



# Vitaflo™ USA Product Guide



Enhancing Lives Together

**Vitaflo** is at the forefront of developing innovative specialized medical foods for Inherited Metabolic Diseases, Pediatric Kidney Disease, and the 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.



Enhancing Lives Together

**Product Information**

Web: [www.VitafloUSA.com](http://www.VitafloUSA.com)

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Vitaflo products are for use under medical supervision.

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Vitaflo products are for use under medical supervision.



Accessing formula can be challenging. Formula4Success is Vitaflo's personalized program offering free assistance to patients.\*

**Any**  
Health Insurance

**No**  
Health Insurance

**All**  
Financial Backgrounds

## Enrollment is simple.

- 1** Patients can complete the **enrollment form online** at [www.Vitaflo4Success.com](http://www.Vitaflo4Success.com)
- 2** Healthcare professionals can access the **Detailed Written Order (DWO)** and **Letter of Medical Necessity (LMN)** templates at [www.Vitaflo4Success.com](http://www.Vitaflo4Success.com)
- 3** The enrollment form, DWO and LMN can be submitted in one of the following ways:

**Fax:** 888-485-7193

**Email:** [Formula4Success@VitafloUSA.com](mailto:Formula4Success@VitafloUSA.com)

**Mail:** Vitaflo USA  
ATTN: Formula4Success  
PO Box 58569  
Raleigh, NC 27658



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Visit [www.Vitaflo4Success.com](http://www.Vitaflo4Success.com) or call 800-520-6112

\*Patients that are prescribed select Vitaflo formulas are eligible to enroll in Formula4Success.

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## METABOLIC PRODUCTS



**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 97 for directions for use



**Ordering/Reimbursement Information**

Packaging	Reimbursement Code	HCPCS Code
Unflavored 30 x 12.5 g packets	50600-0246-51	B4157 & B4162

**PKU explore5 (Unflavored) – 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, 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.

PKU explore5 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	µg RE	470	59
Vitamin D	µg	24	3.0
Vitamin E	mg α TE	8.7	1.1
Vitamin C	mg	80	10
Vitamin K	µg	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	µg	200	25
Vitamin B12	µg	3.3	0.41
Biotin	µg	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	µg	134	17
Molybdenum	µg	36	4.5
Selenium	µg	28	3.5
Chromium	µg	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 97 for directions for use



### Ordering/Reimbursement Information

	Packaging	Reimbursement Code	HCPCS Code
Raspberry	30 x 25 g packets	50600-0246-75	B4157 & B4162
Orange	30 x 25 g packets	50600-0246-68	B4157 & B4162

**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, Nicotinamide, 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 [www.VitaFloUSA.com](http://www.VitaFloUSA.com)

\*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	µg RE	470	117
Vitamin D	µg	24	6.0
Vitamin E	mg α TE	8.7	2.2
Vitamin C	mg	80	20
Vitamin K	µg	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	µg	200	50
Vitamin B12	µg	3.3	0.82
Biotin	µg	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	µg	134	33
Molybdenum	µg	3.6	0.9
Selenium	µg	28	7.0
Chromium	µg	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.



**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 98 for directions for use

Ordering/Reimbursement Information			
	Packaging	Reimbursement Code	HCPCS Code
Unflavored	400 g can	50600-0518-06	B4157 & B4162
Vanilla	400 g can	50600-0518-13	B4157 & B4162

**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 L-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 [www.VitaFloUSA.com](http://www.VitaFloUSA.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	µg RE	416	68.6	416	68.6
Vitamin D	µg	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	µg	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	µg	280	46.2	280	46.2
Vitamin B12	µg	2.4	0.40	2.4	0.40
Biotin	µg	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	µg	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	µg	126	20.8	126	20.8
Molybdenum	µg	72	11.9	72	11.9
Selenium	µg	38	6.3	38	6.3
Chromium	µg	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.



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

**Features**

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

\*Each bottle of PKU sphere20 liquid contains 36 mg of phenylalanine.

**Osmolality**

510 mOsm/kg

See page 100 for directions for use

Ordering/Reimbursement Information			
Packaging	Reimbursement Code	HCPCS Code	
Vanilla	8 fl oz (237 ml)	12539-0248-04	B4157 & B4162

**PKU sphere20 liquid (Vanilla) – Ingredients:** Water, Whey protein isolate (milk), Sugar, Natural and artificial flavor, L-leucine, L-tyrosine, L-arginine, Calcium lactate, Magnesium phosphate, Calcium phosphate, Soy lecithin, L-histidine, Cellulose gel and gum, Choline bitartrate, Glycine, L-tryptophan, L-lysine L-aspartate, C. cohnii oil\*\*, L-cystine, Ascorbic acid, Maltodextrin, High oleic sunflower oil, Ferrous sulfate, Sucralose, L-methionine, DL-alpha tocopheryl acetate, Zinc sulfate, Potassium iodide, Sodium selenite, Sodium molybdate, Vitamin A acetate, Copper gluconate, Niacinamide, Manganese gluconate, Calcium pantothenate, Vitamin K1, Vitamin D3, Biotin, Folic acid, Thiamine hydrochloride, Pyridoxine hydrochloride, Riboflavin, Chromium chloride, Vitamin B12, Ascorbyl palmitate (preservative), Tocopherols (preservative).

**Contains:** Milk and Soy.

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

PKU sphere20 liquid Nutrition Information			
	Units	per 100 ml	per 237 ml (1 bottle)
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	µg RE	110	261
Vitamin D	µg	2.1	5.0
Vitamin E	mg α TE	1.6	3.8
Vitamin C	mg	9.2	22
Vitamin K	µg	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	µg	43	102
Vitamin B12	µg	0.68	1.6
Pantothenic acid	mg	0.84	2.0
Biotin	µg	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	µg	35	83
Molybdenum	µg	8.4	20
Selenium	µg	13	31
Chromium	µg	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	36
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 28 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 101 for directions for use

**Ordering/Reimbursement Information**

	Packaging	Reimbursement Code	HCPCS Code
Vanilla	30 x 27 g packets	50600-0214-38	B4162 & B4157
Red Berry	30 x 27 g packets	50600-0211-31	B4162 & B4157

**PKU sphere15 (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, 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 [www.VitaFloUSA.com](http://www.VitaFloUSA.com)

**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	µg RE	690	186
Vitamin D	µg	12	3.2
Vitamin E	mg α TE	14	3.8
Vitamin C	mg	65	17
Vitamin K	µg	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	µg	260	70
Vitamin B12	µg	4.1	1.1
Biotin	µg	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	µg	210	57
Molybdenum	µg	51	14
Selenium	µg	76	20
Chromium	µg	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	104	28
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 36 mg of phenylalanine.



**Osmolality**

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

See page 101 for directions for use

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

**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, 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 [www.VitaFloUSA.com](http://www.VitaFloUSA.com)

PKU sphere20 Nutrition Information			
	Units	Vanilla/Red Berry per 35 g (1 packet)	Chocolate per 35 g (1 packet)
Calories	kcal	120	120
Protein equivalent	g	20	20
Total carbohydrate	g	6.0	6.0
Sugars	g	2.5	3.0
Total Fat	g	1.5	1.5
Saturated fat	g	0.4	0.4
Docosahexaenoic acid (DHA)	mg	110	110
<b>VITAMINS</b>			
Vitamin A	µg RE	242	242
Vitamin D	µg	4.2	4.2
Vitamin E	mg a TE	3.3	3.3
Vitamin C	mg	20	20
Vitamin K	µg	21	21
Thiamin	mg	0.53	0.53
Riboflavin	mg	0.53	0.53
Niacin	mg	3.0	3.0
Vitamin B6	mg	0.49	0.49
Folic acid	µg	91	91
Vitamin B12	µg	1.4	1.4
Biotin	µg	11	11
Pantothenic acid	mg	1.8	1.8
Choline	mg	178	178
<b>MINERALS</b>			
Sodium	mg	283	283
Potassium	mg	206	206
Chloride	mg	7.0	7.0
Calcium	mg	353	353
Phosphorus	mg	367	367
Magnesium	mg	101	101
Iron	mg	6.7	6.7
Copper	mg	0.53	0.53
Zinc	mg	6.7	6.7
Manganese	mg	0.35	0.35
Iodine	µg	74	74
Molybdenum	µg	18	18
Selenium	µg	27	27
Chromium	µg	11	11
<b>AMINO ACIDS</b>			
L-Alanine	g	0.83	0.83
L-Arginine	g	0.96	0.96
L-Aspartic acid	g	1.31	1.31
L-Cystine	g	0.24	0.24
L-Glutamine	g	2.70	2.70
Glycine	g	0.71	0.71
L-Histidine	g	0.70	0.70
L-Isoleucine	g	1.42	1.42
L-Leucine	g	3.02	3.02
L-Lysine	g	0.95	0.95
L-Methionine	g	0.28	0.28
L-Phenylalanine	mg	36	36
L-Proline	g	1.60	1.60
L-Serine	g	1.01	1.01
L-Threonine	g	2.29	2.29
L-Tryptophan	g	0.40	0.40
L-Tyrosine	g	2.25	2.25
L-Valine	g	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 a low volume drink
- Available in Unflavored, Orange, Lemon, Tropical, and Raspberry flavors



**Osmolality**

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

See page 102 for directions for use

**Ordering/Reimbursement Information**

	Packaging	Reimbursement Code	HCPCS Code
Unflavored	30 x 25 g packets	12539-0248-73	B4162 & B4157
Tropical	30 x 25 g packets	12539-0249-03	B4162 & B4157
Orange	30 x 25 g packets	12539-0248-97	B4162 & B4157
Lemon	30 x 25 g packets	12539-0248-80	B4162 & B4157
Raspberry	30 x 25 g packets	12539-0252-14	B4162 & B4157

**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, L-cysteine, 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 [www.VitafloUSA.com](http://www.VitafloUSA.com)

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	µg RE	690	172	690	172
Vitamin D	µg	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	µg	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	µg	266	66	266	66
Vitamin B12	µg	4.2	1.0	4.2	1.0
Pantothenic acid	mg	5.0	1.2	5.0	1.2
Biotin	µg	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	µg	222	55	222	55
Molybdenum	µg	62	15	62	15
Selenium	µg	71	18	71	18
Chromium	µg	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 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 102 for directions for use

Ordering/Reimbursement Information			
	Packaging	Reimbursement Code	HCPCS Code
Unflavored	30 x 34 g packets	12539-0249-10	B4162 & B4157
Tropical	30 x 34 g packets	12539-0249-41	B4162 & B4157
Orange	30 x 34 g packets	12539-0249-34	B4162 & B4157
Lemon	30 x 34 g packets	12539-0249-27	B4162 & B4157
Raspberry	30 x 34 g packets	12539-0252-21	B4162 & B4157

**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, 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 [www.VitafloUSA.com](http://www.VitafloUSA.com)

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	µg RE	690	235	690	235
Vitamin D	µg	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	µg	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	µg	266	90	266	90
Vitamin B12	µg	4.2	1.4	4.2	1.4
Pantothenic acid	mg	5.0	1.7	5.0	1.7
Biotin	µg	35	11	35	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	µg	222	75	222	75
Molybdenum	µg	62	21	62	21
Selenium	µg	71	24	71	24
Chromium	µg	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.



# 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 Orange, Purple, White, and Red flavors

### Osmolality

1550 mOsm/kg

See page 103 for directions for use

### Ordering/Reimbursement Information

	Packaging	Reimbursement Code	HCPCS Code
Orange	30 x 87 ml pouches	50600-0548-52	B4162 & B4157
Purple	30 x 87 ml pouches	50600-0548-76	B4162 & B4157
White	30 x 87 ml pouches	50600-0549-99	B4162 & B4157
Red	30 x 87 ml pouches	50600-0513-18	B4162 & B4157

**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), Ferrous Sulfate, DL-Alpha Tocopherol Acetate, Mono- and Diglycerides, Copper Gluconate, Vitamin D3, Manganese Gluconate, Vitamin A Acetate, Nicotinamide, 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 [www.VitafoUSA.com](http://www.VitafoUSA.com)

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

	Units	per 100 ml	per 87 ml (1 pouch)
Calories	kcal	75	65
Protein equivalent	g	11.5	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	µg RE	133	116
Vitamin D	µg	5.1	4.4
Vitamin E	mg α TE	2.7	2.3
Vitamin C	mg	19	17
Vitamin K	µg	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	µg	51	44
Vitamin B12	µg	0.82	0.71
Biotin	µg	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	µg	45	39
Molybdenum	µg	11	10
Selenium	µg	13	11
Chromium	µg	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.



# cooler<sup>15</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 15 g protein equivalent
- Available in Orange, Purple, White, and Red flavors

### Osmolality

1550 mOsm/kg

See page 103 for directions for use

### Ordering/Reimbursement Information

	Packaging	Reimbursement Code	HCPCS Code
Orange	30 x 130 ml pouches	50600-0545-00	B4162 & B4157
Purple	30 x 130 ml pouches	50600-0545-62	B4162 & B4157
White	30 x 130 ml pouches	50600-0549-75	B4162 & B4157
Red	30 x 130 ml pouches	50600-0519-98	B4162 & B4157

**PKU cooler<sup>15</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), Ferrous Sulfate, DL-Alpha Tocopherol Acetate, Mono- and Diglycerides, Copper Gluconate, Vitamin D3, Manganese Gluconate, Vitamin A Acetate, Nicotinamide, 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 [www.VitaflouUSA.com](http://www.VitaflouUSA.com)

### PKU cooler<sup>15</sup> 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	µg RE	133	173
Vitamin D	µg	5.1	6.6
Vitamin E	mg α TE	2.7	3.5
Vitamin C	mg	19	25
Vitamin K	µg	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	µg	51	66
Vitamin B12	µg	0.82	1.1
Biotin	µg	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	µg	45	59
Molybdenum	µg	11	14
Selenium	µg	13	17
Chromium	µg	7.1	9.2
<b>AMINO ACIDS</b>			
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, White, and Red flavors



**Osmolality**

1550 mOsm/kg

See page 103 for directions for use

**Ordering/Reimbursement Information**

	Packaging	Reimbursement Code	HCPCS Code
Orange	30 x 174 ml pouches	50600-0548-14	B4162 & B4157
Purple	30 x 174 ml pouches	50600-0548-38	B4162 & B4157
White	30 x 174 ml pouches	50600-0550-19	B4162 & B4157
Red	30 x 174 ml pouches	50600-0520-01	B4162 & B4157

**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 [www.VitaflorUSA.com](http://www.VitaflorUSA.com)

**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
<b>VITAMINS</b>			
Vitamin A	µg RE	133	231
Vitamin D	µg	5.1	8.9
Vitamin E	mg a TE	2.7	4.7
Vitamin C	mg	19	33
Vitamin K	µg	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	µg	51	89
Vitamin B12	µg	0.82	1.4
Biotin	µg	6.7	11.6
Pantothenic acid	mg	0.98	1.7
Choline	mg	102	178
<b>MINERALS</b>			
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	µg	45	78
Molybdenum	µg	11	19
Selenium	µg	13	23
Chromium	µg	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 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 103 for directions for use

**Ordering/Reimbursement Information**

	Packaging	Reimbursement Code	HCPCS Code
Gold	30 x 174 ml pouches	50600-0216-98	B4162 & B4157
Green	30 x 174 ml pouches	50600-0217-04	B4162 & B4157
Yellow	30 x 174 ml pouches	50600-0217-11	B4162 & B4157

**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 [www.VitaFloUSA.com](http://www.VitaFloUSA.com)

**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	µg RE	130	226
Vitamin D	µg	5.1	8.9
Vitamin E	mg α TE	2.7	4.7
Vitamin C	mg	19	33
Vitamin K	µg	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	µg	51	89
Vitamin B12	µg	0.82	1.4
Biotin	µg	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	µg	45	78
Molybdenum	µg	11	19
Selenium	µg	13	23
Chromium	µg	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 be mixed with water or other permitted beverages into a gel/paste or low volume drink
- 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 99 for directions for use

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

**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	µg RE	530	127
Vitamin D	µg	13	3.1
Vitamin E	mg α TE	8	1.9
Vitamin C	mg	56	13
Vitamin K	µg	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	µg	180	43
Vitamin B12	µg	1.8	0.43
Biotin	µg	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	µg	120	29
Molybdenum	µg	44	11
Selenium	µg	31	7.4
Chromium	µg	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 a low volume drink
- Available in Unflavored

**Osmolality**

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

See page 102 for directions for use



Ordering/Reimbursement Information			
Packaging	Reimbursement Code	HCPCS Code	
Unflavored	30 x 25 g packets	12539-0249-96	B4157 & B4162

**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.

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	µg RE	690	172
Vitamin D	µg	24	6.0
Vitamin E	mg α TE	12	3.0
Vitamin C	mg	97	24
Vitamin K	µg	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	µg	266	66
Vitamin B12	µg	4.2	1.0
Pantothenic acid	mg	5.0	1.2
Biotin	µg	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	µg	222	55
Molybdenum	µg	62	15
Selenium	µg	71	18
Chromium	µg	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 a low volume drink
- Available in Unflavored

**Osmolality**

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

See page 102 for directions for use



Ordering/Reimbursement Information			
	Packaging	Reimbursement Code	HCPCS Code
	30 x 34 g packets	12539-0250-09	B4157 & B4162

**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, 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.

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	µg RE	690	235
Vitamin D	µg	24	8.2
Vitamin E	mg α TE	12	4.1
Vitamin C	mg	97	33
Vitamin K	µg	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	µg	266	90
Vitamin B12	µg	4.2	1.4
Pantothenic acid	mg	5.0	1.7
Biotin	µg	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	13	0.44
Iodine	µg	222	75
Molybdenum	µg	62	21
Selenium	µg	71	24
Chromium	µg	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 101 for directions for use

### Ordering/Reimbursement Information

	Packaging	Reimbursement Code	HCPCS Code
Orange	30 x 130 ml pouches	50600-0546-54	B4162 & B4157
Red	30 x 130 ml pouches	50600-0509-15	B4162 & B4157

**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 [www.VitaflorUSA.com](http://www.VitaflorUSA.com)

### 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	µg RE	133	173
Vitamin D	µg	5.1	6.6
Vitamin E	mg a TE	2.7	3.5
Vitamin C	mg	19	25
Vitamin K	µg	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	µg	51	66
Vitamin B12	µg	0.82	1.1
Biotin	µg	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	µg	45	59
Molybdenum	µg	11	14
Selenium	µg	13	17
Chromium	µg	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-free and tyrosine-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 be mixed with water or other permitted beverages into a gel/paste or low volume drink
- 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 99 for directions for use

**Ordering/Reimbursement Information**

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

**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, 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.

**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	µg RE	530	127
Vitamin D	µg	13	3.1
Vitamin E	mg a TE	8	1.9
Vitamin C	mg	56	13
Vitamin K	µg	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	µg	180	43
Vitamin B12	µg	1.8	0.43
Biotin	µg	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	µg	120	29
Molybdenum	µg	44	11
Selenium	µg	31	7.4
Chromium	µg	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 flavor

\*Each packet of TYR sphere20 contains 36 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 101 for directions for use

Ordering/Reimbursement Information			
Packaging	Reimbursement Code	HCPCS Code	
Red Berry	30 x 35 g packets	50600-0220-91	B4157 & B4162

**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.

TYR sphere20 Nutrition Information			
	Units	per 100 g	per 35 g (1 packet)
Calories	kcal	340	120
Protein equivalent	g	56	20
Total Carbohydrate	g	18	6.3
Sugars	g	4.5	3.0
Total Fat	g	4.5	1.6
Saturated Fat	g	1.0	0.4
Docosahexaenoic Acid (DHA)	mg	314	110
<b>VITAMINS</b>			
Vitamin A	µg RE	690	241
Vitamin D	µg	12	4.2
Vitamin E	mg α TE	14	4.9
Vitamin C	mg	65	23
Vitamin K	µg	59	21
Thiamin	mg	1.5	0.52
Riboflavin	mg	1.5	0.52
Niacin	mg	8.6	3.0
Vitamin B6	mg	1.4	0.49
Folic acid	µg	260	91
Vitamin B12	µg	4.1	1.4
Biotin	µg	5.1	1.8
Pantothenic acid	mg	32	11
Choline	mg	510	178
<b>MINERALS</b>			
Sodium	mg	810	283
Potassium	mg	590	206
Chloride	mg	20	7.0
Calcium	mg	1010	353
Phosphorus	mg	1050	367
Magnesium	mg	290	101
Iron	mg	19.0	6.6
Copper	mg	1.5	0.52
Zinc	mg	19.0	6.6
Manganese	mg	1.0	0.35
Iodine	µg	210	74
Molybdenum	µg	51	18
Selenium	µg	76	27
Chromium	µg	30	10
<b>AMINO ACIDS</b>			
L-Alanine	g	2.36	0.83
L-Arginine	g	4.87	1.70
L-Aspartic acid	g	3.74	1.31
L-Cystine	g	0.69	0.24
L-Glutamine	g	7.72	2.70
Glycine	g	7.09	2.48
L-Histidine	g	2.01	0.70
L-Isoleucine	g	4.06	1.42
L-Leucine	g	8.62	3.02
L-Lysine	g	2.73	0.96
L-Methionine	g	0.80	0.28
L-Phenylalanine	mg	104	36
L-Proline	g	4.58	1.60
L-Serine	g	2.88	1.01
L-Threonine	g	6.55	2.29
L-Tryptophan	g	1.15	0.40
L-Tyrosine	mg	<30	<10.5
L-Valine	g	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 a low volume drink
- Available in Unflavored

**Osmolality**

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

See page 102 for directions for use



**Ordering/Reimbursement Information**

Packaging	Reimbursement Code	HCPCS Code
Unflavored 30 x 25 g packets	12539-0249-58	B4157 & B4162

**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, 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.

**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	µg RE	690	172
Vitamin D	µg	24	6.0
Vitamin E	mg α TE	12	3.0
Vitamin C	mg	97	24
Vitamin K	µg	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	µg	266	66
Vitamin B12	µg	4.2	1.0
Pantothenic acid	mg	5.0	1.2
Biotin	µg	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	µg	222	55
Molybdenum	µg	62	15
Selenium	µg	71	18
Chromium	µg	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 a low volume drink
- Available in Unflavored

**Osmolality**

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

See page 102 for directions for use



Ordering/Reimbursement Information			
	Packaging	Reimbursement Code	HCPCS Code
Unflavored	30 x 34 g packets	12539-0249-65	B4157 & B4162

**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.

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	µg RE	690	235
Vitamin D	µg	24	8.2
Vitamin E	mg α TE	12	4.1
Vitamin C	mg	97	33
Vitamin K	µg	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	µg	266	90
Vitamin B12	µg	4.2	1.4
Pantothenic acid	mg	5.0	1.7
Biotin	µg	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	µg	222	75
Molybdenum	µg	62	21
Selenium	µg	71	24
Chromium	µg	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 103 for directions for use

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

**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 [www.VitaFloUSA.com](http://www.VitaFloUSA.com)

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	µg RE	133	173
Vitamin D	µg	5.1	6.6
Vitamin E	mg α TE	2.7	3.5
Vitamin C	mg	19	25
Vitamin K	µg	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	µg	51	66
Vitamin B12	µg	0.82	1.1
Biotin	µg	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	µg	45	59
Molybdenum	µg	11	14
Selenium	µg	13	17
Chromium	µg	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 be mixed with water or other permitted beverages into a gel/paste or low volume drink
- 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 99 for directions for use

Ordering/Reimbursement Information			
Packaging	Reimbursement Code	HCPCS Code	
Unflavored	30 x 24 g packets	50600-0514-86	B4162

**HCU gel (Unflavored) – Ingredients:** Sugar, Corn Starch, L-Lysine L-Aspartate, L-Leucine, Modified Corn Starch, L-Valine, L-Glutamine, 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	µg RE	530	127
Vitamin D	µg	13	3.1
Vitamin E	mg α TE	8	1.9
Vitamin C	mg	56	13
Vitamin K	µg	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	µg	180	43
Vitamin B12	µg	1.8	0.43
Biotin	µg	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	µg	120	29
Molybdenum	µg	44	11
Selenium	µg	31	7.4
Chromium	µg	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 a low volume drink
- Available in Unflavored

**Osmolality**

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

See page 102 for directions for use



Ordering/Reimbursement Information				
	Packaging	Reimbursement Code	HCPCS Code	
	Unflavored	30 x 25 g packets	12539-0249-72	B4157 & B4162

**HCU express plus15 (Unflavored) — Ingredients:** L-lysine L-aspartate, L-leucine, Maltodextrin, L-glutamine, L-valine, L-isoleucine, L-proline, L-arginine L-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.

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	µg RE	690	172
Vitamin D	µg	24	6.0
Vitamin E	mg α TE	12	3.0
Vitamin C	mg	97	24
Vitamin K	µg	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	µg	266	66
Vitamin B12	µg	4.2	1.0
Pantothenic acid	mg	5.0	1.2
Biotin	µg	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	µg	222	55
Molybdenum	µg	62	15
Selenium	µg	71	18
Chromium	µg	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 a low volume drink
- Available in Unflavored



**Osmolality**

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

See page 102 for directions for use

**Ordering/Reimbursement Information**

Packaging	Reimbursement Code	HCPCS Code
Unflavored 30 x 34 g packets	12539-0249-89	B4157 & B4162

**HCU express plus20 (Unflavored) – Ingredients:** L-lysine L-aspartate, L-leucine, Maltodextrin, L-glutamine, L-valine, L-isoleucine, L-proline, L-arginine L-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.

**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	µg RE	690	235
Vitamin D	µg	24	8.2
Vitamin E	mg α TE	12	4.1
Vitamin C	mg	97	33
Vitamin K	µg	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	µg	266	90
Vitamin B12	µg	4.2	1.4
Pantothenic acid	mg	5.0	1.7
Biotin	µg	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	µg	222	75
Molybdenum	µg	62	21
Selenium	µg	71	24
Chromium	µg	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 103 for directions for use

Ordering/Reimbursement Information			
	Packaging	Reimbursement Code	HCPCS Code
Orange	30 x 130 ml pouches	50600-0535-27	B4162 & B4157
Red	30 x 130 ml pouches	50600-0504-34	B4162 & B4157

**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 [www.VitaflouSA.com](http://www.VitaflouSA.com)

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	µg RE	133	173
Vitamin D	µg	5.1	6.6
Vitamin E	mg α TE	2.7	3.5
Vitamin C	mg	19	25
Vitamin K	µg	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	µg	51	66
Vitamin B12	µg	0.82	1.1
Biotin	µg	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	µg	45	59
Molybdenum	µg	11	14
Selenium	µg	13	17
Chromium	µg	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 be mixed with water or other permitted beverages into a gel/paste or low volume drink
- 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 99 for directions for use

Ordering/Reimbursement Information			
Packaging	Reimbursement Code	HCPCS Code	
Unflavored	30 x 24 g packets	50600-0515-23	B4162

**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	µg RE	530	127
Vitamin D	µg	13	3.1
Vitamin E	mg a TE	8	1.9
Vitamin C	mg	56	13
Vitamin K	µg	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	µg	180	43
Vitamin B12	µg	1.8	0.43
Biotin	µg	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	µg	120	29
Molybdenum	µg	44	11
Selenium	µg	31	7.4
Chromium	µg	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.



# express<sup>®</sup>15

**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 102 for directions for use

### Ordering/Reimbursement Information

	Packaging	Reimbursement Code	HCPCS Code
Unflavored	30 x 25 g packets	50600-0543-71	B4162 & B4157

**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	µg RE	740	185
Vitamin D	µg	11.7	2.9
Vitamin E	mg a TE	14	3.5
Vitamin C	mg	96	24
Vitamin K	µg	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	µg	360	90
Vitamin B12	µg	4.3	1.1
Biotin	µg	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	µg	220	55
Molybdenum	µg	130	33
Selenium	µg	78	20
Chromium	µg	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 103 for directions for use

### Ordering/Reimbursement Information

	Packaging	Reimbursement Code	HCPCS Code
Red	30 x 130 ml pouches	50600-0561-22	B4162 & B4157

**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.

### 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	µg RE	133	173
Vitamin D	µg	5.1	6.6
Vitamin E	mg a TE	2.7	3.5
Vitamin C	mg	19	25
Vitamin K	µg	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	µg	51	66
Vitamin B12	µg	0.82	1.1
Biotin	µg	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	µg	45	59
Molybdenum	µg	11	14
Selenium	µg	13	17
Chromium	µg	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 be mixed with water or other permitted beverages to a low volume drink
- 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 99 for directions for use

**Ordering/Reimbursement Information**

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

**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	µg RE	530	127
Vitamin D	µg	13	3.1
Vitamin E	mg α TE	8	1.9
Vitamin C	mg	56	13
Vitamin K	µg	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	µg	180	43
Vitamin B12	µg	1.8	0.43
Biotin	µg	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	µg	120	29
Molybdenum	µg	44	11
Selenium	µg	31	7.4
Chromium	µg	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 102 for directions for use

Ordering/Reimbursement Information			
Packaging	Reimbursement Code	HCPCS Code	
Unflavored	30 x 25 g packets	50600-0516-22	B4162 & B4157

**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	µg RE	740	185
Vitamin D	µg	11.7	2.9
Vitamin E	mg a TE	14	3.5
Vitamin C	mg	96	24
Vitamin K	µg	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	µg	360	90
Vitamin B12	µg	4.3	1.1
Biotin	µg	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	µg	220	55
Molybdenum	µg	130	33
Selenium	µg	78	20
Chromium	µg	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

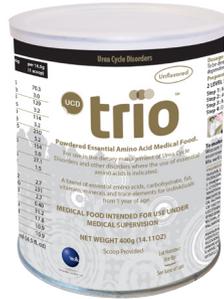
\*No added lysine.



## 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) + 135 ml (4.5 fl oz) water = 661 mOsm/kg

See page 105 for directions for use

### Ordering/Reimbursement Information

	Packaging	Reimbursement Code	HCPCS Code
Unflavored	400 g can	50600-0518-20	B4157 & B4162

**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, Sodium Citrate, Potassium Chloride, L-Threonine, Magnesium Hydrogen Phosphate, L-Tyrosine, Choline Bitartrate, L-Phenylalanine, L-Methionine, L-Histidine, High Docosahexaenoic Acid Single Cell Vegetable 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 (Preservative), Ferrrous Sulfate, L-Carnitine L-Tartrate, DL-Alpha Tocopherol Acetate, Potassium Phosphate, Manganese Gluconate, Mono and Diglycerides of Fatty Acids, Niacinamide, Copper Gluconate, Vitamin A Acetate, Calcium Pantothenate, Soy Lecithin, Pyridoxine Hydrochloride, Thiamine Hydrochloride, Riboflavin, DL-Alpha Tocopherol (Preservative), Folic Acid, Chromium Chloride, Potassium Iodide, Sodium Molybdate, Sodium Selenite, Biotin, Phylloquinone, Cholecalciferol, Cyanocobalamin, Tocopherol (Preservative), Ascorbyl Palmitate (Preservative).

**Contains:** Soy and Milk.

### 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	µg RE	623	103
Vitamin D	µg	22.5	3.7
Vitamin E	mg α TE	11.7	1.9
Vitamin C	mg	81	13.4
Vitamin K	µg	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	µg	420	69.3
Vitamin B12	µg	3.6	0.59
Biotin	µg	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	µg	1400	231
Zinc	mg	16.3	2.7
Manganese	mg	2.4	0.40
Iodine	µg	189	31.2
Molybdenum	µg	108	17.8
Selenium	µg	66	10.9
Chromium	µg	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, 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 (3.4 fl oz) water = 660 mOsm/kg

See page 106 for directions for use

Ordering/Reimbursement Information			
	Packaging	Reimbursement Code	HCPCS Code
EAA Supplement	50 x 12.5 g packets	50600-0549-06	B4157 & B4162

**EAA Supplement — Ingredients:** Sugar, L-Leucine, L-Lysine Acetate, L-Valine, Magnesium Hydrogen Phosphate, Calcium Phosphate, L-Isoleucine, L-Tyrosine, L-Threonine, L-Phenylalanine, Malic Acid, Modified Corn Starch, Maltodextrin, L-Cystine, L-Histidine, L-Methionine, L-Tryptophan, Ferrous Gluconate, Xanthan Gum, L-Ascorbic Acid, Zinc Gluconate, Artificial Flavoring, Soy Lecithin, L-Carnitine L-Tartrate, Acesulfame Potassium, Beta Carotene (Color), Manganese Gluconate, Nicotinamide, Beet Red (Color), DL-Alpha Tocopherol Acetate, Copper Gluconate, Calcium Pantothenate, Pyridoxine Hydrochloride, Thiamine Hydrochloride, Riboflavin, Vitamin A Acetate, Folic Acid, Chromium Chloride, Sodium Molybdate, Potassium Iodide, Biotin, Phylloquinone, Sodium Selenite, Cholecalciferol, Cyanocobalamin.

**Contains:** Soy.

EAA Supplement Nutrition Information			
	Units	per 100 g	per 12.5 g (1 packet)
Calories	kcal	288	36
Protein equivalent	g	40	5.0
Total Carbohydrate	g	31.8	4.0
Sugars	g	24	3.0
Total Fat	g	0.1	0
Saturated Fat	g	0	0
<b>VITAMINS</b>			
Vitamin A	µg RE	2030	254
Vitamin D	µg	25.1	3.2
Vitamin E	mg α TE	31.2	3.9
Vitamin C	mg	218	27.2
Vitamin K	µg	203	25.4
Thiamin	mg	4.1	0.5
Riboflavin	mg	4.6	0.6
Niacin	mg	50.8	6.4
Vitamin B6	mg	5.8	0.8
Folic acid	µg	812	102
Vitamin B12	µg	9.4	1.2
Biotin	µg	377	47.2
Pantothenic acid	mg	16	2.0
<b>MINERALS</b>			
Sodium	mg	15	1.9
Potassium	mg	35	4.4
Chloride	mg	0	0
Calcium	mg	2326	291
Phosphorus	mg	2265	283
Magnesium	mg	837	105
Iron	mg	43.5	5.5
Copper	µg	4400	550
Zinc	mg	43.5	5.5
Manganese	mg	6.4	0.80
Iodine	µg	508	63.5
Molybdenum	µg	290	36.5
Selenium	µg	174	22
Chromium	µg	174	22
<b>AMINO ACIDS</b>			
L-Cystine	g	1.80	0.25
L-Histidine	g	1.80	0.25
L-Isoleucine	g	5.70	0.70
L-Leucine	g	9.80	1.25
L-Lysine	g	6.60	0.85
L-Methionine	g	1.80	0.25
L-Phenylalanine	g	3.40	0.40
L-Threonine	g	4.10	0.50
L-Tryptophan	g	1.30	0.15
L-Tyrosine	g	4.70	0.60
L-Valine	g	7.20	0.90
L-Carnitine	mg	130	17



**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 107 for directions for use

Ordering/Reimbursement Information			
	Packaging	Reimbursement Code	HCPCS Code
LIPIstart	400 g can	50600-0502-05	B4150 & B4158

**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, Nicotinamide, 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	µg RE	408	61
Vitamin D	µg	9.4	1.4
Vitamin E	mg α TE	6.0	0.9
Vitamin C	mg	53	8.0
Vitamin K	µg	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	µg	71	11
Vitamin B12	µg	1.0	0.15
Pantothenic Acid	mg	2.5	0.38
Biotin	µg	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	µg	81	12
Molybdenum	µg	22	3.3
Selenium	µg	17	2.6
Chromium	µg	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 108 for directions for use

Ordering/Reimbursement Information			
Packaging	Reimbursement Code	HCPCS Code	
MCTprocal	30 x 16 g packets	50600-0502-36	B4155

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

**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 109 for directions for use

Ordering/Reimbursement Information			
Packaging	Reimbursement Code	HCPCS Code	
Unflavored	30 x 60 g packets	50600-0514-00	B4155
Lemon	30 x 60 g packets	50600-0247-67	B4155

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.



**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.S20 is recommended from 2 years of age
  - 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.S20 = 20% CHO solution
  - S.O.S25 = 25% CHO solution
- Neutral taste (Unflavored)



**Osmolality**

42 g of S.O.S20 + water to a final volume of 200 ml = 280 mOsm/kg

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

See page 110 for directions for use

Ordering/Reimbursement Information			
	Packaging	Reimbursement Code	HCPCS Code
S.O.S20	30 x 42 g packets	50600-0522-78	B4157 & B4162
S.O.S25	30 x 52 g packets	50600-0522-85	B4157 & B4162

S.O.S Nutrition Information				
	Units	100 g	200 ml of S.O.S20 42 g packet reconstituted	200 ml of S.O.S25 52 g packet reconstituted
Calories	kcal	380	160	200
Protein	g	0	0	0
Total Carbohydrate	g	95	40	50
Sugars	g	9.0	3.8	4.7
Total Fat	g	0	0	0
<b>MINERALS</b>				
Sodium	mg	<20	<8.0	-10

**Ingredient:** Dried Glucose Syrup.

## INTRODUCTION TO 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 109 for directions for use

\*Creatine5000 is 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	
Arginine500	30 x 4 g packets	50600-0546-92	B4155

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	82.5	3.3
Total Fat	g	0	0

**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	
Citrulline200	30 x 4 g packets	50600-0502-81	B4155

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

**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	
Arginine2000	30 x 4 g packets	50600-0502-67	B4155

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	47.5	1.9
Total Fat	g	0	0

**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	
Citrulline1000	30 x 4 g packets	50600-0550-95	B4155

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	72.5	2.9
Total Fat	g	0	0

**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	
Creatine5000	30 x 6 g packets	50600-0503-04	B4155

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

**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	
Glycine500	30 x 4 g packets	50600-0544-56	B4155

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	82.5	3.3
Total Fat	g	0	0

**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	
Cystine500	30 x 4 g packets	50600-0547-77	B4155

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	82.5	3.3
Total Fat	g	0	0

**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	
Isoleucine50	30 x 4 g packets	50600-0543-02	B4155

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

**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	
Isoleucine1000	30 x 4 g packets	50600-0551-18	B4155

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	72.5	2.9
Total Fat	g	0	0

**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	
Methionine100	30 x 4 g packets	50600-0554-40	B4155

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	92.5	3.7
Total Fat	g	0	0

**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	
Leucine100	30 x 4 g packets	50600-0549-20	B4155

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	92.5	3.7
Total Fat	g	0	0

**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	
Phenylalanine50	30 x 4 g packets	50600-0549-44	B4155

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

**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	
Tyrosine1000	30 x 4 g packets	50600-0547-91	B4155

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	72.5	2.9
Total Fat	g	0	0

**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	
Valine1000	30 x 4 g packets	50600-0551-32	B4155

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	72.5	2.9
Total Fat	g	0	0

**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	
Valine50	30 x 4 g packets	50600-0543-33	B4155

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

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

# PEDIATRIC 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 115 for directions for use

### Ordering/Reimbursement Information

	Packaging	Reimbursement Code	HCPCS Code
Powder	400 g can	50600-0546-23	B4154

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	µg RE	110	22
Vitamin D	µg	9.8	2.0
Vitamin E	mg α TE	4.8	1.0
Vitamin C	mg	65	13
Vitamin K	µg	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	µg	70	14
Vitamin B12	µg	0.88	0.18
Pantothenic Acid	mg	2.2	0.44
Biotin	µg	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	µg	85	17
Molybdenum	µg	7.1	1.4
Selenium	µg	17	3.4
Chromium	µg	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 pediatric 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 106 for directions for use

Ordering/Reimbursement Information			
Packaging	Reimbursement Code	HCPCS Code	
Vanilla	15 x 200 ml bottle	12539-0248-42	B4154

**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, Oil from schizochytrium sp.\*, 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	1000	2000
α-Linolenic acid	mg	150	300
Docosahexaenoic Acid (DHA)	mg	40	80
<b>VITAMINS</b>			
Vitamin A	µg RE	39	78
Vitamin D	µg	1.6	3.2
Vitamin E	mg α TE	3.6	7.2
Vitamin C	mg	8.0	16
Vitamin K	µg	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	µg	25	50
Vitamin B12	µg	0.40	0.80
Pantothenic acid	mg	0.60	1.2
Biotin	µg	4.0	8.0
Choline	mg	40	80
<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	µg	22	44
Molybdenum	µg	8.8	18
Selenium	µg	6.3	13
Chromium	µg	3.1	6.2
<b>AMINO ACIDS</b>			
L-Carnitine	mg	4.0	8.0

# **KETOGENIC DIET**



**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 IS50™ fiber blend supporting digestive health with 3 g fiber per bottle
- Available in Vanilla flavor

**Osmolality**

290 mOsm/kg

See page 119 for directions for use

**Ordering/Reimbursement Information**

	Packaging	Reimbursement Code	HCPCS Code
K-Flo	24 x 250 ml bottles	12539-0025-77	B4154

**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

**VITAMINS**

Vitamin A	µg RE	70	175
Vitamin D	µg	3.0	7.5
Vitamin E	mg α TE	3.0	7.5
Vitamin C	mg	11	27
Vitamin K	µg	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	µg	23	57
Vitamin B12	µg	0.40	1.0
Pantothenic Acid	mg	0.80	2.0
Biotin	µg	4.0	10
Choline	mg	36	90
Inositol	mg	4.5	11

**MINERALS**

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	µg	18	45
Molybdenum	µg	7.5	19
Selenium	µg	8.5	21
Chromium	µg	3.0	7.5

**AMINO ACIDS**

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

**Osmolality**

50 mOsm/kg

See page 120 for directions for use



Ordering/Reimbursement Information			
Packaging	Reimbursement Code	HCPCS Code	
K-Quik	12539-0025-75	B4155	

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.

**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.



**A powdered mixture of vitamins and minerals for use in the dietary management of restrictive therapeutic diets, such as the ketogenic diet and 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 121 for directions for use



Ordering/Reimbursement Information			
Packaging	Reimbursement Code	HCPCS Code	
FruitiVits	50600-0513-25	B4104	

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	µg RE	7407	444	
Vitamin D	µg	222	13	
Vitamin E	mg α TE	137	8.2	
Vitamin C	mg	592	36	
Vitamin K	µg	888	53	
Thiamin	mg	17	1.0	
Riboflavin	mg	20	1.2	
Niacin	mg	222	13	
Vitamin B6	mg	25	1.5	
Folic Acid	µg	3555	213	
Vitamin B12	µg	41	2.5	
Biotin	µg	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	µg	2504	150	
Molybdenum	µg	1007	60	
Selenium	µg	607	36	
Chromium	µg	607	36	

**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.

## **OTHER NUTRITIONALS**



**A chocolate flavored bar for the dietary management of conditions requiring a protein restricted diet.**

**Features**

- Suitable for a protein restricted diet
- Chocolate flavor
- Can be used in a variety of ways; serving suggestions are available on request.

See page 123 for more ideas.

Ordering/Reimbursement Information			
	Packaging	Reimbursement Code	HCPCS Code
Vitabite	7 x 25 g bars	n/a	n/a

Nutrition Information		
	Units	per 25 g (1 bar)
Calories	kcal	140
Protein	g	0
Total Carbohydrate	g	15
Sugars	g	15
Total Fat	g	8
Saturated Fat	g	8

**Ingredients:** Lactose (Milk), Vegetable Oil (Palm Kernel, Palm, Shea Nut), Sugar, Natural and Artificial Flavor, Carob Flour, Soy Lecithin.

**Contains:** Milk and Soy.

# METABOLIC PRODUCTS: DIRECTIONS FOR 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 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 breast milk substitute.

### Preparation Guidelines

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 the recommended concentration 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 with the recommended concentration 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 feed should be refrigerated and used within 24 hours. Re-shake before use.

### Pack Size

400 g (14.11 oz) can

### Preparation Guidelines

Measure the required number of scoops and add the amount of water recommended by the clinician or dietitian.

To prepare 10 g PE:

Measure 2 level scoops into glass/mixing cup.



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



Mix 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.

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

For best results the product should be freshly prepared and used immediately.

Water or permitted drinks should be taken after product consumption.

### Storage

Store in a cool dry place. Gel packets are designed for single use. The product should be freshly prepared and consumed immediately.

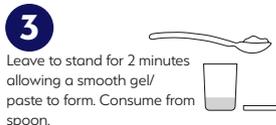
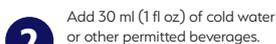
If this is not possible, all prepared products must be tightly covered and consumed within 6 hours at room temperature or within 24 hours if refrigerated.

### Pack Size

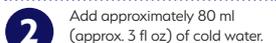
30 x 24 g (0.85 oz) packets

## Preparation Guidelines

### for gel/paste



### for drink



## 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 bottle of PKU sphere<sup>20</sup> liquid provides 20 g protein equivalent.

### Important Notice

Must only be consumed by people with proven Phenylketonuria (PKU) 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 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 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 to avoid separation.

### Pack Size

18 x 237 ml (8 fl oz) bottles

## 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.

Each packet of sphere20 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 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

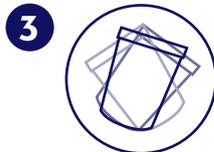
## Preparation Guidelines



1 Measure 120 ml (4 fl oz) of water for sphere20 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.

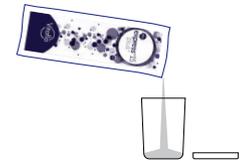
If this is not possible, any prepared product must be tightly covered and consumed within 4 hours if kept at room temperature or within 24 hours if refrigerated. Re-shake before use.

## Pack Size

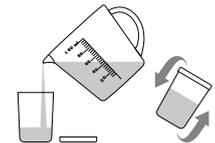
express15 – 30 x 25 g (0.88 oz) packets

express20 – 30 x 34 g (1.2 oz) packets

## Preparation Guidelines



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



2 Add 90 ml (approx. 3 fl oz) of cold water or other permitted beverages. Secure the lid and shake well for 10 seconds until powder dissolves.



3 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.

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

### Pack Size

400 g (14.11 oz) can

### Preparation Guidelines

Measure the required number of scoops and add the amount of water recommended by the clinician or dietitian.

To prepare 5 g PE:



1 Measure 2 level scoops into glass/ mixing cup.



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



3 Mix well until all of the powder is dissolved.



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.

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

50 x 12.5 g (0.44 oz) packets

### Preparation Guidelines

1



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

2



2 Add 100 ml (3.4 fl oz) of cold water or other permitted beverages.

3



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 also be used in cooking and baking.

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.S20 prepared to a final volume of 200 ml gives a 20% carbohydrate solution.

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.S20 is recommended from 2 years of age and 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.S20 – 30 x 42 g (1.48 oz) packets

S.O.S25 – 30 x 52 g (1.83 oz) packets

## Preparation Guidelines

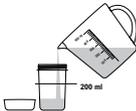
**Preparation to be determined by the clinician or dietitian.**  
For a recommended preparation as a drink:

**1**



Empty 1 packet of S.O.S into a measuring cup with lid.  
MAKE SURE TO USE FULL PACKET

**2**



Add the required amount of 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 feed 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-Isoleucin	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 dietitian 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  
Creatine5000 – 30 x 6 g (0.21 oz) packets

**Preparation Guidelines**

To be determined by the clinician or dietitian.

**Important Notice**

Must only be used under strict medical supervision.

Not for intravenous use.

For enteral use only.

Not for use as a sole source of nutrition.

## PEDIATRIC KIDNEY DISEASE: DIRECTIONS FOR 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.

#### 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).

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.



### 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.

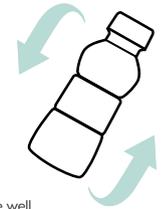
Once opened, seal cap and refrigerate.

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**



### 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.

Further 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.



### 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 3 years 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.

Further 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.

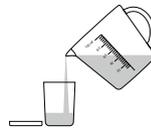
## Pack Size

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.



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.

## OTHER NUTRITIONALS: DIRECTIONS FOR USE



### Dosage and Administration

For use under medical supervision in the dietary management of conditions requiring a protein restricted diet.

For enteral use only.

Not for use as a sole source of nutrition.

### Preparation Guidelines

Vitabite can be easily incorporated into a protein restricted diet in a variety of ways. Serving suggestions are available on request.

### Storage

Store in a cool dry place. Once opened, consume within 4 weeks.

### Pack Size

7 x 25 g (0.88 oz) bars

### Serving suggestions:

**Melting Vitabite** — Break up into a bowl, then either microwave or place over a pan of boiling water (carefully!) and stir until melted.

**Vitabite shapes** — Pour into different moulds, refrigerate for 1 hour and turn out when set.

**Vitabite crispy cakes** — Mix with permitted amount of cereal, spoon into cupcake baking cups and leave to cool.

**Vitabite buttons** — Using a teaspoon, drip small drops onto a nonstick tray and leave to set in the refrigerator.

**Vitabite cookies** — Coat or use as a filling for permitted cookies and cakes, leave in a cool place until set.

**Vitabite fruits** — Coat small pieces of fresh fruit and make a special dessert.

**Vitabite Popsicle** — Great for sunny days. Simply dip the permitted Popsicle into the melted Vitabite to coat and then keep in the freezer for a treat.

Vitabite can also be grated and used to decorate low protein desserts or cakes. For the best results refrigerate the Vitabite before grating.

## 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, 42 or 52 g single serve packet	0.8 ml/g	—	—	—	—	—	—	—	—
Single Dose Amino Acids	Powder, single serve packet	0.8 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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With You

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**NOTE:** Products included herein are 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 Vitafllo. 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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