

COMPLEX SOLUBLE CARBOHYDRATE

QUEMINA 21.226

SUGAR OUT, QUEMINA IN

In 2018, baby food/drink manufacturers worked on strengthening the positioning of their products as being healthier and more nutritious. Compared to previous years, brands were more vocal about sugar reduction, and brought to the market more fortified products.

(from Mintel GNPD)

Quemina 21.226 can boost your infant formula recipe: reducing sugars, reducing lump formation and giving soluble carbohydrates source on a clean label basis.

Further Quemina 21.226 allows to simplify the ingredient list on the label – Clean Label!

“Starch” or “waxy corn starch” as nutritive source AND to improve viscosity: Two functions – one ingredient on the label!



CROSS-APPLICATIONS

- Infant nutrition
- Adult nutrition
- Geriatric nutrition
- Clinical nutrition



QUEMINA
A perfect energy source for infants



Trends

- Consistent energy supply
- Sugar reduction
- Clean Label
- Vegan
- Gluten-free

SUGAR REDUCTION

HEALTH BENEFITS
& technical functions

7 BENEFITS

- Dextrose Equivalent max. 1 %
- > 98% Amylopectin structure
- Not sweet in taste
- Highly soluble in cold water – limited viscosity formation
- Limited Maillard Reaction – reduced browning tendency
- Low osmotic pressure
- High energetic load without sugars

ONLY THE BEST FOR OUR YOUNGEST

SOLUBLE CARBOHYDRATE FOR INFANT FOOD

The "liquid pasta"



- 6 ADVANTAGES**
- Sugar reduction – no sweet impact!
 - Complex carbohydrate – pure amylopectin
 - High energetic load
 - Starch without significant thickening effect
 - Product stability – glossy and transparent
 - Simplification of the ingredient list – starch as nutritive source and as thickener (e.g. Quemina 21.226 and Quemina 21.214)

SOLUBLE CARBOHYDRATES – THE "LIQUID PASTA"

Maltodextrins are a group of carbohydrate entities resulting from the more or less partial hydrolysis of starch. These polysaccharides (oligosaccharides, maltotriose, maltose, glucose ect.) are a reserve molecule for higher plants and an essential component of the human diet. Starch has a dextrose equivalent (DE) value of 0. Maltodextrins may vary between DE >1 and <20. The higher the DE, the higher the blood glucose impact will be and vice versa. High glycemic foods result in a quick spike in blood sugar and insulin. Low glycemic foods have a slower, minor effect.

(Adapted from: Nicolas AUBINEAU, Sports Dietitian Nutritionist, <https://www.nicolas-aubineau.com/en/>)

Maltodextrins or even starches (as AGRANA's Quemina 21.226) are perfect for setting in reserve of glycogen. That is why AGRANA developed this completely new range of functional carbohydrates, combining low load of sugar's from native starch and solubility character of a maltodextrin. An extraordinary low Dextrose-Equivalent is achieved by re-allocation of the starch molecule, allowing the usage of this special ingredient as soluble pure waxy corn starch.

