

Supplementary Data

Soy-Based Diet Exacerbates Seizures in Mouse Models of Neurological Disease

Cara J. Westmark*, Pamela R. Westmark and James S. Malter¹

Waisman Center for Developmental Disabilities, University of Wisconsin, Madison, WI, USA

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Supplementary Table 1

| Diet ^a | Composition of purified diets | | | |
|---------------------------------------|-------------------------------|--------------------------|------------------------|-----------------------|
| | D07030301 | D07030304 (+Soy Protein) | D09080401 (+Genistein) | D09080402 (+Daidzein) |
| Ingredient (g/kg) | | | | |
| Casein, 80 mesh | 177 | 0 | 177 | 177 |
| Soy protein ^b , SUPRO® 661 | 0 | 177 | 0 | 0 |
| DL-methionine | 0 | 2.9 | 0 | 0 |
| L-cystine | 2.9 | 0 | 2.9 | 2.9 |
| Corn starch | 423 | 423 | 423 | 423 |
| Maltodextrin 10 | 122.7 | 122.7 | 122.7 | 122.7 |
| Inulin | 24.5 | 24.5 | 24.5 | 24.5 |
| Cellulose, BW200 | 73.6 | 73.6 | 73.6 | 73.6 |
| Soybean oil | 115.8 | 115.8 | 115.8 | 115.8 |
| Choline bitartrate | 2 | 2 | 2 | 2 |
| Mineral mix S10026B ^c | 49.1 | 49.1 | 49.1 | 49.1 |
| Vitamin mix V10001 ^d | 9.8 | 9.8 | 9.8 | 9.8 |
| Genistein | 0 | 0 | 0.750 | 0 |
| Daidzein | 0 | 0 | 0 | 0.750 |
| Dye ^e | 0 | 0.05 | 0.05 | 0.05 |

^aPurified diets were formulated by Research Diets, Inc. (New Brunswick, NJ), catalog numbers: purified diet (D07030301), purified diet with soy protein substituted for casein protein (D07030304), purified diet supplemented with genistein (D09080401) and purified diet supplemented with daidzein (D09080402). ^bSolae isolated soy protein, SUPRO® 661. ^cMineral mix ingredients (g/kg): calcium phosphate, dibasic, 29.5% calcium, 22.8% phosphate (260 g); calcium carbonate, 39.3% calcium (110 g); potassium citrate, 1 H₂O, 36.2% potassium (330 g); sodium chloride, 39.3% sodium, 60.7% chlorine (51.8 g); magnesium oxide, 60.3% magnesium (8.38 g); magnesium sulfate, 7 H₂O, 9.87% magnesium, 13.0% sulfur (51.52 g); chromium K sulfate, 12 H₂O, 10.4% chromium (385 mg); cupric carbonate, 57.5% copper (210 mg); sodium fluoride, 45.2% fluoride (40 mg); potassium iodate, 59.3% iodine (7 mg); ferric citrate, 21.2% iron (4.2 g); manganous carbonate, 47.8% manganese (2.45 g); ammonium molybdate, 4 H₂O, 54.3% molybdenum (60 mg); sodium selenite, 45.7% selenium (7 mg); zinc carbonate, 52.1% zinc (1.12 g); and sucrose (179.821 g) to 1 kg. ^dVitamin mix ingredients (g/kg): vitamin A palmitate, 500,000 IU/g (0.8 g), vitamin D₃, 100,000 IU/g (1.0 g), vitamin E acetate, 500 IU/g (10.0 g), menadione sodium bisulfite, 62.5% menadione (80 mg), biotin, 1.0% (2.0 g), cyanocobalamin, 0.1% (1.0 g), folic acid (0.2 g), nicotinic acid (3.0 g), calcium pantothenate (1.6 g), pyridoxine-HCl (0.7 g), riboflavin (0.6 g), thiamin HCl (0.6 g) and sucrose (978.42 g) to 1 kg. ^eDiets were colored with FD&C red dye #40 (D07030304 and D09080401) or with FD&C blue dye #1 (D09080402).

¹Present address: Department of Pathology, University of Texas Southwestern Medical Center, Dallas, TX, USA.

*Correspondence to: Dr. Cara J. Westmark, Waisman Center for Developmental Disabilities, Room T507, 1500 Highland Avenue, Madison, WI 53705, USA. Tel.: +1 608 262 9730; E-mail: westmark@wisc.edu.