

# Product Information



**XPHE ENERGY K J A**

**meta**  
INSTITUT FÜR DIÄTIK  
GmbH

## In Short

- **XPhe energy** is a food for special medical purposes for use in the dietary management of Phenylketonuria (PKU) or Hyperphenylalaninemia (HPA)
- for 3 age groups (K, J, A):
  - > **XPhe energy K neutral**: 1 to 6 years of age
  - > **XPhe energy K** (flavoured options): 3 to 6 years of age
  - > **XPhe energy J**: 7 to 14 years of age
  - > **XPhe energy A**: from 15 years of age
- powdered protein supplement free of Phenylalanine
- with extra energy in form of carbohydrate and fat ( $\omega$ -6- and  $\omega$ -3-fatty acids)
- tasty milkshake-like drink
- in 4 different options: neutral, strawberry, lemon, vanilla
- highly purified L-amino acids
- micronutrients in balanced, age-based amounts
- in convenient portion sachets at 5 g protein equivalent (K) and 10 g protein equivalent (J, A)
- **XPhe energy A** also in tin of 660 g

## Product profile

**XPhe energy** is a powdered Phenylalanine free mixture of highly purified L-amino acids.

**XPhe energy** supplies additional energy in the form of easily digestible carbohydrates and a blend of vegetable oils which ensures that the essential fatty acids linoleic ( $\omega$ -6) and  $\alpha$ -linolenic ( $\omega$ -3) acid are available in recommended amounts.

Both energy suppliers prevent that after resorption the amino acids are being used as energy source in the metabolism. Thanks to its increased energy content **XPhe energy** is specifically suitable in cases of weight loss, catabolic status or poor appetite or when extra energy is needed, e.g. for high activity/ sports. Especially children with high physical activity will benefit from its extra energy.

**XPhe energy** is available in 4 different options: neutral, strawberry, lemon, vanilla. The milkshake-like tastes and smells pleasantly and thus contributes to an improved acceptance and compliance in the PKU diet.

The mixture is supplemented with vitamins, minerals and trace elements in balanced amounts that meet the needs of the age group.

## XPhe energy for 3 age groups

- > **XPhe energy K** from 3 to 6 years  
Extra: **XPhe energy K neutral** already from 1 to 6 years
- > **XPhe energy J** from 7 to 14 years
- > **XPhe energy A** from 15 years onwards

## XPhe energy K neutral as some kind of Phe-free "toddlers milk" or milk substitute

**XPhe energy K neutral** does not contain any flavour or sweetener and is therefore suitable for toddlers from 1 year of age. **XPhe energy K neutral** has a milky consistency and may thus facilitate the transition from the Phe-free infant formula (e.g. **XPhe Infant Mix<sup>LCP</sup>**) to (highly) concentrated amino acid mixtures (e.g. **XPhe Kid**). Since **XPhe energy K neutral** contains more energy than a conventional highly concentrated amino acid mixture, it is particularly suited for the toddler age, because it compensates for energy deficits which may arise from the change to the (modified) family diet as well as from developmental activity steps. **XPhe energy K neutral** is 3 times higher in protein content than a Phe-free infant formula and thus covers the elevated protein needs associated with increasing body weight. The taste of **XPhe energy K neutral** is similar to **XPhe Infant Mix<sup>LCP</sup>** and is nearly odour-free.

## Amino acids per 100 g powder

<b>XPhe energy</b>		<b>K</b>	<b>J</b>	<b>A</b>
L-Alanine	g	1,6	1,6	2
L-Arginine	g	1,5	1,5	1,4
L-Aspartic acid	g	4,5	4,3	4,5
L-Cystine	g	0,9	0,9	0,5
L-Glutamine	g	1,5	1,4	2
L-Glutamic acid	g	1,9	2,4	1,7
Glycine	g	3,5	3,2	2
L-Histidine	g	0,9	0,9	1,4
L-Isoleucine	g	2,0	1,9	2
L-Leucine	g	3,3	3,3	3
L-Lysine	g	2,3	2,1	2
L-Methionine	g	0,6	0,6	0,5
L-Phenylalanine	g	0	0	0
L-Proline	g	2,3	2,3	3
L-Serine	g	2,1	2,0	2
L-Threonine	g	2,3	2,3	2
L-Tryptophan	g	0,6	0,6	0,6
L-Tyrosine	g	2,7	2,7	3
L-Valine	g	2,1	2,0	2,5

## Amino acids per 1 sachet

<b>XPhe energy</b>		<b>K</b>	<b>J</b>	<b>A</b>
L-Alanine	g	0,27	0,54	0,7
L-Arginine	g	0,24	0,49	0,45
L-Aspartic acid	g	0,74	1,43	1,5
L-Cystine	g	0,14	0,29	0,18
L-Glutamine	g	0,25	0,45	0,7
L-Glutamic acid	g	0,32	0,79	0,6
Glycine	g	0,57	1,04	0,7
L-Histidine	g	0,15	0,30	0,45
L-Isoleucine	g	0,32	0,63	0,6
L-Leucine	g	0,55	1,08	1
L-Lysine	g	0,38	0,70	0,7
L-Methionine	g	0,10	0,21	0,18
L-Phenylalanine	g	0	0	0
L-Proline	g	0,38	0,75	1
L-Serine	g	0,34	0,67	0,6
L-Threonine	g	0,38	0,76	0,6
L-Tryptophan	g	0,10	0,21	0,2
L-Tyrosine	g	0,45	0,89	1
L-Valine	g	0,34	0,67	0,8

## Administration

Due to the energy contained in **XPhe energy** it is not essential to consume other foods together with this amino acid mixture. **XPhe energy** can well be integrated as a snack into the daily PKU-diet. This makes this protein supplement very flexible in use.

## Preparation

Fill still water into a shaker, empty 1 sachet (sa) **XPhe energy K, J or A** into it. Shake – ready!

We recommend the following amounts of water:

100 ml + 1 sa **energy K** (≅ 5 g PE)

200 ml + 1 sa **energy J** (≅ 10 g PE)

200 ml + 1 sa/ 33 g **energy A** (≅ 10 g PE)

PE = protein equivalent

The scoop enclosed in the **XPhe energy A** tin measures approx. 16,5 g (≅ 5 g PE) when levelled.

Always prepare freshly!

**Function** **XPhe energy** substitutes that part of the protein in the diet which may not be taken up from natural food sources.

**Indication** **XPhe energy** is a food for special medical purposes and as protein supplement suitable for the dietary management of Phenylketonuria (PKU) or Hyperphenylalaninemia (HPA).

**Dosage** The daily total amount of amino acid mixture depends on age, body weight and individual medical condition/ Phenylalanine tolerance and should be re-examined and adjusted in accordance with the results of regular monitoring.

The daily dosage of amino acid mixture should at best be divided into 3 - 5 single portions.

The daily dosage of amino acid mixture can consist either exclusively of **XPhe energy** or of several products suitable for use in the dietary management of Phenylketonuria.

The PKU-diet must be supplemented with energy, natural protein and other nutrients in prescribed quantities.

**Important Notice** Must only be used under medical supervision. Not for use as a sole source of nutrition. For enteral use only. Only for people with proven Phenylketonuria (PKU) or Hyperphenylalaninemia (HPA). Suitable for the – for each of the three products – indicated age group.

## INGREDIENTS

For nutrition specialists the lists of ingredients are provided on our website [www.metax.org](http://www.metax.org).

Delivery Unit	<b>XPhe energy K</b>	box, sachets (sa) 1 x 20 sa at 16,5 g = 330 g	box, sachets (sa) 4 x 20 sa at 16,5 g = 1320 g	
Article Number	<i>strawberry</i> <i>lemon</i> <i>vanilla</i> <i>neutral</i>	xx-001-21210 xx-001-21221 xx-001-21240 xx-001-21310	xx-001-21201 xx-001-21220 xx-001-21242 xx-001-21320	
Delivery Unit	<b>XPhe energy J</b>	box, sachets (sa) 1 x 20 sa at 33 g = 660 g	box, sachets (sa) 4 x 20 sa at 33 g = 2640 g	
Article Number	<i>strawberry</i> <i>lemon</i> <i>vanilla</i> <i>neutral</i>	xx-001-23210 xx-001-23221 xx-001-23240 xx-001-23231	xx-001-23201 xx-001-23220 xx-001-23242 xx-001-23230	
Delivery Unit	<b>XPhe energy A</b>	box, sachets (sa) 1 x 20 sa at 33 g = 660 g	box, sachets (sa) 4 x 20 sa at 33 g = 2640 g	tin 1 x 660 g
Article Number	<i>strawberry</i> <i>lemon</i> <i>vanilla</i> <i>neutral</i>	xx-001-25210 xx-001-25221 xx-001-25240 xx-001-25231	xx-001-25201 xx-001-25220 xx-001-25242 xx-001-25230	xx-001-25215 xx-001-25225 xx-001-25245 xx-001-25235
Delivery to	Pharmacies, clinics			
Storage	Store in a cool, dry place.			

NUTRITION INFORMATION	XPhe energy K						XPhe energy J						XPhe energy A					
	100 g			16,5 g/ 1 sachet			100 g			33 g/ 1 sachet			100 g			33 g/ 1 sachet		
	neutral	straw- berry	lemon	vanilla	neutral	straw- berry	lemon	vanilla	neutral	straw- berry	lemon	vanilla	neutral	straw- berry	lemon	vanilla		
Energy	kJ	1704	1631	1621	1677	281	269	267	277	1669	1649	1639	1673	551	544	541	552	
	kcal	405	387	380	398	67	64	63	66	396	391	389	398	131	129	128	131	
Fat	g	14	10	10	12	2,4	1,7	1,7	2	11	10	11	12	3,6	3,5	3,5	4	
of which	saturates g	3	2	2	2,6	0,5	0,35	0,34	0,4	2	2	2	2,6	0,7	0,7	0,7	0,9	
	mono-unsaturates g	6	4	4	5	1	0,7	0,7	0,8	4	4	4	5	1,4	1,4	1,4	1,7	
	polyunsaturates g	6	4	4	5	1	0,7	0,7	0,8	4	4	4	5	1,4	1,4	1,4	1,6	
Carbohydrate	g	39	41	40	41	6	7	7	7	43	42	41	41	14	14	13	13	
of which sugars	g	3,4	13	11	9	0,6	2	2	1,4	16	14	11	9	5	5	4	3	
Fibre	g	0,6	0	0,7	1	0,1	0	0,12	0,17	-	-	-	-	-	-	-	-	
Protein eqv.	g	30	30	30	30	5	5	5	5	30	30	30	30	10	10	10	10	
Amino acids	g	36	36	36	36	6	6	6	6	36	36	36	36	12	12	12	12	
Salt	g	0	0	0	0,4	0	0	0	0,06	0	0	0	0,7	0	0	0	0,23	

		XPhe energy K						XPhe energy J						XPhe energy A					
		neutral	straw- berry	lemon	vanilla	neutral	straw- berry	lemon	vanilla	neutral	straw- berry	lemon	vanilla	neutral	straw- berry	lemon	vanilla		
Vitamins	µg	424	15	11	39	39	1	1,2	13	0,8	76	3	15	457	3,5	8	34		
Vitamin A	µg	70	2,5	1,8	6	6	0,17	0,2	2	0,085	12	12	12	151	1,2	2,5	11		
Vitamin D3	µg	0,035	0,35	1,3	1,3	0,035	0,04	0,04	0,04	0,8	0,8	0,8	0,8	0,12	0,12	0,12	0,12		
Vitamin E	mg	0,35	0,35	1,3	1,3	0,035	0,04	0,04	0,04	0,8	0,8	0,8	0,8	0,12	0,12	0,12	0,12		
Vitamin K1	µg	6	6	6	6	0,17	0,2	0,2	0,2	2	2	2	2	2,5	2,5	2,5	2,5		
Vitamin C	mg	6	6	6	6	0,17	0,2	0,2	0,2	2	2	2	2	2,5	2,5	2,5	2,5		
Thiamin (B1)	mg	0,035	0,035	1,3	1,3	0,035	0,04	0,04	0,04	0,8	0,8	0,8	0,8	0,12	0,12	0,12	0,12		
Riboflavin (B2)	mg	0,04	0,04	1,3	1,3	0,04	0,04	0,04	0,04	0,8	0,8	0,8	0,8	0,12	0,12	0,12	0,12		
Niacin	mg	0,4	0,4	1,3	1,3	0,4	0,4	0,4	0,4	3,2	3,2	3,2	3,2	4	4	4	4		
Vitamin B6	mg	0,085	0,085	3,2	3,2	0,085	0,085	0,085	0,085	0,8	0,8	0,8	0,8	0,12	0,12	0,12	0,12		
Folic acid	µg	2,5	2,5	9,1	9,1	2,5	2,5	2,5	2,5	20	20	20	20	274	274	274	274		
Vitamin B12	µg	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,8	0,8	0,8	0,8	0,1	0,1	0,1	0,1		
Biotin	µg	0,5	0,5	1,8	1,8	0,5	0,5	0,5	0,5	4	4	4	4	9	9	9	9		
Pantothenic acid	mg	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,8	0,8	0,8	0,8	0,1	0,1	0,1	0,1		
Minerals	mg	29	52	99	150	5	9	5	25	0	0	0	280	0	0	0	78		
Sodium	mg	1,7	1,7	1,7	1,7	1,7	1,7	1,7	1,7	vanil.: 9	vanil.: 9	vanil.: 9	vanil.: 9	vanil.: 8	vanil.: 8	vanil.: 8	vanil.: 8		
Potassium	mg	85	85	311	311	85	85	85	85	601	601	601	601	457	457	457	457		
Calcium	mg	31	31	111	111	31	31	31	31	842	842	842	842	471	471	471	471		
Phosphorus	mg	13	13	47	47	13	13	13	13	400	400	400	400	320	320	320	320		
Magnesium	mg	5	5	17	17	5	5	5	5	162	162	162	162	152	152	152	152		
Trace elements	µg	0,4	0,4	1,4	1,4	0,4	0,4	0,4	0,4	3,6	3,6	3,6	3,6	9	9	9	9		
Iron	mg	0,4	0,4	1,4	1,4	0,4	0,4	0,4	0,4	3,6	3,6	3,6	3,6	9	9	9	9		
Zinc	mg	0,36	0,36	1,3	1,3	0,36	0,36	0,36	0,36	3,6	3,6	3,6	3,6	5	5	5	5		
Copper	mg	0,04	0,04	0,14	0,14	0,04	0,04	0,04	0,04	0,4	0,4	0,4	0,4	0,8	0,8	0,8	0,8		
Manganese	mg	0,1	0,1	0,35	0,35	0,1	0,1	0,1	0,1	1,1	1,1	1,1	1,1	2	2	2	2		
Fluoride	mg	0,015	0,015	0,052	0,052	0,015	0,015	0,015	0,015	0,15	0,15	0,15	0,15	-	-	-	-		
Selenium	µg	1,2	1,2	4,2	4,2	1,2	1,2	1,2	1,2	14	14	14	14	23	23	23	23		
Chromium	µg	1	1	3,5	3,5	1	1	1	1	20	20	20	20	30	30	30	30		
Molybdenum	µg	2	2	7	7	2	2	2	2	17	17	17	17	46	46	46	46		
Iodine	µg	5	5	17	17	5	5	5	5	45	45	45	45	107	107	107	107		
L-Carnitine	mg	0,9	0,9	3,2	3,2	0,9	0,9	0,9	0,9	9	9	9	9	21	21	21	21		
Choline	mg	2,5	2,5	8,5	8,5	2,5	2,5	2,5	2,5	27	27	27	27	76	76	76	76		
myo-Inositol	mg	5	5	17	17	5	5	5	5	47	47	47	47	46	46	46	46		
Taurine	mg	1	1	3,5	3,5	1	1	1	1	10	10	10	10	-	-	-	-		

**FURTHER NUTRITION INFORMATION**

L-Carnitine	mg	0,9
Choline	mg	2,5
myo-Inositol	mg	5
Taurine	mg	1