
  - ☐ Pyridoxine/Pyridoxine Hydrochloride
  - ☐ Total Vitamin B_6
  - ☐ Total Vitamin B_6 by Microbiological Assay
- ☐ Vitamin B_{12}
  - ☐ Cyanocobalamin
  - ☐ Total Vitamin B_{12} by Microbiological Assay

OMB Control #0693-0033
Expiration Date 03/31/2016

d. For which of the following fat-soluble vitamins has your laboratory used <SRM 1849a Infant/Adult Nutritional Formula>? This is an all-inclusive list. Some may be removed if there are no assigned values in the SRM being queried.

- ☐ Vitamin A
  - ☐ Retinol
  - ☐ Retinyl Palmitate
- ☐ Vitamin D
  - ☐ Cholecalciferol (Vitamin D_3)
  - ☐ Ergocalciferol (Vitamin D_2)
- ☐ Phylloquinone (Vitamin K)
- ☐ Vitamin E
  - ☐ α-Tocopherol
  - ☐ α-Tocopheryl Acetate
  - ☐ Total α-Tocopherol
  - ☐ β-Tocopherol
  - ☐ γ-Tocopherol
  - ☐ γ- + β-Tocopherol
  - ☐ δ-Tocopherol

e. For which of the following carotenoids has your laboratory used <SRM 1849a Infant/Adult Nutritional Formula>? This is an all-inclusive list. Some may be removed if there are no assigned values in the SRM being queried.

- ☐ α-Carotene
- ☐ β-Carotene
  - ☐ Total β-Carotene
  - ☐ *trans*-β-Carotene
  - ☐ 9-*cis*-β-Carotene
- ☐ Total β-cryptoxanthin
- ☐ Total Lutein
- ☐ Lycopene
  - ☐ *trans*-Lycopene
  - ☐ Total Lycopene
- ☐ Total Zeaxanthin

f. For which of the following proximates has your laboratory used <SRM 1849a Infant/Adult Nutritional Formula>? This is an all-inclusive list. Some may be removed if there are no assigned values in the SRM being queried.

- ☐ Ash
- ☐ Calories
- ☐ Carbohydrates
- ☐ Fat
  - ☐ Total Fat (sum of fatty acids)
  - ☐ Total Fat (extracted)
- ☐ Moisture
- ☐ Solids
- ☐ Dietary Fiber
  - ☐ Insoluble
  - ☐ Insoluble + High Molecular Weight Soluble
  - ☐ Low Molecular Weight Soluble
  - ☐ High Molecular Weight Soluble
  - ☐ High Molecular Weight Total
  - ☐ Soluble
  - ☐ Total

OMB Control #0693-0033
Expiration Date 03/31/2016

g. For which of the following fatty acids has your laboratory used <SRM 1849a Infant/Adult Nutritional Formula>? This is an all-inclusive list. Some may be removed if there are no assigned values in the SRM being queried.

- ☐ Butryic Acid (C4:0)
- ☐ Caproic Acid (C6:0)
- ☐ Caprylic Acid (C8:0)
- ☐ Capric Acid (C10:0)
- ☐ Undecanoic Acid (C11:0)
- ☐ Lauric Acid (C12:0)
- ☐ Tridecanoic Acid (C13:0)
- ☐ Myristic Acid (C14:0)
- ☐ Myristoleic Acid (C14:1 n-5)
- ☐ Pentadecanoic Acid (C15:0)
- ☐ Palmitic Acid (C16:0)
- ☐ Palmitoleic Acid (C16:1 n-7)
- ☐ *trans*-Palmitelaidic Acid (C16:1-9t)
- ☐ Hexadecadienoic Acid (C16:2)
- ☐ Margaric Acid (C17:0)
- ☐ Margaroleic Acid (C17:1 n-6)
- ☐ Stearic Acid (C18:0)
- ☐ Vaccenic Acid (C18:1 n-7)
- ☐ Oleic Acid (C18:1 n-9)
- ☐ *trans*-Vaccenic Acid (C18:1-11t)
- ☐ Elaidic Acid (C18:1-9t)
- ☐ Linoelaidic Acid (C18:2)
- ☐ 9,12-Octadecadienoic Acid (C18:2-9t)
- ☐ 9,12-Octadecadienoic Acid (C18:2-12t)
- ☐ Linoleic Acid (C18:2 n-6)
- ☐ α-Linolenic Acid (C18:3 n-3)
- ☐ γ-Linolenic Acid (C18:3 n-6)
- ☐ Stearidonic Acid (C18:4)
- ☐ Arachidic Acid (C20:0)
- ☐ Gadoleic Acid (C20:1 n-7)
- ☐ Gondoic Acid (C20:1 n-9)
- ☐ Eicosadienoic Acid (C20:2 n-6)
- ☐ Dihomo-γ-linolenic Acid (C20:3 n-6)
- ☐ 11,14,17-Eicosatrienoic Acid (C20:3 n-3)
- ☐ EPA (C20:4 n-3)
- ☐ Arachidonic Acid (C20:4 n-6)
- ☐ Heneicosanoic Acid (C21:0)
- ☐ Behenic Acid (C22:0)
- ☐ Erucic Acid (C22:1 n-9)
- ☐ 13,16-Docosadienoic Acid (C22:2)
- ☐ DPA (C22:5 n-3)
- ☐ DHA (C22:6 n-3)
- ☐ Lignoceric Acid (C24:0)
- ☐ Nervonic Acid (C24:1 n-9)
- ☐ *cis*-Monounsaturated Fat
- ☐ *cis*-Polyunsaturated Fat
- ☐ Saturated Fat
- ☐ Total *cis*-C18:1
- ☐ Total *cis*-C18:2
- ☐ Total *cis*-C20:1
- ☐ Total *cis*-C22:4
- ☐ Total *cis*-C22:5
- ☐ Total *trans* Fat
- ☐ Total *trans*-C18:1
- ☐ Total *trans*-C18:2
- ☐ Total *trans*-C18:2 Conjugated
- ☐ Total ω-3 Fatty Acids
- ☐ Total ω-6 Fatty Acids

h. For which of the following amino acids has your laboratory used <SRM 1849a Infant/Adult Nutritional Formula>? This is an all-inclusive list. Some may be removed if there are no assigned values in the SRM being queried.

- ☐ Alanine
- ☐ Arginine
- ☐ Aspartic Acid
- ☐ Cystine
- ☐ Glutamic Acid
- ☐ Glycine
- ☐ Histidine
- ☐ Hydroxyproline
- ☐ Isoleucine
- ☐ L-theanine
- ☐ Leucine
- ☐ Lysine
- ☐ Methionine
- ☐ Phenylalanine
- ☐ Proline
- ☐ Serine
- ☐ Taurine
- ☐ Threonine
- ☐ Tryptophan
- ☐ Tyrosine
- ☐ Valine

i. For which of the following sugars has your laboratory used <SRM 1849a Infant/Adult Nutritional Formula>? This is an all-inclusive list. Some may be removed if there are no assigned values in the SRM being queried.

- ☐ Fructose
- ☐ Glucose
- ☐ Lactose
- ☐ Maltose
- ☐ Sucrose
- ☐ Total Sugars

j. For which of the following other analytes has your laboratory used <SRM 1849a Infant/Adult Nutritional Formula>? This is an all-inclusive list. Some may be removed if there are no assigned values in the SRM being queried.

- ☐ Anions
  - ☐ Phosphate
  - ☐ Sulfate
- ☐ Catechins
  - ☐ Catechin
  - ☐ Catechin Monomers
  - ☐ Epicatechin
  - ☐ Epicatechin Gallate
  - ☐ Epigallocatechin
  - ☐ Epigallocatechin Gallate
  - ☐ Gallocatechin Gallate
  - ☐ Gallic Acid
  - ☐ Gallocatechin
  - ☐ Epigallocatechin Methylgallate
- ☐ Cholesterol
- ☐ Isoflavones
  - ☐ Daidzein
  - ☐ Daidzin
  - ☐ Genistein
  - ☐ Genistin
  - ☐ Glycitein
  - ☐ Glycitin
- ☐ Flavonoid Aglycones
  - ☐ Quercetin
  - ☐ Kaempferol
  - ☐ Isorhamnetin
  - ☐ Total
- ☐ Naphthodianthrones
  - ☐ Hypericin
  - ☐ Pseudohypericin
- ☐ Organic Acids
  - ☐ Ascorbic Acid
  - ☐ Citric Acid
  - ☐ Galacturonic Acid
  - ☐ Glycolic Acid
  - ☐ Isocitric Acid
  - ☐ Malic Acid
  - ☐ Oxalic Acid
  - ☐ Quinic Acid
  - ☐ Shikimic Acid
  - ☐ Tartaric Acid
- ☐ Phytosterols
  - ☐ Campesterol
  - ☐ β-Sitosterol
  - ☐ Stigmasterol
  - ☐ Cycloartenol
  - ☐ Brassicasterol
  - ☐ Lupeol
- ☐ Xanthines
  - ☐ Caffeine
  - ☐ Theobromine
  - ☐ Theophylline
  - ☐ L-theanine
- ☐ Terpene Lactones
  - ☐ Ginkgolide A
  - ☐ Ginkgolide B
  - ☐ Ginkgolide C
  - ☐ Ginkgolide J
  - ☐ Bilobalide
- ☐ Total Antioxidant Capacity
- ☐ Total Polyphenols
- ☐ Total Procyanidins

2. Please list any other analytes or analyte groups that would be beneficial to have assigned in <SRM 1849a Infant/Adult Nutritional Formula>. Click here to enter text.

3. Please describe other ways that <SRM 1849a Infant/Adult Nutritional Formula> could better suit your needs. Click here to enter text.

4. Please describe other ways that <SRM 1849a Infant/Adult Nutritional Formula> could better suit your needs. Click here to enter text.

The coordinators of the NIST Food and Nutrition Reference Materials Program thank you for your participation in this questionnaire.