



## In Short

- **XPhe for2** is a Food for Special Medical Purposes (FSMP) for use in the dietary management of Phenylketonuria (PKU) or Hyperphenylalaninemia (MHP/HPA)
- optimal in the time before and during pregnancy and in the period of breastfeeding
- powdered protein supplement free of Phenylalanine
- with extra energy in form of carbohydrate and fat ( $\omega$ -6- and  $\omega$ -3-fatty acids)
- neutral in smell and taste
- highly purified L-amino acids
- micronutrients in adequate amounts
- in convenient sachets at 10 g protein equivalent

## Product Profile

**XPhe for2** is a powdered mixture of highly purified L-amino acids free of Phenylalanine – optimal in the time before and during pregnancy and in the period of breastfeeding.

**XPhe for2** supplies additional energy in the form of easily digestible carbohydrate and a blend of vegetable oils, containing a well balanced proportion of the essential  $\omega$ -6- and  $\omega$ -3-fatty acids, linoleic- and  $\alpha$ -linolenic acid.

Both energy components ensure that the amino acids are used most optimal for building body tissue and muscles of mother and baby.

The energy in **XPhe for2** helps to prevent unwanted loss of weight – especially helpful when the pregnant woman is suffering from lack of appetite and/or emesis and in consequence elevated blood Phe-levels caused by weight loss are to be feared.

**XPhe for2** also provides the extra portion of energy the nursing mother needs when her body is producing milk for the baby. In contrast to a traditional amino acid mixture **XPhe for2** has a pleasant taste and neutral smell. This makes compliance easier for the pregnant woman.

## Vitamins, Minerals and Trace Elements (Micronutrients)

**XPhe for2** is supplemented with vitamins, minerals and trace elements.

The level of enrichment is in accordance with the latest published Reference Values for Nutrient Intake from Germany, Austria and Switzerland (D-A-CH 2000) for the daily intake of micronutrients for

pregnant women: explained below using the example of Calcium.

An additional supplementation with folic acid is required.

## Calcium

Milk and dairy products are the main suppliers of calcium. However these products are (almost) not allowed in a low protein diet.

With 6 sachets **XPhe for2** covers 100 % of the daily calcium requirement.

## Folic Acid

Folic acid reduces risk of neural tube defects (spina bifida). It is important, that folic acid is substituted in sufficient amounts – already at the time when pregnancy is being planned. In combination with the low protein food, **XPhe for2** supplies that amount of folic acid, that is in accordance with the official recommendations for the daily intake for pregnant women. N.B.: It is recommended that PKU women follow the national guidelines for fertile and pregnant women of taking a folic acid supplementation of an extra **400 µg/day** before and during pregnancy. This additional amount of folic acid is **not covered by XPhe for2** and should be **prescribed by the physician**.

## Products for Pregnancy and Lactation

- > **XPhe for2 minis** – tablets
- > **XPhe for2** – neutral – sachet
- > **XPhe for2 LC** – neutral – sachet

All three products are equivalent in respect of their fortification with micronutrients calculated on gram protein equivalent.

Amino acids	XPhe for2	100 g	33 g/ 1 sachet
L-Alanine	g	2,0	0,7
L-Arginine	g	1,4	0,4
L-Aspartic acid	g	4,3	1,4
L-Cystine	g	0,5	0,2
L-Glutamine	g	2,2	0,7
L-Glutamic acid	g	1,8	0,6
Glycine	g	2,1	0,7
L-Histidine	g	1,4	0,4
L-Isoleucine	g	1,8	0,6
L-Leucine	g	3,0	1,0
L-Lysine	g	2,1	0,7
L-Methionine	g	0,5	0,2
L-Phenylalanine	g	-	-
L-Proline	g	3,1	1,0
L-Serine	g	1,8	0,6
L-Threonine	g	1,8	0,6
L-Tryptophan	g	0,6	0,2
L-Tyrosine	g	3,2	1,0
L-Valine	g	2,4	0,8

**XPhe for2 minis**, **XPhe for2** and **XPhe for2 LC** can be used in combination during the MPKU period.

The possibility to exchange the products is only given according to and after calculation of the individual nutrient supply and medical advice.

## Administration

Due to the energy contained in **XPhe for2** there is no need for a concurrent intake of other food. **XPhe for2** can easily be included into the dietary schedule as an in-between meal. This allows for a very flexible usage of this amino acid mixture.

## Preparation

Fill 200 ml non-carbonated drinking water into a shaker.

Add 1 sachet **XPhe for2** – shake – ready. Always prepare freshly!

**Function** **XPhe for2** substitutes that part of the protein in the diet which may not be taken up from natural food sources.

**Indication** **XPhe for2** is a food for special medical purposes and as a protein supplement suitable for the dietary management of Phenylketonuria (PKU) or Hyperphenylalaninemia (MHP/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. **XpH for2** can be combined with other products from the XpH-system – at best with **XpH for2 LC** or **XpH for2 minis**, both are also products specially designed for the MPKU period (see section "Products for Pregnancy and Lactation" page 1).

The PKU-diet must be supplemented with energy, natural protein, other nutrients and water 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 women with proven Phenylketonuria (PKU) or Hyperphenylalaninemia (MHP/HPA) – especially in the time before and during pregnancy and in the period of breastfeeding.

Delivery Unit	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	xx-001-27110	xx-001-27100
Delivery to	Pharmacies, clinics	
Storage	Store in a cool, dry place.	

NUTRITION INFORMATION			
Xphe for2	100 g	33 g/ 1 sachet	
<b>Energy</b>	kJ 1798	593	
	kcal 428	141	
<b>Fat</b>	g 15	5	
of which			
saturates	g 3	1	
mono-unsaturates	g 6	2	
polyunsaturates	g 6	2	
<b>Carbohydrate</b>	g 44	14	
of which sugars	g 3	1	
<b>Protein eqv.</b>	g 30	10	
<b>Amino acids</b>	g 36	12	
<b>Salt</b>	g 0	0	

g protein

**Vitamins**

Vitamin A	µg	362	120	12
Vitamin D3	µg	5	1,6	0,16
Vitamin E	mg	5	1,7	0,17
Vitamin K1	µg	32	10	1
Vitamin C	mg	39	13	1,3
Thiamin (Vit. B1)	mg	0,6	0,2	0,02
Riboflavin (Vit. B2)	mg	0,9	0,3	0,03
Niacin	mg	9	3	0,3
Vitamin B6	mg	0,9	0,3	0,03
Folic acid	µg	151	50	5
Vitamin B12	µg	3	1	0,1
Biotin	µg	15	5	0,5
Pantothenic acid	mg	3	1	0,1

**Minerals**

Sodium	mg	12	4	0,4
Potassium	mg	483	159	16
Calcium	mg	529	175	18
Phosphorus	mg	306	101	10
Magnesium	mg	136	45	4,5

**Trace elements**

Iron	mg	15	5	0,5
Zinc	mg	5	1,7	0,17
Copper	mg	0,6	0,2	0,02
Manganese	mg	1,5	0,5	0,05
Selenium	µg	30	10	1
Chromium	µg	15	5	0,5
Molybdenum	µg	36	12	1,2
Iodine	µg	106	35	3,5

**FURTHER NUTRITION INFORMATION**

L-Carnitine	mg	60	20	2
Choline	mg	166	55	6
myo-Inositol	mg	136	45	4,5

**INGREDIENTS**

Maltodextrin, vegetable oils (rape seed oil, corn oil, palm oil, sunflower oil), L-lysine-L-aspartate, L-tyrosine, L-proline, L-leucine, potassium-L-glutamate, L-valine, L-arginine-L-aspartate, L-glutamine, glycine, L-alanine, L-threonine, L-serine, L-isoleucine, magnesium-L-aspartate, L-histidine, N-acetyl-L-methionine, L-tryptophan, L-cystine, calcium phosphate, calcium gluconate, emulsifier: **soy lecithine** & E 472c, stabilizer: E 415, choline, inositol, ferrous sulphate, L-carnitine, vitamin C, zinc sulphate, niacin, vitamin E, manganese sulphate, pantothenic acid, cupric sulphate, vitamin B2, vitamin B6, vitamin B1, vitamin A, folic acid, potassium iodide, sodium selenite, sodium molybdate, chromium (III) chloride, vitamin K, biotin, vitamin D, vitamin B12.