

Interested in
a magic product?



Discover the world of Lupidor[®]!

1. Lupin
2. Lupidor[®]
3. Applications



1.1 A plant with a history

- already mentioned 2000 years ago

- discovered as a food product by the Romans

- lupin seeds contain large amounts of high-quality protein

- low in fat, but rich in dietary fibre and minerals



1.2 Sweet lupins today

Cultivation countries

Germany, France, Italy, Spain, Poland, Marocco, Russia, Australia, New Zealand, Chile

Cultivation area

Approx. 1 mio. hectares

Consumption worldwide

150'000 tons

Lupin species

Yellow lupin



lat. *Lupinus luteus*

Blue/Narrow leafed lupin



lat. *Lupinus angustifolius*

White lupin



lat. *Lupinus albus*



1.3 Nutritional value of sweet lupin

Sweet lupin*		100 %	
Protein	36 – 48 %	Fatty acids in % of total fat*	
Carbohydrate	5 – 15 %	Oleic acid** (C 18:1)	24 – 40 %
Fat	4 – 7 %	Linoleic acid*** (C 18:2)	45 – 49 %
Dietary fibre	15 – 18 %	Linolenic acid*** (C 18:3)	1 – 8 %
Minerals	4 – 5 %	Lecithin	2.2 %
Water	10 %	Minerals*	USDA value per 100 g
Amino acids in % of total protein*		Calcium	176 mg
Lysine	2.8 – 6.4 %	Magnesium	198 mg
Methionine	0.3 – 1.0 %	Potassium	1013 mg
Cysteine	0.7 – 4.8 %	Trace elements*	in mg
		Iron	4.36 mg
		Zinc	4.75 mg
		Manganese	2.382 mg
		Copper	1.022 mg

* Base: Seeds lupinus albus
 ** Unsaturated fatty acids
 *** Essential fatty acids

A nutritional profile of high potential

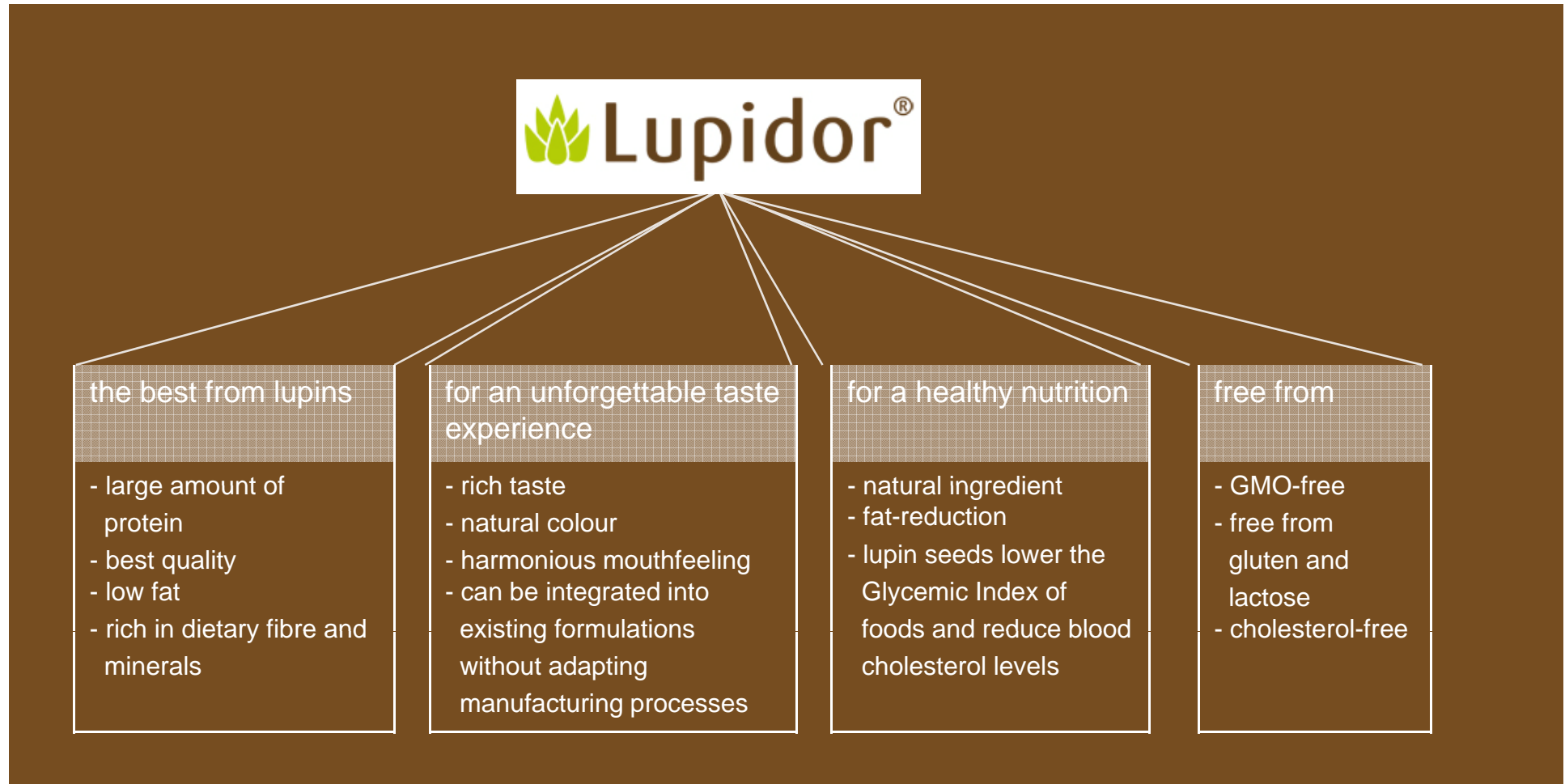
1.4 Vitamin B12

- Uniqueness of lupin: synthesise and storage vitamin B12 in his active form
- is involved in formation of red blood cells and support the cell growth and cell division
- enhance the protein metabolism and nervous system and regenerate the mucosa



Lupin – the plant source of vitamin B12

2.1 A magic product for a new generation



2.1 Our range of products

	Concentrates		Compounds		Fibre
	Lupidor [®] PF	Lupidor [®] HP	Lupidor [®] CPR P / S	Lupidor [®] CPS	Lupidor [®] FI
Raw material	Lupin flour toasted	Lupin flour toasted	Lupin flour toasted, plant fat, dextrose, maltodextrin, emulsifier	Lupin flour toasted, plant fat, dextrose, maltodextrin, emulsifier	Lupin flour toasted
Powder structure	fine powder	fine powder	fine flakes	fine powder	fine powder
Sensory profile	pale yellow, nutty typical taste	yellow, spicy aromatic taste with nutty note	yellow-brown, sweet, caramelised roast odour and taste, very neutral	yellow, sweet and neutral odour and taste	pale yellow, very neutral odour and taste



2.2 Properties and applications

	Concentrates				Compounds				Fibre	
	Lupidor® PF		Lupidor® HP		Lupidor® CPR P / S		Lupidor® CPS		Lupidor® FI	
Composition (values in %)	protein	44	protein	57	protein	23	protein	23	protein	20
	carbohydrate	<1	carbohydrate	11	carbohydrate	28	carbohydrate	26	carbohydrate	4
	fat	7	fat	13	fat	27	fat	27	fat	3
	fibre	40	fibre	5	fibre	20	fibre	20	fibre	65
	water	6	water	4	water	2	water	5	water	6
Properties	well water soluble, strongly hydrophilic and emulsifying		well water soluble, emulsifying, stabilises fat, yellow tinting, interfacial active properties		roller dried, not water soluble		spray dried, water soluble, emulsifying and stabilising		strongly hydrophilic	
Applications	baked goods, sausages, mayonnaise, vegetarian products		baked goods, sausages, mayonnaise, batters, omelets, vegetarian products		chocolate		ice cream, madeleines, chocolate, vegetarian drinks		application in meat replacers, soups and sauces, for fibre fortification	

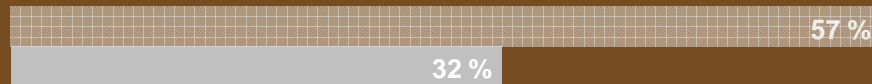


A broad range on plant base

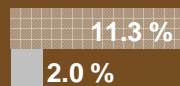
2.3 Lupidor® HP by comparison

	Protein	Carbohydrate	Fat	Fibre	Cholesterol	kJ / kcal (per 100 g)
Lupidor® HP	57.0 %	11.3 %	13.2 %	4.6 %	0 mg/100 g	1700 / 404
Egg yolk powder	32.0 %	2.0 %	63.0 %	0.0 %	2330 mg/100g	2920 / 697

Protein



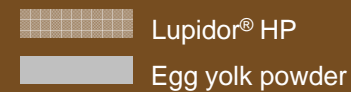
Carbohydrate



Fat



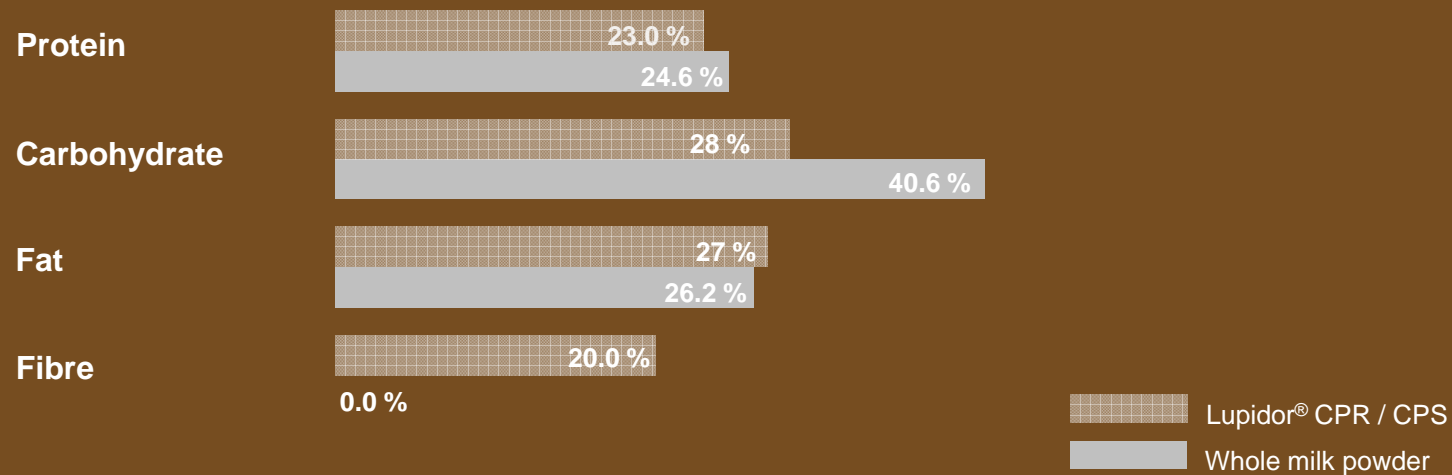
Fibre



Lupidor® HP – the low calorie protein source

2.4 Lupidor[®] CPR / CPS by comparison

	Protein	Carbohydrate	Fat	Fibre	kJ / kcal (per 100 g)
Lupidor [®] CPR / CPS	23.0 %	28 %	27.0 %	20.0 %	1960 / 469
Whole milk powder	24.6 %	40.6 %	26.2 %	0.0 %	2076 / 497



The plant alternative for whole milk powder

3.1 Applications

Product

Lupidor[®] CPR

Benefit

- milk-free
- harmonious mouthfeeling
- cholesterol- and GMO-free
- suitable for people with milk allergy or lactose intolerance, for vegetarians and vegans

Milk-free chocolate



Milk-free chocolate – rich taste without compromise

3.2 Applications

Smooth ice cream

Product

Lupidor[®] CPS

Benefit

- extraordinary creaminess and form stability due to the emulsifying and stabilising qualities of Lupidor[®] CPS
- suitable for people with milk allergy or lactose intolerance, for vegetarians and vegans
- cholesterol- and GMO-free



2 in 1 – ice cream and mousse in one product

3.3 Applications

Madeleine

Product

Lupidor® CPS

Benefit

- increased shelf life due to excellent hydrophilic properties
- natural yellow colour
- cholesterol- and GMO-free



Cholesterol-free Madeleine – better consistence and natural colour

3.4 Applications

Croissants

Product

Lupidor[®] HP

Benefit

- with Lupidor[®] HP fat can be reduced up to 50% in croissants
- intensive flavour even with reduced fat content



Croissants – fat-reduced and increased shelf life

3.5 Applications

Cholesterol-free mayonnaise

Product

Lupidor[®] PF

Benefit

- pure plant origin, is used to replace egg yolk
- suitable for vegetarians and vegans
- cholesterol- and GMO-free



Mayonnaise – cholesterol- and egg-free, pure plant origin

3.6 Applications

Sausages

Product

Lupidor[®] PF

Benefit

- with Lupidor[®] PF fat can be reduced up to 100% in sausages
- contains protein and dietary fibre
- helps in reducing salt and spices



Sausages – fat reduced, containing dietary fibre

3.7 Applications

Plant based coating

Product

Lupidor[®] HP

Benefit

- cholesterol-free
- GMO-free
- low in calories
- outstanding technological and processing qualities
- also suitable for vegetarians and vegans



Coating – low in calories and pure plant origin

Gasid is Italian dealer of LUPIDOR[®]

Thank you very much for your interest.

GASID

Natural Raw Material

GASID

Strada Piosasco 46/c

10040 Volvera (TO) - Italy

Telephone: +39.011.98531069

Fax +39.011.9853578

info@gasid.it

www.gasid.it

HOCHDORF
BEST PARTNER

HOCHDORF Nutrifood Ltd.

Siedereistrasse 9

CH- 6281 Hochdorf

