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# **Report Name:** National Food Safety Standard Formulas for Special Medical Purposes Intended for Infants Finalized

Country: China - People's Republic of

Post: Beijing

**Report Category:** FAIRS Subject Report, Sanitary/Phytosanitary/Food Safety, WTO Notifications, Trade Policy Monitoring

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#### **Report Highlights:**

On March 27, 2025, the People's Republic of China's (China's) National Health Commission (NHC) and the State Administration for Market Regulation (SAMR) jointly released the final National Food Safety Standard Formulas for Special Medical Purposes Intended for Infants (GB 25596-2025) applicable for infants aged 0 to 12 months, and it will enter into force on March 16, 2027. China notified the draft standard to the WTO on March 6, 2023. This report provides unofficial translation of the final standard. Stakeholders should conduct their own review of the regulation.

FAS China provides this analysis and reporting as a service to the United States agricultural community, and to our farmers, ranchers, rural communities, and agribusiness operations in support of a worldwide agricultural information system and a level playing field for U.S. agriculture.

#### Summary:

On March 27, 2025, the People's Republic of China's (China's) National Health Commission (NHC) and the State Administration for Market Regulation (SAMR) jointly released the National Food Safety Standard Formulas for Special Medical Purposes Intended for Infants (GB 25596-2025).

On March 6, 2023, China notified the draft National Food Safety Standard of Formulas for Special Medical Purposes Intended for Infants to the WTO under <u>G/SPS/N/CHN/1268</u>. This standard applies to formula foods for special medical purposes intended for infants aged 0 to 12 months old and regulates the requirements of ingredients, nutritional components, contaminants, labeling, and packaging for the products produced and sold in China.

The final standard will enter into force on March 16, 2027, and will replace the current implementing standard of GB 25596-2010 which entered into force since January 2012. This report provides an unofficial translation of the final standard. Stakeholders should conduct their own review of the regulation.

#### **BEGIN TRANSLATION**

#### National Food Safety Standard Formulas for Special Medical Purposes Intended for Infants Foreword

The Standard replaces GB 25596-2010 the National Food Safety Standard Formulas for Special Medical Purposes Intended for Infants.

When compared with GB 25596-2010, the standard mainly has following changes:

- Terms and definitions are modified,
- The necessary components are modified, and the minimum or maximum values for some nutrients are adjusted or added,
- The choline is changed into necessary ingredients from optional ingredients.
- The indicators of contaminants limits are modified,
- The indicators of mycotoxin limits are modified,
- The microbial limits indicators are modified,
- Appendix A is modified, six categories are added on the basis of the original product categories, and the technical indicators are clarified,
- Appendix B is modified.

#### National Food Safety Standard

#### Formulas for Special Medical Purposes Intended for Infants

#### 1 Scope

The standard applies to formula foods for special medical purposes for infants aged  $0 \sim 12$  months.

#### 2 Terms and Definitions

2.1 Formula foods for special medical purposes intended for infants

Refers to the formula foods specially prepared and produced to meet the dietary nutritional needs of infants with special medical conditions such as restricted feeding, digestive and absorption issues, and metabolic disorders. This kind of food shall be eaten alone or in combination with other foods under the guidance of physicians or clinical nutritionists.

#### **3 Technical Requirements**

#### 3.1 General requirements

3.1.1 The formulas for infant formulas for special medical purposes shall be based on research results of medical and nutritional studies, and their safety, nutritional adequacy, and clinical effects need to be scientifically proven.

3.1.1.1 The categories, applicable population of special medical conditions, primary technical requirements of common infant formulas for special medical purposes shall conform to Appendix A of the Standard.

3.1.1.2 Other special infant formulas for special medical purposes that are clinically needed should comply with the requirements of 3.1.1.

3.1.2 The processing technology of infant formulas for special medical purposes shall comply with all applicable national standards.

#### **3.2 Requirements of ingredients**

3.2.1 Materials used in products shall comply with corresponding safety standards and or relevant provisions, and materials which will cause harm to nutrition and health of infants shall not be used.

3.2.2 Ingredients and food additives shall not contain gluten.

3.2.3 Hydrogenated oil and fat shall not be used.

3.2.4 Materials treated with radiation shall not be used.

#### **3.3 Sensory requirements**

The color, taste, smell, texture, and reconstitution properties of infant formulas for special medical purposes shall be consistent with characteristics of corresponding products, and there shall be no visible foreign matters.

#### **3.4 Essential ingredients**

3.4.1 The energy, nutritional components, and content of infant formulas for special medical purposes shall be based on the necessary components specified in this Standard, but can be appropriately adjusted in light of the special nutritional needs of infants with such conditions as special disorders, diseases, or medical conditions and in accordance with product categories and main technical requirements listed in Appendix A in order to meet the nutritional needs of infants with special medical conditions.

3.4.2 In a ready-to-eat state, the product should include 250 kJ (60 kcal) to 314 kJ (75 kcal) of energy in every 100 mL of product. The energy is calculated by multiplying the content of protein, fat, and carbohydrate in every 100 mL of product by the energy coefficients of 17 kJ/g, 37 kJ/g and 17 kJ/g (the energy coefficient of dietary fiber is 8 kJ/g), and then dividing the sum (a value in kilojoule /100 milliliter (kJ /100 mL)) by 4.184 to obtain a value in kilocalorie /100 milliliter (kcal/100 mL).

3.4.3 The content of protein, fat, and carbohydrate per 100 kJ (100 kcal) in products shall follow the provisions in Table 1.

$\mathbf{r}$						
		Indi				
Nutrients	Per 100 kJ		Per 100 kcal		Testing method	
	Minimum	Maximum	Minimum	Maximum		
Protein <sup>a</sup> /g	0.43	0.84	1.8	3.5	GB 5009.5	
Fat <sup>b</sup> /g Of which: Linoleic acid/ g α-linolenic acid/ mg Ratio of linoleic acid to α- linolenic acid	0.84	1.43	3.5	6.0	GB 5009.6	
	0.07	0.33	0.3	1.4	GB 5009.168	
	12	N.S. <sup>c</sup>	50	N.S. <sup>c</sup>		
	5:1	15:1	5:1	15:1	-	
Carbohydrate <sup>d</sup> / g	2.2	3.3	9.0	14.0	-	

#### Table 1: Indicators for protein, fat, and carbohydrate

<sup>a</sup> The protein content shall be calculated as nitrogen (N) x 6.25; L mono-amino acids can be selectively added according to the special nutritional needs of infants with special disorders, diseases, or medical conditions, shall be consistent with provisions of Appendix B.

<sup>b</sup> The total amount of lauric acid and myristic acid (myristanoic acid) in fat of the final product  $\leq 20\%$  of total fatty acids; the maximum content of trans-fatty acids  $\leq 3\%$  of total fatty acids; erucic acid content  $\leq 1\%$  of total fatty acids; total fatty acids refer to sum of C4 ~ C24 fatty acids.

<sup>c</sup> N.S. means no special instructions.

<sup>d</sup> The carbohydrate content  $A_1$  shall be calculated according to the formula (1):

 $A_1 = 100 - (A_2 + A_3 + A_4 + A_5 + A_6)....(1)$ 

Where:

A<sub>1</sub>- Carbohydrate content, g/100g:

 $A_2$  - Protein content, g/100g;

 $A_3$  - Fat content, g/100g;

A<sub>4</sub> - Water content, g/100g;

A<sub>5</sub> - Ash content, g/100g;

 $A_6$  - Dietary fiber content (Based on the addition amount of oligosaccharide and/or polysaccharide), g/100g.

3.4.4 For infant formulas for special medical purposes, except for special needs (such as lactose intolerance), the preferred carbohydrate source shall be lactose. Glucose polymer may be added as appropriate (among which starch may be added only after being pre-gelatinized), and fructose or saccharose shall not be used as sources of carbohydrates.

3.4.5 Vitamins: shall be consistent with provisions of Table 2.

Nutrients	Per 100 kJ		Per 100 kcal		Testing method
	Minimum	Maximum	Minimum	Maximum	
Vitamin A/ (µg RE) <sup>a</sup>	14	43	60	180	GB 5009.82
Vitamin D/ µg <sup>b</sup>	0.48	1.20	2.0	5.0	GB 5009.296
Vitamin E / (mg a-TE) <sup>c</sup>	0.12	1.20	0.5	5.0	GB 5009.82
Vitamin K <sub>1</sub> / µg	0.96	6.45	4.0	27.0	GB 5009.158
Vitamin $B_1/\mu g$	14	72	60	300	GB 5009.84
Vitamin B <sub>2</sub> / μg	19	120	80	500	GB 5009.85
Vitamin B <sub>6</sub> / µg	8.4	41.8	35	175	GB 5009.154
Vitamin B <sub>12</sub> / µg	0.024	0.359	0.10	1.50	GB 5009.285
Nicotinic acid (nicotinamide) <sup>d</sup> / μg	96	359	400	1 500	GB 5009.89
Folic acid /µg	2.4	12.0	10	50	GB 5009.211
Pantothenic acid /µg	96	478	400	2 000	GB 5009.210
Vitamin C/ mg	2.4	16.7	10	70	GB 5413.18
Biotin / μg	0.36	2.39	1.5	10.0	GB 5009.259
Choline / mg	4.8	23.9	20	100	GB 5413.20

**Table 2 Vitamin Indicators** 

<sup>a</sup> RE is retinol equivalent. 1µg RE=1µg all trans retinol (vitamin A) =3.33 IU vitamin A. Vitamin A only includes preformed retinol and doesn't include any carotene components when Vitamin A activity is calculated and claimed.

<sup>b</sup> Calciferol, 1µg Vitamin D=40 IU Vitamin D.

<sup>c</sup> 1 mg *d*- $\alpha$ - tocopherol=1 mg  $\alpha$ -TE ( $\alpha$ - tocopherol equivalent); 1 mg *dl*- $\alpha$ - tocopherol=0.74 mg a-TE ( $\alpha$ - tocopherol equivalent).

<sup>d</sup> Niacin does not include precursor forms.

3.4.6 Minerals: shall comply with provisions in Table 3.

		iole of miller u	5 maicators			
Nutrients	Per 1	00 kJ	Per 100 kcal	Per 100 kcal		
	Minimum	Maximum	Minimum	Maximum		
Sodium/ mg	N.S. <sup>a</sup>	20	N.S. <sup>a</sup>	84	CP 5000 01	
Potassium/ mg	17	54	70	225	GB 3009.91	
Copper / µg	8.4	28.7	35	120	GB5009.13	
Magnesium / mg	1.2	3.6	5.0	15.0	GB5009.241	
Iron / mg	0.10	0.48	0.42	2.00	GB5009.90	
Zinc/ mg	0.12	0.36	0.50	1.50	GB5009.14	
Manganese / µg	0.24	23.90	1.0	100.0	GB5009.242	
Calcium / mg	12	43	50	180	GB5009.92	
Phosphorus / mg	6	26	25	110	GB5009.87	
Ratio of calcium to phosphorus	1:1	2:1	1:1	2:1	-	
Iodine / µg	3.6	14.1	15	59	GB5009.267	
Chlorine / mg	N.S. <sup>a</sup>	52	N.S. <sup>a</sup>	218	GB 5009.44	
Selenium / µg	0.48	2.06	2.0	8.6	GB 5009.93	
<sup>a</sup> N.S. means no spec	cial instructions.		·		•	

Table	3.	Minerals	Indicators
I add	J.	<b>IVIIIUU AIS</b>	inuicators

#### **3.5 Optional ingredients**

3.5.1 In addition to essential ingredients in 3.4, when one or multiple ingredients in Table 4 are selected to be added in products or to be indicated on labels, their content shall comply with provisions in Table 4.

3.5.2 When other substances are added to products in addition to Table 4 and Appendix B, relevant national regulations shall be met.

			1 0		
Optional ingredients	Per 1	Per 100 kJ		00 kcal	Testing method
	Minimum	Maximum	Minimum	Maximum	
Chromium / µg	0.4	2.4	1.5	10.0	GB 5009.123
Molybdenum / µg	0.4	2.4	1.5	10.0	GB 5009.297
Inositol / mg	1.0	9.6	4	40	GB 5009.270
Taurine/ mg	0.8	4.0	3.5	16.7	GB 5009.169
L-carnitine/ mg	0.3	N.S.	1.3	N.S.	GB 5009.300
Docosahexaenoic acid (DHA) <sup>a/</sup> mg	3.6	9.6	15	40	GB5009.168
Eicosatetraenoic acid (AA/ARA) / mg	N.S. <sup>b</sup>	19.1	N.S. <sup>b</sup>	80	GB5009.168
	•	•		•	•

**Table 4: Indicators for Optional Ingredients** 

<sup>a.</sup> If docosahexaenoic add (22:6 *n*-3) is added to the infant formulas for special medical purposes, at least the same amount of eicosatetraenoic acid (20:4 *n*-6) shall be added. The amount of eicosapentaenoic acid (20:5 *n*-3) shall not exceed that of docosahexaenoic acid. <sup>b.</sup> N.S. means no special instructions.

#### 3.6 Other indicators

It shall meet the requirements of Table 5.

Table 5: Other Indicators						
Items		Indicator	Testing method			
Water content <sup>a</sup> / %	$\leq$	5.0	GB 5009.3			
Ash						
Solid product/ %	$\leq$	5.0	GB 5009.4			
Liquid product (based on total dry matter) <sup>b</sup> / %	$\leq$	5.3				
Impurity degree						
Solid product/ (mg/kg)	$\leq$	12	GB 5413.30			
Liquid product / (mg/8L)	$\leq$	2				
<sup>a</sup> limited to solid products.						
<sup>b</sup> liquid products after mixing breast milk nutritiona	l supple	ments with bre	ast milk should meet the			
ash content requirements.						

#### **3.7 Contaminant limits**

It shall comply with provisions of GB 2762<sup>1</sup>.

#### **3.8 Mycotoxin limits**

It shall comply with provisions of GB  $2761^2$ .

#### **3.9 Microbial limits**

3.9.1 Pathogen limits in solid products shall be consistent with provisions of GB 29921<sup>3</sup>, and other microbial limits shall be consistent with provisions of Table 6.

3.9.2 Liquid products shall meet commercial sterility requirements and be tested following the methods specified in GB 4789.26.

	10		biai Linnis mu	icator 5	
Items	Sampling pl CFU/ m	lan <sup>a</sup> and limit L except that	Testing method		
	n	c	m	М	
Total bacterial count <sup>b</sup>	5	2	1 000	10 000	GB 4789.2
Coliform group	5	2	10	100	GB 4789.3 plate counting method
<sup>a</sup> Collection and tre <sup>b</sup> It is not applicable added [active strait	atment for sar e to products t	nples are con to which activ be >10 <sup>6</sup> CFI	ducted according ve strains (aerobio 1/g (mL) ]	to GB 4789.1 c bacteria and a	and GB 4789.18. maerobic bacteria) are

**Table 6: Microbial Limits Indicators** 

#### 3. 10 Food additives and nutritional fortification substances

3.10.1 The use of food additives and nutritional fortification substances shall comply with the provisions of GB  $2760^4$  and GB  $14880^5$ .

3.10.2 The quality of food additives and nutritional fortification substances shall comply with the corresponding safety standards and relevant regulations.

<sup>&</sup>lt;sup>1</sup> National Food Safety Standard Maximum Levels of Contaminants in Foods (GB2762-2022).

<sup>&</sup>lt;sup>2</sup> National Food Safety Standard Maximum Levels of Mycotoxins in Foods (GB2761-2017).

<sup>&</sup>lt;sup>3</sup> National Food Safety Standard for Limits of Pathogens in Pre-packaged Foods (GB29921-2021).

<sup>&</sup>lt;sup>4</sup> National Food Safety Standard Usage Standard for Food Additives (GB2760-2024).

<sup>&</sup>lt;sup>5</sup> National Food Safety Standard Use of Nutritional Fortification Substances (GB14880-2012).

#### **3.11 Urease activity**

Urease activity in products with soybean and soybean protein products as the main source of protein shall be consistent with provisions of Table 7.

Table 7: Urease Activity Indicators							
Items	Indicator	Testing method					
Qualitative determination of urease activity	Negative	GB 5009.183 <sup>a</sup>					
<sup>a.</sup> The sampling quantity of liquid products sh matter.	all be converted acco	ording to the content of dry					

#### **4** Others

#### 4.1 Label

4.1.1 Content indicated on the label shall be consistent with GB 13432<sup>6</sup> and/or relevant provisions. Content "per 100 kJ" for essential ingredients and optional ingredients shall be indicated.

4.1.2 The label shall clearly indicate the product category (such as lactose-free formula), applicable people with special medical conditions and osmotic pressures.

4.1.3 The label of anti-reflux formula shall indicate the preparation temperature, storage time, and other parameters of the products, as well as the viscosity of the product after preparation.

4.1.4 The formula for special medical purposes, which can be consumed by infants over 6 months of age shall be marked "When the product is consumed by infants over 6 months old with special medical conditions, supplementary food shall be added."

4.1.5 The label shall clearly indicate "Please use under the guidance of a physician or clinical nutritionist."

4.1.6 There must be no image of infants and women on the label, and "Humanization", "breast milk-simulated", or similar terminologies cannot be used.

<sup>&</sup>lt;sup>6</sup> National Food Safety Standard Labeling of Prepackaged Foods for Special Dietary Uses (GB13432-2013).

#### 4.2 Use instructions

4.2.1 Instructions and illustrations for usage and preparation, and products storage conditions shall be clearly stated on the label. When the maximum surface area of the packaging is less than  $100 \text{ cm}^2$  or the product mass is less than 100 g, the illustration may not be indicated.

4.2.2 Warnings should be given regarding possible health hazards caused by improper preparation and use.

#### 4.3 Packaging

Carbon dioxide and/or nitrogen conforming to national food safety standard may serve as packaging medium.

#### Appendix A Common Infant Formulas for Special Medical Purposes

Common infant formulas for special medical purposes are shown in Table A.1.

	Applicable population with	Main technical requirements of the formula				
Product category	special medical conditions					
		a) The lactose shall be completely or partially replaced by other available				
		carbohydrates in the formula;				
Lactose-free or		b) The lactose content in the solid lactose-free formula food shall be lower than				
low-lactose	Lactose intolerance infants	0.5g/100g; The lactose content in solid low-lactose formula food should be less than				
formula		2g/100g. Lactose content in liquid products can be converted according to dilution				
		multiples;				
		c) The protein in the formula is provided by milk protein.				
	Infants with functional	a) Protein in the formula is provided by milk protein;				
Partially	gastrointestinal discomfort	b) All milk proteins in the product are processed and decomposed into amino acids,				
hydrolyzed milk	and can be selectively used	peptide segments, and small molecular milk proteins;				
protein formula	for infants with high risk of	c) Lactose can be completely or partially replaced by other available carbohydrates in				
	milk protein allergy	the formula.				
		a) The product shall contain 250 kJ (60 kcal) ~ 418 kJ (100 kcal) of energy per 100 mL				
		in the ready-to-eat state;				
		b) The protein in the formula is provided by milk protein;				
Deeply	Infants with food protein	c) All milk proteins in the formula are deeply hydrolyzed, mainly broken down into				
hydrolyzed milk	allergy or gastrointestinal	short peptides and amino acids;				
protein formula	dysfunction	d) Lactose can be completely or partially replaced by other available carbohydrates in				
		the formula;				
		e) The content of some nutrients can be adjusted appropriately, and the adjusted range				
		of nutrients content shall comply with the provisions in Table A.2.				
		a) The product shall contain 250 kJ (60 kcal) ~ 418 kJ (100 kcal) of energy per 100 mL				
Amina asid	Infants with food protein	in the ready-to-eat state;				
Amino acid	allergy or gastrointestinal	b) The protein in the formula is provided by amino acids;				
iorinula	dysfunction	c) Amino acids used in the products shall be inconsistent with provisions of Appendix				
		B;				

 Table A.1: Common Infant Formulas for Special Medical Purposes

		d) Lactose can be completely or partially replaced by other available carbohydrates in
		the formula;
		e) The content of some nutrients can be adjusted appropriately, and the adjusted range
		of nutrients content shall comply with the provisions in Table A.2.
		a) The product shall contain 250 kJ (60 kcal) ~ 418 kJ (100 kcal) of energy per 100 mL
		in the ready-to-eat state;
		b) The protein in the formula is provided by amino acids, and its source shall comply
Amino acid		with the provisions of Appendix B of this Standard;
metabolism	Infants with amino acid	c) The types and content of amino acids that shall be restricted in formula foods with
disorder formula	metabolism disorder	common amino acid metabolic disorders are shown in Table A.3;
uisoidei ioimuia		d) Lactose can be completely or partially replaced by other available carbohydrates in
		the formula;
		e) The content of some nutrients can be adjusted appropriately, and the adjusted range
		of nutrient content shall comply with the provisions in Table A.2.
	Premature/low birth weight infants	a) The product shall contain 250 kJ (60 kcal) ~465 kJ (111 kcal) of energy per 100 mL
		in the ready-to-eat state;
		b) Medium-chain fat shall be used as part of the source of fat, and the medium-chain fat
Premature/low		shall not exceed 40% of the total fat;
birth weight		c) The content of some nutrients can be adjusted appropriately, and the adjusted range
infant formula		of nutrient content shall comply with the provisions in Table A.4;
		d) The protein in the formula is provided by a single source of high-quality protein.
		Milk protein can be whole protein or hydrolyzed protein.
		a) The essential components and optional components in 3.4 and 3.5 can be selectively
		added, and their content can be appropriately adjusted according to the nutritional needs
Breast milk		of premature/low birth weight infants and the recognized breast milk data. The
nutritional	Premature/low birth weight	combination with breast milk can meet the requirements of the maximum and minimum
supplement	infants	values of energy and nutrients in the formula of premature/low birth weight infants.
11		b) The protein is provided by milk protein, may be whole protein or hydrolyzed
		protein.
		a) The mass ratio of fat to (protein + carbohydrate) ranges from 1:1 to 4:1;
Ketogenic	Infants with refractory	b) The maximum value for fat and linoleic acid, and the minimum value for
formula	epilepsy	carbohydrate are not limited;
		c) The protein in the formula is provided by a single source of high-quality protein.
Anti-reflux	Infants with frequent	a) Adding pregelatinized forms of high-amylopectin starch and/or thickeners;

formula	gastroesophageal reflux	c) When adding high-amylopectin starch, the addition amount of starch is (9 g - 25					
		g)/100 g.					
		d) The protein in the formula is provided by a single source of high-quality protein.					
Abnormal fat	Infants with fatty acid	a) Medium-chain fat shall be used as part of the source of fat;					
metabolism	transport, metabolism, and	b) The content of medium-chain fat shall not be less than 50% of total fat.					
formula	absorption disorders	c) The protein in the formula is provided by a single source of high-quality protein.					
	Infants with high	a) The product shall contain 314kJ (75kcal) -565 kJ (135 kcal) of energy per 100 mL in					
High energy	consumption, growth	the ready-to-eat state;					
formula	retardation, and limited	) The content of protein shall be not less than 0.53 g/100 kJ (2.2 g/100 kcal);					
Iomuna	liquid intake caused by	c) The protein in the formula is provided by a single source of high-quality protein or					
	diseases	amino acid. Milk protein can be whole protein or hydrolyzed protein.					
		a) The protein in the formula is provided by a single source of high-quality protein.					
		Milk protein can be whole protein or hydrolyzed protein.					
Protein	Infants needing to be	b) The content of protein in whole protein products shall not be less than $90 \text{ g}/100 \text{ g}$ ;					
components	supplemented with	The content of protein in partially hydrolyzed and deeply hydrolyzed products shall be					
components	additional protein	greater than 80 g/100 g (based on dry matter);					
		c) No additional ingredients shall be added (except those necessary for the process);					
		d) It shall be used in conjunction with other foods.					
		a) From vegetable oil with relatively high medium-chain fat content;					
Medium-chain	Infants needing additional	b) The content of medium-chain fat shall not be less than 95% of total fat;					
fat components	medium-chain fatty acids	c) No additional ingredients shall be added (except those necessary for the process);					
		d) It shall be used in conjunction with other foods.					

## 

	Indicator						
Nutrients need to be adjusted <sup>a</sup>	Per 1	00 kJ	Per 100 kcal				
	Minimum Maximum		Minimum	Maximum			
Protein/ g	0.45	1.41	1.8	5.9			
Carbohydrate/ g	2.2	3.7	9.0	15.3			
Vitamin B <sub>1</sub> / µg	10	72	41	300			

Vitamin B <sub>2</sub> / µg	14	119	58	500
Vitamin B <sub>6</sub> / µg	8.5	75.0	35	314
Nicotinic acid (nicotinamide)/ µg	96	750	400	3 138
Folic acid/ µg	1.0	12.0	4	50
Pantothenic acid / µg	70	478	293	2 000
Vitamin C/ mg	1.9	16.7	8	70
Biotin / µg	0.41	5.00	1.7	20.9
Zinc / mg	0.12	0.60	0.50	2.50
Calcium/ mg	12	60	50	251
Manganese / µg	0.24	50.00	1.0	209.0
Copper / µg	4.8	28.7	20	120
Iodine / µg	1.2	14.1	5	59
Selenium / µg	0.25	2.06	1.0	8.6
<sup>a</sup> Formulas for rare diseases with amino acid metabolism disorders, appropriate adjustments may be made to the content of some nutrients based on the provisions of 3.1.1.				

Table A.3: Common Amino Acid Metabolic Disorders, Types and Content Requirements of Amino Acids that Should be
Restricted

Common amino acid metabolic disorders	Types of amino acids that shall be restricted	Amino acid content that shall be restricted in formula foods/ (mg/g) protein equivalent
Phenylketonuria	Phenylalanine	≤ 1.5
Maple Syrup Urine Disease	Leucine, isoleucine, valine	$\leq 1.5^{a}$
Propionaemia/methylmalonacidemia	Methionine, Threonine and Valine	$\leq 1.5^{a}$
	Isoleucine	<i>≤</i> 5

Tyrosinemia	Phenylalanine and tyrosine	≤1.5ª	
Hypercystinuria	Methionine	≤1.5	
Glutaralemia type I	Lysine	≤1.5	
	Tryptophan	$\leq 8$	
Isovaleric acidemia	Leucine	≤1.5	
Urea circulation disorder	Non-essential amino acids (alanine, arginine, aspartic acid, asparagine, glutamic acid, glutamine,Glycine, proline and serine)	≤1.5ª	
<sup>a</sup> refers to the content of single amino acid.			

### Table A.4: Nutrients Indicators of Formulas for Premature/Low Birth Weight Infants that Should be Adjusted

Nutrients need to be adjusted	Per 100 kJ		Per 100 kcal	
ivutrients need to be adjusted	Minimum	Maximum	Minimum	Maximum
Protein/ g	0.48	0.98	2.0	4.1
Fat/ g	0.84	1.90	3.5	8.0
Carbohydrate/ g	0.7	3.3	2.9	14.0
Vitamin A/ (µg RE)	14	177	60	741
Vitamin D/ µg	0.48	2.18	2.0	9.1
Vitamin E/ (mg α-TE)	0.12	2.39	0.5	10.0
Vitamin B <sub>2</sub> / µg	19	148	80	619
Vitamin B <sub>6</sub> / µg	8.4	75.0	35	314

Nicotinic acid (nicotinamide)/ μg	96	1 195	400	5 000
Folic acid / µg	2.4	21.5	10	90
Biotin / µg	0.36	8.80	1.5	36.8
Sodium / mg	N.S. <sup>a</sup>	25	N.S. <sup>a</sup>	105
Copper / µg	8.4	59.8	35	250
Magnesium / mg	1.2	4.1	5.0	17.2
Iron / mg	0.10	0.87	0.42	3.64
Zinc / mg	0.12	0.65	0.50	2.72
Calcium / mg	12	60	50	251
Phosphorus / mg	6	30	25	126
Selenium/ µg	0.48	2.15	2.0	9.0
Inositol / mg	1.0	17.7	4	74

#### Appendix B

#### Requirements for Monomeric Amino Acids that Could be Used in Infant Formulas for Special Medical Purposes

Please refer to Tabel B.1 for the requirements for monomeric amino acids that can be used in infant formulas for special medical purposes.

No.	Amino Acid	Source of Chemical Compound
1	Aspartic acid	L-aspartic acid
I	Aspartie dela	L-magnesium aspartate
2	Threonine	L-threonine
3	Serine	L-serine
4	Chutomia asid	L-glutamic acid
4	Glutamic acid	L-potassium glutamate
5	Glutamine	<i>L</i> -glutamine
6	Proline	<i>L</i> -proline
7	Glycine	Glycine
8	Alanine	<i>L</i> -alanine
9	Cystine	L-cystine
	Cystille	L- cysteine
		L-cysteine hydrochloride monohydrate
10	Valine	<i>L</i> -valine
		L-methionine
11	Methionine	<i>N</i> -acetyl- <i>L</i> -methionine

Table B.1: Monomeric Amino Acids Used in Infant Formulas for Special Medical Purposes <sup>a</sup>

12	Leucine	L-leucine
13	Isoleucine	L-isoleucine
14	Tyrosine	L-tyrosine
15	Phenylalanine	L-phenylalanine
16	Lysine	L-lysine hydrochloride
		L-lysine acetate
17	Arginine	<i>L</i> -arginine
		L-arginine hydrochloride
18	Histidine	L-histidine
		L-Histidine hydrochloride monohydrate
19	Tryptophan	L-tryptophan
<sup>a</sup> Non-edible animal and plant ingredients shall not be used as sources of monomeric amino acids.		

#### END TRANSLATION

Attachments:

GB 25596-2025.pdf