

# Vitaflo™ USA Product Guide



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**Vitaflo** is at the forefront of developing innovative specialized medical foods for Inherited Metabolic Diseases, Kidney Disease, and the medical Ketogenic Diet. Our aim is to create nutritional products that combine cutting-edge research with the lifestyle demands of modern living, ensuring the most acceptable products are available for nutrition management.

By constantly evolving to meet the nutrition needs of people with rare conditions, **Vitaflo** will continue to develop products which offer choice, flexibility and convenience to support a sustainable therapeutic diet.



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Vitafo products are for use under medical supervision.

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Vitafo products are for use under medical supervision.



## Formula4Success®

The Formula4Success® program offers step-by-step, detailed information to support getting **Vitaflo** products. Whether it's navigating insurance, finding distributors or suppliers, we can help.

No cost

Benefit investigation

Claim support

Product access

## Enrollment is simple.

- 1 Fill out the [Online Enrollment Form](#) or download the [Enrollment Form](#) at [VitafloUSA.com/Formula4Success](https://VitafloUSA.com/Formula4Success) for your formula needs. For Spanish speakers: [Spanish Enrollment Form](#)
- 2 Patients should work with the healthcare professional to complete the form\*, sign the **patient privacy statement**, and include a front and back copy of all active health insurance cards
- 3 Email [Formula4Success@VitafloUSA.com](mailto:Formula4Success@VitafloUSA.com) or fax the completed form and documents\*\* to **888-485-7193**

\* All fields must be filled out to complete the enrollment process.

\*\* You can click [here](#) to access the Detailed Written Order (DWO) and [here](#) for Letters of Medical Necessity (LOMN) templates, or download them at [VitafloUSA.com/Formula4Success](https://VitafloUSA.com/Formula4Success) then send them via email along with recent and/or relevant clinical notes and labs to the **Formula4Success** team.



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Visit [VitafloUSA.com/Formula4Success](https://VitafloUSA.com/Formula4Success) or call **800-520-6112**

Fruitivits and Single Dose Amino Acids are not eligible for **Formula4Success**.

## METABOLIC PRODUCTS



**Amino Acid-based Powdered Phenylalanine-free Infant Formula with Iron for use in the dietary management of Phenylketonuria (PKU) for infants and toddlers.**



**Features**

- Suitable for infants and toddlers
- Up-to-date nutritional profile: Containing all essential vitamins and minerals
  - Consistent with scientific evidence in infant formula nutrition<sup>1-3</sup> and PKU management<sup>4</sup>
  - Includes DHA and ARA to help support brain and eye development<sup>5,6</sup>
- Well tolerated: Infants with PKU demonstrate good tolerance, growth, and metabolic control in clinical evaluations<sup>7</sup>

**Osmolality**

435 mOsm/kg

**Osmolarity**

393 mOsm/L

See [page 99](#) for directions for use

**Ordering/Reimbursement Information**

Flavor	Packaging	Reimbursement Code	HCPSC Code	Product Code
Unflavored	4 x 400 g cans	12539-0025-90	B4162	812539025900

**PKU start — Ingredients:** Dried Glucose Syrup, Vegetable Oil (High Oleic Sunflower, Canola, Sunflower), Potato Starch, L-Lysine L-Aspartate, and less than 2% of: L-Leucine, Calcium Glycerophosphate, L-Tyrosine, L-Arginine L-Aspartate, Glycine, Citric Acid Esters of Mono- and Diglycerides, L-Valine, L-Proline, L-Threonine, L-Glutamine, L-Isoleucine, Potassium Chloride, L-Serine, L-Alanine, L-Histidine, Calcium Citrate, Sodium Phosphate, Trisodium Citrate, Choline Bitartrate, L-Cystine, L-Tryptophan, M. Alpina Oil\*, Potassium Citrate, L-Methionine, Schizochytrium Oil\*\*, Citric Acid, Sodium Ascorbate, Magnesium Oxide, Inositol, Taurine, Ferrous Sulfate, Zinc Sulfate, L-Carnitine, Mixed Tocopherols, L-Ascorbyl Palmitate, Niacinamide, DL-Alpha Tocopheryl Acetate, Calcium Pantothenate, Copper Sulfate, Vitamin A Acetate, Manganese Sulfate, Pyridoxine Hydrochloride, Thiamine Mononitrate, Riboflavin, Potassium Iodide, Folic Acid, Sodium Selenate, Chromium Chloride, Sodium Molybdate, Vitamin K1, Biotin, Vitamin D3, Vitamin B12.

\*A source of arachidonic acid (ARA)

\*\*A source of docosahexaenoic acid (DHA)

**References:**

<sup>1</sup>EFSA NDA Panel, Scientific Opinion on the essential composition of infant and follow-on formulae. *EFSA Journal*. 2014; 12(7):3760.

<sup>2</sup>Raiten D, Talbot J, Waters J. Assessment of nutrient requirements for infant formulas: [LSRO report]. *J Nutr*. 1998; 28(11).

<sup>3</sup>Koletzko B, Baker S, Cleghorn G, et al. Global standard for the composition of infant formula: recommendations of an ESPGHAN coordinated international expert group. *J Pediatr Gastroenterol Nutr*. 2005; 41(5): 584-99.

<sup>4</sup>Singh RH, Cunningham AC, Mofidi S, et al. Updated, web-based nutrition management guideline for PKU: An evidence and consensus based approach. *Mol Genet Metab*. 2016; 118(2):72-83.

<sup>5</sup>Birch EE, et al. The DIAMOND (DHA Intake and Measurement Of Neural Development) Study: a double-masked, randomized controlled clinical trial of the maturation of infant visual acuity as a function of the dietary level of docosahexaenoic acid. *Am J Clin Nutr*. 2010; 91(4):848-59.

<sup>6</sup>Agostoni C, et al. Plasma long-chain polyunsaturated fatty acids and neurodevelopment through the first 12 months of life in phenylketonuria. *Dev Med Child Neurol*. 2003; 45(4):257-61.

<sup>7</sup>Yilmaz O, Cochrane B, Wildgoose J, et al. Phenylalanine free infant formula in the dietary management of phenylketonuria. *Orphanet J Rare Dis*. 2023; 18:16.

**PKU start Nutrition Information**

	Units	per 100 g	per 100 kcal
Calories	kcal	490	100
Protein Equivalent	g	14.3	2.9
L-Phenylalanine	mg	-	-
Total Carbohydrate	g	52	10.6
Total Fat	g	25	5
Docosahexaenoic acid (DHA)	mg	110	22
Arachidonic acid (ARA)	mg	110	22
Linoleic Acid	mg	3200	650
<b>VITAMINS</b>			
Vitamin A	IU/mcg	1370/411	276/84
Vitamin D	IU/mcg	400/10	81/2.0
Vitamin E	IU/mg	13/9	2.7/1.8
Vitamin K	mcg	35	7
Thiamine	mcg	350	71
Riboflavin	mcg	445	90
Vitamin B6	mcg	380	77
Vitamin B12	mcg	1.1	0.22
Niacin	mcg	3300	673
Folic Acid	mcg	68	13.8
Pantothenic Acid	mcg	2400	485
Biotin	mcg	18	3.6
Vitamin C	mg	54	11
Choline	mg	137	27.7
Inositol	mg	53	10.7
<b>MINERALS</b>			
Calcium	mg	370	75
Phosphorus	mg	290	59
Magnesium	mg	45	9.0
Iron	mg	7.4	1.5
Zinc	mg	5.8	1.18
Manganese	mcg	220	45
Copper	mcg	380	77
Iodine	mcg	97	19
Selenium	mcg	18	3.8
Chromium	mcg	13	2.6
Molybdenum	mcg	14	2.8
Sodium	mg	190	39
Potassium	mg	510	104
Chloride	mg	355	72
<b>AMINO ACIDS</b>			
L-Alanine	g	0.63	
L-Arginine	g	0.91	
L-Aspartic acid	g	1.67	
L-Cystine	g	0.39	
L-Glutamine	g	1.11	
Glycine	g	1.6	
L-Histidine	g	0.63	
L-Isoleucine	g	1.1	
L-Leucine	g	1.72	
L-Lysine	g	1.07	
L-Methionine	g	0.30	
L-Proline	g	1.15	
L-Serine	g	0.71	
L-Threonine	g	1.11	
L-Tryptophan	g	0.35	
L-Tyrosine	g	1.62	
L-Valine	g	1.27	
<b>OTHER</b>			
Taurine	mg	3.70	
L-Carnitine	mg	13	



# explore<sup>5</sup>

## A powdered phenylalanine-free medical food for use in the dietary management of Phenylketonuria.

### Features

- Suitable from 6 months of age
- A blend of essential and non-essential amino acids, carbohydrate, arachidonic acid (ARA), docosahexaenoic acid (DHA), vitamins and minerals
- 1 packet provides 5 g protein equivalent
- Designed to form a semi-solid (spoonable) consistency when mixed with water to support introduction of solids in the PKU diet
- Available in Unflavored

See [page 100](#) for directions for use



### Ordering/Reimbursement Information

Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	30 x 12.5 g packets	12539-0024-65	B4157 & B4162	812539024651

### PKU explore<sup>5</sup> (Unflavored) — Ingredients:

Sugar, L-Lysine L-Aspartate, Corn Starch, Modified Corn Starch, L-Leucine, L-Tyrosine, Glycine, L-Arginine Aspartate, L-Glutamine, L-Valine, L-Proline, L-Threonine, L-Isoleucine, Dried Glucose Syrup, Calcium Phosphate, L-Serine, L-Alanine, L-Histidine, Choline Bitartrate, L-Cystine, Magnesium Phosphate, L-Tryptophan, Potassium Chloride, L-Methionine, L-Arginine, High Oleic Sunflower Oil, Refined Tuna Oil (Fish), Calcium Glycerophosphate, Maltodextrin, Sodium Citrate, Sodium Ascorbate, M. Alpina Oil\*, Salt, Taurine, Zinc Gluconate, L-Carnitine L-Tartrate, Potassium Phosphate, Ferrous Sulfate, Mono- and Diglycerides, DL-Alpha Tocopheryl Acetate, Vitamin D3, Calcium Pantothenate, Niacinamide, Sodium Selenite, Copper Gluconate, Retinyl Acetate, Vitamin B12, Chromium Chloride, Folic Acid, Biotin, Potassium Iodide, Manganese Gluconate, Riboflavin, Pyridoxine Hydrochloride, Thiamine Hydrochloride, Sodium Molybdate, Vitamin K1, Tocopherols, Ascorbyl Palmitate.

**Contains:** Fish (tuna). **May contain:** Milk.

\*A source of arachidonic acid (ARA).

### PKU explore<sup>5</sup> Nutrition Information

	Units	per 100 g	per 12.5 g (1 packet)
Calories	kcal	342	43
Protein equivalent	g	40	5.0
Total Carbohydrate	g	42	5.2
Sugars	g	28	3.5
Total Fat	g	1.5	0.2
Saturated Fat	g	0.7	0.09
Arachidonic Acid (ARA)	mg	280	35
Docosahexaenoic Acid (DHA)	mg	140	17
<b>VITAMINS</b>			
Vitamin A	mcg RE	470	59
Vitamin D	mcg	24	3.0
Vitamin E	mg α TE	8.7	1.1
Vitamin C	mg	80	10
Vitamin K	mcg	24	3.0
Thiamin	mg	0.90	0.11
Riboflavin	mg	1.4	0.17
Niacin	mg	6.2	0.77
Vitamin B6	mg	1.0	0.12
Folic acid	mcg	200	25
Vitamin B12	mcg	3.3	0.41
Biotin	mcg	21	2.6
Pantothenic acid	mg	6.6	0.82
Choline	mg	405	51
<b>MINERALS</b>			
Sodium	mg	200	25
Potassium	mg	450	56
Chloride	mg	450	56
Calcium	mg	1100	137
Phosphorus	mg	650	81
Magnesium	mg	120	15
Iron	mg	14.2	1.8
Copper	mg	0.72	0.09
Zinc	mg	10.0	1.2
Manganese	mg	0.23	0.03
Iodine	mcg	134	17
Molybdenum	mcg	36	4.5
Selenium	mcg	28	3.5
Chromium	mcg	27	3.4
<b>AMINO ACIDS</b>			
L-Alanine	g	1.71	0.21
L-Arginine	g	2.76	0.35
L-Aspartic acid	g	4.38	0.55
L-Cystine	g	1.11	0.14
L-Glutamine	g	3.45	0.43
Glycine	g	4.36	0.55
L-Histidine	g	1.70	0.21
L-Isoleucine	g	2.98	0.37
L-Leucine	g	4.69	0.59
L-Lysine	g	3.10	0.39
L-Methionine	g	0.83	0.10
L-Phenylalanine*	g	0	0
L-Proline	g	3.12	0.39
L-Serine	g	1.94	0.24
L-Threonine	g	3.03	0.38
L-Tryptophan	g	0.94	0.12
L-Tyrosine	g	4.40	0.55
L-Valine	g	3.45	0.43
L-Carnitine	mg	44	5.5
Taurine	mg	88	11

\*No added phenylalanine.



# explore<sup>TM</sup>10

**A powdered phenylalanine-free medical food for use in the dietary management of Phenylketonuria.**

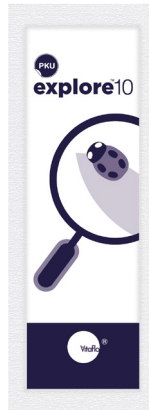
### Features

- Suitable from 1 year of age
- A blend of essential and non-essential amino acids, carbohydrate, arachidonic acid (ARA), docosahexaenoic acid (DHA), vitamins and minerals
- 1 packet provides 10 g protein equivalent
- Designed to form a semi-solid (spoonable) consistency when mixed with water to support introduction of solids in the PKU diet
- Available in Orange and Raspberry flavors

### Osmolality when prepared as a low volume drink:

25 g (1 packet) + 80 ml (2.7 fl oz) water = 1550 mOsm/kg

See [page 100](#) for directions for use



### Ordering/Reimbursement Information

Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Raspberry	30 x 25 g packets	12539-0024-67	B4157 & B4162	812539024675
Orange		12539-0024-66		812539024668

**PKU explore10 (Orange) – Ingredients:** Sugar, L-Lysine L-Aspartate, Corn Starch, Modified Corn Starch, L-Leucine, L-Tyrosine, Glycine, L-Arginine L-Aspartate, L-Glutamine, L-Valine, L-Proline, L-Threonine, L-Isoleucine, Dried Glucose Syrup, Calcium Phosphate, Citric Acid, L-Serine, L-Alanine, L-Histidine, Choline Bitartrate, Natural Flavor, L-Cystine, Magnesium Phosphate, L-Tryptophan, Potassium Chloride, L-Methionine, L-Arginine, High Oleic Sunflower Oil, Refined Tuna Oil (Fish)\*, Calcium Glycerophosphate, Maltodextrin, Sodium Citrate, Sodium Ascorbate, M. Alpina Oil\*\*, Salt, Taurine, Zinc Gluconate, L-Carnitine L-Tartrate, Potassium Phosphate, Ferrous Sulfate, Mono- and Diglycerides, DL-Alpha Tocopheryl Acetate, Dipotassium Phosphate, Vitamin D3, Calcium Pantothenate, Niacinamide, Sodium Selenite, Copper Gluconate, Retinyl Acetate, Vitamin B12, Chromium Chloride, Folic Acid, Biotin, Potassium Iodide, Manganese Gluconate, Riboflavin, Pyridoxine Hydrochloride, Thiamine Hydrochloride, Sodium Molybdate, Vitamin K1, Tocopherols, Ascorbyl Palmitate.

**Contains:** Fish (tuna). **May contain:** Milk.

**Ingredient lists for all flavored options are available at [VitaflouUSA.com](http://VitaflouUSA.com)**

**\*A source of docosahexaenoic acid (DHA).**

**\*\*A source of arachidonic acid (ARA).**

### PKU explore10 Nutrition Information

	Units	per 100 g	per 25 g (1 packet)
Calories	kcal	330	83
Protein equivalent	g	40	10
Total Carbohydrate	g	39	9.8
Sugars	g	25	6.3
Total Fat	g	1.5	0.4
Saturated Fat	g	0.7	0.17
Arachidonic Acid (ARA)	mg	280	70
Docosahexaenoic Acid (DHA)	mg	140	35
<b>VITAMINS</b>			
Vitamin A	mcg RE	470	117
Vitamin D	mcg	24	6.0
Vitamin E	mg α TE	8.7	2.2
Vitamin C	mg	80	20
Vitamin K	mcg	24	6.0
Thiamin	mg	0.90	0.22
Riboflavin	mg	1.4	0.35
Niacin	mg	6.2	1.5
Vitamin B6	mg	1.0	0.25
Folic acid	mcg	200	50
Vitamin B12	mcg	3.3	0.82
Biotin	mcg	21	5.2
Pantothenic acid	mg	6.6	1.6
Choline	mg	405	101
<b>MINERALS</b>			
Sodium	mg	200	50
Potassium	mg	450	112
Chlo	mg	450	112
Calcium	mg	1100	275
Phosphorus	mg	650	162
Magnesium	mg	120	30
Iron	mg	14.2	3.5
Copper	mg	0.72	0.18
Zinc	mg	10.0	2.5
Manganese	mg	0.23	0.06
Iodine	mcg	134	33
Molybdenum	mcg	36	9.0
Selenium	mcg	28	7.0
Chromium	mcg	27	6.7
<b>AMINO ACIDS</b>			
L-Alanine	g	1.71	0.43
L-Arginine	g	2.76	0.69
L-Aspartic acid	g	4.38	1.10
L-Cystine	g	1.11	0.28
L-Glutamine	g	3.45	0.86
Glycine	g	4.36	1.09
L-Histidine	g	1.70	0.43
L-Isoleucine	g	2.98	0.75
L-Leucine	g	4.69	1.17
L-Lysine	g	3.10	0.78
L-Methionine	g	0.83	0.21
L-Phenylalanine*	g	0	0
L-Proline	g	3.12	0.78
L-Serine	g	1.94	0.49
L-Threonine	g	3.03	0.76
L-Tryptophan	g	0.94	0.24
L-Tyrosine	g	4.40	1.10
L-Valine	g	3.45	0.86
L-Carnitine	mg	44	11
Taurine	mg	88	22

\*No added phenylalanine.

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**A powdered phenylalanine-free medical food for use in the dietary management of Phenylketonuria.**

**Features**

- Suitable from 1 year of age
- A blend of essential and non-essential amino acids, carbohydrate, fat (including docosahexaenoic acid – DHA), vitamins and minerals
- 2 level scoops (33 g) provide 10 g protein equivalent
- Available in Unflavored and Vanilla flavor



**Osmolality**

Unflavored: 33 g (2 scoops) + 135 ml (4.5 fl oz) water = 815 mOsm/kg

Vanilla: 33 g (2 scoops) + 135 ml (4.5 fl oz) water = 862 mOsm/kg

See [page 101](#) for directions for use

Ordering/Reimbursement Information				
Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	6 x 400 g can	60014-0051-80	B4157 & B4162	5060014051806
Vanilla		60014-0051-81		5060014051813

**PKU trio (Unflavored) – Ingredients:** Dried Glucose Syrup, Blend of Vegetable Oils (High Oleic Sunflower Oil, Soybean Oil), L-Lysine L-Aspartate, L-Leucine, L-Tyrosine, Glycine, Calcium Phosphate, L-Arginine Aspartate, L-Valine, L-Glutamine, L-Proline, L-Threonine, L-Isoleucine, L-Serine, Sodium Citrate, Potassium Chloride, L-Alanine, L-Histidine, Magnesium Hydrogen Phosphate, Choline Bitartrate, L-Cystine, L-Tryptophan, Maltodextrin, C.cohnii Oil\*, L-Methionine, L-Arginine, Citric Acid Esters of Mono and Di-Glycerides of Fatty Acids, Xanthan Gum, Magnesium Acetate, Sodium Caseinate (Milk), Sodium Ascorbate, Zinc Gluconate, Inositol, Taurine, Sodium Ascorbate (Preservative), L-Carnitine L-Tartrate, Ferrous Sulfate, Potassium Phosphate, DL-Alpha Tocopheryl Acetate, Mono And Diglycerides Of Fatty Acids, Manganese Gluconate, Nicotinamide, Vitamin D3, Copper Gluconate, Retinyl Acetate, Calcium Pantothenate, Pyridoxine Hydrochloride, Thiamin Hydrochloride, Riboflavin, Vitamin K (Phylloquinone), Folic Acid (Pteroylmonoglutamic Acid), Chromium Chloride, Potassium Iodine, Sodium Molybdate, Sodium Selenite, Biotin, Vitamin B12, Tocopherol (Preservative), Ascorbyl Palmitate (Preservative).

**Contains:** Milk.

**Ingredient lists for all flavored options are available at [VitaflorUSA.com](http://VitaflorUSA.com)**

**\*A source of docosahexaenoic acid (DHA).**

PKU trio Nutrition Information					
	Units	Unflavored		Flavored	
		per 100 g	per 16.5 g (1 scoop)	per 100 g	per 16.5 g (1 scoop)
Calories	kcal	405	67	405	67
Protein equivalent	g	30	5.0	30	5.0
Total Carbohydrate	g	38.9	6.4	38.9	6.4
Sugars	g	3.8	0.6	3.8	0.6
Total Fat	g	14.3	2.4	14.3	2.4
<b>VITAMINS</b>					
Vitamin A	mcg RE	416	68.6	416	68.6
Vitamin D	mcg	15	2.5	15	2.5
Vitamin E	mg α TE	7.8	1.3	7.8	1.3
Vitamin C	mg	54	8.9	54	8.9
Vitamin K	mcg	50	8.3	50	8.3
Thiamin	mg	1.0	0.17	1.0	0.17
Riboflavin	mg	1.2	0.20	1.2	0.20
Niacin	mg	8.5	1.4	8.5	1.4
Vitamin B6	mg	1.4	0.23	1.4	0.23
Folic acid	mcg	280	46.2	280	46.2
Vitamin B12	mcg	2.4	0.40	2.4	0.40
Biotin	mcg	60	9.9	60	9.9
Pantothenic acid	mg	4.0	0.66	4.0	0.66
Choline	mg	300	49.5	300	49.5
Inositol	mg	60	9.9	60	9.9
<b>MINERALS</b>					
Sodium	mg	360	59.4	360	59.4
Potassium	mg	522	86.1	522	86.1
Chloride	mg	460	75.9	460	75.9
Calcium	mg	850	140	850	140
Phosphorus	mg	624	103	624	103
Magnesium	mg	150	24.8	150	24.8
Iron	mg	10.8	1.8	10.8	1.8
Copper	mcg	900	149	900	149
Zinc	mg	10.8	1.8	10.8	1.8
Manganese	mg	1.6	0.26	1.6	0.26
Iodine	mcg	126	20.8	126	20.8
Molybdenum	mcg	72	11.9	72	11.9
Selenium	mcg	38	6.3	38	6.3
Chromium	mcg	44	7.3	44	7.3
<b>AMINO ACIDS</b>					
L-Alanine	g	116	0.19	116	0.19
L-Arginine	g	1.87	0.31	1.87	0.31
L-Aspartic acid	g	2.96	0.49	2.96	0.49
L-Cystine	g	0.75	0.12	0.75	0.12
L-Glutamine	g	2.29	0.38	2.29	0.38
Glycine	g	2.95	0.49	2.95	0.49
L-Histidine	g	1.15	0.19	1.15	0.19
L-Isoleucine	g	2.02	0.33	2.02	0.33
L-Leucine	g	3.17	0.52	3.17	0.52
L-Lysine	g	2.09	0.34	2.09	0.34
L-Methionine	g	0.56	0.09	0.56	0.09
L-Phenylalanine*	g	0	0	0	0
L-Proline	g	2.11	0.35	2.11	0.35
L-Serine	g	1.32	0.22	1.32	0.22
L-Threonine	g	2.05	0.34	2.05	0.34
L-Tryptophan	g	0.64	0.11	0.64	0.11
L-Tyrosine	g	2.98	0.49	2.98	0.49
L-Valine	g	2.34	0.39	2.34	0.39
L-Carnitine	mg	32	5.3	32	5.3
Taurine	mg	64	11	64	11

\*No added phenylalanine.





**Ready-to-drink low Phenylalanine Medical Food for use in the dietary management of Phenylketonuria.**

**Features**

- Suitable for ages 1 year and over
- A blend of whey protein isolate (glycomacropeptide – GMP), essential and non-essential amino acids, carbohydrate, fat (including docosahexaenoic acid – DHA), vitamins and minerals.
- 1 bottle provides 15 g protein equivalent from GMP and amino acids
- Available in Creamy, Neutral flavor
- Each bottle of **PKU sphere NEXT15** contains 23 mg of phenylalanine.



**Osmolality**

640 mOsm/kg

See page 103 for directions for use

**Ordering/Reimbursement Information**

Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Neutral	15 x 180 mL	12539-0026-00	B4157 & B4162	26006

**PKU sphere™ NEXT15 (Neutral) – Ingredients:** Water, Casein glycomacropeptide (milk), Sugar, Vegetable oils (High oleic sunflower oil, Canola oil). Contains 2% or less of: L-leucine, L-tyrosine, Calcium phosphate, Citric acid esters of mono- and diglycerides, Mono and diglycerides of fatty acids, Natural flavors, Magnesium acetate, L-arginine, L-histidine, Glycine, Choline bitartrate, L-tryptophan, Xanthan gum, L-cystine, Schizochytrium sp. oil\*, Ascorbic acid, Potassium hydroxide, Zinc gluconate, Taurine, L-carnitine L-tartrate, Ferrous sulfate, L-methionine, Vitamin D3, DL-alpha tocopheryl acetate, Copper gluconate, Niacinamide, Retinyl Acetate, Manganese gluconate, Pantothenic acid, Sodium selenite, Vitamin K1, Biotin, Vitamin B12, Folic acid, Potassium iodide, Thiamine hydrochloride, Chromium chloride, Vitamin B6, Riboflavin, Sodium molybdate, Ascorbyl palmitate and Tocopherols (preservatives).

**Contains:** Milk.

\*A source of docosahexaenoic acid (DHA).

**PKU sphere NEXT15 Nutrition Information**

	Units	per 100 mL	per 180 mL (1 bottle)
Calories	kcal	90	161
Protein Equivalent	g	8.4	15
L-Phenylalanine	mg	13	23
Total Carbohydrate	g	4.3	7.7
Sugars	g	3.9	7.0
Total Fat	g	4.3	7.7
Saturated Fat	g	0.8	1.4
Docosahexaenoic Acid	mg	47	85
<b>VITAMINS</b>			
Vitamin A	µg RE	100	180
Vitamin D	µg	3.8	6.8
Vitamin E	mg α TE	1.4	2.5
Vitamin C	mg	10	18
Vitamin K	µg	9	16
Thiamin	mg	0.23	0.41
Riboflavin	mg	0.29	0.52
Niacin	mg	1.3	2.3
Vitamin B6	mg	0.23	0.41
Folic Acid	µg	40	72
Vitamin B12	µg	0.6	1.1
Pantothenic acid	mg	0.8	1.4
Biotin	µg	7.6	13.7
Choline	mg	76	137
<b>MINERALS</b>			
Sodium	mg	125	225
Potassium	mg	108	194
Chloride	mg	2.3	4.1
Calcium	mg	249	448
Phosphorus	mg	154	277
Magnesium	mg	44	79
Iron	mg	2.9	5.2
Copper	mg	0.23	0.41
Zinc	mg	2.2	4
Manganese	µg	144	259
Iodine	µg	34	61
Molybdenum	µg	7.7	14
Selenium	µg	12	22
Chromium	mg	3.8	6.8
Taurine	mg	16	29
Carnitine	mg	7.9	14
<b>AMINO ACIDS</b>			
L-Alanine	g	0.35	0.63
L-Arginine	g	0.41	0.74
L-Aspartic Acid	g	0.57	1.03
L-Cystine	g	0.12	0.22
L-Glutamine	g	1.14	2.05
Glycine	g	0.30	0.54
L-Histidine	g	0.30	0.54
L-Isoleucine	g	0.60	1.08
L-Leucine	g	1.27	2.29
L-Lysine	g	0.49	0.88
L-Methionine	g	0.12	0.22
L-Phenylalanine	mg	13	23
L-Proline	g	0.68	1.22
L-Serine	g	0.43	0.77
L-Threonine	g	0.97	1.75
L-Tryptophan	g	0.17	0.31
L-Tyrosine	g	0.95	1.71
L-Valine	g	0.48	0.86



**A ready-to-drink glycomacropeptide (GMP)-based low phenylalanine\* medical food for use in the dietary management of Phenylketonuria.**

**Features**

- Suitable from 3 years of age
- A blend of GMP, essential and non-essential amino acids, carbohydrate, fat (including docosahexaenoic acid – DHA), vitamins and minerals
- 1 carton provides 20 g protein equivalent from GMP and amino acids
- Available in Vanilla flavor

\* Each carton of PKU sphere liquid contains 30 mg of phenylalanine.

**Osmolality**

420 mOsm/kg

See page 104 for directions for use

Ordering/Reimbursement Information				
Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Vanilla	15 x 237 ml (8 fl oz) cartons	12539-0025-84	B4157 & B4162	812539025849

**PKU sphere20 liquid (Vanilla) – Ingredients:** Water, Whey Protein Isolate (Milk). Contains 2% or Less of: Sugar, Natural and Artificial Flavor, L-Leucine, L-Tyrosine, L-Arginine, Magnesium Phosphate, Calcium Phosphate, Canola Lecithin, L-Histidine, Calcium Lactate, Cellulose Gel and Gum, Choline Bitartrate, Glycine, L-Tryptophan, Schizochytrium Sp Oil\*, L-Cystine, L-Lysine, L-Aspartate, Ascorbic Acid, Maltodextrin, Zinc Sulfate, Sucralose, Ferrous Sulfate, L-Methionine, High Oleic Sunflower Oil, DL-Alpha Tocopheryl Acetate, Copper Gluconate, Niacinamide, Manganese Gluconate, Calcium Pantothenate, Thiamine Hydrochloride, Pyridoxine Hydrochloride, Riboflavin, Vitamin A Palmitate, Folic Acid, Potassium Iodide, Sodium Selenite, Sodium Molybdate, Chromium Chloride, Vitamin K1, Biotin, Vitamin D3, Vitamin B12, Ascorbyl Palmitate (Preservative), Tocopherols (Preservative), Dimethylpolysiloxane.

**Contains:** Milk.

**\*\*A source of docosahexaenoic acid (DHA).**

PKU sphere20 liquid Nutrition Information			
	Units	per 100 ml	per 237 ml (1 carton)
Calories	kcal	50	120
Protein Equivalent	g	8.3	20
Total Carbohydrate	g	2.8	6.6
Sugars	g	1.8	4.3
Total Fat	g	0.5	1.2
Saturated Fat	g	0	0
Docosahexaenoic Acid (DHA)	mg	46	109
<b>VITAMINS</b>			
Vitamin A	mcg RE	110	261
Vitamin D	mcg	2.1	5.0
Vitamin E	mg α TE	1.6	3.8
Vitamin C	mg	9.2	22
Vitamin K	mcg	9.7	23
Thiamin	mg	0.25	0.59
Riboflavin	mg	0.25	0.59
Niacin	mg	1.4	3.3
Vitamin B6	mg	0.21	0.50
Folic Acid	mcg	43	102
Vitamin B12	mcg	0.68	1.6
Pantothenic acid	mg	0.84	2.0
Biotin	mcg	5.5	13
Choline	mg	84	199
<b>MINERALS</b>			
Sodium	mg	120	284
Potassium	mg	100	237
Chloride	mg	0	0
Calcium	mg	170	403
Phosphorus	mg	170	403
Magnesium	mg	50	118
Iron	mg	3.1	7.3
Copper	mg	0.25	0.59
Zinc	mg	2.8	6.6
Manganese	mg	0.17	0.40
Iodine	mcg	35	83
Molybdenum	mcg	8.4	20
Selenium	mcg	13	31
Chromium	mcg	5.1	12
<b>AMINO ACIDS</b>			
L-Alanine	g	0.35	0.83
L-Arginine	g	0.41	0.97
L-Aspartic acid	g	0.55	1.30
L-Cystine	g	0.10	0.24
L-Glutamine	g	1.14	2.70
Glycine	g	0.30	0.71
L-Histidine	g	0.30	0.71
L-Isoleucine	g	0.60	1.42
L-Leucine	g	1.27	3.01
L-Lysine	g	0.40	0.95
L-Methionine	g	0.12	0.28
L-Phenylalanine	mg	15	30
L-Proline	g	0.68	1.61
L-Serine	g	0.43	1.02
L-Threonine	g	0.97	2.30
L-Tryptophan	g	0.17	0.40
L-Tyrosine	g	0.95	2.25
L-Valine	g	0.48	1.14



**A powdered glycomacropeptide (GMP)-based low phenylalanine\* medical food for use in the dietary management of Phenylketonuria.**

**Features**

- Suitable from 3 years of age
- A blend of GMP, essential and non-essential amino acids, carbohydrate, fat (including docosahexaenoic acid – DHA), vitamins and minerals
- 1 packet provides 15 g protein equivalent from GMP and amino acids
- Available in Vanilla and Red Berry flavors

\*Each packet of PKU sphere15 contains 23 mg of phenylalanine.

**Osmolality**

Vanilla: 27 g (1 packet) + 120 ml (4 fl oz) water = 572 mOsm/kg

Red Berry: 27 g (1 packet) + 120 ml (4 fl oz) water = 609 mOsm/kg

See page 105 for directions for use

**Ordering/Reimbursement Information**

Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Vanilla	30 x 27 g packets	12539-0021-43	B4162 & B4157	812539021438
Red Berry		12539-0021-13		812539021131

**PKU sphere15 Vanilla (artificially flavored) – Ingredients:** Whey Protein Isolate (Milk), L-Leucine, Sugar, L-Tyrosine, Natural and Artificial Flavor, Modified Corn Starch, Soy Lecithin, L-Arginine, Calcium Lactate, Magnesium Phosphate, Calcium Phosphate, Dried Corn Syrup, L-Histidine, Choline Bitartrate, Glycine, Refined Tuna Oil (Fish)\*, L-Tryptophan, L-Lysine L-Aspartate, L-Cystine, Sodium Ascorbate, Zinc Gluconate, Maltodextrin, Dipotassium Phosphate, Ferrous Sulfate, L-Methionine, Sucralose, DL-Alpha Tocopheryl Acetate, Potassium Iodide, Mono- And Diglycerides, Chromium Chloride, Sodium Selenite, Sodium Molybdate, Copper Gluconate, Niacinamide, Manganese Gluconate, Vitamin A Acetate, Calcium Pantothenate, Vitamin D3, Vitamin B12, Biotin, Folic Acid, Thiamine Hydrochloride, Pyridoxine Hydrochloride, Riboflavin, Vitamin K1, Tocopherols (Preservative).

**Contains:** Fish (tuna), Milk, and Soy.

**Ingredient lists for all flavored options are available at [VitaflouSA.com](http://VitaflouSA.com)**

\*A source of docosahexaenoic acid (DHA).

**PKU sphere15 Nutrition Information**

	Units	per 100 g	per 27 g (1 packet)
Calories	kcal	340	90
Protein equivalent	g	56	15
Total Carbohydrate	g	18	4.9
Sugars	g	7.0	1.9
Total Fat	g	4.5	1.2
Saturated Fat	g	1.0	0.3
Docosahexaenoic Acid (DHA)	mg	314	85
<b>VITAMINS</b>			
Vitamin A	mcg RE	690	186
Vitamin D	mcg	12	3.2
Vitamin E	mg α TE	14	3.8
Vitamin C	mg	80	22
Vitamin K	mcg	59	16
Thiamin	mg	1.5	0.40
Riboflavin	mg	1.5	0.40
Niacin	mg	8.6	2.3
Vitamin B6	mg	1.4	0.38
Folic acid	mcg	260	70
Vitamin B12	mcg	4.1	1.1
Biotin	mcg	32	8.6
Pantothenic acid	mg	5.1	1.4
Choline	mg	510	138
<b>MINERALS</b>			
Sodium	mg	810	219
Potassium	mg	590	159
Chloride	mg	20	5.4
Calcium	mg	1010	273
Phosphorus	mg	1050	283
Magnesium	mg	290	78
Iron	mg	19	5.1
Copper	mg	1.5	0.40
Zinc	mg	19	5.1
Manganese	mg	1.0	0.27
Iodine	mcg	210	57
Molybdenum	mcg	51	14
Selenium	mcg	76	20
Chromium	mcg	30	8.1
<b>AMINO ACIDS</b>			
L-Alanine	g	2.36	0.64
L-Arginine	g	2.73	0.74
L-Aspartic acid	g	3.73	1.01
L-Cystine	g	0.69	0.19
L-Glutamine	g	7.72	2.08
Glycine	g	2.02	0.55
L-Histidine	g	2.01	0.54
L-Isoleucine	g	4.06	1.10
L-Leucine	g	8.62	2.33
L-Lysine	g	2.72	0.73
L-Methionine	g	0.80	0.22
L-Phenylalanine	mg	87	23
L-Proline	g	4.58	1.24
L-Serine	g	2.88	0.78
L-Threonine	g	6.55	1.77
L-Tryptophan	g	1.15	0.31
L-Tyrosine	g	6.43	1.74
L-Valine	g	3.27	0.88



**A powdered glycomacropeptide (GMP)-based low phenylalanine\* medical food for use in the dietary management of Phenylketonuria.**

**Features**

- Suitable from 3 years of age
- A blend of GMP, essential and non-essential amino acids, carbohydrate, fat (including docosahexaenoic acid – DHA), vitamins and minerals
- 1 packet provides 20 g protein equivalent from GMP and amino acids
- Available in Vanilla, Red Berry, Chocolate, Banana, and Lemon flavors

\*Each packet of PKU sphere20 contains 30 mg of phenylalanine.

**Osmolality**

Average osmolality: 35 g (1 packet) + 120 ml (4 fl oz) = 800 mOsm/kg

See [page 105](#) for directions for use

Ordering/Reimbursement Information				
Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Vanilla	30 x 35 g packets	12539-0021-12	B4157 & B4162	812539021124
Red Berry		12539-0021-11		812539021117
Chocolate		12539-0022-05		812539022053
Banana		12539-0025-82		812539025825
Lemon		12539-0025-80		812539025801

**PKU sphere20 (Vanilla) – Ingredients:** Whey Protein Isolate (Milk), L-Leucine, Sugar, L-Tyrosine, Natural and Artificial Flavor, Modified Corn Starch, Soy Lecithin, L-Arginine, Calcium Lactate, Magnesium Phosphate, Calcium Phosphate, Corn Syrup, L-Histidine, Choline Bitartrate, Glycine, Refined Tuna Oil (Fish)\*, L-Tryptophan, L-Lysine L-Aspartate, L-Cystine, Sodium Ascorbate, Zinc Gluconate, Maltodextrin, Dipotassium Phosphate, Ferrous Sulfate, L-Methionine, Sucralose, DL-Alpha Tocopheryl Acetate, Potassium Iodide, Mono- and Diglycerides, Chromium Chloride, Sodium Selenite, Sodium Molybdate, Copper Gluconate, Nicotinamide, Manganese Gluconate, Vitamin A Acetate, Calcium Pantothenate, Vitamin D3, Vitamin B12, Biotin, Folic Acid, Thiamine Hydrochloride, Pyridoxine Hydrochloride, Riboflavin, Vitamin K1, Tocopherols (Preservative).

**Contains:** Fish (tuna), Milk, and Soy.

**Ingredient lists for all flavored options are available at [VitaFloUSA.com](http://VitaFloUSA.com)**

\*A source of docosahexaenoic acid (DHA).

PKU sphere20 Nutrition Information					
	Units	Vanilla/Red Berry per 35 g (1 packet)	Chocolate per 35 g (1 packet)	Banana per 35 g (1 packet)	Lemon per 35 g (1 packet)
Calories	kcal	120	120	120	120
Protein equivalent	g	20	20	20	20
Total carbohydrate	g	6.3	6.3	6.3	6.3
Sugars	g	2.5	3.0	3.0	3.0
Total Fat	g	1.6	1.6	1.6	1.6
Saturated fat	g	0.4	0.4	0.4	0.4
Docosahexaenoic acid (DHA)	mg	110	110	110	110
<b>VITAMINS</b>					
Vitamin A	mcg RE	241	241	241	241
Vitamin D	mcg	4.2	4.2	4.2	4.2
Vitamin E	mg α TE	4.9	4.9	4.9	4.9
Vitamin C	mg	28	28	28	28
Vitamin K	mcg	21	21	21	21
Thiamin	mg	0.52	0.52	0.52	0.52
Riboflavin	mg	0.52	0.52	0.52	0.52
Niacin	mg	3.0	3.0	3.0	3.0
Vitamin B6	mg	0.49	0.49	0.49	0.49
Folic acid	mcg	91	91	91	91
Vitamin B12	mcg	1.4	1.4	1.4	1.4
Biotin	mcg	11	11	11	11
Pantothenic acid	mg	1.8	1.8	1.8	1.8
Choline	mg	178	178	178	178
<b>MINERALS</b>					
Sodium	mg	283	283	283	283
Potassium	mg	206	206	206	206
Chloride	mg	7.0	7.0	7.0	7.0
Calcium	mg	353	353	353	353
Phosphorus	mg	367	367	367	367
Magnesium	mg	101	101	101	101
Iron	mg	6.6	6.6	6.6	6.6
Copper	mg	0.52	0.52	0.52	0.52
Zinc	mg	6.6	6.6	6.6	6.6
Manganese	mg	0.35	0.35	0.35	0.35
Iodine	mcg	74	74	74	74
Molybdenum	mcg	18	18	18	18
Selenium	mcg	27	27	27	27
Chromium	mcg	11	11	11	11
<b>AMINO ACIDS</b>					
L-Alanine	g	0.83	0.83	0.83	0.83
L-Arginine	g	0.96	0.96	0.96	0.96
L-Aspartic acid	g	1.31	1.31	1.31	1.31
L-Cystine	g	0.24	0.24	0.24	0.24
L-Glutamine	g	2.70	2.70	2.70	2.70
Glycine	g	0.71	0.71	0.71	0.71
L-Histidine	g	0.70	0.70	0.70	0.70
L-Isoleucine	g	1.42	1.42	1.42	1.42
L-Leucine	g	3.02	3.02	3.02	3.02
L-Lysine	g	0.95	0.95	0.95	0.95
L-Methionine	g	0.28	0.28	0.28	0.28
L-Phenylalanine	mg	30	30	30	30
L-Proline	g	1.60	1.60	1.60	1.60
L-Serine	g	1.01	1.01	1.01	1.01
L-Threonine	g	2.29	2.29	2.29	2.29
L-Tryptophan	g	0.40	0.40	0.40	0.40
L-Tyrosine	g	2.25	2.25	2.25	2.25
L-Valine	g	1.14	1.14	1.14	1.14



**A powdered phenylalanine-free medical food for use in the dietary management of Phenylketonuria.**

**Features**

- Suitable from 3 years of age
- A blend of essential and non-essential amino acids, carbohydrate, docosahexaenoic acid (DHA), vitamins and minerals
- 1 packet provides 15 g protein equivalent
- Designed to be mixed with water or other permitted beverages to prepare a low volume drink
- Available in Unflavored, Orange, Lemon, and Tropical flavors

**Osmolality**

25 g (1 packet) + 90 ml (3 fl oz) water = 1705 mOsm/kg

See page 106 for directions for use



Ordering/Reimbursement Information				
Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	30 x 25 g packets	12539-0024-87	B4162 & B4157	812539024873
Tropical		12539-0024-90		812539024903
Orange		12539-0024-89		812539024897
Lemon		12539-0024-88		812539024880

**PKU express15 plus (Unflavored) – Ingredients:** L-Lysine L-Aspartate, Maltodextrin, L-Leucine, L-Tyrosine, Glycine, L-Arginine L-Aspartate, L-Valine, L-Glutamine, L-Proline, L-Threonine, L-Isoleucine, Calcium Phosphate, Corn Starch, L-Serine, Corn Syrup, L-Alanine, L-Histidine, Magnesium Phosphate, Refined Tuna Oil (Fish)\*, Potassium Citrate, Choline Bitartrate, L-Cystine, L-Tryptophan, L-Methionine, L-Arginine, Modified Corn Starch, Sodium Chloride, Sodium Citrate, Xanthan Gum, Sodium Ascorbate, Soy Lecithin, Taurine, Zinc Gluconate, L-Carnitine L-Tartrate, Potassium Phosphate, Ferrous Sulfate, DL-Alpha Tocopheryl Acetate, Mono- and Diglycerides, Ascorbic Acid, Sodium Selenite, Copper Gluconate, Vitamin D3, Manganese Gluconate, Niacinamide, Vitamin A Acetate, Calcium Pantothenate, Chromium Chloride, Vitamin B12, Biotin, Tocopherols (Preservative), Pyridoxine Hydrochloride, Potassium Iodide, Folic Acid, Thiamine Hydrochloride, Riboflavin, Sodium Molybdate, Vitamin K1.

**Contains:** Fish (tuna) and Soy. **May contain:** Milk.

**Ingredient lists for all flavored options are available at [VitafloUSA.com](http://VitafloUSA.com)**

**\*A source of docosahexaenoic acid (DHA).**

PKU express plus15 Nutrition Information					
	Units	Unflavored		Flavored	
		per 100 g	per 25 g (1 packet express plus15)	per 100 g	per 25 g (1 packet express plus15)
Calories	kcal	316	79	306	77
Protein equivalent	g	60	15	60	15
Total carbohydrate	g	14	3.5	11.5	2.9
Sugars	g	1.2	0.3	2.9	0.7
Total fat	g	2.2	0.6	2.2	0.6
Saturated fat	g	0.7	0.2	0.7	0.2
Docosahexaenoic acid (DHA)	mg	400	100	400	100
<b>VITAMINS</b>					
Vitamin A	mcg RE	690	172	690	172
Vitamin D	mcg	24	6.0	24	6.0
Vitamin E	mg α TE	12	3.0	12	3.0
Vitamin C	mg	97	24	97	24
Vitamin K	mcg	62	15	62	15
Thiamin	mg	1.7	0.42	1.7	0.42
Riboflavin	mg	2.0	0.50	2.0	0.50
Niacin	mg	8.8	2.2	8.8	2.2
Vitamin B6	mg	2.4	0.60	2.4	0.60
Folic acid	mcg	266	66	266	66
Vitamin B12	mcg	4.2	1.0	4.2	1.0
Pantothenic acid	mg	5.0	1.2	5.0	1.2
Biotin	mcg	33	8.2	33	8.2
Choline	mg	533	133	533	133
<b>MINERALS</b>					
Sodium	mg	373	93	373	93
Potassium	mg	648	162	648	162
Chloride	mg	373	93	373	93
Calcium	mg	1060	265	1060	265
Phosphorus	mg	951	238	951	238
Magnesium	mg	293	73	293	73
Iron	mg	19	4.7	19	4.7
Copper	mg	1.6	0.40	1.6	0.40
Zinc	mg	15	3.7	15	3.7
Manganese	mg	1.3	0.32	1.3	0.32
Iodine	mcg	222	55	222	55
Molybdenum	mcg	62	15	62	15
Selenium	mcg	71	18	71	18
Chromium	mcg	37	9.2	37	9.2
<b>AMINO ACIDS</b>					
L-Alanine	g	2.56	0.64	2.56	0.64
L-Arginine	g	4.14	1.04	4.14	1.04
L-Aspartic acid	g	6.56	1.64	6.56	1.64
L-Cystine	g	1.67	0.42	1.67	0.42
L-Glutamine	g	5.10	1.28	5.10	1.28
Glycine	g	6.53	1.63	6.53	1.63
L-Histidine	g	2.55	0.64	2.55	0.64
L-Isoleucine	g	4.47	1.12	4.47	1.12
L-Leucine	g	7.02	1.76	7.02	1.76
L-Lysine	g	4.64	1.16	4.64	1.16
L-Methionine	g	1.24	0.31	1.24	0.31
L-Phenylalanine*	g	0	0	0	0
L-Proline	g	4.68	1.17	4.68	1.17
L-Serine	g	2.91	0.73	2.91	0.73
L-Threonine	g	4.54	1.13	4.54	1.13
L-Tryptophan	g	1.41	0.35	1.41	0.35
L-Tyrosine	g	6.59	1.65	6.59	1.65
L-Valine	g	5.17	1.29	5.17	1.29
L-Carnitine	mg	56	14	56	14
Taurine	mg	117	29	117	29

\*No added phenylalanine.



**A powdered phenylalanine-free medical food for use in the dietary management of Phenylketonuria.**

**Features**

- Suitable from 3 years of age
- A blend of essential and non-essential amino acids, carbohydrate, docosahexaenoic acid (DHA), vitamins and minerals
- 1 packet provides 20 g protein equivalent
- Designed to be mixed with water or other permitted beverages to prepare a low volume drink
- Available in Unflavored, Orange, Lemon, Tropical, and Raspberry flavors



**Osmolality**

34 g (1 packet) + 90 ml (3 fl oz) water = 2155 mOsm/kg

See page 106 for directions for use

Ordering/Reimbursement Information				
Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	30 x 34 g packets	12539-0024-91	B4162 & B4157	812539024910
Tropical		12539-0024-94		812539024941
Orange		12539-0024-93		812539024934
Lemon		12539-0024-92		812539024927
Raspberry		12539-0025-22		812539025221

**PKU express plus20 (Unflavored) – Ingredients:** L-Lysine L-Aspartate, Maltodextrin, L-Leucine, L-Tyrosine, Glycine, L-Arginine L-Aspartate, L-Valine, L-Glutamine, L-Proline, L-Threonine, L-Isoleucine, Calcium Phosphate, Corn Starch, L-Serine, Corn Syrup, L-Alanine, L-Histidine, Magnesium Phosphate, Refined Tuna Oil (Fish)\*, Potassium Citrate, Choline Bitartrate, L-Cystine, L-Tryptophan, L-Methionine, L-Arginine, Modified Corn Starch, Sodium Chloride, Sodium Citrate, Xanthan Gum, Sodium Ascorbate, Soy Lecithin, Taurine, Zinc Gluconate, L-Carnitine L-Tartrate, Potassium Phosphate, Ferrous Sulfate, DL-Alpha Tocopheryl Acetate, Mono- And Diglycerides, Ascorbic Acid, Sodium Selenite, Copper Gluconate, Vitamin D3, Manganese Gluconate, Nicotinamide, Vitamin A Acetate, Calcium Pantothenate, Chromium Chloride, Vitamin B12, Biotin, Tocopherols (Preservative), Pyridoxine Hydrochloride, Potassium Iodide, Folic Acid, Thiamine Hydrochloride, Riboflavin, Sodium Molybdate, Vitamin K1.

**Contains:** Fish (tuna) and Soy. **May contain:** Milk.

**Ingredient lists for all flavored options are available at [VitafloUSA.com](http://VitafloUSA.com)**

**\*A source of docosahexaenoic acid (DHA).**

PKU express plus20 Nutrition Information					
	Units	Unflavored		Flavored	
		per 100 g	per 34 g (1 packet express plus20)	per 100 g	per 34 g (1 packet express plus20)
Calories	kcal	316	107	306	104
Protein equivalent	g	60	20	60	20
Total carbohydrate	g	14	4.8	11.5	3.9
Sugars	g	1.2	0.4	2.9	1.0
Total fat	g	2.2	0.8	2.2	0.8
Saturated fat	g	0.7	0.2	0.7	0.2
Docosahexaenoic acid (DHA)	mg	400	136	400	136
<b>VITAMINS</b>					
Vitamin A	mcg RE	690	235	690	235
Vitamin D	mcg	24	8.2	24	8.2
Vitamin E	mg α TE	12	4.1	12	4.1
Vitamin C	mg	97	33	97	33
Vitamin K	mcg	62	21	62	21
Thiamin	mg	1.7	0.58	1.7	0.58
Riboflavin	mg	2.0	0.68	2.0	0.68
Niacin	mg	8.8	3.0	8.8	3.0
Vitamin B6	mg	2.4	0.82	2.4	0.82
Folic acid	mcg	266	90	266	90
Vitamin B12	mcg	4.2	1.4	4.2	1.4
Pantothenic acid	mg	5.0	1.7	5.0	1.7
Biotin	mcg	33	11	33	11
Choline	mg	533	181	533	181
<b>MINERALS</b>					
Sodium	mg	373	127	373	127
Potassium	mg	648	220	648	220
Chloride	mg	373	127	373	127
Calcium	mg	1060	360	1060	360
Phosphorus	mg	951	323	951	323
Magnesium	mg	293	100	293	100
Iron	mg	19	6.5	19	6.5
Copper	mg	1.6	0.54	1.6	0.54
Zinc	mg	15	5.1	15	5.1
Manganese	mg	1.3	0.44	1.3	0.44
Iodine	mcg	222	75	222	75
Molybdenum	mcg	62	21	62	21
Selenium	mcg	71	24	71	24
Chromium	mcg	37	13	37	13
<b>AMINO ACIDS</b>					
L-Alanine	g	2.56	0.87	2.56	0.87
L-Arginine	g	4.14	1.41	4.14	1.41
L-Aspartic acid	g	6.56	2.23	6.56	2.23
L-Cystine	g	1.67	0.57	1.67	0.57
L-Glutamine	g	5.10	1.73	5.10	1.73
Glycine	g	6.53	2.22	6.53	2.22
L-Histidine	g	2.55	0.87	2.55	0.87
L-Isoleucine	g	4.47	1.52	4.47	1.52
L-Leucine	g	7.02	2.39	7.02	2.39
L-Lysine	g	4.64	1.58	4.64	1.58
L-Methionine	g	1.24	0.42	1.24	0.42
L-Phenylalanine*	g	0	0	0	0
L-Proline	g	4.68	1.59	4.68	1.59
L-Serine	g	2.91	0.99	2.91	0.99
L-Threonine	g	4.54	1.54	4.54	1.54
L-Tryptophan	g	1.41	0.48	1.41	0.48
L-Tyrosine	g	6.59	2.24	6.59	2.24
L-Valine	g	5.17	1.76	5.17	1.76
L-Carnitine	mg	56	19	56	19
Taurine	mg	117	40	117	40

\*No added phenylalanine.

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# cooler<sup>10</sup>

**A ready-to-drink phenylalanine-free medical food for use in the dietary management of Phenylketonuria.**

### Features

- Suitable from 3 years of age
- A blend of essential and non-essential amino acids, carbohydrate, vitamins, minerals, and docosahexaenoic acid (DHA)
- 1 pouch provides 10 g protein equivalent
- Available in Red flavor

### Osmolality

1550 mOsm/kg

See [page 107](#) for directions for use



### Ordering/Reimbursement Information

Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Red	30 x 87 ml pouches	50600-0513-18	B4162 & B4157	812539020363

**PKU cooler<sup>10</sup> (Red) — Ingredients:** Water, Sugar, L-Lysine L-Aspartate, L-Leucine, L-Tyrosine, Glycine, L-Arginine L-Aspartate, Malic Acid, L-Valine, L-Proline, L-Threonine, L-Isoleucine, Modified Corn Starch, Natural and Artificial Flavor, Soy Lecithin, Calcium Phosphate, L-Serine, L-Alanine, L-Histidine, Glucose Syrup, Magnesium Phosphate, Refined Tuna Oil (Fish)\*, L-Cystine, Choline Bitartrate, Potassium Citrate, L-Tryptophan, L-Methionine, L-Arginine, Salt, Maltodextrin, Carmine (Color), Ascorbic Acid, Xanthan Gum, Acesulfame Potassium, Sodium Ascorbate, Taurine, Zinc Gluconate, Potassium Sorbate (Preservative), L-Carnitine L-Tartrate, Sodium Benzoate (Preservative), Ferrus Sulfate, DL-Alpha Tocopherol Acetate, Mono- and Diglycerides, Copper Gluconate, Vitamin D3, Manganese Gluconate, Vitamin A Acetate, Niacinamide, Calcium Pantothenate, Sodium Selenite, Vitamin B12, Biotin, Pyridoxine Hydrochloride, Potassium Iodide, Thiamine Hydrochloride, Riboflavin, Vitamin K1, Folic Acid, Sodium Molybdate, Chromium Chloride.

**Contains:** Fish (tuna) and Soy.

**\*A source of docosahexaenoic acid (DHA).**

### PKU cooler<sup>10</sup> Nutrition Information

	Units	per 100 ml	per 87 ml (1 pouch)
Calories	kcal	75	65
Protein equivalent	g	115	10
Total Carbohydrate	g	5.1	4.4
Sugars	g	3.4	3.0
Total Fat	g	0.9	0.8
Saturated Fat	g	0.2	0.2
Docosahexaenoic Acid (DHA)	mg	77	67

### VITAMINS

Vitamin A	mcg RE	133	116
Vitamin D	mcg	5.1	4.4
Vitamin E	mg α TE	2.7	2.3
Vitamin C	mg	19	17
Vitamin K	mcg	12	10
Thiamin	mg	0.35	0.30
Riboflavin	mg	0.39	0.34
Niacin	mg	1.8	1.6
Vitamin B6	mg	0.44	0.38
Folic acid	mcg	51	44
Vitamin B12	mcg	0.82	0.71
Biotin	mcg	6.7	5.8
Pantothenic acid	mg	0.98	0.85
Choline	mg	102	89

### MINERALS

Sodium	mg	60	52
Potassium	mg	124	108
Chloride	mg	71	62
Calcium	mg	210	183
Phosphorus	mg	190	165
Magnesium	mg	60	52
Iron	mg	3.7	3.2
Copper	mg	0.37	0.32
Zinc	mg	2.8	2.4
Manganese	mg	0.25	0.22
Iodine	mcg	45	39
Molybdenum	mcg	11	10
Selenium	mcg	13	11
Chromium	mcg	7.1	6.2

### AMINO ACIDS

L-Alanine	g	0.53	0.46
L-Arginine	g	0.86	0.75
L-Aspartic acid	g	1.36	1.18
L-Cystine	g	0.35	0.30
L-Glutamine	g	0	0
Glycine	g	1.35	1.17
L-Histidine	g	0.53	0.46
L-Isoleucine	g	0.93	0.81
L-Leucine	g	1.46	1.27
L-Lysine	g	0.96	0.84
L-Methionine	g	0.26	0.23
L-Phenylalanine*	g	0	0
L-Proline	g	0.97	0.84
L-Serine	g	0.60	0.52
L-Threonine	g	0.93	0.81
L-Tryptophan	g	0.29	0.25
L-Tyrosine	g	1.37	1.19
L-Valine	g	1.07	0.93
L-Carnitine	mg	13	11
Taurine	mg	25	22

\*No added phenylalanine.

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**A ready-to-drink phenylalanine-free medical food for use in the dietary management of Phenylketonuria.**

**Features**

- Suitable from 3 years of age
- A blend of essential and non-essential amino acids, carbohydrate, vitamins, minerals, and docosahexaenoic acid (DHA)
- 1 pouch provides 15 g protein equivalent
- Available in Orange, Purple, and Red flavors

**Osmolality**

1550 mOsm/kg

See [page 107](#) for directions for use

Ordering/Reimbursement Information				
Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Orange	30 x 130 ml pouches	12539-0020-40	B4162 & B4157	812539020400
Purple		12539-0020-43		812539020431
Red		50600-0519-98		812539020370

**PKU cooler15 (Red) — Ingredients:** Water, Sugar, L-Lysine L-Aspartate, L-Leucine, L-Tyrosine, Glycine, L-Arginine L-Aspartate, Malic Acid, L-Valine, L-Proline, L-Threonine, L-Isoleucine, Modified Corn Starch, Natural and Artificial Flavor, Soy Lecithin, Calcium Phosphate, L-Serine, L-Alanine, L-Histidine, Glucose Syrup, Magnesium Phosphate, Refined Tuna Oil (Fish)\*, L-Cystine, Choline Bitartrate, Potassium Citrate, L-Tryptophan, L-Methionine, L-Arginine, Salt, Maltodextrin, Carmine (Color), Ascorbic Acid, Xanthan Gum, Acesulfame Potassium, Sodium Ascorbate, Taurine, Zinc Gluconate, Potassium Sorbate (Preservative), L-Carnitine L-Tartrate, Sodium Benzoate (Preservative), Ferrous Sulfate, DL-Alpha Tocopherol Acetate, Mono- and Diglycerides, Copper Gluconate, Vitamin D3, Manganese Gluconate, Vitamin A Acetate, Niacinamide, Calcium Pantothenate, Sodium Selenite, Vitamin B12, Biotin, Pyridoxine Hydrochloride, Potassium Iodide, Thiamine Hydrochloride, Riboflavin, Vitamin K1, Folic Acid, Sodium Molybdate, Chromium Chloride.

**Contains:** Fish (tuna) and Soy.

**Ingredient lists for all flavored options available at [VitaflorUSA.com](http://VitaflorUSA.com)**

**\*A source of docosahexaenoic acid (DHA).**

**PKU cooler15 Nutrition Information**

	Units	per 100 ml	per 150 ml (1 pouch)
Calories	kcal	75	97
Protein equivalent	g	11.5	15
Total Carbohydrate	g	5.1	6.6
Sugars	g	3.4	4.4
Total Fat	g	0.9	1.2
Saturated Fat	g	0.2	0.3
Docosahexaenoic Acid (DHA)	mg	77	100

VITAMINS			
Vitamin A	mcg RE	133	173
Vitamin D	mcg	5.1	6.6
Vitamin E	mg α TE	2.7	3.5
Vitamin C	mg	19	25
Vitamin K	mcg	12	16
Thiamin	mg	0.35	0.46
Riboflavin	mg	0.39	0.51
Niacin	mg	1.8	2.3
Vitamin B6	mg	0.44	0.57
Folic acid	mcg	51	66
Vitamin B12	mcg	0.82	1.1
Biotin	mcg	6.7	8.7
Pantothenic acid	mg	0.98	1.3
Choline	mg	102	133

MINERALS			
Sodium	mg	60	78
Potassium	mg	124	161
Chloride	mg	71	92
Calcium	mg	210	273
Phosphorus	mg	190	247
Magnesium	mg	60	78
Iron	mg	3.7	4.8
Copper	mg	0.37	0.48
Zinc	mg	2.8	3.6
Manganese	mg	0.25	0.33
Iodine	mcg	45	59
Molybdenum	mcg	11	14
Selenium	mcg	13	17
Chromium	mcg	7.1	9.2

AMINO ACIDS			
L-Alanine	g	0.53	0.69
L-Arginine	g	0.86	1.12
L-Aspartic acid	g	1.36	1.77
L-Cystine	g	0.35	0.46
L-Glutamine	g	0	0
Glycine	g	1.35	1.76
L-Histidine	g	0.53	0.69
L-Isoleucine	g	0.93	1.21
L-Leucine	g	1.46	1.90
L-Lysine	g	0.96	1.25
L-Methionine	g	0.26	0.34
L-Phenylalanine*	g	0	0
L-Proline	g	0.97	1.26
L-Serine	g	0.60	0.78
L-Threonine	g	0.93	1.21
L-Tryptophan	g	0.29	0.38
L-Tyrosine	g	1.37	1.78
L-Valine	g	1.07	1.39
L-Carnitine	mg	13	17
Taurine	mg	25	33

\*No added phenylalanine.





**A ready-to-drink phenylalanine-free medical food for use in the dietary management of Phenylketonuria.**

**Features**

- Suitable from 3 years of age
- A blend of essential and non-essential amino acids, carbohydrate, vitamins, minerals, and docosahexaenoic acid (DHA)
- 1 pouch provides 20 g protein equivalent
- Available in Orange, Purple, and Red flavors



**Osmolality**

1550 mOsm/kg

See page 107 for directions for use

**Ordering/Reimbursement Information**

Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Orange	30 x 174 ml pouches	12539-0020-41	B4162 & B4157	812539020417
Purple		12539-0020-44		812539020448
Red		50600-0520-01		812539020387

**PKU cooler20 (Red) – Ingredients:** Water, Sugar, L-Lysine L-Aspartate, L-Leucine, L-Tyrosine, Glycine, L-Arginine L-Aspartate, Malic Acid, L-Valine, L-Proline, L-Threonine, L-Isoleucine, Modified Corn Starch, Natural and Artificial Flavor, Soy Lecithin, Calcium Phosphate, L-Serine, L-Alanine, L-Histidine, Glucose Syrup, Magnesium Phosphate, Refined Tuna Oil (Fish)\*, L-Cystine, Choline Bitartrate, Potassium Citrate, L-Tryptophan, L-Methionine, L-Arginine, Salt, Maltodextrin, Carmine (Color), Ascorbic Acid, Xanthan Gum, Acesulfame Potassium, Sodium Ascorbate, Taurine, Zinc Gluconate, Potassium Sorbate (Preservative), L-Carnitine L-Tartrate, Sodium Benzoate (Preservative), Ferrous Sulfate, DL-Alpha Tocopherol Acetate, Mono- and Diglycerides, Copper Gluconate, Vitamin D3, Manganese Gluconate, Vitamin A Acetate, Niacinamide, Calcium Pantothenate, Sodium Selenite, Vitamin B12, Biotin, Pyridoxine Hydrochloride, Potassium Iodide, Thiamine Hydrochloride, Riboflavin, Vitamin K1, Folic Acid, Sodium Molybdate, Chromium Chloride.

**Contains:** Fish (tuna) and Soy.

**Ingredient lists for all flavored options are available at [VitaflouUSA.com](http://VitaflouUSA.com)**

**\*A source of docosahexaenoic acid (DHA).**

**PKU cooler20 Nutrition Information**

	Units	per 100 ml	per 174 ml (1 pouch)
Calories	kcal	75	130
Protein equivalent	g	11.5	20
Total Carbohydrate	g	5.1	8.9
Sugars	g	3.4	5.9
Total Fat	g	0.9	1.6
Saturated Fat	g	0.2	0.3
Docosahexaenoic Acid (DHA)	mg	77	134

**VITAMINS**

Vitamin A	mcg RE	133	231
Vitamin D	mcg	5.1	8.9
Vitamin E	mg α TE	2.7	4.7
Vitamin C	mg	19	33
Vitamin K	mcg	12	21
Thiamin	mg	0.35	0.61
Riboflavin	mg	0.39	0.68
Niacin	mg	1.8	3.1
Vitamin B6	mg	0.44	0.77
Folic acid	mcg	51	89
Vitamin B12	mcg	0.82	1.4
Biotin	mcg	6.7	11.6
Pantothenic acid	mg	0.98	1.7
Choline	mg	102	178

**MINERALS**

Sodium	mg	60	104
Potassium	mg	124	216
Chloride	mg	71	124
Calcium	mg	210	365
Phosphorus	mg	190	331
Magnesium	mg	60	104
Iron	mg	3.7	6.4
Copper	mg	0.37	0.64
Zinc	mg	2.8	4.9
Manganese	mg	0.25	0.44
Iodine	mcg	45	78
Molybdenum	mcg	11	19
Selenium	mcg	13	23
Chromium	mcg	7.1	12

**AMINO ACIDS**

L-Alanine	g	0.53	0.92
L-Arginine	g	0.86	1.50
L-Aspartic acid	g	1.36	2.37
L-Cystine	g	0.35	0.61
L-Glutamine	g	0	0
Glycine	g	1.35	2.35
L-Histidine	g	0.53	0.92
L-Isoleucine	g	0.93	1.62
L-Leucine	g	1.46	2.54
L-Lysine	g	0.96	1.67
L-Methionine	g	0.26	0.45
L-Phenylalanine*	g	0	0
L-Proline	g	0.97	1.69
L-Serine	g	0.60	1.04
L-Threonine	g	0.93	1.62
L-Tryptophan	g	0.29	0.50
L-Tyrosine	g	1.37	2.38
L-Valine	g	1.07	1.86
L-Carnitine	mg	13	23
Taurine	mg	25	44

\*No added phenylalanine.



**A ready-to-drink phenylalanine-free medical food for use in the dietary management of Phenylketonuria.**

**Features**

- Suitable from 3 years of age
- A blend of essential and non-essential amino acids, carbohydrate, vitamins, minerals, and docosahexaenoic acid (DHA)
- 100 kcal and 0.3 g sugar per pouch
- 1 pouch provides 20 g protein equivalent
- Available in Gold, Green, and Yellow flavors
- Specifically designed with teens and adults in mind

**Osmolality**

1400 mOsm/kg

See page 108 for directions for use

**Ordering/Reimbursement Information**

Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Gold	30 x 174 ml pouches	12539-0021-69	B4162 & B4157	812539021698
Green		12539-0021-70		812539021704
Yellow		12539-0021-71		812539021711

**PKU air (Yellow) – Ingredients:** Water, L-Lysine L-Aspartate, L-Leucine, L-Tyrosine, Glycine, Malic Acid, L-Arginine L-Aspartate, L-Valine, L-Proline, L-Threonine, L-Isoleucine, Modified Corn Starch, Calcium Phosphate, L-Serine, Soy Lecithin, L-Alanine, L-Histidine, Glucose Syrup Solids, Magnesium Hydrogen Phosphate, Refined Tuna Oil (Fish)\*, L-Cystine, Choline Bitartrate, Potassium Citrate, L-Tryptophan, Natural and Artificial Flavor, L-Methionine, L-Arginine, L-Ascorbic Acid, Salt, Maltodextrin, Xanthan Gum, Acesulfame Potassium, Beta Carotene (Color), Zinc Gluconate, Taurine, Sucralose, Potassium Sorbate (Preservative), L-Carnitine L-Tartrate, Sodium Benzoate (Preservative), Iron Sulfate, Copper Gluconate, Manganese Gluconate, Niacinamide, Vitamin E Acetate, Sodium Selenite, Calcium Panthothenate, Pyridoxine Hydrochloride, Thiamine Hydrochloride, Riboflavin, Vitamin A Acetate, Chromium Chloride, Sodium Molybdate, Folic Acid, Potassium Iodide, Biotin, Vitamin K, Vitamin D, Vitamin B12.

**Contains:** Fish (tuna) and Soy.

**Ingredient lists for all flavored options are available at [VitaflouUSA.com](http://VitaflouUSA.com)**

**\*A source of docosahexaenoic acid (DHA).**

**PKU air20 Nutrition Information**

	Units	per 100 ml	per 174 ml (1 pouch)
Calories	kcal	57	100
Protein equivalent	g	11.5	20
Total Carbohydrate	g	1.5	2.6
Sugars	g	0.2	0.3
Total Fat	g	0.6	1.0
Saturated Fat	g	0.2	0.3
Docosahexaenoic Acid (DHA)	mg	68	118
<b>VITAMINS</b>			
Vitamin A	mcg RE	130	226
Vitamin D	mcg	5.1	8.9
Vitamin E	mg α TE	2.7	4.7
Vitamin C	mg	19	33
Vitamin K	mcg	12	22
Thiamin	mg	0.36	0.63
Riboflavin	mg	0.39	0.68
Niacin	mg	1.8	3.1
Vitamin B6	mg	0.44	0.77
Folic Acid	mcg	51	89
Vitamin B12	mcg	0.82	1.4
Biotin	mcg	6.7	12
Pantothenic acid	mg	1.0	1.7
Choline	mg	102	178
<b>MINERALS</b>			
Sodium	mg	60	104
Potassium	mg	120	209
Chloride	mg	70	122
Calcium	mg	210	365
Phosphorus	mg	190	331
Magnesium	mg	60	104
Iron	mg	3.7	6.4
Copper	mg	0.37	0.64
Zinc	mg	2.8	4.9
Manganese	mg	0.26	0.45
Iodine	mcg	45	78
Molybdenum	mcg	11	19
Selenium	mcg	13	23
Chromium	mcg	7.1	12
<b>AMINO ACIDS</b>			
L-Alanine	g	0.53	0.92
L-Arginine	g	0.86	1.50
L-Aspartic Acid	g	1.36	2.37
L-Cystine	g	0.35	0.61
L-Glutamine	g	0	0
Glycine	g	1.35	2.35
L-Histidine	g	0.53	0.92
L-Isoleucine	g	0.93	1.62
L-Leucine	g	1.46	2.54
L-Lysine	g	0.96	1.67
L-Methionine	g	0.26	0.45
L-Phenylalanine*	g	0	0
L-Proline	g	0.97	1.69
L-Serine	g	0.60	1.04
L-Threonine	g	0.93	1.62
L-Tryptophan	g	0.29	0.50
L-Tyrosine	g	1.37	2.38
L-Valine	g	1.07	1.86
L-Carnitine	mg	13	23
Taurine	mg	25	44

\*No added phenylalanine.



**A powdered isoleucine, leucine, and valine-free medical food for use in the dietary management of Maple Syrup Urine Disease.**

**Features**

- Suitable from 1 year of age
- A blend of essential and non-essential amino acids, carbohydrate, vitamins and minerals
- 1 packet provides 10 g protein equivalent
- Designed to form a semi-solid (spoonable) consistency when mixed with water, or a low volume drink when mixed with water or other permitted beverage
- Available in Unflavored

**Osmolality**

24 g (1 packet) + 30 ml (1 fl oz) water = 3000 mOsm/kg

24 g (1 packet) + 80 ml (2.7 fl oz) water = 1540 mOsm/kg

See page 102 for directions for use



Ordering/Reimbursement Information				
Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	30 x 24 g packets	50600-0514-93	B4162	812539020042

**MSUD gel (Unflavored) – Ingredients:** Sugar, Corn Starch, L-Lysine L-Aspartate, L-Arginine L-Aspartate, L-Alanine, L-Glutamine, Modified Corn Starch, L-Proline, Glycine, L-Serine, L-Tyrosine, L-Phenylalanine, L-Threonine, Calcium Phosphate, L-Histidine, L-Tryptophan, L-Cystine, Calcium Glycerophosphate, Sodium Citrate, Magnesium Phosphate Dibasic, L-Arginine, Potassium Chloride, L-Methionine, Potassium Citrate, Choline Bitartrate, Maltodextrin, Ascorbic Acid, Taurine, Salt, Zinc Gluconate, L-Carnitine L-Tartrate, Ferrous Sulfate, DL-Alpha Tocopherol Acetate, Niacinamide, Manganese Gluconate, Chromium Chloride, Sodium Selenite, Retinyl Acetate, Vitamin D3, Copper Gluconate, Calcium Pantothenate, Biotin, Folic Acid, Vitamin K, Potassium Iodide, Pyridoxine Hydrochloride, Thiamine Hydrochloride, Sodium Molybdate, Riboflavin, Vitamin B12.

MSUD gel Nutrition Information			
	Units	per 100 g	per 24 g (1 packet)
Calories	kcal	338	81
Protein equivalent	g	41.7	10
Total Carbohydrate	g	43	10.3
Sugars	g	27	6.5
Total Fat	g	0	0
Saturated Fat	g	0	0
<b>VITAMINS</b>			
Vitamin A	mcg RE	530	127
Vitamin D	mcg	13	3.1
Vitamin E	mg α TE	8	1.9
Vitamin C	mg	56	13
Vitamin K	mcg	36	8.6
Thiamin	mg	0.89	0.21
Riboflavin	mg	1.1	0.26
Niacin	mg	12	2.9
Vitamin B6	mg	0.98	0.24
Folic acid	mcg	180	43
Vitamin B12	mcg	1.8	0.43
Biotin	mcg	22	5.3
Pantothenic acid	mg	4.4	1.1
Choline	mg	250	60
<b>MINERALS</b>			
Sodium	mg	379	91
Potassium	mg	830	200
Chloride	mg	520	125
Calcium	mg	1080	260
Phosphorus	mg	730	175
Magnesium	mg	150	36
Iron	mg	12.4	3.0
Copper	mg	0.70	0.17
Zinc	mg	10	2.4
Manganese	mg	15	0.36
Iodine	mcg	120	29
Molybdenum	mcg	44	11
Selenium	mcg	31	7.4
Chromium	mcg	63	15
<b>AMINO ACIDS</b>			
L-Alanine	g	5.11	1.23
L-Arginine	g	4.85	1.16
L-Aspartic acid	g	6.13	1.47
L-Cystine	g	1.45	0.35
L-Glutamine	g	5.51	1.32
Glycine	g	4.06	0.97
L-Histidine	g	1.74	0.42
L-Isoleucine*	g	0	0
L-Leucine*	g	0	0
L-Lysine	g	3.65	0.88
L-Methionine	g	1.05	0.25
L-Phenylalanine	g	2.73	0.66
L-Proline	g	4.29	1.03
L-Serine	g	2.90	0.70
L-Threonine	g	2.61	0.63
L-Tryptophan	g	1.45	0.35
L-Tyrosine	g	2.90	0.70
L-Valine*	g	0	0
L-Carnitine	mg	46	11
Taurine	mg	92	22

\*No added isoleucine, leucine, and valine.



**A powdered isoleucine-, leucine-, and valine-free medical food for use in the dietary management of Maple Syrup Urine Disease.**

**Features**

- Suitable from 3 years of age
- A blend of essential and non-essential amino acids, carbohydrate, docosahexaenoic acid (DHA), vitamins and minerals
- 1 packet provides 15 g protein equivalent
- Designed to be mixed with water or other permitted beverages to prepare a low volume drink
- Available in Unflavored

**Osmolality**

25 g (1 packet) + 90 ml (3 fl oz) water = 1705 mOsm/kg

See page 106 for directions for use



Ordering/Reimbursement Information				
Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	30 x 25 g packets	12539-0024-99	B4157 & B4162	812539024996

**MSUD express plus15 (Unflavored) – Ingredients:** L-Lysine L-Aspartate, L-Arginine L-Aspartate, L-Glutamine, L-Alanine, L-Proline, Glycine, Maltodextrin, L-Serine, L-Tyrosine, L-Phenylalanine, L-Threonine, Calcium Phosphate, Corn Starch, Corn Syrup, L-Histidine, Magnesium Phosphate, L-Cystine, L-Tryptophan, Refined Tuna Oil (Fish)\*, Potassium Citrate, Choline Bitartrate, L-Arginine, L-Methionine, Modified Corn Starch, Sodium Chloride, Sodium Citrate, Xanthan Gum, Sodium Ascorbate, Soy Lecithin, Taurine, Zinc Gluconate, L-Carnitine L-Tartrate, Potassium Phosphate, Ferrous Sulfate, DL-Alpha Tocopheryl Acetate, Mono- and Diglycerides, Ascorbic Acid, Sodium Selenite, Copper Gluconate, Vitamin D3, Manganese Gluconate, Niacinamide, Vitamin A Acetate, Calcium Pantothenate, Chromium Chloride, Vitamin B12, Biotin, Tocopherols (Preservative), Pyridoxine Hydrochloride, Potassium Iodide, Folic Acid, Thiamine Hydrochloride, Riboflavin, Sodium Molybdate, Vitamin K1.

**Contains:** Fish (tuna) and Soy. **May contain:** Milk.

\*A source of docosahexaenoic acid (DHA).

MSUD express plus15 Nutrition Information			
	Units	per 100 g	per 25 g (1 packet express plus15)
Calories	kcal	316	79
Protein equivalent	g	60	15
Total carbohydrate	g	14	3.5
Sugars	g	1.2	0.3
Total fat	g	2.2	0.6
Saturated fat	g	0.7	0.2
Docosahexaenoic acid (DHA)	mg	400	100
<b>VITAMINS</b>			
Vitamin A	mcg RE	690	172
Vitamin D	mcg	24	6.0
Vitamin E	mg α TE	12	3.0
Vitamin C	mg	97	24
Vitamin K	mcg	62	15
Thiamin	mg	1.7	0.42
Riboflavin	mg	2.0	0.50
Niacin	mg	8.8	2.2
Vitamin B6	mg	2.4	0.60
Folic acid	mcg	266	66
Vitamin B12	mcg	4.2	1.0
Pantothenic acid	mg	5.0	1.2
Biotin	mcg	33	8.2
Choline	mg	533	133
<b>MINERALS</b>			
Sodium	mg	373	93
Potassium	mg	648	162
Chloride	mg	373	93
Calcium	mg	1060	265
Phosphorus	mg	951	238
Magnesium	mg	293	73
Iron	mg	19	4.7
Copper	mg	1.6	0.40
Zinc	mg	15	3.7
Manganese	mg	1.3	0.32
Iodine	mcg	222	55
Molybdenum	mcg	62	15
Selenium	mcg	71	18
Chromium	mcg	37	9.2
<b>AMINO ACIDS</b>			
L-Alanine	g	7.58	1.90
L-Arginine	g	7.19	1.80
L-Aspartic acid	g	9.11	2.28
L-Cystine	g	2.15	0.54
L-Glutamine	g	7.80	1.95
Glycine	g	6.03	1.51
L-Histidine	g	2.59	0.65
L-Isoleucine*	g	0	0
L-Leucine*	g	0	0
L-Lysine	g	5.42	1.36
L-Methionine	g	1.55	0.39
L-Phenylalanine	g	4.05	1.01
L-Proline	g	6.37	1.59
L-Serine	g	4.31	1.08
L-Threonine	g	3.88	0.97
L-Tryptophan	g	2.15	0.54
L-Tyrosine	g	4.31	1.08
L-Valine*	g	0	0
L-Carnitine	mg	56	14
Taurine	mg	117	29

\*No added isoleucine, leucine, and valine.



**A powdered isoleucine-, leucine-, and valine-free medical food for use in the dietary management of Maple Syrup Urine Disease.**

**Features**

- Suitable from 3 years of age
- A blend of essential and non-essential amino acids, carbohydrate, docosahexaenoic acid (DHA), vitamins and minerals
- 1 packet provides 20 g protein equivalent
- Designed to be mixed with water or other permitted beverages to prepare a low volume drink
- Available in Unflavored

**Osmolality**

34 g (1 packet) + 90 ml (3 fl oz) water = 2155 mOsm/kg

See page 106 for directions for use



Ordering/Reimbursement Information				
Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	30 x 34 g packets	12539-0025-00	B4157 & B4162	812539025009

**MSUD express plus20 (Unflavored) — Ingredients:** L-Lysine L-Aspartate, L-Arginine L-Aspartate, L-Glutamine, L-Alanine, L-Proline, Glycine, Maltodextrin, L-Serine, L-Tyrosine, L-Phenylalanine, L-Threonine, Calcium Phosphate, Corn Starch, Corn Syrup, L-Histidine, Magnesium Phosphate, L-Cystine, L-Tryptophan, Refined Tuna Oil (Fish)\*, Potassium Citrate, Choline Bitartrate, L-Arginine, L-Methionine, Modified Corn Starch, Sodium Chloride, Sodium Citrate, Xanthan Gum, Sodium Ascorbate, Soy Lecithin, Taurine, Zinc Gluconate, L-Carnitine L-Tartrate, Potassium Phosphate, Ferrous Sulfate, DL-Alpha Tocopheryl Acetate, Mono- and Diglycerides, Ascorbic Acid, Sodium Selenite, Copper Gluconate, Vitamin D3, Manganese Gluconate, Niacinamide, Vitamin A Acetate, Calcium Pantothenate, Chromium Chloride, Vitamin B12, Biotin, Tocopherols (Preservative), Pyridoxine Hydrochloride, Potassium Iodide, Folic Acid, Thiamine Hydrochloride, Riboflavin, Sodium Molybdate, Vitamin K1.

**Contains:** Fish (tuna) and Soy. **May contain:** Milk.

**\*A source of docosahexaenoic acid (DHA).**

MSUD express plus20 Nutrition Information			
	Units	per 100 g	per 34 g (1 packet express plus20)
Calories	kcal	316	107
Protein equivalent	g	60	20
Total carbohydrate	g	14	4.8
Sugars	g	1.2	0.4
Total fat	g	2.2	0.8
Saturated fat	g	0.7	0.2
Docosahexaenoic acid (DHA)	mg	400	136
<b>VITAMINS</b>			
Vitamin A	mcg RE	690	235
Vitamin D	mcg	24	8.2
Vitamin E	mg α TE	12	4.1
Vitamin C	mg	97	33
Vitamin K	mcg	62	21
Thiamin	mg	1.7	0.58
Riboflavin	mg	2.0	0.68
Niacin	mg	8.8	3.0
Vitamin B6	mg	2.4	0.82
Folic acid	mcg	266	90
Vitamin B12	mcg	4.2	1.4
Pantothenic acid	mg	5.0	1.7
Biotin	mcg	33	11
Choline	mg	533	181
<b>MINERALS</b>			
Sodium	mg	373	127
Potassium	mg	648	220
Chloride	mg	373	127
Calcium	mg	1060	360
Phosphorus	mg	951	323
Magnesium	mg	293	100
Iron	mg	19	6.5
Copper	mg	1.6	0.54
Zinc	mg	15	5.1
Manganese	mg	1.3	0.44
Iodine	mcg	222	75
Molybdenum	mcg	62	21
Selenium	mcg	71	24
Chromium	mcg	37	13
<b>AMINO ACIDS</b>			
L-Alanine	g	7.58	2.58
L-Arginine	g	7.19	2.44
L-Aspartic acid	g	9.11	3.10
L-Cystine	g	2.15	0.73
L-Glutamine	g	7.80	2.65
Glycine	g	6.03	2.05
L-Histidine	g	2.59	0.88
L-Isoleucine*	g	0	0
L-Leucine*	g	0	0
L-Lysine	g	5.42	1.84
L-Methionine	g	1.55	0.53
L-Phenylalanine	g	4.05	1.38
L-Proline	g	6.37	2.17
L-Serine	g	4.31	1.47
L-Threonine	g	3.88	1.32
L-Tryptophan	g	2.15	0.73
L-Tyrosine	g	4.31	1.47
L-Valine*	g	0	0
L-Carnitine	mg	56	19
Taurine	mg	117	40

\*No added isoleucine, leucine, and valine.



# cooler<sup>15</sup>



**A ready-to-drink isoleucine-, leucine-, and valine-free medical food for use in the dietary management of Maple Syrup Urine Disease.**

### Features

- Suitable from 3 years of age
- A blend of essential and non-essential amino acids, carbohydrate, vitamins, minerals, and docosahexaenoic acid (DHA)
- 1 pouch provides 15 g protein equivalent
- Available in Orange and Red flavors

### Osmolality

1550 mOsm/kg

See [page 107](#) for directions for use

### Ordering/Reimbursement Information

Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Orange	30 x 130 ml pouches	12539-0020-55	B4162 & B4157	812539020578
Red		12539-0020-57		812539020554

**MSUD cooler15 (Red) – Ingredients:** Water, Sugar, L-Lysine L-Aspartate, L-Arginine L-Aspartate, L-Alanine, L-Proline, Malic Acid, Glycine, Modified Corn Starch, L-Serine, L-Tyrosine, Natural and Artificial Flavor, L-Phenylalanine, L-Threonine, Soy Lecithin, Calcium Phosphate, L-Histidine, Glucose Syrup, Magnesium Phosphate, L-Cystine, L-Tryptophan, Refined Tuna Oil (Fish)\*, L-Arginine, Choline Bitartrate, Potassium Citrate, L-Methionine, Salt, Maltodextrin, Carmine (Color), Ascorbic Acid, Xanthan Gum, Acesulfame Potassium, Sodium Ascorbate, Taurine, Zinc Gluconate, Potassium Sorbate (Preservative), L-Carnitine L-Tartrate, Sodium Benzoate (Preservative), Ferrous Sulfate, DL-Alpha Tocopherol Acetate, Mono- and Diglycerides, Copper Gluconate, Vitamin D3, Manganese Gluconate, Vitamin A Acetate, Niacinamide, Calcium Pantothenate, Sodium Selenite, Vitamin B12, Biotin, Pyridoxine Hydrochloride, Potassium Iodide, Thiamine Hydrochloride, Riboflavin, Vitamin K1, Folic Acid, Sodium Molybdate, Chromium Chloride.

**Contains:** Fish (tuna) and Soy.

**Ingredient lists for all flavored options are available at [VitaflouUSA.com](http://VitaflouUSA.com)**

**\*A source of docosahexaenoic acid (DHA).**

### MSUD cooler15 Nutrition Information

	Units	per 100 ml	130 ml (1 pouch)
Calories	kcal	75	97
Protein equivalent	g	11.5	15
Total Carbohydrate	g	5.1	6.6
Sugars	g	3.4	4.4
Total Fat	g	0.9	1.2
Saturated Fat	g	0.2	0.3
Docosahexaenoic Acid (DHA)	mg	77	100
<b>VITAMINS</b>			
Vitamin A	mcg RE	133	173
Vitamin D	mcg	5.1	6.6
Vitamin E	mg α TE	2.7	3.5
Vitamin C	mg	19	25
Vitamin K	mcg	12	16
Thiamin	mg	0.35	0.46
Riboflavin	mg	0.39	0.51
Niacin	mg	1.8	2.3
Vitamin B6	mg	0.44	0.57
Folic acid	mcg	51	66
Vitamin B12	mcg	0.82	1.1
Biotin	mcg	6.7	8.7
Pantothenic acid	mg	0.98	1.3
Choline	mg	102	133
<b>MINERALS</b>			
Sodium	mg	60	78
Potassium	mg	124	161
Chloride	mg	71	92
Calcium	mg	210	273
Phosphorus	mg	190	247
Magnesium	mg	60	78
Iron	mg	3.7	4.8
Copper	mg	0.37	0.48
Zinc	mg	2.8	3.6
Manganese	mg	0.25	0.33
Iodine	mcg	45	59
Molybdenum	mcg	11	14
Selenium	mcg	13	17
Chromium	mcg	7.1	9.2
<b>AMINO ACIDS</b>			
L-Alanine	g	1.57	2.04
L-Arginine	g	1.49	1.94
L-Aspartic acid	g	1.88	2.44
L-Cystine	g	0.44	0.57
L-Glutamine	g	0	0
Glycine	g	1.25	1.63
L-Histidine	g	0.53	0.69
L-Isoleucine*	g	0	0
L-Leucine*	g	0	0
L-Lysine	g	1.12	1.46
L-Methionine	g	0.32	0.42
L-Phenylalanine	g	0.84	1.09
L-Proline	g	1.32	1.72
L-Serine	g	0.89	1.16
L-Threonine	g	0.80	1.04
L-Tryptophan	g	0.45	0.59
L-Tyrosine	g	0.89	1.16
L-Valine*	g	0	0
L-Carnitine	mg	13	17
Taurine	mg	25	33

\*No added isoleucine, leucine, and valine.



**A powdered phenylalanine and tyrosine-free medical food for use in the dietary management of Tyrosinemia.**

**Features**

- Suitable from 1 year of age
- A blend of essential and non-essential amino acids, carbohydrate, vitamins and minerals
- 1 packet provides 10 g protein equivalent
- Designed to form a semi-solid (spoonable) consistency when mixed with water, or a low volume drink when mixed with water or other permitted beverage
- Available in Unflavored



**Osmolality**

24 g (1 packet) + 30 ml (1 fl oz) water = 3000 mOsm/kg

24 g (1 packet) + 80 ml (2.7 fl oz) water = 1540 mOsm/kg

See page 102 for directions for use

**Ordering/Reimbursement Information**

Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	30 x 24 g packets	50600-0515-09	B4162	812539020691

**TYR gel (Unflavored) – Ingredients:** Sugar, Corn Starch, L-Lysine L-Aspartate, L-Leucine, L-Arginine L-Aspartate, Modified Corn Starch, L-Valine, L-Glutamine, L-Isoleucine, L-Proline, Glycine, L-Alanine, L-Threonine, L-Serine, Calcium Phosphate, L-Histidine, L-Cystine, Calcium Glycerophosphate, Sodium Citrate, Magnesium Phosphate Dibasic, Potassium Chloride, L-Tryptophan, Potassium Citrate, L-Methionine, L-Arginine, Choline Bitartrate, Maltodextrin, Ascorbic Acid, Taurine, Salt, Zinc Gluconate, L-Carnitine L-Tartrate, Ferrous Sulfate, DL-Alpha Tocopherol Acetate, Nicotinamide, Manganese Gluconate, Chromium Chloride, Sodium Selenite, Retinyl Acetate, Vitamin D3, Copper Gluconate, Calcium Pantothenate, Biotin, Folic Acid, Vitamin K, Potassium Iodide, Pyridoxine Hydrochloride, Thiamine Hydrochloride, Sodium Molybdate, Riboflavin, Vitamin B12.

**TYR gel Nutrition Information**

	Units	per 100 g	per 24 g (1 packet)
Calories	kcal	338	81
Protein equivalent	g	41.7	10
Total Carbohydrate	g	43	10.3
Sugars	g	27	6.5
Total Fat	g	0	0
Saturated Fat	g	0	0
<b>VITAMINS</b>			
Vitamin A	mcg RE	530	127
Vitamin D	mcg	13	3.1
Vitamin E	mg α TE	8	1.9
Vitamin C	mg	56	13
Vitamin K	mcg	36	8.6
Thiamin	mg	0.89	0.21
Riboflavin	mg	1.1	0.26
Niacin	mg	12	2.9
Vitamin B6	mg	0.98	0.24
Folic acid	mcg	180	43
Vitamin B12	mcg	1.8	0.43
Biotin	mcg	22	5.3
Pantothenic acid	mg	4.4	1.1
Choline	mg	250	60
<b>MINERALS</b>			
Sodium	mg	379	91
Potassium	mg	830	200
Chloride	mg	520	125
Calcium	mg	1080	260
Phosphorus	mg	730	175
Magnesium	mg	150	36
Iron	mg	12.4	3.0
Copper	mg	0.70	0.17
Zinc	mg	10	2.4
Manganese	mg	15	0.36
Iodine	mcg	120	29
Molybdenum	mcg	44	11
Selenium	mcg	31	7.4
Chromium	mcg	63	15
<b>AMINO ACIDS</b>			
L-Alanine	g	3.12	0.75
L-Arginine	g	3.83	0.92
L-Aspartic acid	g	5.92	1.42
L-Cystine	g	1.43	0.34
L-Glutamine	g	3.79	0.91
Glycine	g	3.12	0.75
L-Histidine	g	2.09	0.50
L-Isoleucine	g	3.48	0.84
L-Leucine	g	5.57	1.34
L-Lysine	g	3.97	0.95
L-Methionine	g	0.89	0.21
L-Phenylalanine*	g	0	0
L-Proline	g	3.21	0.77
L-Serine	g	2.45	0.59
L-Threonine	g	2.67	0.64
L-Tryptophan	g	1.11	0.27
L-Tyrosine*	g	0	0
L-Valine	g	3.79	0.91
L-Carnitine	mg	46	11
Taurine	mg	92	22

\*No added phenylalanine and tyrosine.



**A powdered glycomacropeptide (GMP)-based low phenylalanine\* and tyrosine\* medical food for use in the dietary management of Tyrosinemia.**

**Features**

- Suitable from 3 years of age
- A blend of glycomacropeptide (GMP), essential and non-essential amino acids, carbohydrate, fat (including docosahexaenoic acid – DHA), vitamins and minerals
- 1 packet provides 20 g protein equivalent from GMP and amino acids
- Available in Red Berry and Vanilla flavors

\*Each packet of TYR sphere20 contains 30 mg of phenylalanine and less than 10.5 mg of tyrosine.



**Osmolality**

27 g (1 packet) + 120 ml (4 fl oz) water = 1000 mOsm/kg

See [page 105](#) for directions for use

Ordering/Reimbursement Information				
Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Red Berry	30 x 35 g packets	12539-0022-09	B4157 & B4162	812539022091
Vanilla		12539-0025-87		812539025870

**TYR sphere (Red Berry) – Ingredients:** Whey Protein Isolate (Milk), L-Leucine, Natural and Artificial Flavor, Glycine, Modified Corn Starch, L-Arginine, Sugar, Soy Lecithin, Calcium Lactate, Magnesium Phosphate, Calcium Phosphate, Corn Syrup, L-Histidine, Choline Bitartrate, Refined Tuna Oil (Fish)\*, L-Tryptophan, Beet Juice Concentrate (Color), L-Lysine L-Aspartate, L-Cystine, Sodium Ascorbate, Zinc Gluconate, Maltodextrin, Sucralose, Dipotassium Phosphate, Ferrous Sulfate, L-Methionine, DL-Alpha Tocopheryl Acetate, Potassium Iodide, Mono- and Diglycerides, Chromium Chloride, Sodium Selenite, Sodium Molybdate, Copper Gluconate, Niacinamide, Manganese Gluconate, Vitamin A Acetate, Calcium Pantothenate, Vitamin D3, Vitamin B12, Biotin, Folic Acid, Thiamine Hydrochloride, Pyridoxine Hydrochloride, Riboflavin, Vitamin K1, Tocopherols (Preservative).

**Contains:** Fish (tuna), Milk, and Soy.

**Ingredient lists for all flavored options are available at [VitaFloUSA.com](http://VitaFloUSA.com)**

**\*A source of docosahexaenoic acid (DHA).**

TYR sphere20 Nutrition Information					
	Units	Red Berry per 100 g	Red Berry per 35 g (1 packet)	Vanilla per 100 g	Vanilla per 35 g (1 packet)
Calories	kcal	340	120	330	120
Protein equivalent	g	56	20	56	20
Total Carbohydrate	g	18	6.3	17	6.0
Sugars	g	4.5	3.0	7.0	2.5
Total Fat	g	4.5	1.6	4.5	1.6
Saturated Fat	g	1.0	0.4	1.5	0.5
Docosahexaenoic Acid (DHA)	mg	314	110	314	110
<b>VITAMINS</b>					
Vitamin A	mcg RE	690	241	690	241
Vitamin D	mcg	12	4.2	12	4.2
Vitamin E	mg α TE	14	4.9	14	4.9
Vitamin C	mg	80	28	80	28
Vitamin K	mcg	59	21	59	21
Thiamin	mg	1.5	0.52	1.5	0.52
Riboflavin	mg	1.5	0.52	1.5	0.52
Niacin	mg	8.6	3.0	8.6	3.0
Vitamin B6	mg	1.4	0.49	1.4	0.49
Folic acid	mcg	260	91	260	91
Vitamin B12	mcg	4.1	1.4	4.1	1.4
Biotin	mcg	5.1	1.8	5.1	1.8
Pantothenic acid	mg	32	11	32	11
Choline	mg	510	178	510	178
<b>MINERALS</b>					
Sodium	mg	810	283	810	283
Potassium	mg	590	206	590	206
Chloride	mg	20	7.0	20	7.0
Calcium	mg	1010	353	1010	353
Phosphorus	mg	1050	367	1050	367
Magnesium	mg	290	101	290	101
Iron	mg	19.0	6.6	19.0	6.6
Copper	mg	1.5	0.52	1.5	0.52
Zinc	mg	19.0	6.6	19.0	6.6
Manganese	mg	1.0	0.35	1.0	0.35
Iodine	mcg	210	74	210	74
Molybdenum	mcg	51	18	51	18
Selenium	mcg	76	27	76	27
Chromium	mcg	30	10	30	10
<b>AMINO ACIDS</b>					
L-Alanine	g	2.36	0.83	2.36	0.83
L-Arginine	g	4.87	1.70	4.87	1.70
L-Aspartic acid	g	3.74	1.31	3.74	1.31
L-Cystine	g	0.69	0.24	0.69	0.24
L-Glutamine	g	7.72	2.70	7.72	2.70
Glycine	g	7.09	2.48	7.09	2.48
L-Histidine	g	2.01	0.70	2.01	0.70
L-Isoleucine	g	4.06	1.42	4.06	1.42
L-Leucine	g	8.62	3.02	8.62	3.02
L-Lysine	g	2.73	0.96	2.73	0.96
L-Methionine	g	0.80	0.28	0.80	0.28
L-Phenylalanine	mg	86	30	86	30
L-Proline	g	4.58	1.60	4.58	1.60
L-Serine	g	2.88	1.01	2.88	1.01
L-Threonine	g	6.55	2.29	6.55	2.29
L-Tryptophan	g	1.15	0.40	1.15	0.40
L-Tyrosine	mg	<30	<10.5	<30	<10.5
L-Valine	g	3.27	1.14	3.27	1.14





**A powdered phenylalanine-free and tyrosine-medical food for use in the dietary management of Tyrosinemia.**

**Features**

- Suitable from 3 years of age
- A blend of essential and non-essential amino acids, carbohydrate, docosahexaenoic acid (DHA), vitamins and minerals
- 1 packet provides 15 g protein equivalent
- Designed to be mixed with water or other permitted beverages to prepare a low volume drink
- Available in Unflavored

**Osmolality**

25 g (1 packet) + 90 ml (3 fl oz) water = 1705 mOsm/kg

See [page 106](#) for directions for use



Ordering/Reimbursement Information				
Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	30 x 25 g packets	12539-0024-95	B4157 & B4162	812539024958

**TYR express plus15 (Unflavored) – Ingredients:** L-Lysine L-Aspartate, L-Leucine, Maltodextrin, L-Arginine L-Aspartate, L-Valine, L-Glutamine, L-Isoleucine, L-Proline, L-Alanine, Glycine, L-Threonine, L-Serine, Calcium Phosphate, Corn Starch, L-Histidine, Corn Syrup, Magnesium Phosphate, Refined Tuna Oil (Fish)\*, L-Cystine, Potassium Citrate, Choline Bitartrate, L-Tryptophan, L-Methionine, L-Arginine, Modified Corn Starch, Sodium Chloride, Sodium Citrate, Xanthan Gum, Sodium Ascorbate, Soy Lecithin, Taurine, Zinc Gluconate, L-Carnitine L-Tartrate, Potassium Phosphate, Ferrous Sulfate, DL-Alpha Tocopheryl Acetate, Mono- and Diglycerides, Ascorbic Acid, Sodium Selenite, Copper Gluconate, Vitamin D3, Manganese Gluconate, Niacinamide, Vitamin A Acetate, Calcium Pantothenate, Chromium Chloride, Vitamin B12, Biotin, Tocopherols (Preservative), Pyridoxine Hydrochloride, Potassium Iodide, Folic Acid, Thiamine Hydrochloride, Riboflavin, Sodium Molybdate, Vitamin K1.

**Contains:** Fish (tuna) and Soy. **May contain:** Milk.

**\*A source of docosahexaenoic acid (DHA).**

TYR express plus15 Nutrition Information			
	Units	per 100 g	per 25 g (1 packet express plus15)
Calories	kcal	316	79
Protein equivalent	g	60	15
Total carbohydrate	g	14	3.5
Sugars	g	1.2	0.3
Total fat	g	2.2	0.6
Saturated fat	g	0.7	0.2
Docosahexaenoic acid (DHA)	mg	400	100
<b>VITAMINS</b>			
Vitamin A	mcg RE	690	172
Vitamin D	mcg	24	6.0
Vitamin E	mg α TE	12	3.0
Vitamin C	mg	97	24
Vitamin K	mcg	62	15
Thiamin	mg	1.7	0.42
Riboflavin	mg	2.0	0.50
Niacin	mg	8.8	2.2
Vitamin B6	mg	2.4	0.60
Folic acid	mcg	266	66
Vitamin B12	mcg	4.2	1.0
Pantothenic acid	mg	5.0	1.2
Biotin	mcg	33	8.2
Choline	mg	533	133
<b>MINERALS</b>			
Sodium	mg	373	93
Potassium	mg	648	162
Chloride	mg	373	93
Calcium	mg	1060	265
Phosphorus	mg	951	238
Magnesium	mg	293	73
Iron	mg	19	4.7
Copper	mg	1.6	0.40
Zinc	mg	15	3.7
Manganese	mg	1.3	0.32
Iodine	mcg	222	55
Molybdenum	mcg	62	15
Selenium	mcg	71	18
Chromium	mcg	37	9.2
<b>AMINO ACIDS</b>			
L-Alanine	g	4.46	1.12
L-Arginine	g	5.48	1.37
L-Aspartic acid	g	8.46	2.12
L-Cystine	g	2.04	0.51
L-Glutamine	g	5.10	1.28
Glycine	g	4.46	1.12
L-Histidine	g	2.99	0.75
L-Isoleucine	g	4.97	1.24
L-Leucine	g	7.96	1.99
L-Lysine	g	5.66	1.42
L-Methionine	g	1.27	0.32
L-Phenylalanine*	g	0	0
L-Proline	g	4.59	1.15
L-Serine	g	3.50	0.88
L-Threonine	g	3.82	0.96
L-Tryptophan	g	1.59	0.40
L-Tyrosine*	g	0	0
L-Valine	g	5.42	1.36
L-Carnitine	mg	56	14
Taurine	mg	117	29

\*No added phenylalanine and tyrosine.



**A powdered phenylalanine-free and tyrosine-medical food for use in the dietary management of Tyrosinemia.**

**Features**

- Suitable from 3 years of age
- A blend of essential and non-essential amino acids, carbohydrate, docosahexaenoic acid (DHA), vitamins and minerals
- 1 packet provides 20 g protein equivalent
- Designed to be mixed with water or other permitted beverages to prepare a low volume drink
- Available in Unflavored

**Osmolality**

34 g (1 packet) + 90 ml (3 fl oz) water = 2155 mOsm/kg

See page 106 for directions for use



Ordering/Reimbursement Information				
Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	30 x 34 g packets	12539-0024-96	B4157 & B4162	812539024965

**TYR express plus20 (Unflavored) – Ingredients:** L-Lysine L-Aspartate, L-Leucine, Maltodextrin, L-Arginine L-Aspartate, L-Valine, L-Glutamine, L-Isoleucine, L-Proline, L-Alanine, Glycine, L-Threonine, L-Serine, Calcium Phosphate, Corn Starch, L-Histidine, Corn Syrup, Magnesium Phosphate, Refined Tuna Oil (Fish)\*, L-Cystine, Potassium Citrate, Choline Bitartrate, L-Tryptophan, L-Methionine, L-Arginine, Modified Corn Starch, Sodium Chloride, Sodium Citrate, Xanthan Gum, Sodium Ascorbate, Soy Lecithin, Taurine, Zinc Gluconate, L-Carnitine L-Tartrate, Potassium Phosphate, Ferrous Sulfate, DL-Alpha Tocopheryl Acetate, Mono- and Diglycerides, Ascorbic Acid, Sodium Selenite, Copper Gluconate, Vitamin D3, Manganese Gluconate, Niacinamide, Vitamin A Acetate, Calcium Pantothenate, Chromium Chloride, Vitamin B12, Biotin, Tocopherols (Preservative), Pyridoxine Hydrochloride, Potassium Iodide, Folic Acid, Thiamine Hydrochloride, Riboflavin, Sodium Molybdate, Vitamin K1.

**Contains:** Fish (tuna) and Soy. **May contain:** Milk.

\*A source of docosahexaenoic acid (DHA).

TYR express plus20 Nutrition Information			
	Units	per 100 g	per 34 g (1 packet express plus20)
Calories	kcal	316	107
Protein equivalent	g	60	20
Total carbohydrate	g	14	4.8
Sugars	g	1.2	0.4
Total fat	g	2.2	0.8
Saturated fat	g	0.7	0.2
Docosahexaenoic acid (DHA)	mg	400	136
<b>VITAMINS</b>			
Vitamin A	mcg RE	690	235
Vitamin D	mcg	24	8.2
Vitamin E	mg α TE	12	4.1
Vitamin C	mg	97	33
Vitamin K	mcg	62	21
Thiamin	mg	1.7	0.58
Riboflavin	mg	2.0	0.68
Niacin	mg	8.8	3.0
Vitamin B6	mg	2.4	0.82
Folic acid	mcg	266	90
Vitamin B12	mcg	4.2	1.4
Pantothenic acid	mg	5.0	1.7
Biotin	mcg	33	11
Choline	mg	533	181
<b>MINERALS</b>			
Sodium	mg	373	127
Potassium	mg	648	220
Chloride	mg	373	127
Calcium	mg	1060	360
Phosphorus	mg	951	323
Magnesium	mg	293	100
Iron	mg	19	6.5
Copper	mg	1.6	0.54
Zinc	mg	15	5.1
Manganese	mg	1.3	0.44
Iodine	mcg	222	75
Molybdenum	mcg	62	21
Selenium	mcg	71	24
Chromium	mcg	37	13
<b>AMINO ACIDS</b>			
L-Alanine	g	4.46	1.52
L-Arginine	g	5.48	1.86
L-Aspartic acid	g	8.46	2.88
L-Cystine	g	2.04	0.69
L-Glutamine	g	5.10	1.73
Glycine	g	4.46	1.52
L-Histidine	g	2.99	1.02
L-Isoleucine	g	4.97	1.69
L-Leucine	g	7.96	2.71
L-Lysine	g	5.66	1.92
L-Methionine	g	1.27	0.43
L-Phenylalanine*	g	0	0
L-Proline	g	4.59	1.56
L-Serine	g	3.50	1.19
L-Threonine	g	3.82	1.30
L-Tryptophan	g	1.59	0.54
L-Tyrosine*	g	0	0
L-Valine	g	5.42	1.84
L-Carnitine	mg	56	19
Taurine	mg	117	40

\*No added phenylalanine and tyrosine.



**A ready-to-drink phenylalanine- and tyrosine-free medical food for use in the dietary management of Tyrosinemia.**



**Features**

- Suitable from 3 years of age
- A blend of essential and non-essential amino acids, carbohydrate, vitamins, minerals, and docosahexaenoic acid (DHA)
- 1 pouch provides 15 g protein equivalent
- Available in Orange and Red flavors

**Osmolality**

1550 mOsm/kg

See [page 107](#) for directions for use

Ordering/Reimbursement Information				
Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Orange	30 x 130 ml pouches	50600-0539-92	B4162 & B4157	812539020752
Red		50600-0543-26		812539020738

**TYR cooler15 (Red) – Ingredients:** Water, Sugar, L-Lysine L-Aspartate, L-Leucine, L-Arginine L-Aspartate, Malic Acid, L-Valine, L-Isoleucine, L-Proline, Glycine, L-Alanine, Modified Corn Starch, L-Threonine, Soy Lecithin, L-Serine, L-Histidine, Calcium Phosphate, Glucose Syrup, Magnesium Phosphate, L-Cystine, Refined Tuna Oil (Fish)\*, Choline Bitartrate, L-Tryptophan, Potassium Citrate, L-Methionine, L-Arginine, Salt, Maltodextrin, Ascorbic Acid, Natural and Artificial Flavor, Carmine (Color), Xanthan Gum, Acesulfame Potassium, Sodium Ascorbate, Taurine, Zinc Gluconate, Potassium Sorbate (Preservative), L-Carnitine L-Tartrate, Sodium Benzoate (Preservative), Ferrous Sulfate, DL-Alpha Tocopherol Acetate, Mono- and Diglycerides, Copper Gluconate, Vitamin D3, Manganese Gluconate, Vitamin A Acetate, Niacinamide, Calcium Pantothenate, Sodium Selenite, Vitamin B12, Biotin, Pyridoxine Hydrochloride, Potassium Iodide, Thiamine Hydrochloride, Riboflavin, Vitamin K1, Folic Acid, Chromium Chloride, Sodium Molybdate.

**Contains:** Fish (tuna) and Soy.

**Ingredient lists for all flavored options are available at [VitaflouSA.com](http://VitaflouSA.com)**

**\*A source of docosahexaenoic acid (DHA).**

TYR cooler15 Nutrition Information			
	Units	per 100 ml	per 150 ml (1 pouch)
Calories	kcal	75	97
Protein equivalent	g	11.5	15
Total Carbohydrate	g	5.1	6.6
Sugars	g	3.4	4.4
Total Fat	g	0.9	1.2
Saturated Fat	g	0.2	0.3
Docosahexaenoic Acid (DHA)	mg	77	100
<b>VITAMINS</b>			
Vitamin A	mcg RE	133	173
Vitamin D	mcg	5.1	6.6
Vitamin E	mg α TE	2.7	3.5
Vitamin C	mg	19	25
Vitamin K	mcg	12	16
Thiamin	mg	0.35	0.46
Riboflavin	mg	0.39	0.51
Niacin	mg	1.8	2.3
Vitamin B6	mg	0.44	0.57
Folic acid	mcg	51	66
Vitamin B12	mcg	0.82	1.1
Biotin	mcg	6.7	8.7
Pantothenic acid	mg	0.98	1.3
Choline	mg	102	133
<b>MINERALS</b>			
Sodium	mg	60	78
Potassium	mg	124	161
Chloride	mg	71	92
Calcium	mg	210	273
Phosphorus	mg	190	247
Magnesium	mg	60	78
Iron	mg	3.7	4.8
Copper	mg	0.37	0.48
Zinc	mg	2.8	3.6
Manganese	mg	0.25	0.33
Iodine	mcg	45	59
Molybdenum	mcg	11	14
Selenium	mcg	13	17
Chromium	mcg	7.1	9.2
<b>AMINO ACIDS</b>			
L-Alanine	g	0.93	1.21
L-Arginine	g	1.14	1.48
L-Aspartic acid	g	1.76	2.29
L-Cystine	g	0.42	0.55
L-Glutamine	g	0	0
Glycine	g	0.93	1.21
L-Histidine	g	0.62	0.81
L-Isoleucine	g	1.03	1.34
L-Leucine	g	1.66	2.16
L-Lysine	g	1.18	1.53
L-Methionine	g	0.27	0.35
L-Phenylalanine*	g	0	0
L-Proline	g	0.95	1.24
L-Serine	g	0.73	0.95
L-Threonine	g	0.80	1.04
L-Tryptophan	g	0.33	0.43
L-Tyrosine*	g	0	0
L-Valine	g	1.13	1.47
L-Carnitine	mg	13	17
Taurine	mg	25	33

\*No added phenylalanine and tyrosine.



**A powdered methionine-free medical food for use in the dietary management of Homocystinuria.**

**Features**

- Suitable from 1 year of age
- A blend of essential and non-essential amino acids, carbohydrate, vitamins and minerals
- 1 packet provides 10 g protein equivalent
- Designed to form a semi-solid (spoonable) consistency when mixed with water, or a low volume drink when mixed with water or other permitted beverage
- Available in Unflavored



**Osmolality**

24 g (1 packet) + 30 ml (1 fl oz) water = 3000 mOsm/kg

24 g (1 packet) + 80 ml (2.7 fl oz) water = 1540 mOsm/kg

See page 102 for directions for use

**Ordering/Reimbursement Information**

Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	30 x 24 g packets	50600-0514-86	B4162	812539020035

**HCU gel (Unflavored) – Ingredients:** Sugar, Corn Starch, L-Lysine L-Aspartate, L-Leucine, Modified Corn Starch, L-Valine, L-Glutamine, L-Isoleucine, L-Proline, Glycine, L-Arginine L-Aspartate, L-Phenylalanine, L-Tyrosine, L-Threonine, L-Serine, Calcium Phosphate, L-Histidine, L-Alanine, L-Arginine, Calcium Glycerophosphate, L-Cystine, Sodium Citrate, Magnesium Phosphate Dibasic, Potassium Chloride, L-Tryptophan, Potassium Citrate, Choline Bitartrate, Maltodextrin, Ascorbic Acid, Taurine, Salt, Zinc Gluconate, L-Carnitine L-Tartrate, Ferrous Sulfate, DL-Alpha Tocopherol Acetate, Niacinamide, Manganese Gluconate, Chromium Chloride, Sodium Selenite, Retinyl Acetate, Vitamin D3, Copper Gluconate, Calcium Pantothenate, Biotin, Folic Acid, Vitamin B12, Potassium Iodide, Pyridoxine Hydrochloride, Thiamine Hydrochloride, Sodium Molybdate, Riboflavin, Vitamin K.

**HCU gel Nutrition Information**

	Units	per 100 g	per 24 g (1 packet)
Calories	kcal	338	81
Protein equivalent	g	41.7	10
Total Carbohydrate	g	43	10.3
Sugars	g	27	6.5
Total Fat	g	0	0
Saturated Fat	g	0	0
<b>VITAMINS</b>			
Vitamin A	mcg RE	530	127
Vitamin D	mcg	13	3.1
Vitamin E	mg α TE	8	1.9
Vitamin C	mg	56	13
Vitamin K	mcg	36	8.6
Thiamin	mg	0.89	0.21
Riboflavin	mg	1.1	0.26
Niacin	mg	12	2.9
Vitamin B6	mg	0.98	0.24
Folic acid	mcg	180	43
Vitamin B12	mcg	1.8	0.43
Biotin	mcg	22	5.3
Pantothenic acid	mg	4.4	1.1
Choline	mg	250	60
<b>MINERALS</b>			
Sodium	mg	379	91
Potassium	mg	830	200
Chloride	mg	520	125
Calcium	mg	1080	260
Phosphorus	mg	730	175
Magnesium	mg	150	36
Iron	mg	12.4	3.0
Copper	mg	0.70	0.17
Zinc	mg	10	2.4
Manganese	mg	15	0.36
Iodine	mcg	120	29
Molybdenum	mcg	44	11
Selenium	mcg	31	7.4
Chromium	mcg	63	15
<b>AMINO ACIDS</b>			
L-Alanine	g	2.05	0.49
L-Arginine	g	3.41	0.82
L-Aspartic acid	g	4.56	1.09
L-Cystine	g	1.37	0.33
L-Glutamine	g	4.02	0.96
Glycine	g	3.00	0.72
L-Histidine	g	2.14	0.51
L-Isoleucine	g	3.21	0.77
L-Leucine	g	5.57	1.34
L-Lysine	g	3.59	0.86
L-Methionine*	g	0	0
L-Phenylalanine	g	2.48	0.60
L-Proline	g	3.13	0.75
L-Serine	g	2.40	0.58
L-Threonine	g	2.44	0.59
L-Tryptophan	g	1.07	0.26
L-Tyrosine	g	2.46	0.59
L-Valine	g	3.53	0.85
L-Carnitine	mg	46	11
Taurine	mg	92	22

\*No added methionine.



**A powdered methionine-free medical food for use in the dietary management of Homocystinuria.**

**Features**

- Suitable from 3 years of age
- A blend of essential and non-essential amino acids, carbohydrate, docosahexaenoic acid (DHA), vitamins and minerals
- 1 packet provides 15 g protein equivalent
- Designed to be mixed with water or other permitted beverages to prepare a low volume drink
- Available in Unflavored



**Osmolality**

25 g (1 packet) + 90 ml (3 fl oz) water = 1705 mOsm/kg

See page 106 for directions for use

**Ordering/Reimbursement Information**

Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	30 x 25 g packets	12539-0024-97	B4157 & B4162	812539024972

**HCU express plus15 (Unflavored) — Ingredients:** L-Lysine L-Aspartate, L-Leucine, Maltodextrin, L-Glutamine, L-Valine, L-Isoleucine, L-Proline, L-Arginine Aspartate, Glycine, L-Phenylalanine, L-Tyrosine, L-Threonine, L-Serine, Calcium Phosphate, L-Histidine, Corn Starch, L-Alanine, Corn Syrup, L-Arginine, Magnesium Phosphate, Refined Tuna Oil (Fish)\*, L-Cystine, Potassium Citrate, Choline Bitartrate, L-Tryptophan, Modified Corn Starch, Sodium Chloride, Sodium Citrate, Xanthan Gum, Sodium Ascorbate, Soy Lecithin, Taurine, Zinc Gluconate, L-Carnitine L-Tartrate, Potassium Phosphate, Ferrous Sulfate, DL-Alpha Tocopheryl Acetate, Mono- and Diglycerides, Ascorbic Acid, Sodium Selenite, Copper Gluconate, Vitamin D3, Manganese Gluconate, Niacinamide, Vitamin A Acetate, Calcium Pantothenate, Chromium Chloride, Vitamin B12, Biotin, Tocopherols (Preservative), Pyridoxine Hydrochloride, Potassium Iodide, Folic Acid, Thiamine Hydrochloride, Riboflavin, Sodium Molybdate, Vitamin K1.

**Contains:** Fish (tuna) and Soy. **May contain:** Milk.

**\*A source of docosahexaenoic acid (DHA).**

**HCU express plus15 Nutrition Information**

	Units	per 100 g	per 25 g (1 packet express plus15)
Calories	kcal	316	79
Protein equivalent	g	60	15
Total carbohydrate	g	14	3.5
Sugars	g	1.2	0.3
Total fat	g	2.2	0.6
Saturated fat	g	0.7	0.2
Docosahexaenoic acid (DHA)	mg	400	100
<b>VITAMINS</b>			
Vitamin A	mcg RE	690	172
Vitamin D	mcg	24	6.0
Vitamin E	mg α TE	12	3.0
Vitamin C	mg	97	24
Vitamin K	mcg	62	15
Thiamin	mg	1.7	0.42
Riboflavin	mg	2.0	0.50
Niacin	mg	8.8	2.2
Vitamin B6	mg	2.4	0.60
Folic acid	mcg	266	66
Vitamin B12	mcg	4.2	1.0
Pantothenic acid	mg	5.0	1.2
Biotin	mcg	33	8.2
Choline	mg	533	133
<b>MINERALS</b>			
Sodium	mg	373	93
Potassium	mg	648	162
Chloride	mg	373	93
Calcium	mg	1060	265
Phosphorus	mg	951	238
Magnesium	mg	293	73
Iron	mg	19	4.7
Copper	mg	1.6	0.40
Zinc	mg	15	3.7
Manganese	mg	1.3	0.32
Iodine	mcg	222	55
Molybdenum	mcg	62	15
Selenium	mcg	71	18
Chromium	mcg	37	9.2
<b>AMINO ACIDS</b>			
L-Alanine	g	2.95	0.74
L-Arginine	g	4.90	1.23
L-Aspartic acid	g	6.56	1.64
L-Cystine	g	1.97	0.49
L-Glutamine	g	5.80	1.45
Glycine	g	4.31	1.08
L-Histidine	g	3.07	0.77
L-Isoleucine	g	4.62	1.16
L-Leucine	g	8.00	2.00
L-Lysine	g	5.15	1.29
L-Methionine*	g	0	0
L-Phenylalanine	g	3.57	0.89
L-Proline	g	4.50	1.13
L-Serine	g	3.45	0.86
L-Threonine	g	3.51	0.88
L-Tryptophan	g	1.54	0.39
L-Tyrosine	g	3.54	0.89
L-Valine	g	5.08	1.27
L-Carnitine	mg	56	14
Taurine	mg	117	29

\*No added methionine.



**A powdered methionine-free medical food for use in the dietary management of Homocystinuria.**

**Features**

- Suitable from 3 years of age
- A blend of essential and non-essential amino acids, carbohydrate, docosahexaenoic acid (DHA), vitamins and minerals
- 1 packet provides 20 g protein equivalent
- Designed to be mixed with water or other permitted beverages to prepare a low volume drink
- Available in Unflavored

**Osmolality**

34 g (1 packet) + 90 ml (3 fl oz) water = 2155 mOsm/kg

See page 106 for directions for use



HCU express plus20 Nutrition Information			
	Units	per 100 g	per 34 g (1 packet express plus20)
Calories	kcal	316	107
Protein equivalent	g	60	20
Total carbohydrate	g	14	4.8
Sugars	g	1.2	0.4
Total fat	g	2.2	0.8
Saturated fat	g	0.7	0.2
Docosahexaenoic acid (DHA)	mg	400	136
<b>VITAMINS</b>			
Vitamin A	mcg RE	690	235
Vitamin D	mcg	24	8.2
Vitamin E	mg α TE	12	4.1
Vitamin C	mg	97	33
Vitamin K	mcg	62	21
Thiamin	mg	1.7	0.58
Riboflavin	mg	2.0	0.68
Niacin	mg	8.8	3.0
Vitamin B6	mg	2.4	0.82
Folic acid	mcg	266	90
Vitamin B12	mcg	4.2	1.4
Pantothenic acid	mcg	5.0	1.7
Biotin	mcg	33	11
Choline	mg	533	181
<b>MINERALS</b>			
Sodium	mg	373	127
Potassium	mg	648	220
Chloride	mg	373	127
Calcium	mg	1060	360
Phosphorus	mg	951	323
Magnesium	mg	293	100
Iron	mg	19	6.5
Copper	mg	1.6	0.54
Zinc	mg	15	5.1
Manganese	mg	1.3	0.44
Iodine	mcg	222	75
Molybdenum	mcg	62	21
Selenium	mcg	71	24
Chromium	mcg	37	13
<b>AMINO ACIDS</b>			
L-Alanine	g	2.95	1.00
L-Arginine	g	4.90	1.67
L-Aspartic acid	g	6.56	2.23
L-Cystine	g	1.97	0.67
L-Glutamine	g	5.80	1.97
Glycine	g	4.31	1.47
L-Histidine	g	3.07	1.04
L-Isoleucine	g	4.62	1.57
L-Leucine	g	8.00	2.72
L-Lysine	g	5.15	1.75
L-Methionine*	g	0	0
L-Phenylalanine	g	3.57	1.21
L-Proline	g	4.50	1.53
L-Serine	g	3.45	1.17
L-Threonine	g	3.51	1.19
L-Tryptophan	g	1.54	0.52
L-Tyrosine	g	3.54	1.20
L-Valine	g	5.08	1.73
L-Carnitine	mg	56	19
Taurine	mg	117	40

\*No added methionine.



**A ready-to-drink methionine-free medical food for use in the dietary management of Homocystinuria.**

**Features**

- Suitable from 3 years of age
- A blend of essential and non-essential amino acids, carbohydrate, vitamins, minerals, and docosahexaenoic acid (DHA)
- 1 pouch provides 15 g protein equivalent
- Available in Orange and Red flavors

**Osmolality**

1550 mOsm/kg

See [page 107](#) for directions for use

Ordering/Reimbursement Information				
Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Orange	30 x 130 ml pouches	12539-0020-66	B4162 & B4157	812539020660
Red		12539-0020-64		812539020646

**HCU cooler15 (Red) – Ingredients:** Water, Sugar, L-Lysine L-Aspartate, L-Leucine, Malic Acid, L-Valine, L-Isoleucine, L-Proline, Modified Corn Starch, Glycine, L-Arginine L-Aspartate, Natural and Artificial Flavor, Soy Lecithin, L-Phenylalanine, L-Tyrosine, L-Threonine, L-Serine, L-Histidine, Calcium Phosphate, L-Alanine, Glucose Syrup, L-Arginine, Magnesium Phosphate, Refined Tuna Oil (Fish)\*, L-Cystine, Choline Bitartrate, Potassium Citrate, L-Tryptophan, Salt, Maltodextrin, Carmine (Color), Ascorbic Acid, Xanthan Gum, Acesulfame Potassium, Sodium Ascorbate, Taurine, Zinc Gluconate, Potassium Sorbate (Preservative), L-Carnitine L-Tartrate, Sodium Benzoate (Preservative), Ferrous Sulfate, DL-Alpha Tocopherol Acetate, Mono- and Diglycerides, Copper Gluconate, Vitamin D3, Manganese Gluconate, Vitamin A Acetate, Niacinamide, Calcium Pantothenate, Sodium Selenite, Vitamin B12, Biotin, Pyridoxine Hydrochloride, Potassium Iodide, Thiamine Hydrochloride, Riboflavin, Vitamin K1, Folic Acid, Sodium Molybdate, Chromium Chloride.

**Contains:** Fish (tuna) and Soy.

**Ingredient lists for all flavored options are available at [VitafloUSA.com](http://VitafloUSA.com)**

**\*A source of docosahexaenoic acid (DHA).**

HCU cooler15 Nutrition Information			
	Units	per 100 ml	per 130 ml (1 pouch)
Calories	kcal	75	97
Protein equivalent	g	11.5	15
Total Carbohydrate	g	5.1	6.6
Sugars	g	3.4	4.4
Total Fat	g	0.9	1.2
Saturated Fat	g	0.2	0.3
Docosahexaenoic Acid (DHA)	mg	77	100
<b>VITAMINS</b>			
Vitamin A	mcg RE	133	173
Vitamin D	mcg	5.1	6.6
Vitamin E	mg α TE	2.7	3.5
Vitamin C	mg	19	25
Vitamin K	mcg	12	16
Thiamin	mg	0.35	0.46
Riboflavin	mg	0.39	0.51
Niacin	mg	1.8	2.3
Vitamin B6	mg	0.44	0.57
Folic acid	mcg	51	66
Vitamin B12	mcg	0.82	1.1
Biotin	mcg	6.7	8.7
Pantothenic acid	mg	0.98	1.3
Choline	mg	102	133
<b>MINERALS</b>			
Sodium	mg	60	78
Potassium	mg	124	161
Chloride	mg	71	92
Calcium	mg	210	273
Phosphorus	mg	190	247
Magnesium	mg	60	78
Iron	mg	3.7	4.8
Copper	mg	0.37	0.48
Zinc	mg	2.8	3.6
Manganese	mg	0.25	0.33
Iodine	mcg	45	59
Molybdenum	mcg	11	14
Selenium	mcg	13	17
Chromium	mcg	7.1	9.2
<b>AMINO ACIDS</b>			
L-Alanine	g	0.61	0.79
L-Arginine	g	1.01	1.31
L-Aspartic acid	g	1.35	1.76
L-Cystine	g	0.41	0.53
L-Glutamine	g	0	0
Glycine	g	0.89	1.16
L-Histidine	g	0.64	0.83
L-Isoleucine	g	0.95	1.24
L-Leucine	g	1.65	2.15
L-Lysine	g	1.07	1.39
L-Methionine*	g	0	0
L-Phenylalanine	g	0.74	0.96
L-Proline	g	0.93	1.21
L-Serine	g	0.71	0.92
L-Threonine	g	0.73	0.95
L-Tryptophan	g	0.32	0.42
L-Tyrosine	g	0.73	0.95
L-Valine	g	1.05	1.37
L-Carnitine	mg	13	17
Taurine	mg	25	33

\*No added methionine.



**A powdered methionine-, threonine-, valine-free, and low isoleucine medical food for use in the dietary management of Methylmalonic Acidemia and Propionic Acidemia.**

**Features**

- Suitable from 1 year of age
- A blend of essential and non-essential amino acids, carbohydrate, vitamins and minerals
- 1 packet provides 10 g protein equivalent
- Designed to form a semi-solid (spoonable) consistency when mixed with water, or a low volume drink when mixed with water or other permitted beverage
- Available in Unflavored



**Osmolality**

24 g (1 packet) + 30 ml (1 fl oz) water = 3000 mOsm/kg

24 g (1 packet) + 80 ml (2.7 fl oz) water = 1540 mOsm/kg

See page 102 for directions for use

**Ordering/Reimbursement Information**

Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	30 x 24 g packets	50600-0515-23	B4162	812539020066

**MMA/PA gel (Unflavored) – Ingredients:** Sugar, Corn Starch, L-Lysine Aspartate, L-Arginine Aspartate, L-Leucine, L-Glutamine, Modified Corn Starch, L-Alanine, L-Serine, L-Histidine, L-Tyrosine, L-Phenylalanine, Calcium Phosphate, L-Proline, Glycine, L-Cystine, Calcium Glycerophosphate, Sodium Citrate, Magnesium Phosphate Dibasic, L-Tryptophan, Potassium Chloride, Potassium Citrate, Choline Bitartrate, Maltodextrin, L-Isoleucine, Ascorbic Acid, Taurine, Salt, Zinc Gluconate, L-Carnitine L-Tartrate, Ferrous Sulfate, DL-Alpha Tocopherol Acetate, Niacinamide, Manganese Gluconate, Chromium Chloride, Sodium Selenite, Retinyl Acetate, Vitamin D3, Copper Gluconate, Calcium Pantothenate, Biotin, Folic Acid, Vitamin K, Potassium Iodide, Pyridoxine Hydrochloride, Thiamine Hydrochloride, Sodium Molybdate, Riboflavin, Vitamin B12.

**MMA/PA gel Nutrition Information**

	Units	per 100 g	per 24 g (1 packet)
Calories	kcal	338	81
Protein equivalent	g	41.7	10
Total Carbohydrate	g	43	10.3
Sugars	g	27	6.5
Total Fat	g	0	0
Saturated Fat	g	0	0
<b>VITAMINS</b>			
Vitamin A	mcg RE	530	127
Vitamin D	mcg	13	3.1
Vitamin E	mg α TE	8	1.9
Vitamin C	mg	56	13
Vitamin K	mcg	36	8.6
Thiamin	mg	0.89	0.21
Riboflavin	mg	1.1	0.26
Niacin	mg	12	2.9
Vitamin B6	mg	0.98	0.24
Folic acid	mcg	180	43
Vitamin B12	mcg	1.8	0.43
Biotin	mcg	22	5.3
Pantothenic acid	mg	4.4	1.1
Choline	mg	250	60
<b>MINERALS</b>			
Sodium	mg	379	91
Potassium	mg	830	200
Chloride	mg	520	125
Calcium	mg	1080	260
Phosphorus	mg	730	175
Magnesium	mg	150	36
Iron	mg	12.4	3.0
Copper	mg	0.70	0.17
Zinc	mg	10	2.4
Manganese	mg	15	0.36
Iodine	mcg	120	29
Molybdenum	mcg	44	11
Selenium	mcg	31	7.4
Chromium	mcg	63	15
<b>AMINO ACIDS</b>			
L-Alanine	g	4.15	1.00
L-Arginine	g	4.30	1.03
L-Aspartic acid	g	7.46	1.79
L-Cystine	g	1.77	0.42
L-Glutamine	g	5.06	1.21
Glycine	g	1.95	0.47
L-Histidine	g	2.78	0.67
L-Isoleucine	g	0.15	0.04
L-Leucine	g	6.58	1.58
L-Lysine	g	4.58	1.10
L-Methionine*	g	0	0
L-Phenylalanine	g	2.78	0.67
L-Proline	g	2.02	0.48
L-Serine	g	2.93	0.70
L-Threonine*	g	0	0
L-Tryptophan	g	1.11	0.27
L-Tyrosine	g	2.78	0.67
L-Valine*	g	0	0
L-Carnitine	mg	46	11
Taurine	mg	92	22

\*No added methionine, threonine, and valine.





# express15

**A powdered methionine-, threonine-, valine-free and low isoleucine medical food for use in the dietary management of Methylmalonic Acidemia and Propionic Acidemia.**

### Features

- Suitable from 3 years of age
- A blend of essential and non-essential amino acids, carbohydrate, vitamins and minerals
- 1 packet provides 15 g protein equivalent
- Available in Unflavored

### Osmolality

25 g (1 packet) + 80 ml (2.7 fl oz) water = 1896 mOsm/kg

See page 106 for directions for use



Ordering/Reimbursement Information				
Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	30 x 25 g packets	12539-0020-07	B4162 & B4157	812539020073

**MMA/PA express15 (Unflavored) – Ingredients:** L-Lysine Aspartate, Dried Glucose Syrup, L-Arginine Aspartate, L-Leucine, L-Glutamine, L-Alanine, L-Serine, L-Tyrosine, L-Phenylalanine, L-Histidine, Calcium Phosphate, L-Proline, Glycine, Magnesium Phosphate Dibasic, Modified Corn Starch, Potassium Citrate, L-Cystine, Choline Bitartrate, L-Tryptophan, Salt, Maltodextrin, Xanthan Gum, Ascorbic Acid, L-Isoleucine, Ferrous Gluconate, Soy Lecithin, Zinc Gluconate, Taurine, L-Carnitine L-Tartrate, DL-Alpha Tocopheryl Acetate, Manganese Gluconate, Niacinamide, Sodium Selenite, D-Biotin, Copper Gluconate, Chromium Chloride, Calcium Pantothenate, Retinyl Acetate, Vitamin D3, Vitamin B12, Folic Acid, Sodium Molybdate, Pyridoxine Hydrochloride, Potassium Iodide, Thiamine Hydrochloride, Riboflavin, Vitamin K.

**Contains:** Soy.

### MMA/PA express15 Nutrition Information

	Units	per 100 g	per 25 g (1 packet)
Calories	kcal	297	74
Protein equivalent	g	60	15
Total Carbohydrate	g	13.7	3.4
Sugars	g	1.0	0.2
Total Fat	g	0.20	0.05
Saturated Fat	g	0	0
<b>VITAMINS</b>			
Vitamin A	mcg RE	740	185
Vitamin D	mcg	11.7	2.9
Vitamin E	mg α TE	14	3.5
Vitamin C	mg	96	24
Vitamin K	mcg	89	22
Thiamin	mg	1.8	0.45
Riboflavin	mg	2.0	0.50
Niacin	mg	22	5.5
Vitamin B6	mg	2.5	0.63
Folic acid	mcg	360	90
Vitamin B12	mcg	4.3	1.1
Biotin	mcg	170	43
Pantothenic acid	mg	7.1	1.8
Choline	mg	530	133
<b>MINERALS</b>			
Sodium	mg	510	128
Potassium	mg	840	210
Chloride	mg	650	163
Calcium	mg	1090	273
Phosphorus	mg	990	248
Magnesium	mg	330	83
Iron	mg	19	4.8
Copper	mg	2.0	0.50
Zinc	mg	19	4.8
Manganese	mg	2.8	0.70
Iodine	mcg	220	55
Molybdenum	mcg	130	33
Selenium	mcg	78	20
Chromium	mcg	78	20
<b>AMINO ACIDS</b>			
L-Alanine	g	5.92	1.48
L-Arginine	g	6.14	1.54
L-Aspartic acid	g	10.64	2.66
L-Cystine	g	2.53	0.63
L-Glutamine	g	7.22	1.81
Glycine	g	2.79	0.70
L-Histidine	g	3.97	0.99
L-Isoleucine	g	0.22	0.06
L-Leucine	g	9.39	2.35
L-Lysine	g	6.54	1.64
L-Methionine*	g	0	0
L-Phenylalanine	g	3.97	0.99
L-Proline	g	2.89	0.72
L-Serine	g	4.19	1.05
L-Threonine*	g	0	0
L-Tryptophan	g	1.59	0.40
L-Tyrosine	g	3.97	0.99
L-Valine*	g	0	0
L-Carnitine	mg	64	16
Taurine	mg	132	33

\*No added methionine, threonine, and valine.



# cooler<sup>15</sup>

**A ready-to-drink methionine-, threonine-, valine-free, and low isoleucine medical food for use in the dietary management of Methylmalonic Acidemia and Propionic Acidemia.**



### Features

- Suitable from 3 years of age
- A blend of essential and non-essential amino acids, carbohydrate, vitamins, minerals, and docosahexaenoic acid (DHA)
- 1 pouch provides 15 g protein equivalent
- Available in Red flavor

### Osmolality

1550 mOsm/kg

See [page 107](#) for directions for use

### Ordering/Reimbursement Information

Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Red	30 x 130 ml pouches	12539-0020-77	B4162 & B4157	812539020776

**MMA/PA cooler15 (Red) – Ingredients:** Water, Sugar, L-Lysine L-Aspartate, L-Arginine L-Aspartate, L-Leucine, Malic Acid, Soy Lecithin, L-Alanine, L-Serine, Modified Corn Starch, L-Histidine, L-Phenylalanine, L-Tyrosine, Natural and Artificial Flavor, L-Proline, Glycine, Calcium Phosphate, L-Cystine, Glucose Syrup, Magnesium Phosphate, Refined Tuna Oil (Fish)\*, L-Tryptophan, Choline Bitartrate, Potassium Citrate, Salt, Maltodextrin, Carmine (Color), Ascorbic Acid, Xanthan Gum, Acesulfame Potassium, L-Isoleucine, Sodium Ascorbate, Taurine, Zinc Gluconate, Potassium Sorbate (Preservative), L-Carnitine L-Tartrate, Sodium Benzoate (Preservative), Ferrous Sulfate, DL-Alpha Tocopherol Acetate, Mono- and Diglycerides, Copper Gluconate, Vitamin D3, Manganese Gluconate, Vitamin A Acetate, Niacinamide, Calcium Pantothenate, Sodium Selenite, Vitamin B12, Biotin, Pyridoxine Hydrochloride, Potassium Iodide, Thiamine Hydrochloride, Riboflavin, Vitamin K1, Folic Acid, Chromium Chloride, Sodium Molybdate.

**Contains:** Fish (tuna) and Soy.

**\*A source of docosahexaenoic acid (DHA).**

### MMA/PA cooler15 Nutrition Information

	Units	per 100 ml	per 130 ml (1 pouch)
Calories	kcal	75	97
Protein equivalent	g	11.5	15
Total Carbohydrate	g	5.1	6.6
Sugars	g	3.4	4.4
Total Fat	g	0.9	1.2
Saturated Fat	g	0.2	0.3
Docosahexaenoic Acid (DHA)	mg	77	100
<b>VITAMINS</b>			
Vitamin A	mcg RE	133	173
Vitamin D	mcg	5.1	6.6
Vitamin E	mg α TE	2.7	3.5
Vitamin C	mg	19	25
Vitamin K	mcg	12	16
Thiamin	mg	0.35	0.46
Riboflavin	mg	0.39	0.51
Niacin	mg	1.8	2.3
Vitamin B6	mg	0.44	0.57
Folic acid	mcg	51	66
Vitamin B12	mcg	0.82	1.1
Biotin	mcg	6.7	8.7
Pantothenic acid	mg	0.98	1.3
Choline	mg	102	133
<b>MINERALS</b>			
Sodium	mg	60	78
Potassium	mg	124	161
Chloride	mg	71	92
Calcium	mg	210	273
Phosphorus	mg	190	247
Magnesium	mg	60	78
Iron	mg	3.7	4.8
Copper	mg	0.37	0.48
Zinc	mg	2.8	3.6
Manganese	mg	0.25	0.33
Iodine	mcg	45	59
Molybdenum	mcg	11	14
Selenium	mcg	13	17
Chromium	mcg	7.1	9.2
<b>AMINO ACIDS</b>			
L-Alanine	g	1.22	1.59
L-Arginine	g	1.25	1.63
L-Aspartic acid	g	2.12	2.76
L-Cystine	g	0.53	0.69
L-Glutamine	g	0	0
Glycine	g	0.58	0.75
L-Histidine	g	0.82	1.07
L-Isoleucine	g	0.04	0.05
L-Leucine	g	1.72	2.24
L-Lysine	g	1.33	1.73
L-Methionine*	g	0	0
L-Phenylalanine	g	0.82	1.07
L-Proline	g	0.60	0.78
L-Serine	g	0.90	1.17
L-Threonine*	g	0	0
L-Tryptophan	g	0.34	0.44
L-Tyrosine	g	0.82	1.07
L-Valine*	g	0	0
L-Carnitine	mg	13	17
Taurine	mg	25	33

\*No added methionine, threonine, and valine.



**A powdered lysine-free and low tryptophan medical food for use in the dietary management of Glutaric Aciduria Type 1.**

**Features**

- Suitable from 1 year of age
- A blend of essential and non-essential amino acids, carbohydrate, vitamins and minerals
- 1 packet provides 10 g protein equivalent
- Designed to form a semi-solid (spoonable) consistency when mixed with water, or a low volume drink when mixed with water or other permitted beverage
- Available in Unflavored



**Osmolality**

24 g (1 packet) + 30 ml (1 fl oz) water = 3000 mOsm/kg

24 g (1 packet) + 80 ml (2.7 fl oz) water = 1540 mOsm/kg

See [page 102](#) for directions for use

**Ordering/Reimbursement Information**

Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	30 x 24 g packets	50600-0515-16	B4162	812539020059

**GA gel (Unflavored) – Ingredients:** Sugar, Corn Starch, L-Leucine, Modified Corn Starch, L-Alanine, L-Valine, L-Arginine, L-Isoleucine, L-Tyrosine, L-Proline, L-Threonine, L-Serine, L-Phenylalanine, Glycine, L-Aspartic Acid, Calcium Phosphate, L-Histidine, L-Cystine, Calcium Glycerophosphate, Sodium Citrate, Magnesium Phosphate Dibasic, Potassium Chloride, L-Methionine, Potassium Citrate, Choline Bitartrate, L-Tryptophan, Maltodextrin, Ascorbic Acid, Taurine, Salt, Zinc Gluconate, L-Carnitine L-Tartrate, Ferrous Sulfate, DL-Alpha Tocopherol Acetate, Niacinamide, Manganese Gluconate, Chromium Chloride, Sodium Selenite, Retinyl Acetate, Vitamin D3, Copper Gluconate, Calcium Pantothenate, Biotin, Folic Acid, Vitamin B12, Potassium Iodide, Pyridoxine Hydrochloride, Thiamine Hydrochloride, Sodium Molybdate, Riboflavin, Vitamin K.

**GA gel Nutrition Information**

	Units	per 100 g	per 24 g (1 packet)
Calories	kcal	338	81
Protein equivalent	g	41.7	10
Total Carbohydrate	g	43	10.3
Sugars	g	27	6.5
Total Fat	g	0	0
Saturated Fat	g	0	0
<b>VITAMINS</b>			
Vitamin A	mcg RE	530	127
Vitamin D	mcg	13	3.1
Vitamin E	mg α TE	8	1.9
Vitamin C	mg	56	13
Vitamin K	mcg	36	8.6
Thiamin	mg	0.89	0.21
Riboflavin	mg	1.1	0.26
Niacin	mg	12	2.9
Vitamin B6	mg	0.98	0.24
Folic acid	mcg	180	43
Vitamin B12	mcg	1.8	0.43
Biotin	mcg	22	5.3
Pantothenic acid	mg	4.4	1.1
Choline	mg	250	60
<b>MINERALS</b>			
Sodium	mg	379	91
Potassium	mg	830	200
Chloride	mg	520	125
Calcium	mg	1083	260
Phosphorus	mg	730	175
Magnesium	mg	150	36
Iron	mg	12.4	3.0
Copper	mg	0.70	0.17
Zinc	mg	10	2.4
Manganese	mg	15	0.36
Iodine	mcg	120	29
Molybdenum	mcg	44	11
Selenium	mcg	31	7.4
Chromium	mcg	63	15
<b>AMINO ACIDS</b>			
L-Alanine	g	4.47	1.07
L-Arginine	g	4.19	1.01
L-Aspartic acid	g	2.61	0.63
L-Cystine	g	1.60	0.38
L-Glutamine	g	0	0
Glycine	g	2.82	0.68
L-Histidine	g	1.97	0.47
L-Isoleucine	g	3.62	0.87
L-Leucine	g	6.28	1.51
L-Lysine*	g	0	0
L-Methionine	g	1.10	0.26
L-Phenylalanine	g	3.02	0.72
L-Proline	g	3.52	0.84
L-Serine	g	3.12	0.75
L-Threonine	g	3.37	0.81
L-Tryptophan	g	0.31	0.07
L-Tyrosine	g	3.52	0.84
L-Valine	g	4.41	1.06
L-Carnitine	mg	46	11
Taurine	mg	92	22

\*No added lysine.



**A powdered lysine-free and low tryptophan medical food for use in the dietary management of Glutaric Aciduria Type 1.**

**Features**

- Suitable from 3 years of age
- A blend of essential and non-essential of amino acids, carbohydrate, vitamins and minerals
- 1 packet provides 15 g protein equivalent
- Designed to be mixed with water or other permitted beverages to a low volume drink
- Available in Unflavored



**Osmolality**

25 g (1 packet) + 80 ml (2.7 fl oz) water = 1896 mOsm/kg

See [page 106](#) for directions for use

**Ordering/Reimbursement Information**

Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	30 x 25 g packets	50600-0516-22	B4162 & B4157	812539020103

**GA express15 (Unflavored) – Ingredients:** Dried Glucose Syrup, L-Leucine, L-Alanine, L-Valine, L-Arginine, L-Isoleucine, L-Tyrosine, L-Proline, L-Threonine, L-Serine, L-Phenylalanine, Glycine, L-Aspartic Acid, Calcium Phosphate, L-Histidine, Magnesium Phosphate Dibasic, Modified Corn Starch, Potassium Citrate, L-Cystine, Choline Bitartrate, L-Methionine, Salt, Maltodextrin, L-Tryptophan, Xanthan Gum, Ascorbic Acid, Ferrous Gluconate, Soy Lecithin, Zinc Gluconate, Taurine, L-Carnitine L-Tartrate, DL-Alpha Tocopheryl Acetate, Manganese Gluconate, Niacinamide, Sodium Selenite, D-Biotin, Copper Gluconate, Chromium Chloride, Calcium Pantothenate, Retinyl Acetate, Vitamin D3, Vitamin B12, Folic Acid, Sodium Molybdate, Pyridoxine Hydrochloride, Potassium Iodide, Thiamine Hydrochloride, Riboflavin, Vitamin K.

**Contains:** Soy.

**GA express15 Nutrition Information**

	Units	per 100 g	per 25 g (1 packet)
Calories	kcal	297	74
Protein equivalent	g	60	15
Total Carbohydrate	g	13.7	3.4
Sugars	g	1.0	0.2
Total Fat	g	0.20	0.05
Saturated Fat	g	0	0

<b>VITAMINS</b>			
Vitamin A	mcg RE	740	185
Vitamin D	mcg	11.7	2.9
Vitamin E	mg α TE	14	3.5
Vitamin C	mg	96	24
Vitamin K	mcg	89	22
Thiamin	mg	1.8	0.45
Riboflavin	mg	2.0	0.50
Niacin	mg	22	5.5
Vitamin B6	mg	2.5	0.63
Folic acid	mcg	360	90
Vitamin B12	mcg	4.3	1.1
Biotin	mcg	170	43
Pantothenic acid	mg	7.1	1.8
Choline	mg	530	133

<b>MINERALS</b>			
Sodium	mg	510	128
Potassium	mg	840	210
Chloride	mg	650	163
Calcium	mg	1090	273
Phosphorus	mg	990	248
Magnesium	mg	330	83
Iron	mg	19	4.8
Copper	mg	2.0	0.50
Zinc	mg	19	4.8
Manganese	mg	2.8	0.70
Iodine	mcg	220	55
Molybdenum	mcg	130	33
Selenium	mcg	78	20
Chromium	mcg	78	20

<b>AMINO ACIDS</b>			
L-Alanine	g	6.43	1.61
L-Arginine	g	6.03	1.51
L-Aspartic acid	g	3.76	0.94
L-Cystine	g	2.30	0.58
L-Glutamine	g	0	0
Glycine	g	4.05	1.01
L-Histidine	g	2.83	0.71
L-Isoleucine	g	5.21	1.30
L-Leucine	g	9.04	2.26
L-Lysine*	g	0	0
L-Methionine	g	1.59	0.40
L-Phenylalanine	g	4.34	1.09
L-Proline	g	5.07	1.27
L-Serine	g	4.49	1.12
L-Threonine	g	4.85	1.21
L-Tryptophan	g	0.45	0.11
L-Tyrosine	g	5.07	1.27
L-Valine	g	6.36	1.59
L-Carnitine	mg	64	16
Taurine	mg	132	33

\*No added lysine.



## A powdered essential amino acid medical food for the dietary management of Urea Cycle Disorders.

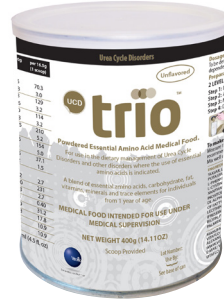
### Features

- Suitable from 1 year of age
- A blend of essential amino acids, carbohydrate, fat (including docosahexaenoic acid – DHA), vitamins and minerals
- 2 level scoops (33 g) provide 5 g protein equivalent
- Available in Unflavored

### Osmolality

33 g (2 scoops) + 120 ml (4 fl oz) water = 661 mOsm/kg

See [page 109](#) for directions for use



### Ordering/Reimbursement Information

Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	6 x 400 g can	60014-0051-82	B4157 & B4162	5060014051820

**UCD trio (Unflavored) – Ingredients:** Dried Glucose Syrup, Blend of Vegetable Oils (High Oleic Sunflower Oil, Soybean Oil), Sugar, L-Leucine, Calcium Phosphate, L-Lysine Acetate, L-Valine, L-Isoleucine, and less than 2% of: Sodium Citrate, Potassium Chloride, L-Threonine, Magnesium Hydrogen Phosphate, L-Tyrosine, Choline Bitartrate, L-Phenylalanine, L-Methionine, L-Histidine, Schizochytrium Sp. Oil\*, L-Cystine, Maltodextrin, L-Tryptophan, Citric Acid Esters of Mono and Diglycerides of Fatty Acids, Xanthan Gum, Magnesium Acetate, L-Ascorbic Acid, Zinc Gluconate, Sodium Caseinate (Milk), Inositol, Taurine, Sodium Ascorbate, Ferrous Sulfate, L-Carnitine L-Tartrate, DL-Alpha Tocopherol Acetate, Potassium Phosphate, Manganese Gluconate, Mono and Diglycerides of Fatty Acids, Niacinamide, Copper Gluconate, Retinyl Acetate, Calcium Pantothenate, Pyridoxine Hydrochloride, Thiamine Hydrochloride, Riboflavin, Folic Acid, Chromium Chloride, Potassium Iodide, Sodium Molybdate, Sodium Selenite, Biotin, Vitamin K1, Vitamin D3, Vitamin B12, Tocopherol (Preservative), Ascorbyl Palmitate (Preservative).

**Contains:** Milk

\*A source of docosahexaenoic acid (DHA).

### UCD trio Nutrition Information

	Units	per 100 g	per 16.5 g (1 scoop)
Calories	kcal	393	65
Protein equivalent	g	15	2.5
Total Carbohydrate	g	51	8.4
Sugars	g	16.4	2.7
Total Fat	g	14.3	2.4
<b>VITAMINS</b>			
Vitamin A	mcg RE	623	103
Vitamin D	mcg	22.5	3.7
Vitamin E	mg α TE	11.7	1.9
Vitamin C	mg	81	13.4
Vitamin K	mcg	75	12.4
Thiamin	mg	15	0.25
Riboflavin	mg	1.8	0.30
Niacin	mg	12.8	2.1
Vitamin B6	mg	2.1	0.35
Folic acid	mcg	420	69.3
Vitamin B12	mcg	3.6	0.59
Biotin	mcg	90	14.9
Pantothenic acid	mg	6.0	0.99
Choline	mg	450	74.3
Inositol	mg	90	14.9
<b>MINERALS</b>			
Sodium	mg	426	70.3
Potassium	mg	783	129
Chloride	mg	690	114
Calcium	mg	1275	210
Phosphorus	mg	936	154
Magnesium	mg	225	37.1
Iron	mg	16.2	2.7
Copper	mcg	1400	231
Zinc	mg	16.3	2.7
Manganese	mg	2.4	0.40
Iodine	mcg	189	31.2
Molybdenum	mcg	108	17.8
Selenium	mcg	66	10.9
Chromium	mcg	66	10.9
<b>AMINO ACIDS</b>			
L-Alanine	g	0	0
L-Arginine	g	0	0
L-Aspartic acid	g	0	0
L-Cystine	g	0.56	0.09
L-Glutamine	g	0	0
Glycine	g	0	0
L-Histidine	g	0.68	0.11
L-Isoleucine	g	2.71	0.45
L-Leucine	g	4.52	0.75
L-Lysine	g	2.48	0.41
L-Methionine	g	0.71	0.12
L-Phenylalanine	g	0.85	0.14
L-Proline	g	0	0
L-Serine	g	0	0
L-Threonine	g	1.55	0.26
L-Tryptophan	g	0.49	0.08
L-Tyrosine	g	1.47	0.24
L-Valine	g	2.71	0.45
L-Carnitine	mg	64	11
Taurine	mg	32	5.3



**A powdered essential amino acid medical food for the dietary management of Urea Cycle Disorders.**

**Features**

- Suitable from 3 years of age
- A blend of essential amino acids, carbohydrate, docosahexaenoic acid (DHA), vitamins and minerals
- 1 packet contains 5 g protein equivalent
- Designed to be mixed with water or other permitted beverages to a low volume drink
- Available in Tropical flavor

**Osmolality**

12.5 g (1 packet) + 100 ml (3 fl oz) water = 647 mOsm/kg

See page 110 for directions for use

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
EAA Supplement	30 x 12.5 g packets	12539-0025-19	B4157	812539025191

**EAA Supplement – Ingredients:** Sugar, L-leucine, L-lysine acetate, L-valine, L-isoleucine, Calcium phosphate, Modified corn starch, L-threonine, L-tyrosine, Malic acid, Dried glucose syrup, Magnesium gluconate, Refined tuna oil (fish), Magnesium phosphate, Natural and artificial flavor, L-phenylalanine, L-methionine, Choline bitartrate, L-histidine, Maltodextrin, L-cystine, L-tryptophan, Xanthan gum, Sodium ascorbate, Soy lecithin, L-carnitine L-tartrate, Zinc gluconate, Dipotassium phosphate, Ferrous sulfate, DL-alpha tocopheryl acetate, Mono- and diglycerides, Ascorbic acid, Acesulfame potassium, Sucralose, Sodium selenite, Copper gluconate, Vitamin D3, Manganese gluconate, Niacinamide, Vitamin A acetate, Calcium pantothenate, Chromium chloride, Vitamin B12, Biotin, Pyridoxine hydrochloride, Potassium iodide, Folic acid, Thiamine hydrochloride, Riboflavin, Sodium molybdate, Vitamin K1, Tocopherols (preservative).

**Contains:** Fish (tuna) and Soy.

**May contain:** Milk.

EAA Supplement Nutrition Information			
	Units	Per 100 g	Per 12.5 g (1 packet)
Calories	kcal	310	39
Protein Equivalent	g	40	5.0
Total Carbohydrate	g	31	3.9
Sugars	g	19	2.4
Total Fat	g	2.9	0.4
Saturated Fat	g	1.0	0.1
Docosahexaenoic Acid (DHA)	mg	530	66
<b>VITAMINS</b>			
Vitamin A	µg RE	1000	125
Vitamin D	µg	39	4.9
Vitamin E	mg α TE	15	1.9
Vitamin C	mg	145	18
Vitamin K	µg	94	12
Thiamin	mg	2.6	0.32
Riboflavin	mg	2.9	0.36
Niacin	mg	13	1.6
Vitamin B6	mg	3.6	0.45
Folic Acid	µg	390	49
Vitamin B12	µg	5.9	0.74
Biotin	µg	48	6.0
Pantothenic acid	mg	7.3	0.91
Choline	mg	600	75
<b>MINERALS</b>			
Sodium	mg	52	6.5
Potassium	mg	40	5.0
Chloride	mg	0	0
Calcium	mg	2200	275
Phosphorus	mg	1400	175
Magnesium	mg	500	62
Iron	mg	28	3.5
Copper	mg	2.3	0.29
Zinc	mg	22	2.7
Manganese	mg	2.1	0.26
Iodine	mcg	320	40
Molybdenum	µg	90	11
Selenium	µg	102	13
Chromium	µg	54	6.7
<b>AMINO ACIDS</b>			
L-Cystine	g	1.43	0.18
L-Histidine	g	1.71	0.21
L-Isoleucine	g	6.84	0.85
L-Leucine	g	11.41	1.43
L-Lysine	g	6.24	0.78
L-Methionine	g	1.80	0.22
L-Phenylalanine	g	2.14	0.27
L-Threonine	g	3.91	0.49
L-Tryptophan	g	1.23	0.15
L-Tyrosine	g	3.71	0.46
L-Valine	g	6.85	0.86
L-Carnitine	mg	130	16



**A powdered formula containing whey protein, carbohydrate, fat (high in medium chain triglycerides [MCT], low in long chain triglycerides [LCT]), vitamins, minerals, DHA and ARA.**



**Features**

- Suitable from 1 year of age
- For use in the dietary management of long chain fatty acid oxidation disorders, fat malabsorption, and other disorders requiring a high MCT, low LCT formula
- 99% of protein from whey
- Can be used as oral supplement or tube feeding
- Neutral taste (Unflavored)

**Osmolality**

20 kcal/fl oz (0.67 kcal/ml) dilution:

5 g powder (1 scoop) + 30 ml (1 fl oz) water = 180 mOsm/kg

See page 111 for directions for use

**Ordering/Reimbursement Information**

	Packaging	Reimbursement Code	HCPCS Code	Product Code
LIPIstart	6 x 400 g can	12539-0021-33	B4150 & B4158	812539021339

**LIPIstart – Ingredients:** Dried Corn Syrup, Medium Chain Triglycerides (From Coconut and Palm Kernel Oil), Whey Protein Concentrate (Milk), Soybean Oil, Calcium Phosphate, Canola Oil, Mono- and Diglycerides, Potassium Chloride, Choline Bitartrate, Potassium Citrate, Maltodextrin, M. Alpina Oil\*, Magnesium Phosphate, C. Cohnii Oil\*\*, Calcium Chloride, Sodium Ascorbate, Sodium Caseinate, Dipotassium Phosphate, Inositol, Taurine, Sunflower Oil, Zinc Gluconate, Sodium Citrate, DL-Alpha-Tocopherol Acetate, L-Carnitine L-Tartrate, Ferrous Sulfate, Vitamin D3, Vitamin A Acetate, Niacinamide, Calcium Pantothenate, Copper Gluconate, Manganese Gluconate, Riboflavin, Thiamine Hydrochloride, Pyridoxine Hydrochloride, Vitamin K1, Citric Acid, Ascorbyl Palmitate (Preservative), Tocopherols (Preservative), Potassium Iodide, Folic Acid, Chromium Chloride, Sodium Molybdate, Sodium Selenite, Biotin, Vitamin B12.

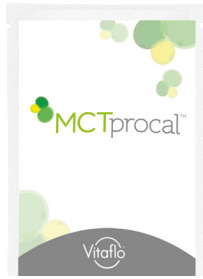
**Contains:** Milk

**\*A source of Arachidonic acid (ARA)**

**\*\*A source of Docosahexaenoic acid (DHA)**

**LIPIstart Nutrition Information**

	Units	per 100 g	per 100 ml (at 20 kcal/fl oz dilution)
Calories	kcal	469	70
Protein	g	12	1.8
Carbohydrate	g	58	8.7
Sugars	g	6.0	0.9
Total Fat	g	21	3.2
Saturated fat	g	16.4	2.5
Polyunsaturated fat	g	2.1	0.31
Linoleic Acid	mg	1470	220
Arachidonic Acid (ARA)	mg	100	15
α-Linolenic acid	mg	230	34
Docosahexaenoic Acid (DHA)	mg	100	15
Monounsaturated fat	g	1.6	0.24
Medium Chain Triglycerides (MCT)	g	15.6	2.34
Long Chain Triglycerides (LCT)	g	4.4	0.66
<b>VITAMINS</b>			
Vitamin A	mcg RE	408	61
Vitamin D	mcg	9.4	1.4
Vitamin E	mg α TE	6.0	0.9
Vitamin C	mg	53	8.0
Vitamin K	mcg	24	3.6
Thiamin	mg	0.53	0.08
Riboflavin	mg	0.71	0.11
Niacin	mg	3.7	0.56
Vitamin B6	mg	0.46	0.07
Folic Acid	mcg	71	11
Vitamin B12	mcg	1.0	0.15
Pantothenic Acid	mg	2.5	0.38
Biotin	mcg	16	2.4
Choline	mg	142	21
Inositol	mg	53	8.0
<b>MINERALS</b>			
Sodium	mg	210	31
Potassium	mg	430	64
Chloride	mg	320	48
Calcium	mg	355	53
Phosphorus	mg	270	40
Magnesium	mg	40	6.0
Iron	mg	5.1	0.77
Copper	mg	0.36	0.05
Zinc	mg	4.1	0.61
Manganese	mg	0.24	0.04
Iodine	mcg	81	12
Molybdenum	mcg	22	3.3
Selenium	mcg	17	2.6
Chromium	mcg	11	1.6
<b>AMINO ACIDS</b>			
L-Carnitine	mg	12	1.8
Taurine	mg	40	6.0



**A medium chain triglyceride-based powder, containing a blend of carbohydrate and protein.**

**Features**

- Suitable from 3 years of age
- For the dietary management of disorders of long chain fatty acid oxidation, fat malabsorption and other disorders requiring a high MCT, low long chain triglyceride (LCT) diet
- MCTprocal can be added to a wide variety of foods and drinks\*
- May be used to fortify enteral formula with a source of MCT
- Neutral taste (Unflavored)

\* not suitable for addition to fruit juice

See [page 112](#) for directions for use

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
MCTprocal	30 x 16 g packets	12539-0021-58	B4155	812539021582

MCTprocal Nutrition Information				
	Units	per 100 g	per 16 g (1 packet)	
Calories	kcal	703	112	
Protein	g	12.2	2.0	
Total Carbohydrate	g	20.6	3.3	
Sugars	g	3.3	0.5	
Total Fat	g	63.5	10	
Saturated Fat	g	61.2	10	
Medium Chain Triglycerides (MCT)	g	60.7	10	
Long Chain Triglycerides (LCT)	g	0.90	0.14	
<b>MINERALS</b>				
Sodium	mg	220	35	
Potassium	mg	542	87	
Calcium	mg	320	51	
Phosphorus	mg	444	71	

**MCTprocal – Ingredients:** Medium Chain Triglycerides (from Coconut and Palm Kernel Oil), Glucose Syrup, Sodium Caseinate (milk), Dipotassium Phosphate, Calcium Phosphate.

**Contains:** Milk



**A hydrothermally processed high amylopectin cornstarch. For use in the dietary management of hepatic Glycogen Storage Diseases (GSD) where the use of a long acting cornstarch is indicated.**

**Features**

- Suitable from 5 years of age
- Specialized patented heat and moisture process for slower release starch
- Glycosade can be taken as a drink or given as a bolus via feeding tube
- Available in Unflavored and Lemon flavor

**Osmolality**

Unflavored: 60 g (1 packet) + 120 ml (4 fl oz) water = 14 mOsm/kg

Lemon flavor: 60 g (1 packet) + 120 ml (4 fl oz) water = 19 mOsm/kg

See [page 113](#) for directions for use

Ordering/Reimbursement Information				
Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Unflavored	30 x 60 g packets	50600-0514-00	B4155	812539021346
Lemon		12539-0024-76		812539024767

Glycosade Nutrition Information					
	Units	Unflavored		Flavored	
		per 100 g	per 60 g (1 packet)	per 100 g	per 60 g (1 packet)
Calories	kcal	352	212	352	212
Protein	g	0	0	0	0
Total Carbohydrate	g	88	53	88	53
Sugars	g	0	0	0	0
Total Fat	g	0	0	0	0
Saturated Fat	g	0	0	0	0

**Unflavored – Ingredient:** Cornstarch.

**Lemon (artificially flavored) – Ingredients:** Cornstarch, Natural and Artificial Flavor, Xanthan Gum, Citric Acid, Sucralose.



# S.O.S25™

**A powdered neutral tasting carbohydrate drink mix specifically formulated for use as an emergency regimen in the dietary management of inherited metabolic diseases.**



## Features

- Age indication\*:
  - S.O.S25 is recommended from 10 years of age
- \*can vary depending on individual requirements
- Pre-measured amounts of carbohydrate
- Use 1 full packet and add sufficient water to achieve a final volume of 200 ml :
  - S.O.S25 = 25% CHO solution
- Neutral taste (Unflavored)

## Osmolality

52 g of S.O.S25 + water to a final volume of 200 ml = 390 mOsm/kg

See [page 114](#) for directions for use

### Ordering/Reimbursement Information

	Packaging	Reimbursement Code	HCPCS Code	Product Code
S.O.S25	30 x 52 g packets	12539-0021-40	B4157 & B4162	812539021407

### S.O.S Nutrition Information

	Units	100 g	200 ml of S.O.S25 52 g packet reconstituted
Calories	kcal	380	200
Protein	g	0	0
Total Carbohydrate	g	95	50
Sugars	g	9.0	4.7
Total Fat	g	0	0
<b>MINERALS</b>			
Sodium	mg	<20	<10

**S.O.S25 – Ingredient:** Dried Glucose Syrup.

## SINGLE DOSE AMINO ACIDS:

Vitaflo's Single Dose Amino Acids supply pre-measured doses of amino acids on a carbohydrate base. Suitable from 1 year of age.\*

Product	Amino acid dose	Packet size
<b>Arginine500</b>	500 mg of L-Arginine	4 g
<b>Arginine2000</b>	2000 mg of L-Arginine	4 g
<b>Citrulline200</b>	200 mg of L-Citrulline	4 g
<b>Citrulline1000</b>	1000 mg of L-Citrulline	4 g
<b>Creatine5000</b>	5000 mg of Creatine	6 g
<b>Cystine500</b>	500 mg of L-Cystine	4 g
<b>Glycine500</b>	500 mg of L-Glycine	4 g
<b>Isoleucine50</b>	50 mg of L-Isoleucine	4 g
<b>Isoleucine1000</b>	1000 mg of L-Isoleucine	4 g
<b>Leucine100</b>	100 mg of L-Leucine	4 g
<b>Methionine100</b>	100 mg of L-Methionine	4 g
<b>Phenylalanine50</b>	50 mg of L-Phenylalanine	4 g
<b>Tyrosine1000</b>	1000 mg of L-Tyrosine	4 g
<b>Valine50</b>	50 mg of L-Valine	4 g
<b>Valine1000</b>	1000 mg of L-Valine	4 g

See [page 113](#) for directions for use

\*Creatine5000, Cystine500 & Tyrosine1000 are suitable from 3 years of age.

# Arginine500

A powdered medical food required for the dietary management of inherited metabolic diseases such as Urea Cycle Disorders, to be used under strict medical supervision to provide the specific amounts of arginine unable to be achieved by dietary modification alone.

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
Arginine500	30 x 4 g packets	12539-0020-82	B4155	812539020820

Nutrition Information	Units	100 g	4 g packet
Calories	kcal	370	15
Protein equivalent	g	10	0.4
L-Arginine	mg	12500	500
Total Carbohydrate	g	82	3.3
Total Fat	g	0	0

**Arginine500 – Ingredients:** Dried Glucose Syrup, L-Arginine.

# Citrulline200

A powdered medical food required for the dietary management of inherited metabolic diseases such as Urea Cycle Disorders, to be used under strict medical supervision to provide the specific amounts of citrulline unable to be achieved by dietary modification alone.

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
Citrulline200	30 x 4 g packets	12539-0020-91	B4155	812539020912

Nutrition Information	Units	100 g	4 g packet
Calories	kcal	380	15
Protein equivalent	g	5.0	0.2
L-Citrulline	mg	5000	200
Total Carbohydrate	g	90	3.6
Total Fat	g	0	0

**Citrulline200 – Ingredients:** Maltodextrin, L-Citrulline.

# Arginine2000

A powdered medical food required for the dietary management of inherited metabolic diseases such as Urea Cycle Disorders, to be used under strict medical supervision to provide the specific amounts of arginine unable to be achieved by dietary modification alone.

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
Arginine2000	30 x 4 g packets	12539-0020-83	B4155	812539020837

Nutrition Information	Units	100 g	4 g packet
Calories	kcal	360	14
Protein equivalent	g	42.5	1.7
L-Arginine	mg	50000	2000
Total Carbohydrate	g	47	1.9
Total Fat	g	0	0

**Arginine2000 – Ingredients:** L-Arginine, Maltodextrin.

# Citrulline1000

A powdered medical food required for the dietary management of inherited metabolic diseases such as Urea Cycle Disorders, to be used under strict medical supervision to provide the specific amounts of citrulline unable to be achieved by dietary modification alone.

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
Citrulline1000	30 x 4 g packets	12539-0020-89	B4155	812539020899

Nutrition Information	Units	100 g	4 g packet
Calories	kcal	370	15
Protein equivalent	g	20	0.8
L-Citrulline	mg	25000	1000
Total Carbohydrate	g	72	2.9
Total Fat	g	0	0

**Citrulline1000 – Ingredients:** Dried Glucose Syrup, L-Citrulline.

# Creatine5000

A powdered medical food required for the dietary management of inherited metabolic diseases such as GAMT deficiency and other disorders of creatine synthesis, to be used under strict medical supervision to provide specific amounts of creatine unable to be achieved by dietary modification alone.

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
Creatine5000	30 x 6 g packets	12539-0020-93	B4155	812539020936

Nutrition Information	Units	100 g	6 g packet
Calories	kcal	14	0.8
Protein equivalent	g	0	0
Creatine	mg	83333	5000
Total Carbohydrate	g	3.6	0.2
Total Fat	g	0	0

**Creatine5000 – Ingredients:** Creatine Monohydrate, Maltodextrin, Xanthan Gum.

# Glycine500

A powdered medical food required for the dietary management of inherited metabolic diseases such as Isovaleric Acidemia, to be used under strict medical supervision to provide the specific amounts of glycine unable to be achieved by dietary modification alone.

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
Glycine500	30 x 4 g packets	12539-0020-65	B4155	812539020653

Nutrition Information	Units	100 g	4 g packet
Calories	kcal	370	15
Protein equivalent	g	10	0.4
Glycine	mg	12500	500
Total Carbohydrate	g	82	3.3
Total Fat	g	0	0

**Glycine500 – Ingredients:** Maltodextrin, Glycine.

# Cystine500

A powdered medical food required for the dietary management of inherited metabolic diseases such as Homocystinuria, to be used under strict medical supervision to provide the specific amounts of cystine unable to be achieved by dietary modification alone.

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
Cystine500	30 x 4 g packets	12539-0020-95	B4155	812539020950

Nutrition Information	Units	100 g	4 g packet
Calories	kcal	370	15
Protein equivalent	g	10	0.4
L-Cystine	mg	12500	500
Total Carbohydrate	g	82	3.3
Total Fat	g	0	0

**Cystine500 – Ingredients:** Dried Glucose Syrup, L-Cystine, Xanthan Gum.

# Isoleucine50

A powdered medical food required for the dietary management of inherited metabolic diseases such as Maple Syrup Urine Disease, to be used under strict medical supervision to provide the specific amounts of isoleucine unable to be achieved by dietary modification alone.

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
Isoleucine50	30 x 4 g packets	50600-0543-02	B4155	812539021001

Nutrition Information	Units	100 g	4 g packet
Calories	kcal	384	15
Protein equivalent	g	1.0	0.04
L-Isoleucine	mg	1250	50
Total Carbohydrate	g	95	3.8
Total Fat	g	0	0

**Isoleucine50 – Ingredients:** Dried Glucose Syrup, L-Isoleucine.

# Isoleucine1000

A powdered medical food required for the dietary management of inherited metabolic diseases such as Maple Syrup Urine Disease, to be used under strict medical supervision to provide the specific amounts of isoleucine unable to be achieved by dietary modification alone.

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
Isoleucine1000	30 x 4 g packets	12539-0021-01	B4155	812539021018

Nutrition Information	Units	100 g	4 g packet
Calories	kcal	370	15
Protein equivalent	g	20	0.8
L-Isoleucine	mg	25000	1000
Total Carbohydrate	g	72	2.9
Total Fat	g	0	0

**Isoleucine1000 – Ingredients:** Dried Glucose Syrup, L-Isoleucine.

# Methionine100

A powdered medical food required for the dietary management of inherited metabolic diseases such as Cobalamin Disorders, to be used under strict medical supervision to provide the specific amounts of methionine unable to be achieved by dietary modification alone.

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
Methionine100	30 x 4 g packets	12539-0021-08	B4155	812539021001

Nutrition Information	Units	100 g	4 g packet
Calories	kcal	378	15
Protein equivalent	g	2.0	0.08
L-Methionine	mg	2500	100
Total Carbohydrate	g	92	3.7
Total Fat	g	0	0

**Methionine100 – Ingredients:** Dried Glucose Syrup, L-Methionine.

# Leucine100

A powdered medical food required for the dietary management of inherited metabolic diseases such as branched chain amino acid metabolism and Urea Cycle Disorders, to be used under strict medical supervision to provide the specific amounts of leucine unable to be achieved by dietary modification alone.

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
Leucine100	30 x 4 g packets	12539-0020-82	B4155	812539021018

Nutrition Information	Units	100 g	4 g packet
Calories	kcal	378	15
Protein equivalent	g	2.0	0.08
L-Leucine	mg	2500	100
Total Carbohydrate	g	92	3.7
Total Fat	g	0	0

**Leucine100 – Ingredients:** Dried Glucose Syrup, L-Leucine.

# Phenylalanine50

A powdered medical food required for the dietary management of inherited metabolic diseases such as Tyrosinemia, to be used under strict medical supervision to provide the specific amounts of phenylalanine unable to be achieved by dietary modification alone.

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
Phenylalanine50	30 x 4 g packets	12539-0021-15	B4155	812539021087

Nutrition Information	Units	100 g	4 g packet
Calories	kcal	384	15
Protein equivalent	g	1.0	0.04
L-Phenylalanine	mg	1250	50
Total Carbohydrate	g	95	3.8
Total Fat	g	0	0

**Phenylalanine50 – Ingredients:** Dried Glucose Syrup, L-Phenylalanine.

# Tyrosine1000

A powdered medical food required for the dietary management of inherited metabolic diseases such as Phenylketonuria, to be used under strict medical supervision to provide the specific amounts of tyrosine unable to be achieved by dietary modification alone.

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
Tyrosine1000	30 x 4 g packets	12539-0021-16	B4155	812539021162

Nutrition Information	Units	100 g	4 g packet
Calories	kcal	370	15
Protein equivalent	g	20	0.8
L-Tyrosine	mg	25000	1000
Total Carbohydrate	g	72	2.9
Total Fat	g	0	0

**Tyrosine1000 – Ingredients:** Dried Glucose Syrup, L-Tyrosine, Xanthan Gum.

# Valine1000

A powdered medical food required for the dietary management of inherited metabolic diseases such as Maple Syrup Urine Disease, to be used under strict medical supervision to provide the specific amounts of valine unable to be achieved by dietary modification alone.

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
Valine1000	30 x 4 g packets	12539-0021-18	B4155	812539021186

Nutrition Information	Units	100 g	4 g packet
Calories	kcal	370	15
Protein equivalent	g	20	0.8
L-Valine	mg	25000	1000
Total Carbohydrate	g	72	2.9
Total Fat	g	0	0

**Valine1000 – Ingredients:** Dried Glucose Syrup, L-Valine.

# Valine50

A powdered medical food required for the dietary management of inherited metabolic diseases such as Maple Syrup Urine Disease, to be used under strict medical supervision to provide the specific amounts of valine unable to be achieved by dietary modification alone.

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
Valine50	30 x 4 g packets	50600-0543-33	B4155	812539021209

Nutrition Information	Units	100 g	4 g packet
Calories	kcal	384	15
Protein equivalent	g	1.0	0.04
L-Valine	mg	1250	50
Total Carbohydrate	g	95	3.8
Total Fat	g	0	0

**Valine50 – Ingredients:** Dried Glucose Syrup, L-Valine.

# KIDNEY DISEASE



**A powdered formula with low levels of protein, calcium, chloride, potassium, phosphorus and vitamin A, for the dietary management of pediatric kidney disease.**

### Features

- Suitable from 1 year of age
- A blend of whey protein, carbohydrate, fat (including docosahexaenoic acid – DHA and arachidonic acid – ARA), vitamins, minerals, and low levels of renal specific nutrients
- Can be concentrated to provide up to 2 kcal/ml
- Suitable for oral and tube feeding use
- Neutral taste (Unflavored) to allow for mixing with other formulas and supplements

### Osmolality

30 kcal/fl oz (1 kcal/ml) dilution:

7 g powder (1 scoop) + 30 ml (1 fl oz) water = 230 mOsm/kg

Potential renal solute load = 125 mOsm/L

See [page 121](#) for directions for use

### Ordering/Reimbursement Information

	Packaging	Reimbursement Code	HCPSC Code	Product Code
Powder	6 x 400 g can	12539-0021-49	B4154	812539021490

**Renastart – Ingredients:** Dried Corn Syrup, Vegetable Oil (High Oleic Sunflower, Coconut, Canola, Sunflower), Whey Protein Concentrate (Milk), Mono- and Diglycerides, Magnesium Gluconate, M. Alpina Oil\*, Sodium Citrate, Choline Bitartrate, Maltodextrin, C. Cohnii Oil\*\*, L-Tyrosine, Sodium Caseinate, L-Phenylalanine, L-Valine, Calcium Phosphate, Dipotassium Phosphate, Sodium Ascorbate, L-Isoleucine, Calcium Chloride, L-Histidine, L-Threonine, L-Cystine, Taurine, L-Leucine, L-Tryptophan, Potassium Chloride, Inositol, L-Carnitine L-Tartrate, Zinc Gluconate, Calcium Citrate, Sodium Selenite, Ferrous Sulfate, Potassium Iodide, Tocopherols (Preservative), Vitamin D3, Ascorbyl Palmitate (Preservative), Niacinamide, Calcium Pantothenate, Copper Gluconate, Biotin, L-Methionine, Vitamin A Acetate, Chromium Chloride, Folic Acid, Pyridoxine Hydrochloride, Vitamin B12, Vitamin K1, Manganese Gluconate, Riboflavin, Thiamine Hydrochloride, Citric Acid, Sodium Molybdate.

**Contains:** Milk

\* A source of arachidonic acid (ARA)

\*\* A source of docosahexaenoic acid (DHA)

### Renastart Nutrition Information

	Units	per 100 g	per 100 ml (at 30 kcal/fl oz or 1 kcal/ml dilution)
Calories	kcal	494	100
Protein	g	7.5	1.5
Carbohydrate	g	62	12
Sugars	g	6.5	1.3
Total Fat	g	24	4.8
Saturated Fat	g	6.0	1.2
Linoleic Acid	mg	3700	740
Arachidonic Acid (ARA)	mg	200	40
Docosahexaenoic Acid (DHA)	mg	115	23
<b>VITAMINS</b>			
Vitamin A	mcg RE	110	22
Vitamin D	mcg	9.8	2.0
Vitamin E	mg α TE	4.8	1.0
Vitamin C	mg	65	13
Vitamin K	mcg	26	5.2
Thiamin	mg	0.32	0.06
Riboflavin	mg	0.44	0.09
Niacin	mg	3.6	0.72
Vitamin B6	mg	0.50	0.10
Folic Acid	mcg	70	14
Vitamin B12	mcg	0.88	0.18
Pantothenic Acid	mg	2.2	0.44
Biotin	mcg	19	3.8
Choline	mg	140	28
Inositol	mg	26	5.2
<b>MINERALS</b>			
Sodium	mg	210	42
Potassium	mg	95	19
Chloride	mg	80	16
Calcium	mg	100	20
Phosphorus	mg	83	17
Magnesium	mg	35	7.0
Iron	mg	4.5	0.90
Copper	mg	0.34	0.07
Zinc	mg	3.9	0.78
Manganese	mg	0.07	0.01
Iodine	mcg	85	17
Molybdenum	mcg	7.1	1.4
Selenium	mcg	17	3.4
Chromium	mcg	8.4	1.7
<b>AMINO ACIDS</b>			
L-Carnitine	mg	18	3.6
Taurine	mg	44	8.8



**A ready-to-drink formula with restricted levels of potassium, chloride, phosphorus, calcium, and vitamin A for the dietary management of kidney disease.**



**Features**

- Suitable from 1 year of age
- A blend of protein, carbohydrate, fat (including docosahexaenoic acid – DHA) vitamins, minerals and restricted levels of renal specific nutrients
- Calorie dense: 2 kcal/ml
- Suitable for tube and oral feeding use
- Available in Vanilla flavor

**Osmolality**

700 mOsm/kg

See [page 122](#) for directions for use

Ordering/Reimbursement Information				
Flavor	Packaging	Reimbursement Code	HCPCS Code	Product Code
Vanilla	15 x 200 ml bottle	12539-0024-84	B4154	812539024842

**Renastep – Ingredients:** Water, Dried Glucose Syrup, Vegetable Oil (High Oleic Sunflower, Canola), Calcium Caseinate (Milk), Sodium Caseinate (Milk), Citric Acid Esters Of Mono- and Diglycerides, Cellulose Gel and Gum, Sodium Citrate, Natural and Artificial Flavor, Calcium Lactate, Schizochytrium Sp. Oil\*, Potassium Citrate, Magnesium Chloride, Choline Chloride, Maltodextrin, Salt, Ascorbic Acid, Sodium Ascorbate, Magnesium Oxide, Ferrous Sulfate, Zinc Sulfate, L-Carnitine, Manganese Gluconate, Niacinamide, Copper Gluconate, Vitamin D3, Calcium Pantothenate, Vitamin A Acetate, Biotin, Vitamin B12, Sodium Selenite, Potassium Iodide, Pyridoxine Hydrochloride, Riboflavin, Sodium Molybdate, Thiamine Mononitrate, Vitamin K1, Chromium Chloride, Tocopherols (Preservative), Ascorbyl Palmitate (Preservative), Folic Acid.

**Contains:** Milk

\* A source of Docosahexaenoic Acid (DHA).

Renastep Nutrition Information			
	Units	Per 100 ml	Per 200 ml (1 bottle)
Calories	kcal	200	400
Protein	g	4.0	8.0
Carbohydrate	g	21	42
Sugars	g	3.4	6.8
Total Fat	g	11	22
Saturated Fat	g	1.7	3.4
Monounsaturated Fat	g	7.8	15.6
Polyunsaturated Fat	g	1.1	2.2
Linoleic acid	mg	725	1450
α-Linolenic acid	mg	150	300
Docosahexaenoic Acid (DHA)	mg	40	80
<b>VITAMINS</b>			
Vitamin A	mcg RE	39	78
Vitamin D	mcg	1.6	3.2
Vitamin E	mg α TE	4.5	8.9
Vitamin C	mg	8.0	16
Vitamin K	mcg	8.8	18
Thiamin	mg	0.15	0.30
Riboflavin	mg	0.20	0.40
Niacin	mg	1.5	3.0
Vitamin B6	mg	0.21	0.42
Folic Acid	mcg	25	50
Vitamin B12	mcg	0.40	0.80
Pantothenic acid	mg	0.60	1.2
Biotin	mcg	4.0	8.0
Choline	mg	30	60
<b>MINERALS</b>			
Sodium	mg	84	168
Potassium	mg	35	70
Chloride	mg	60	120
Calcium	mg	47	94
Phosphorus	mg	30	60
Magnesium	mg	15	30
Iron	mg	2.0	4.0
Copper	mg	0.16	0.32
Zinc	mg	1.6	3.2
Manganese	mg	0.20	0.40
Iodine	mcg	22	44
Molybdenum	mcg	8.8	18
Selenium	mcg	6.3	13
Chromium	mcg	3.1	6.2
<b>AMINO ACIDS</b>			
L-Carnitine	mg	4.0	8.0



# KETOGENIC



**Ready-to-drink nutritionally complete ketogenic formula in a 4:1 ratio of fat to carbohydrate and protein; for use in the dietary management of intractable epilepsy and other medical conditions where a ketogenic diet is indicated.**

**Features**

- Suitable from 3 years of age
- Can be used as a sole source of nutrition or an oral supplement in combination with foods as part of a medical ketogenic diet
- Suitable for tube and oral feeding use
- Provides ISSO™ fiber blend supporting digestive health with 3.2 g fiber per bottle
- Available in Vanilla flavor

**Osmolality**

290 mOsm/kg

See [page 125](#) for directions for use

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPSC Code	Product Code
K-Flo	24 x 250 ml bottles	12539-0025-77	B4154	812539025771

**K-Flo — Ingredients:** Water, High Oleic Sunflower Oil, Canola Oil, Milk Protein Isolate, Pea Fiber, Sodium Citrate, Citric Acid Esters of Mono- and Diglycerides, Potassium Citrate, Gum Acacia, Fructooligosaccharides, Calcium Chloride, Magnesium Chloride, Dipotassium Phosphate, Natural and Artificial Flavor, Inulin, Mono- and Diglycerides, Choline Bitartrate, M. Alpina Oil\*, Schizochytrium Sp. Oil\*\*, Ascorbic Acid, Taurine, Maltodextrin, L-Carnitine, Potassium Hydroxide, Sucralose, Ferrous Sulfate, Inositol, Potassium Iodide, Niacinamide, Zinc Sulfate, Manganese Gluconate, Vitamin D3, Vitamin A Acetate, Calcium Pantothenate, Copper Gluconate, Sodium Selenite, Biotin, Vitamin B12, Chromium Chloride, Pyridoxine Hydrochloride, Folic Acid, Riboflavin, Sodium Molybdate, Thiamine Hydrochloride, Tocopherols (Preservative), Ascorbyl Palmitate (Preservative).

**Contains:** Milk

\* A source of arachidonic acid (ARA).

\*\*A source of docosahexaenoic acid (DHA).

K-Flo Nutrition Information			
	Units	Per 100 ml	Per 250 ml (1 bottle)
Calories	kcal	150	375
Protein	g	3.4	8.5
Total Carbohydrate	g	1.6	4.0
Dietary Fiber	g	1.3	3.2
Sugars	g	0	0
Total Fat	g	14.7	36.8
Saturated Fat	g	1.4	3.5
Monounsaturated Fat	g	8.8	22
Polyunsaturated Fat	g	1.9	4.7
Linoleic Acid	mg	1460	3650
Arachidonic Acid (ARA)	mg	44	110
α-Linolenic Acid	mg	400	1000
Docosahexaenoic Acid (DHA)	mg	44	110
<b>VITAMINS</b>			
Vitamin A	mcg RE	70	175
Vitamin D	mcg	3.0	7.5
Vitamin E	mg α TE	3.0	7.5
Vitamin C	mg	11	27
Vitamin K	mcg	5.5	14
Thiamin	mg	0.12	0.30
Riboflavin	mg	0.20	0.50
Niacin	mg	1.5	3.7
Vitamin B6	mg	0.20	0.50
Folic Acid	mcg	23	57
Vitamin B12	mcg	0.40	1.0
Pantothenic Acid	mg	0.80	2.0
Biotin	mcg	4.0	10
Choline	mg	36	90
Inositol	mg	4.5	11
<b>MINERALS</b>			
Sodium	mg	130	325
Potassium	mg	250	625
Chloride	mg	180	450
Calcium	mg	130	325
Phosphorus	mg	80	200
Magnesium	mg	27	67
Iron	mg	1.6	4.0
Copper	mg	0.12	0.30
Zinc	mg	1.0	2.5
Manganese	mg	0.18	0.45
Iodine	mcg	18	45
Molybdenum	mcg	7.5	19
Selenium	mcg	8.5	21
Chromium	mcg	3.0	7.5
<b>AMINO ACIDS</b>			
L-Carnitine	mg	17	42
Taurine	mg	36	90



**A ready-to-use liquid emulsion of medium chain triglycerides (MCT) for use in the ketogenic diet or in the dietary management of conditions requiring MCT.**

**Features**

- Suitable from 1 year of age
- 20% MCT emulsion in a 7.6 fl oz (225 ml) bottle
- Can be incorporated into cooking and baking recipes
- May be used to fortify enteral formula with a source of MCT
- Available in Unflavored

**Osmolality**

50 mOsm/kg

See [page 126](#) for directions for use



**A powdered mixture of vitamins and minerals for use in restrictive therapeutic diets for management of conditions such as intractable epilepsy or inherited metabolic diseases.**

**Features**

- Suitable from 4 years of age
- Can be made into a low volume drink
- 0.7 g carbohydrate per packet
- Available in Orange flavor

**Osmolality**

1 packet (6 g) + 60 ml (2 fl oz) water = 275 mOsm/kg

See [page 127](#) for directions for use



Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
K-Quik	15 x 225 ml bottles	12539-0025-75	B4155	812539025757

Nutrition Information		
	Units	per 225 ml (1 bottle)
Calories	kcal	420
Total Fat	g	47
Saturated Fat	g	45
Trans Fat	g	0
Medium Chain Triglycerides (MCT)	g	45
Long Chain Triglycerides (LCT)	g	2.0
Sodium	mg	115
Total Carbohydrate	g	0
Protein	g	0

Not a significant source of cholesterol, dietary fiber, total sugars, added sugars, vitamin D, calcium, iron, and potassium.

**K-Quik – Ingredients:** Water, Medium Chain Triglycerides (from Coconut and Palm Kernel Oil), Citric Acid Esters of Mono- and Diglycerides, Mono- and Diglycerides, Sodium Chloride, Tocopherols (Preservative), Sucralose.

Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	Product Code
FruitiVits	30 x 6 g packets	12539-0021-41	B4104	812539021414

Nutrition Information				
	Units	per 100 g	per 6 g (1 packet)	
Calories	kcal	46	3	
Protein	g	0	0	
Total Carbohydrate	g	11.6	0.7	
Sugars	g	0.5	0.03	
Total Fat	g	0	0	
Saturated Fat	g	0	0	
<b>VITAMINS</b>				
Vitamin A	mcg RE	7407	444	
Vitamin D	mcg	222	13	
Vitamin E	mg α TE	137	8.2	
Vitamin C	mg	592	36	
Vitamin K	mcg	888	53	
Thiamin	mg	17	1.0	
Riboflavin	mg	20	1.2	
Niacin	mg	222	13	
Vitamin B6	mg	25	1.5	
Folic Acid	mcg	3555	213	
Vitamin B12	mcg	41	2.5	
Biotin	mcg	1659	100	
Pantothenic acid	mg	69	4.1	
Choline	mg	3704	222	
<b>MINERALS</b>				
Sodium	mg	45	2.7	
Potassium	mg	180	10.8	
Chloride	mg	20	1.2	
Calcium	mg	11911	715	
Phosphorus	mg	7437	446	
Magnesium	mg	2977	179	
Iron	mg	148	8.9	
Copper	mg	15	0.90	
Zinc	mg	148	8.9	
Manganese	mg	22	1.3	
Iodine	mcg	2504	150	
Molybdenum	mcg	1007	60	
Selenium	mcg	607	36	
Chromium	mcg	607	36	

**FruitiVits – Ingredients:** Calcium Phosphate, Magnesium Sulfate, Magnesium Phosphate, Choline Bitartrate, Natural and Artificial Flavor, Citric Acid, Xanthan Gum, Ascorbic Acid, Beta Carotene (Color), Ferrous Sulfate, DL-Alpha Tocopherol Acetate, Zinc Sulfate, Acesulfame Potassium, Niacinamide, Biotin, Sucralose, Vitamin D3, Calcium Pantothenate, Vitamin A Acetate, Manganese Sulfate, Sodium Selenite, Vitamin B12, Copper Sulfate, Potassium Iodide, Pyridoxine Hydrochloride, Thiamine Hydrochloride, Riboflavin, Vitamin K1, Folic Acid, Chromium Chloride, Sodium Molybdate.

# **METABOLIC PRODUCTS: DIRECTIONS FOR USE**

**Dosage and Administration**

To be determined by the clinician or dietitian and is dependent on the age, body weight, and medical condition of the patient.

**Important Notice**

PKU start must only be consumed by individuals with proven Phenylketonuria in conjunction with human milk or infant formula to provide the phenylalanine, fluid and general nutritional requirements of the infant in quantities as advised by a clinician or dietitian.

Suitable for infants and toddlers.

Not for intravenous use.

For enteral use only.

Not for use as a sole source of nutrition.

**Preparation guidelines**

The standard dilution of 21 kcal/fl oz or 0.69 kcal/ml is made by adding 1 level scoop of PKU start (4.7 g) to 30 ml (1 fl oz) of water. Use only the scoop provided in the can or a gram scale for greatest accuracy.

**Storage**

Store opened and unopened cans in a cool dry place.

Once opened: Tightly cover open can and use within 3 weeks. Avoid extreme storage temperatures.

**Pack Size**

4 x 400 g cans

**Preparation Guidelines**



Pour prescribed amount of water into bottle.



Add the prescribed number of level scoops to the water.



Close the bottle; shake well. Feed infant or toddler immediately. Once feeding begins, use contents within 1 hour or discard.

**Dosage and Administration**

To be determined by the clinician or dietitian and is dependent on age, body weight and medical condition of the patient.

Each 12.5 g packet of PKU explore provides 5 g protein equivalent.

Each 25 g packet of PKU explore provides 10 g protein equivalent.

**Important Notice**

Must only be consumed by people with proven Phenylketonuria under strict medical supervision.

PKU explore5 is suitable from 6 months of age.

PKU explore10 is suitable from 1 year of age.

Diet must be supplemented with natural protein, water and other nutrients in prescribed quantities to supply phenylalanine, fluid, and general nutrition requirements.

Not for intravenous use.

For enteral use only.

Not for use as a sole source of nutrition.

Not intended for use as a human milk substitute.

**Preparation Guidelines**

Water or permitted drinks should be taken after product consumption. The product should be prepared immediately prior to feeding and any remaining product must be discarded if not used within 1 hour.

Water or permitted drinks should be taken after product consumption.

**Storage**

Store in a cool dry place.

Packets are designed for single use and should be used immediately once opened.

**Pack Size**

explore5 — 30 x 12.5 g (0.44 oz) packets

explore10 — 30 x 25 g (0.88 oz) packets

**Preparation Guidelines**

**To prepare PKU explore5 as a spoonable consistency:**

**1** For PKU explore5, add 12.5 ml (approx. 1 Tbsp) of cold water into a small container with a lid. For PKU explore10, add 25 ml (1.5–2 Tbsp) of cold water into a small container with a lid.

**2** Empty the contents of the packet into the container.

**3** Secure the lid and shake well for 10 seconds.

**4** Leave to stand for 2 minutes, allowing a smooth semi-solid consistency to form. Consume with a spoon.

**To prepare PKU explore10 as a low volume drink:**

**1** Add 80 ml (approx. 3 fl oz) of cold water into a small container with a lid.

**2** Empty the contents of the packet into the container.

**3** Secure the lid and shake well for 10 seconds.

**4** Drink immediately.

### Dosage and Administration

To be determined by the clinician or dietitian and is dependent on age, body weight, and medical condition of the patient.

2 level scoops provide 10 g protein equivalent.

### Important Notice

Must only be consumed by people with proven Phenylketonuria under strict medical supervision.

Suitable from 1 year of age.

Diet must be supplemented with natural protein, water and other nutrients in prescribed quantities to supply the phenylalanine, fluid, and general nutrition requirements.

Not for intravenous use.

For enteral use only.

Not for use as a sole source of nutrition.

### Storage

Unopened: PKU trio should be stored in a cool dry place.

Once opened: Use within 1 month.

Any prepared product or formula should be refrigerated and used within 24 hours. Re-shake before use.

### Pack Size

400 g (14.11 oz) can

### Preparation Guidelines

To prepare 10 g PE:

Measure 2 level scoops into glass/ mixing cup.



1

Add approx. 135 ml (4.5 fl oz) of cold water.



2

Mix well until all of the powder is dissolved.



3

Drink immediately.



4

### Dosage and Administration

To be determined by the clinician or dietitian and is dependent on age, body weight and medical condition of the patient.

Each packet of gel provides 10 g protein equivalent.

### Important Notice

Must only be consumed by people with a proven metabolic disorder under strict medical supervision.

Suitable from 1 year of age.

Diet must be supplemented with natural protein, water and other nutrients in prescribed quantities to supply the restricted amino acids, fluid, and general nutrition requirements.

Not for intravenous use.

For enteral use only.

Not for use as a sole source of nutrition.

### Preparation Guidelines

Water or permitted drinks should be taken after product consumption. The product should be prepared immediately prior to feeding and any remaining product must be discarded if not used within 1 hour.

### Storage

Store in a cool dry place. Packets are designed for single use. Any unused powder in a packet must be tightly sealed and used within 24 hours.

### Pack Size

30 x 24 g (0.85 oz) packets

### Preparation Guidelines

To prepare a spoonable consistency

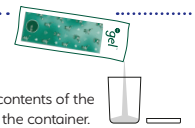
1

Add 30 ml (1 fl oz) of cold water into a small container with a lid.



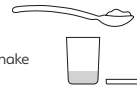
2

Empty the contents of the packet into the container.



3

Secure the lid and shake well for 10 seconds.

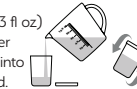


Leave to stand for 2 minutes, allowing a smooth semi-solid consistency to form. Consume with a spoon.

1

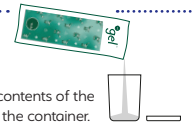
To prepare a low volume drink

Add 80 ml (approx. 3 fl oz) of cold water or other permitted beverage into a container with a lid.



2

Empty the contents of the packet into the container.



3

Secure the lid and shake well until powder dissolves. Drink immediately.





For more information on PKU sphere NEXT15, see [page 11](#)

### Dosage and Administration

To be determined by the clinician or dietitian and is dependent on the age, body weight, and medical condition of the patient.

Each 180 mL (6 fl oz) bottle of **PKU sphere NEXT15** provides 15 g of Protein Equivalent and contains 25 mg of phenylalanine.

### Preparation Guidelines

Shake vigorously before use. If desired, refrigerate before use.

### Important Notice

Must only be consumed by people with proven PKU under strict medical supervision.

Diet must be supplemented with natural protein, water, and other nutrients in prescribed quantities to supply phenylalanine, fluid, and general nutrition requirements.

Not for intravenous use. For enteral use (oral and tube feeding). Not for use as a sole source of nutrition.

### Storage

Store in a cool dry place or refrigerate before use if desired.

The product should be consumed immediately after opening.

However, if this is not possible, seal cap and consume within 6 hours at room temperature or within 24 hours if refrigerated.


Re-shake well before use to avoid separation.

### Pack Size

15 x 180 ml (6 fl oz) bottles

**Preparation Guidelines**

Shake vigorously before use. If desired, refrigerate before use.



For more information on PKU sphere liquid, see [page 13](#)

### Dosage and Administration

To be determined by the clinician or dietitian and is dependent on the age, body weight, and medical condition of the patient.

Each 8 fl oz (237 ml) carton of PKU sphere20 liquid provides 20 g of protein equivalent and contains 30 mg of phenylalanine.

### Important Notice

Must only be consumed by people with proven PKU under strict medical supervision.

Suitable from 3 years of age.

Diet must be supplemented with natural protein, water, and other nutrients in prescribed quantities to supply phenylalanine, fluid, and general nutrition requirements.

Not for intravenous use.

For enteral use only (tube or oral).

Not for use as a sole source of nutrition.

### Storage

Store in a cool dry place or refrigerate before use if desired.

The product should be consumed immediately after opening. However, if this is not possible, seal cap and consume within 4 hours at room temperature or within 24 hours if refrigerated.


Re-shake well before use.

### Pack Size

15 x 237 ml (8 fl oz) cartons

**Preparation Guidelines**

Shake vigorously before use. If desired, refrigerate before use.



## Dosage and Administration

To be determined by the clinician or dietitian and is dependent on the age, body weight and medical condition of the patient.

Each packet of sphere15 provides 15 g protein equivalent and contains 23 mg of phenylalanine.

Each packet of sphere20 provides 20 g protein equivalent and contains 30 mg of phenylalanine.

## Important Notice

Must only be consumed by people with a proven metabolic disorder under strict medical supervision.

Suitable from 3 years of age.

Diet must be supplemented with natural protein, water, and other nutrients in prescribed quantities to supply restricted amino acids, fluid, and general nutrition requirements.

Not for intravenous use.

For enteral use only.

Not for use as a sole source of nutrition.

## Storage

Store in a cool dry place.

The product should be freshly prepared and consumed immediately.

If this is not possible, all prepared products must be tightly covered and consumed within 4 hours at room temperature or within 24 hours if refrigerated.

## Pack Size

sphere15: 30 x 27 g (0.95 oz) packets  
sphere20: 30 x 35 g (1.23 oz) packets

## Preparation Guidelines



1 Measure 120 ml (4 fl oz) of water into a cup with a lid.



2 Add one packet of sphere.



3 Secure lid and shake well until the powder is fully dissolved.

For best results the product should be freshly prepared and used immediately. Water or permitted drinks should be taken after product consumption.

## Dosage and Administration

To be determined by the clinician or dietitian and is dependent on age, body weight and medical condition of the patient.

Each packet of express plus15 provides 15 g protein equivalent.

Each packet of express plus20 provides 20 g protein equivalent.

## Important Notice

Must only be consumed by people with a proven metabolic disorder under strict medical supervision.

Suitable from 3 years of age.

Diet must be supplemented with natural protein, water and other nutrients in prescribed quantities to supply the restricted amino acids, fluid and general nutrition requirements.

Not for intravenous use.

For enteral use only.

Not for use as a sole source of nutrition.

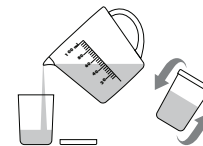
## Storage

Store in a cool dry place. Packets are designed for single use and should be used immediately once opened. Any unused powder in a packet must be tightly sealed and used within 24 hours.

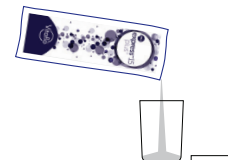
## Pack Size

express15 – 30 x 25 g (0.88 oz) packets  
express20 – 30 x 34 g (1.2 oz) packets

## Preparation Guidelines



1 Add 90 ml (3 fl oz) of cold water or other permitted beverages into a cup with a lid.



2 Empty the contents of the packet into the cup.



3 Secure the lid and shake well for 10 seconds until powder dissolves. Drink immediately.

The product should be freshly prepared and used immediately. Water or permitted drinks should be taken after product consumption.



## Dosage and Administration

To be determined by the clinician or dietitian and is dependent on age, body, weight and medical condition of the patient.

Each cooler10 pouch provides 10 g protein equivalent.

Each cooler15 pouch provides 15 g protein equivalent.

Each cooler20 pouch provides 20 g protein equivalent.

## Important Notice

Must only be consumed by people with a proven metabolic disorder under strict medical supervision.

Suitable from 3 years of age.

Diet must be supplemented with natural protein, water and other nutrients in prescribed quantities to supply the restricted amino acids, fluid and general nutrition requirements.

Not for intravenous use.

For enteral use only.

Not for use as a sole source of nutrition.

## Storage

Store in a cool dry place.

Once opened drink immediately or recap, refrigerate and use within 24 hours.

## Pack Size

cooler10 – 30 x 87 ml (2.94 fl oz) pouches  
cooler15 – 30 x 130 ml (4.39 fl oz) pouches  
cooler20 – 30 x 174 ml (5.88 fl oz) pouches

## Preparation Guidelines



**1** Shake well



**2** Open



**3** Drink

Shake well before use.  
Best served chilled.

Water or permitted drinks should be taken after product consumption.

## Dosage and Administration

To be determined by the clinician or dietitian and is dependent on the age, body weight, and medical condition of the patient.

Each pouch of PKU air20 provides 20 g protein equivalent.

## Important Notice

Must only be consumed by people with proven Phenylketonuria under strict medical supervision.

Suitable from 3 years of age.

Diet must be supplemented with natural protein, water, and other nutrients in prescribed quantities to supply phenylalanine, fluid, and general nutrition requirements.

Not for intravenous use.

For enteral use only.

Not for use as a sole source of nutrition.

## Storage

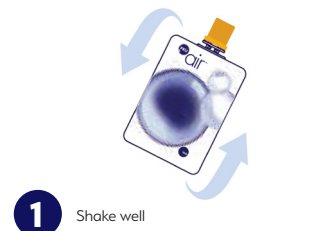
Store in a cool dry place.

Once opened drink immediately or recap, refrigerate and use within 24 hours.

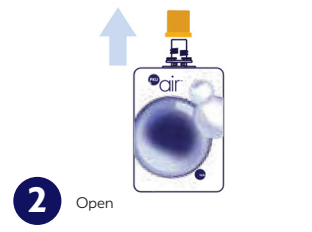
## Pack Size

30 x 174 ml (5.88 fl oz) pouches

## Preparation Guidelines



**1** Shake well



**2** Open



**3** Drink

Shake well before use.  
Best served chilled.

Water or permitted drinks should be taken after product consumption.

### Dosage and Administration

To be determined by the clinician or dietitian and is dependent on age, body weight and medical condition of the patient.

2 level scoops provide 5 g protein equivalent.

### Important Notice

Must only be consumed by people with proven Urea Cycle Disorders and other disorders where the use of essential amino acids is indicated under strict medical supervision.

Diet must be supplemented with natural protein, water, and other nutrients in prescribed quantities to meet fluid and general nutrition requirements.

Suitable from 1 year of age.

Not for intravenous use.

For enteral use only.

Not for use as sole source of nutrition.

### Storage

Unopened: UCD trio should be stored in a cool dry place.

Once opened: Use within 1 month.

The product should be freshly prepared and consumed immediately. If this is not possible, all prepared products must be tightly covered and consumed within 4 hours at room temperature or within 24 hours if refrigerated.

### Pack Size

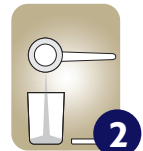
400 g (14.11 oz) can

### Preparation Guidelines

#### To prepare 5 g PE:



1 Measure 120 ml (4 fl oz) of cold water into a cup with a lid.



2 Add 2 level scoops of UCO trio.



3 Secure the lid and shake until the powder is fully dissolved.



4 UCD trio is now ready to use.

### Dosage and Administration

To be determined by the clinician or dietitian and is dependent on age, body weight and medical condition of the patient.

Each packet of EAA provides 5 g protein equivalent.

### Important Notice

Must only be consumed by people with proven Urea Cycle Disorders or other disorders of protein metabolism under strict medical supervision.

Suitable from 3 years of age.

Not for intravenous use.

For enteral use only.

Not for use as a sole source of nutrition.

### Storage

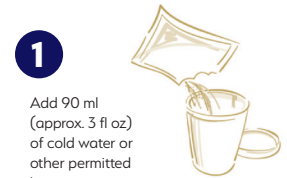
Store in a cool dry place.

Packets are designed for single use and should be used once opened.

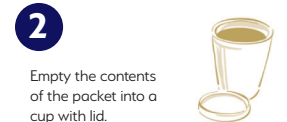
### Pack Size

30 x 12.5 g (0.44 oz) packets

### Preparation Guidelines



1 Add 90 ml (approx. 3 fl oz) of cold water or other permitted beverages.



2 Empty the contents of the packet into a cup with lid.



3 Secure the lid and shake well until all of the powder is dissolved. Drink immediately.

### Dosage and Administration

To be determined by the clinician or dietitian and is dependent on age, body weight and medical condition of the patient.

### Important Notice

Must only be used under strict medical supervision.

Suitable from 1 year of age.

Not for intravenous use.

For enteral use only (orally or tube feeding).

### Preparation Guidelines

LIPIstart is typically mixed with water. Preparation instructions are given by the dietitian or clinician.

The standard dilution of approximately 20 kcal/fl oz or 0.67 kcal/ml is made by adding 1 level scoop of LIPIstart (5 g) to 30 ml of water (1 fl oz). Use the scoop provided in the can or a gram scale for greatest accuracy.

Any prepared formula should be refrigerated and used within 24 hours. Re-shake before use.

Do not heat LIPIstart in a microwave as uneven heating may occur and could cause a burn. Do not boil LIPIstart.

### Storage

Store in a cool dry place.

Once opened, LIPIstart powder must be tightly sealed and consumed within 4 weeks.

### Pack Size

400 g (14.1 oz) can

### Preparation Guidelines



1 Wash your hands and clean surfaces, utensils, and formula container.



2 Boil water and leave to cool for no more than 30 minutes to ensure it remains at a temperature of at least 158°F (70°C).



3 Measure out the required amount of water into the formula container. Do not use artificially softened water or repeatedly boiled water.



4 Using the scoop provided, add the prescribed number of scoops of LIPIstart to the water, leveling off each scoop with the back of a clean dry knife. Return dry scoop to LIPIstart can.



5 Seal formula container and shake well until powder is dissolved. Test the temperature before feeding. The formula should feel warm or cool, but not hot.



6 LIPIstart is now ready to use.

**\*Other dilutions and tube-feeding:** To be determined by the clinician or dietitian.

### Dosage and Administration

To be determined by the clinician or dietitian and is dependent on age, body weight and medical condition of the patient.

### Important Notice

Must only be consumed under strict medical supervision.

Suitable from 3 years of age.

Not for intravenous use.

For enteral use only.

Not for use as a sole source of nutrition.

### Pack Size

30 x 16 g (0.56 oz) packets

### Storage

Unopened: Store in a cool dry place.

Opened: Packets are designed for single use and should be used once opened. Any unused powder in an open packet should be kept in an airtight container, or sealed with a clip and used within 24 hours.

### Preparation Guidelines

Sprinkle MCTprocal onto the desired food or drink and stir until powder is dissolved.

MCTprocal can be used in cooking and baking.

May be used to fortify enteral formula with a source of MCT.

Serving suggestions for MCTprocal are available on request.

Not suitable for addition to fruit juice.

### Serving Suggestions



**Skim Milk** — Add the required amount of MCTprocal to warm or cold skim or low fat milk (as directed). Stir until dissolved.



**Water** — Add the required amount of MCTprocal to previously boiled warm water or cold water. Stir until dissolved.



#### Hot Drinks

• **Tea** — Add the required amount of MCTprocal to a cup of tea and stir until dissolved.

• **Coffee** — Add the required amount of MCTprocal to coffee granules, add previously boiled hot water. Stir until dissolved.

• **Hot Chocolate** — Add the required amount of MCTprocal to hot skim or low fat milk (as directed) or previously boiled hot water. Stir until dissolved.

**Low Fat Desserts or Puddings** — (e.g. custard, rice pudding) Make up the pudding as directed. Sprinkle the required amount of MCTprocal onto the pudding. Stir until dissolved.



**Low Fat Yogurt** — Add the required amount of MCTprocal to yogurt (as directed) and mix until smooth.



**Oatmeal** — Mix the required amount of MCTprocal into hot oatmeal before serving.



**Low Fat Soup** — Add the required amount of MCTprocal to soup and stir until dissolved.



**Mashed Potato** — Sprinkle the required amount of MCTprocal onto hot mashed potato and mix well.



## Dosage and Administration

To be determined by the clinician or dietitian and is dependent on the age, body weight and medical condition of the patient.

### Important Notice

Must only be used in individuals with proven hepatic GSD where the use of long acting starch is indicated under strict medical supervision.

### Suitable from 5 years of age.

Not for intravenous use. For enteral use only. Not for use as a sole source of nutrition. Glycosade may be given through a feeding tube. Not intended for use as a continuous enteral feed. Administer as a bolus to prevent possible tube blockage.

### Storage

Store in a cool dry place. Packets are designed for single use and should be used immediately once opened.

### Pack Size

30 x 60 g (2.1 oz) packets

## Preparation Guidelines

**Preparation to be determined by the clinician or dietitian.**

**For a recommended preparation as a drink:**

**1**

Measure the required amount of liquid into a container with a lid.



**2**

Add the required amount of Glycosade to the container. Typically, a packet of Glycosade can be added to 120 ml (4 fl oz) of cold water or other suitable fluids.



**3**

Secure lid and shake until the powder is dissolved.



**4**

Glycosade is now ready to use.



**DO NOT HEAT OR WARM GLYCOSADE AS THIS DESTROYS THE PROPERTIES OF THE STARCH.**

The product should be freshly prepared and consumed immediately.

## Dosage and Administration

To be determined by the clinician or dietitian and is dependent on the age, body weight and medical condition of the patient.

Each packet of S.O.S25 prepared to a final volume of 200 ml gives a 25% carbohydrate solution.

### Important Notice

Must only be given to patients with proven inherited metabolic diseases under strict medical supervision.

S.O.S25 is recommended from 10 years of age (can vary depending on individual requirements of the patient).

Not for intravenous use.

For enteral use only.

Not for use as a sole source of nutrition.

### Storage

Store in a cool dry place. Packets are designed for single use and should be used immediately once opened.

### Pack Size

S.O.S25 – 30 x 52 g (1.83 oz) packets

## Preparation Guidelines

**Preparation to be determined by the clinician or dietitian.**

**For a recommended preparation as a drink:**

**1**

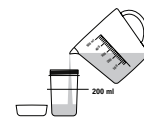
Empty 1 packet of S.O.S into a measuring cup with lid.



**MAKE SURE TO USE FULL PACKET**

**2**

Add the water to a final volume of 200 ml.



**3**

Secure lid and shake until the powder is dissolved.



**4**

S.O.S is now ready to use. Any prepared product should be refrigerated and used within 24 hours. Re-shake before use.

# **SINGLE DOSE AMINO ACIDS: DIRECTIONS FOR USE**

**Powdered Single Dose Amino Acids for use in the dietary management of inherited metabolic diseases of protein metabolism.**

Product	Amino acid dose	Packet size
<b>Arginine500</b>	500 mg of L-Arginine	4 g
<b>Arginine2000</b>	2000 mg of L-Arginine	4 g
<b>Citrulline200</b>	200 mg of L-Citrulline	4 g
<b>Citrulline1000</b>	1000 mg of L-Citrulline	4 g
<b>Creatine5000</b>	5000 mg of Creatine	6 g
<b>Cystine500</b>	500 mg of L-Cystine	4 g
<b>Glycine500</b>	500 mg of L-Glycine	4 g
<b>Isoleucine50</b>	50 mg of L-Isoleucine	4 g
<b>Isoleucine1000</b>	1000 mg of L-Isoleucine	4 g
<b>Leucine100</b>	100 mg of L-Leucine	4 g
<b>Methionine100</b>	100 mg of L-Methionine	4 g
<b>Phenylalanine50</b>	50 mg of L-Phenylalanine	4 g
<b>Tyrosine1000</b>	1000 mg of L-Tyrosine	4 g
<b>Valine50</b>	50 mg of L-Valine	4 g
<b>Valine1000</b>	1000 mg of L-Valine	4 g

**Dosage and Administration**

To be determined by the clinician or dietician and is dependent on the age, body weight and medical condition of the patient.

**Storage**

Store in a cool dry place. Packets are designed for single use and should be used once opened.

**Pack Size**

30 x 4 g (0.14 oz) packets

**Preparation Guidelines**

To be determined by the clinician or dietician.

**Important Notice**

Must only be used under strict medical supervision.

Not for intravenous use.

For enteral use only (oral and tube feeding).

Not for use as a sole source of nutrition.

**Single Dose Amino Acids**

For more information on Single Dose Amino Acids, see pages 76–84

**Preparation Guidelines**

**1** Measure out 2 fl oz (60 ml)\* of water into a cup with a lid.

---

**2** Add one packet.

**3** Shake vigorously for 30 seconds.

---

**4** Depending on the product, follow the relevant instructions below:

\* 3 fl oz (90 ml) for Citrulline200 and Citrulline1000

Creatine5000 Cystine500 Glycine500 Isoleucine50 Tyrosine1000	Valine50 Valine1000	Arginine500 Arginine2000 Citrulline200 Leucine100 Methionine100 Phenylalanine50	Citrulline1000 Isoleucine1000
Product is now ready to serve. If left to stand, re-shake before serving.	Wait 1 minute, shake and serve immediately.	Wait 5 minutes, shake and serve immediately.	Wait 10 minutes, shake and serve immediately.

# **KIDNEY DISEASE: DIRECTIONS FOR USE**



For more information on Renastart, see [page 87](#)

### Dosage and Administration

To be determined by the clinician or dietitian and is dependent on age, body weight and medical condition of the patient.

### Important Notice

Must only be used under strict medical supervision.

Suitable from 1 year of age.

Not for intravenous use.

For enteral use only (tube or oral feeding).

Regular monitoring of nutritional status and electrolyte levels is required.

Not suitable for use as a sole source of nutrition.

### Preparation Guidelines

Renastart is typically mixed with water. Preparation instructions are given by the dietitian or clinician.

The standard dilution of approximately 30 kcal/fl oz or 1 kcal/ml is made by adding 1 level scoop of Renastart (7 g) to 30 ml of water (1 fl oz). Use the scoop provided in the can or a gram scale for greatest accuracy.

Any prepared formula should be refrigerated and used within 24 hours. Re-shake before use.

Do not heat Renastart in a microwave as uneven heating may occur and could cause a burn. Do not boil Renastart.

### Storage

Store in a cool dry place.

Once opened, Renastart powder must be tightly sealed and consumed within 4 weeks.

### Pack Size

400 g (14.1 oz) can

### Preparation Guidelines



1 Wash your hands and clean surfaces, utensils, and formula container.



2 Boil water and leave to cool for no more than 30 minutes to ensure it remains at a temperature of at least 158°F (70°C).



3 Measure out the required amount of water into the formula container. Do not use artificially softened water or repeatedly boiled water.



4 Using the scoop provided, add the prescribed number of scoops of Renastart to the water, leveling off each scoop with the back of a clean dry knife. Return dry scoop to Renastart can.



5 Seal formula container and shake well until powder is dissolved. Test the temperature before feeding. The formula should feel warm or cool, but not hot.



6 Renastart is now ready to use.

**\*Other dilutions and tube-feeding:** To be determined by the clinician or dietitian.



For more information on Renastep, see [page 89](#)

### Dosage and Administration

To be determined by the clinician or dietitian and is dependent on the age, body weight, and medical condition of the patient.

### Important Notice

Must only be used under strict medical supervision.

Suitable from 1 year of age.

Not for intravenous use.

For enteral use only (tube and oral feeding).

Regular monitoring of nutritional status and electrolyte levels is required.

Not suitable for use as a sole source of nutrition.

### Storage

Store in a cool dry place. Refrigerate before use if desired.

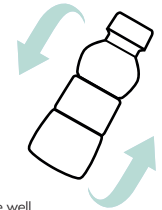
Once opened, seal cap and refrigerate.

Re-shake before use. Discard any opened, unused product after 6 hours if stored at room temperature or within 24 hours if refrigerated.

### Pack Size

15 x 200 ml (6.7 fl oz) bottles

### Preparation Guidelines



1 Shake well



2 Open



3 Drink

Shake well before use.  
Best served chilled.



# **KETOGENIC DIET: DIRECTIONS FOR USE**



For more information on K-Flo, see [page 93](#)

### Dosage and Administration

To be determined by the clinician or dietitian and is dependent on the patient's age, body weight and medical condition/ketogenic diet regimen.

### Important Notice

Must only be used under strict medical supervision.

Suitable from 3 years of age.

Not for intravenous use.

For enteral use only (tube and oral feeding).

Suitable for use as a sole source of nutrition.

### Preparation Guidelines for Oral Use

Shake well before use.

Best served chilled.

Serving suggestions and recipes for K-Flo are available on request.

### Tube Feeding Precautions

If using a tube feeding pump, do NOT shake the bottle before administration.

Addition of foods or medications to tube feeding formulas may lead to tube blockages.

### Storage

Unopened: Store in a cool dry place.

Refrigerate before use if desired.

Once opened: Seal cap and refrigerate. Discard any opened, unused product after 6 hours if stored at room temperature or within 24 hours if refrigerated.

### Pack Size

24 x 250 ml (8.45 fl oz) bottles

### Preparation Guidelines



**1** Shake well



**2** Open



**3** Drink

Shake well before use.  
Best served chilled.



For more information on K-Quik, see [page 95](#)

### Dosage and Administration

To be determined by the clinician or dietitian and is dependent on the age, body weight and medical condition of the patient.

### Important Notice

Must only be used under strict medical supervision.

Suitable from 1 year of age.

Not for intravenous use.

For enteral use only.

Not for use as a sole source of nutrition.

### Preparation Guidelines

Shake well before use.

Can be incorporated into food, beverages, or an enteral formula.

Best served chilled.

Serving suggestions and recipes for K-Quik are available on request.

### Storage

Store in a cool dry place.

Once opened keep refrigerated and use within 48 hours.

### Pack Size

15 x 225 ml (7.6 fl oz) bottles



## Dosage and Administration

To be determined by the clinician or dietitian and is dependent on the age, body weight and medical condition of the patient.

## Important Notice

Must only be used under strict medical supervision.

Suitable from 4 years of age.

Not for intravenous use.

For enteral use only.

Not for use as a sole source of nutrition.

## Storage

Store in a cool dry place.

Packets are designed for single use and it is recommended that contents are used immediately once opened.

If a smaller dose size is required any unused powder in an open packet should be stored in an airtight container or re-sealed with a clip and used within 24 hours.

The product should be freshly prepared and consumed immediately. However, if this is not possible, all prepared products must be tightly covered and consumed within 4 hours at room temperature or within 24 hours if refrigerated.

Re-shake product before use.

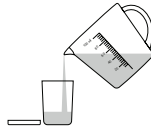
## Pack Size

30 x 6 g (0.21 oz) packets

## Preparation Guidelines

1

Add 60 ml (2 fl oz) of cold water into a cup with lid.



2

Empty contents of the packet into the cup. Secure the lid and shake well until powder is fully dissolved.



3

Drink immediately.



# WEIGHTS & HOUSEHOLD MEASUREMENTS

Product Name	Presentation	Displacement factor ml displaced by 1 gram powder	Product yield approximate final volume (L)	1 level scoop approximate weight (g)	1 teaspoon (g)	1 tablespoon (g)	1/4 cup (g)	1/3 cup (g)	1/2 cup (g)	1 cup (g)
PKU trio	Powder, 400 g can	0.55 ml/g	1 can yields 1.62	16.5	3	9	36	48	72	N/A
LIP1start	Powder, 400 g can	0.83 ml/g	1 can yields 2.8	5	2.4	7.5	30	40	63	122
UCD trio	Powder, 400 g can	0.4 ml/g	1 can yields 2.7	16.5	3	9	36	48	72	N/A
Renastart	Powder, 400 g can	0.74 ml/g	1 can yields 2	7	2.4	7.3	31	40	58	120
explore5 & 10	Powder, single serve packet, 5 or 10 g protein equivalent	0.63 ml/g	–	–	–	–	–	–	–	–
gel	Powder, single serve packet, 10 g protein equivalent	0.63 ml/g	–	–	–	–	–	–	–	–
sphere15 & 20	Powder, single serve packet, 15 or 20 g protein equivalent	0.57 ml/g	–	–	–	–	–	–	–	–
express plus15 & 20	Powder, single serve packet, 15 or 20 g protein equivalent	0.6 ml/g	–	–	–	–	–	–	–	–
MCTprocal	Powder, 16 g single serve packet	0.8 ml/g	–	–	–	–	–	–	–	–
Glycosade	Powder, 60 g single serve packet	0.6 ml/g	–	–	–	–	–	–	–	–
S.O.S	Powder, 52 g single serve packet	0.8 ml/g	–	–	–	–	–	–	–	–
Single Dose Amino Acids	Powder, single serve packet	0.8 ml/g	–	–	–	–	–	–	–	–
EAA	Powder, 12.5 g single serve packet, 5 g protein equivalent	0.5 ml/g	–	–	–	–	–	–	–	–

**Important Note:** Household measurements are for a level unpacked measure and are approximations. Measure is tapped to remove air pockets and leveled off using the back of a clean dry knife. Results can vary significantly based on the individual, device, and/or method. The values Vitaflo provides are based on averages derived from multiple measurements. Vitaflo recommends using a gram scale for greatest accuracy. The scoop Vitaflo provides has been validated with Vitaflo products, so using it is preferable to household measurements.



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**NOTE:** Products included herein are medical foods intended for the dietary management of medical conditions as indicated in the table of contents. At the time of publication, every effort was made to confirm that all product information was accurate. It is, however, subject to change. The most current information can always be obtained by referring to the package label, or contacting **Vitaflo**. The contents of this product guide are for informational purposes only and are not intended to be a substitute for medical advice or clinical judgement. All products are for use under medical supervision.

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