



Introducing JRS Silvateam Ingredients

AITA, November 27, 2023

The Joint Venture



- JRS and Silvateam, two family companies, joined together in Sept. 2019 to build an even bigger family in the food ingredients market.
- Strong investment in development and production of novel vegetable based texturizing solutions with high consumer acceptance to respond to the increasing demand for label friendly food ingredients.



Our Vision



WE ARE PASSIONATE
NATURAL SOLUTION
DESIGNERS AND
MANUFACTURERS TO
ESTABLISH LONG-TERM
COLLABORATIONS



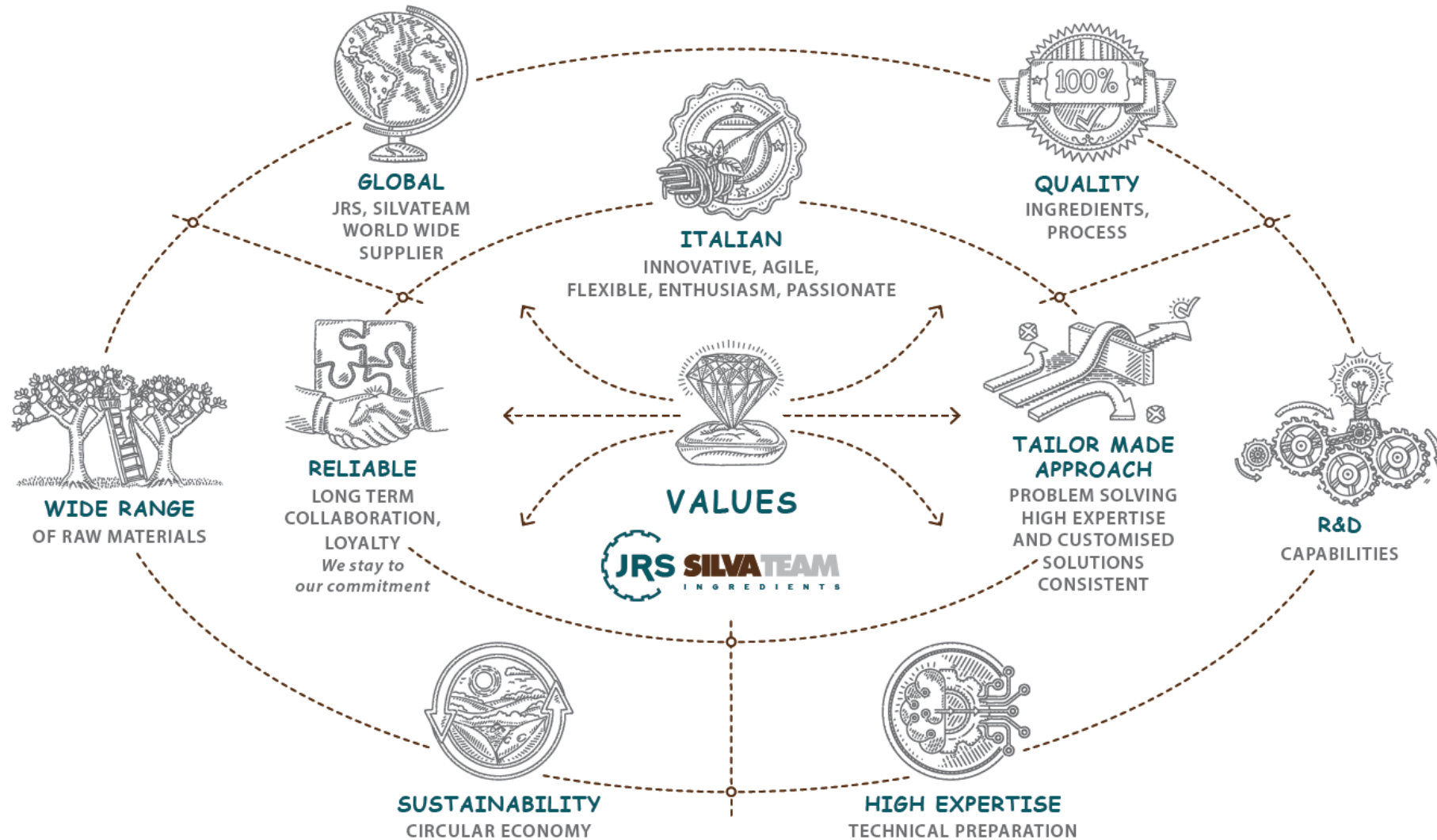
WE FEEL RESPONSIBLE
IN THE GLOBAL
CHALLENGE TO BOOST
OUR CUSTOMERS
WELLNESS



SUSTAINABILITY
IS OUR DNA
SINCE 1850s

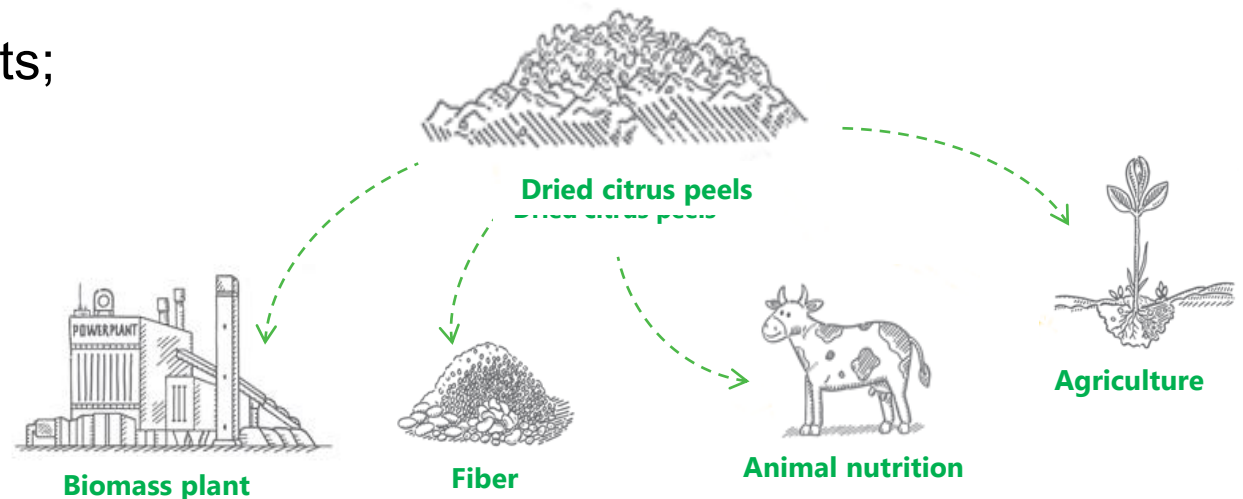


Our Core Values



From Citrus Pectin to Citrus Fibers

- Dried citrus peels and fresh squeezed perishable citrus peels, mainly coming from locally sourced bergamot and lemon, can be used as raw material for the production of pectin. This can help juice and essential oil producers to avoid waste disposal.
- Exhausted peels from the separation of the pectin juice can be used for:
 - ✓ Biomass for power plants;
 - ✓ Animal nutrition, especially for ruminants;
 - ✓ **Fiber**;
 - ✓ Soil improver for agriculture.



Our Core Product Line

We are passionate natural solution designers and manufacturers



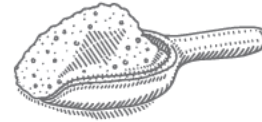
AGLU *Fiber*

CITRUS FIBER



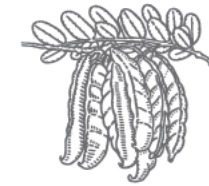
AGLU *Pectin*

CITRUS PECTIN



AGLU *Tex*

TAILOR-MADE BLENDS



AGLU *Mix* 01

TARA GUM - LBG REPLACER





AGLUFIBER
CLEAN LABEL. FUNCTIONAL. SMART.

AITA, 27 October 2023

Prepare for scrutiny of 'ultra-processed' foods

Attention to 'ultra processed' foods will continue to drive demand for 'clean' ingredients, and processing techniques with a more natural, less industrial image.

Unwanted substances

Look beyond ingredients when considering what 'clean' means next. The new generation of 'clean' labels should be void of unwanted substances, as well as unwanted ingredients.

Go clean and conscious

Many consumers already make the link between natural attributes in food and drink, and the environment. Now is the time to strengthen this link and consider aspects of sustainability such as carbon-neutral, that at present are scarcely communicated in food and drink.

Attention to 'Ultra-Processed'



OVERLY PROCESSED FOOD

75%

of French consumers agree that eating/drinking overly processed foods are bad for your health□



SHORT INGREDIENT LIST

35%

UK consumers agree food products with a short ingredients list are healthier than those with longer lists



NATURAL INGREDIENTS

47%

Italian consumers agree 'natural ingredients' is a top factor for them when shopping for food, higher than other attributes

Base: France: 1,000 internet users aged 16+; UK: 1,000 internet users aged 18+; Italy: 1,000 internet users aged 16+

Source: Kantar Profiles/Mintel

Next Level: Looking at Unwanted Substances



UNWANTED SUBSTANCES

25%

of UK consumers buy ethical food and drink to avoid consuming unwanted ingredients (e.g. pesticides, antibiotics etc)



NATURAL

36%

of UK consumers agree that foods which contain artificial ingredients cannot be healthy



MICRO-PLASTICS

35%

of German consumers agree the potential for micro-plastics in tap water is concerning

Base: UK: 1,663 internet users aged 16+ who are aware of but have not bought food and drink with at least one ethical label/certification, Germany: 889 internet users aged 16+ who have drunk and bought bottled water in the last 3 months

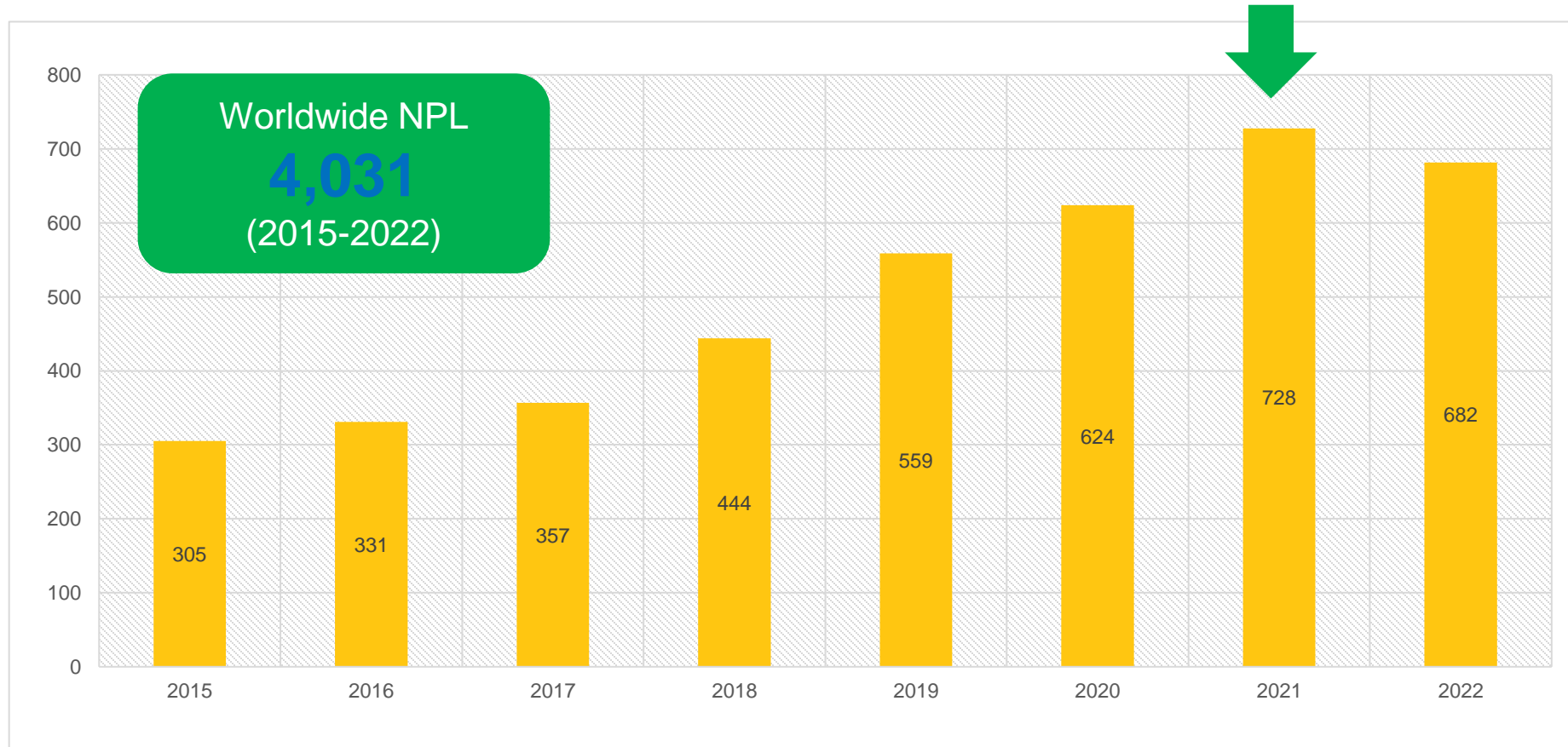
Source: Kantar Profiles/Mintel

**Leverage
the health-
boosting
benefits of
fibres**

**Fibres can
be a 'clean'
choice to
improve
texture**

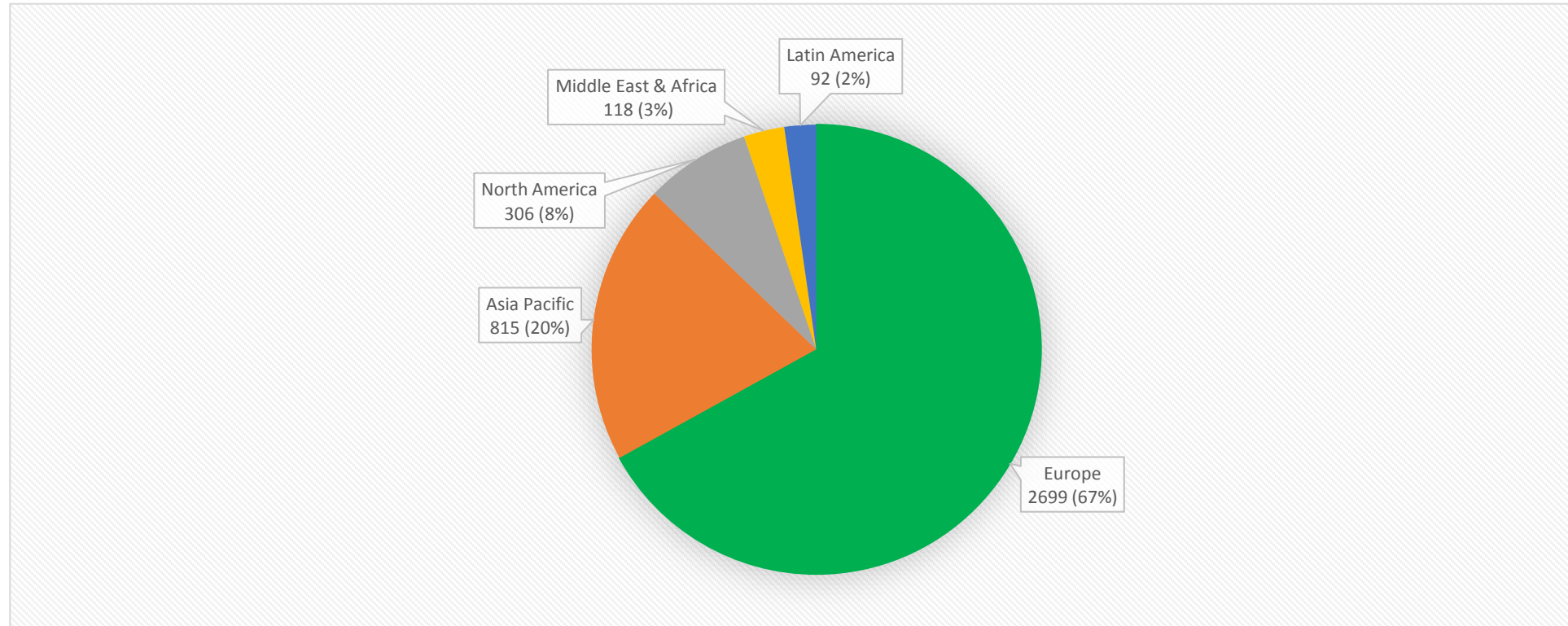
**Explore
new and
improved
fibre
sources**

Citrus Fibre New Product Launches (NPL)



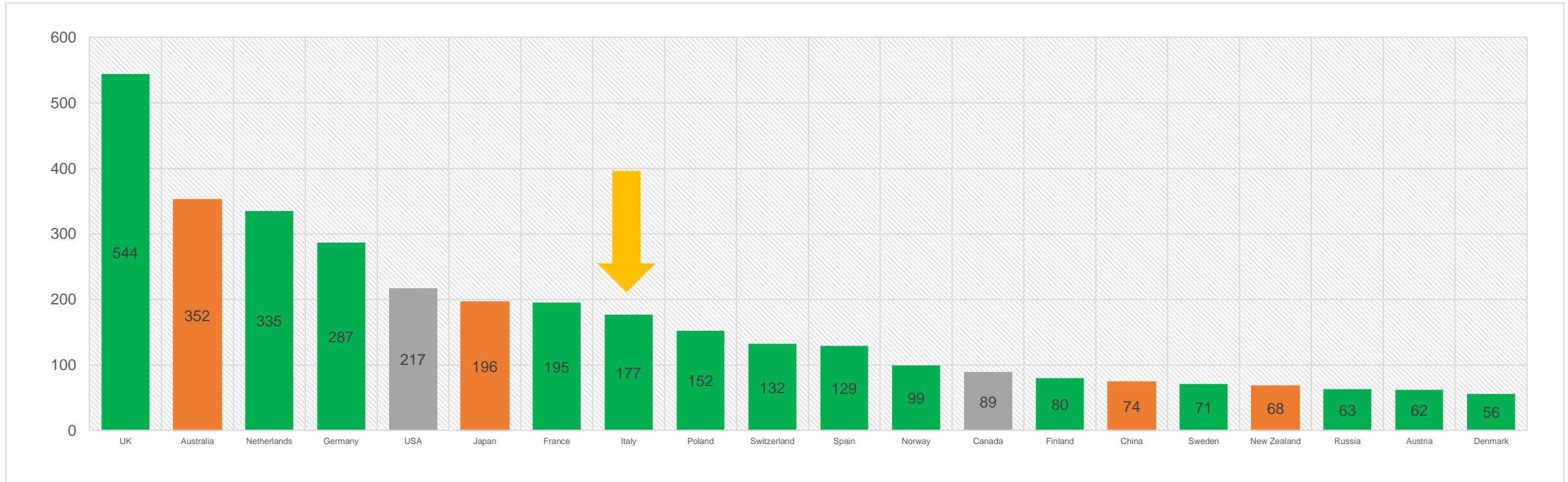
- Global launches are 4,031
- Average Annual Growth Rate (AAGR) is 15% in the investigation period
 - Highest rate was in 2022 with 728 NPL

Citrus Fibre Launches by Region



- Around 2,700 NPL in Europe
- Australia (352 NPL), Japan (196) and China (74)
 - USA (217) and Canada (89)
- South Africa (47 NPL) and Israel (26)
 - Peru (21) and Mexico (15)

Citrus Fibre Launches by Top 20 Countries



- Top 20 countries cover around 85% of new launches.
- New products launches involving 75 countries globally.
 - Focus on most industrialised countries.
 - 14 over top 20 countries were based in Europe.

Fibres can Deliver Sensory Attributes

- Natural or plant-based fibres like citrus fibre help improving texture (e.g. thickening/stabilising), mouthfeel and moisture retention, delivering cleaner labels than artificial/manufactured alternatives.



Unsweetened Coconut Dairy Alternative

Made with just five ingredients including coconuts, rice, spring water, citrus fibre and sea salt. This vegan product is said to be tasty, sourced sustainably, naturally dairy free and free from additives, artificial stabilisers and refined sugar (Innocent, UK).



Vegan Looks-Like-Chicken Burger

This product comprises soy-based chicken burger-style patties with proteins, which are said to be juicy, tender and delicious. It is thickened with methyl cellulose and citrus fiber (Unilever, Germany).



Fibre Smoothie

Raspberry, Cherry & Blackcurrant smoothie with added fibre. This drink provides one of five a day and is a source of vitamin C, which is said to support the immune system. (Waitrose & Partners, UK).

Fibres in Sugar Reduction Trend

- In indulgence categories, sugar reduction is no longer limited to diet or smaller, niche brands.
- In savoury categories, such as sauces and dressings, brands can attract consumers by removing and reducing the content of sugar and salt.



Tomato Ketchup Sauce with Sweetener

Tomato Ketchup Virtually zero: sugar free, no added sugar, gluten free, fat free, 100% vegan, Made in Britain (The Skinny Food Co, UK).



Orange Juice with No Added Sugars

100% natural origin product made from selected fruits with no added sugars. While being made up to 66% of fruit juice. It is thickened only with citrus fiber (Parmalat, Italy).



Pineapple and Coconut Drinking Yogurt

The gluten-free semi-skimmed yoghurt made with no added sugars and 100% natural ingredients (Danone, Spain).

Fibres in Fat Reduction Trends

- The fiber helps to provide similar sensory characteristics to a full-fat recipe, contributing to the flavor, texture, mouth feel and appearance of the finished products.



Mayonnaise with Dijon Mustard

Mayonnaise with Low Fat Yogurt contains 55% less saturated fat compared to the classic Calvé mayonnaise and is free from preservatives (Unilever, Italy).



Linessa Light Cream Cheese

It only contains 5% fat. This product is suitable for vegetarians and retails in a recyclable 200g pack (Lidl, UK).

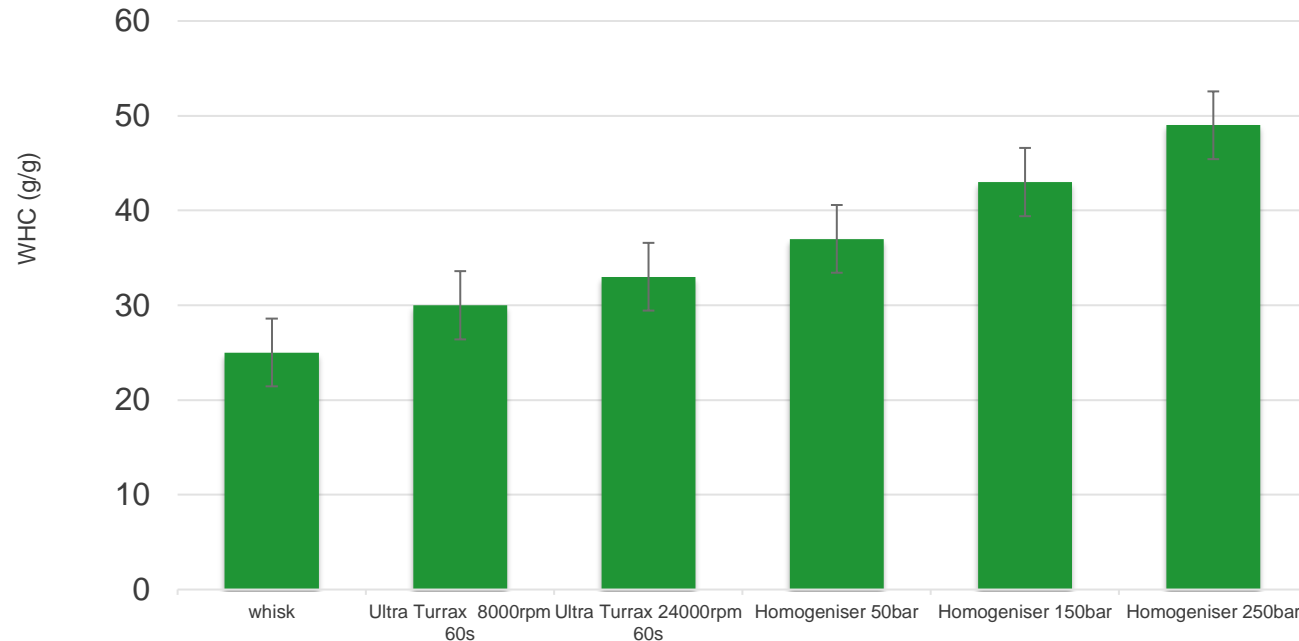


Coconut Stirred Yogurt

Wiener Sausage features 50% less fat than the original version, and only 1.7g salt, 0.6g sugar per 100g. It is free from milk and gluten (Gilde Go' & Mager, Norway).

- High swelling fibre favours a longer lasting satiety, in addition to functional properties which permit to replace stabiliser systems and improve your label declaration.
- Extremely performing in stabilising and texturizing as well as increasing the viscosity in various food & beverage applications.
- Thanks to its neutral sensory properties and high water-binding capacity, citrus fiber allows to reduce the cost in use.

- Different functional properties depending on the energy applied.



Impact of mechanical energy input on Aglufiber FA

You need to define the activation parameters in order to compare our fiber with those on the market.

Aglufiber FA vs Aglufiber FAS

Parameters	Aglufiber FA	Aglufiber FAS
Viscosity (Pa*s)	8,5 ± 2,5	8,5 ± 2,5
Density (g/cm ³)	0,32 ± 0,03	0,37 ± 0,03
WHC (g/g)	23.5 ± 3.5	23.5 ± 3.5
pH	4.5 ± 1.0	4.5 ± 1.0
Granulometry (µm)	max 5% > 250	max 7% > 100
Colour [ΔE]	7.0 ± 1.5	6 ± 1.5
Soluble dietary Fiber (%)	4-8	4-8
Insoluble dietary Fiber (%)*	70-80	70-80

* The remaining are salts (Fe, Mg, ect.) and 6 - 10% of water.

Applications vs Benefits

Applications	Benefits	Aglufiber® Type
Sauces (mayonnaises, ketchup, & dressings)	Advantages in emulsions • Texturising, emulsification and stabilisation • Egg-free (vegan) • Fat reduction • Calorie reduction • Suitable for cold and warm production process • Smooth, creamy texture • Viscous structure, easy to pump • high storage stability without syneresis.	FA
Yogurts and dairy drinks	Syneresis prevention • Increased creaminess • Mouthfeel improvement • Fat reduction • Increased viscosity • Replaces emulsifiers / thickening agents like starch.	FAS
Dairy alternatives	Syneresis prevention • Increased creaminess • Mouthfeel improvement • Fat reduction • Increased viscosity • Replaces emulsifiers/thickening agents like starch.	FAS
Juice drinks	Stabilisation and texturisation • Mouthfeel improvement • Sugar reduction • Calorie reduction • Increased viscosity.	FA
Meat based products	Texture improvement • Increased firmness • Delays brine loss • Salt reduction • Phosphate reduction • Fat reduction • Replaces emulsifiers / stabilisers / thickening agents.	FA/FAS
Bakery products (with and without gluten)	Optimises machine processing • Reduces dough stickiness • Increased dough yield • Fresh keeping improvement • Crumb properties enhancement.	FA

Clean Label Vegan Tomato Ketchup

Recipe

Ingredients	Q.ty (%)
Aglufiber® FA	1.00
Water	60.30
Native Starch	2.00
Salt	2.70
Sugar (Sucrose Powder)	8.00
Tomato Paste (Double Concentrated)	18.00
Vinegar (6% Acetic Acid)	8.00
Total	100.00
Characteristics	pH: 3.6 - 3.7; TSS: 18 - 20°Bx.

Production Technology



- Disperse **Aglufiber® FA** in a small part of oil for 3'.
- Add the native starch, salt and sugar, then mix at high speed for 30''.
- Add tomato paste and vinegar then mix at high speed for 30''.
- Heat up to 90°C.
- Check the TSS and cool down to 80°C.
- Fill into buckets.

Aglufiber® FA is a dietary fiber obtained from citrus fruits after the juice, oils and pectin are extracted.

Consistency of Ketchup



Clean Label Pulpy Mango Juice Drink

Recipe

Ingredients	Q.ty (%)
<i>Aglufiber</i> [®] FA	0.50
Sugar (Sucrose Powder)	10.00
Water	65.00
Mango Puree (19°Bx)	19.00
Lemon Juice (10°Bx)	5.50
Total	100.00
Characteristics	pH: 3.3 - 3.5; TSS: 12 - 16°Bx.

Aglufiber[®] FA is a dietary fiber obtained from citrus fruits after the juice, oils and pectin are extracted.

Production Technology

- Dry mix *Aglufiber*[®] FA and sugar and disperse in cold water.
- Then add the mango puree.
- Add the lemon juice.
- Check the pH and, if necessary, adjust to desired value;
- Heat the mixture up to 40°C and homogenise at 50/100 Bar.
- pasteurise at 85°C,
- Check the TSS and, if necessary, adjust to desired value.
- Fill into bottles.
- Cool down to 20°C.

Pulp Suspension in Mango Juice Drink



Mango juice drink
without Aglufiber®



Mango juice drink
with Aglufiber®



Reduced Fat Panna Cotta



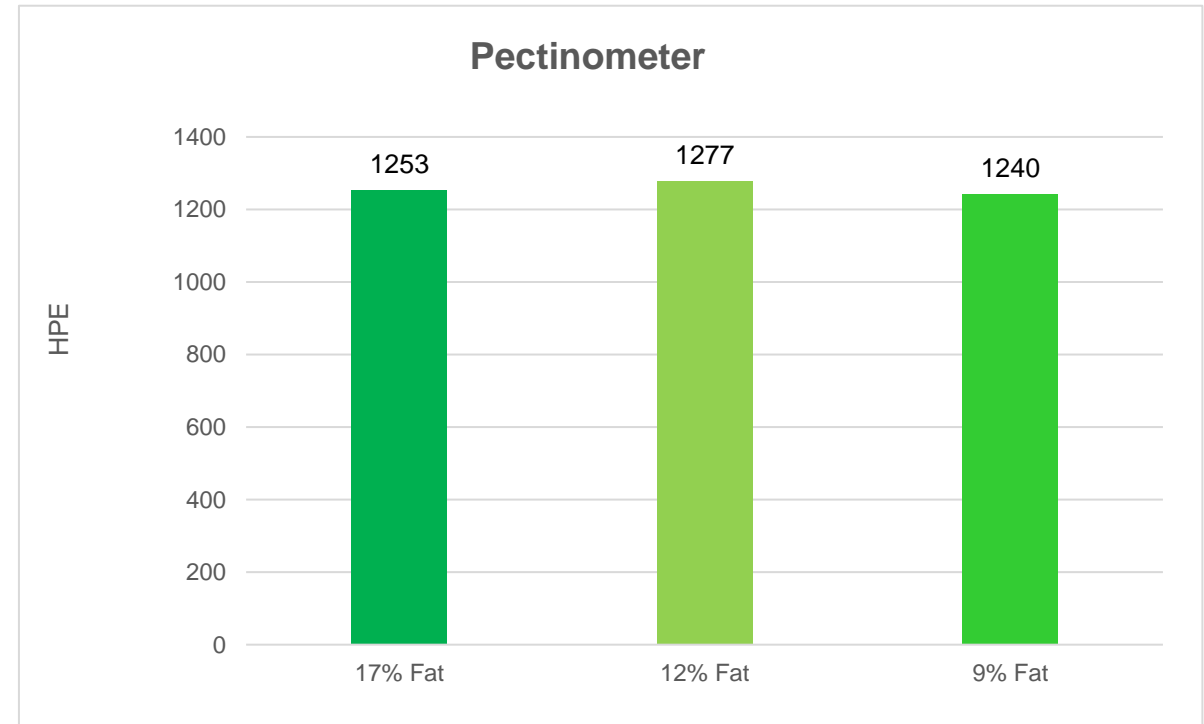
Ingredients	17% Fat Recipe	12% Fat Recipe	9% Fat Recipe
Aglufiber® FAS	-	0.30	0.55
Carrageenan	0.50	0.50	0.50
Calcium Lactate (Powder)	0.025	0.025	0.025
Sugar A (Sucrose Powder)	2.00	2.00	2.00
Water	6.475	7.175	7.075
Whole UHT Milk	28.00	44.00	50.85
Glucose Syrup (44 DE, 82°Bx)	10.00	10.00	10.00
Sugar B (Sucrose)	8.00	8.00	8.00
Cream (36% Fat)	45.00	28.00	21.00
Total	100.00	100.00	100.00
Characteristics	pH: 6.6 - 6.8; TSS: 40 - 42°Bx; Fat: 16 - 18%; Protein: 2.3 - 2.5%.	pH: 6.6 - 6.8; TSS: 35 - 37°Bx; Fat: 11 - 13%; Protein: 2.3 - 2.5%.	pH: 6.4 - 6.6; TSS: 32 - 34°Bx; Fat: 8 - 10%; Protein: 2.2 - 2.4%.

Production Technology

- Dry mix **Aglufiber® FAS**, carrageenan, calcium lactate and sugar A; then disperse in water, milk and glucose syrup under mild stirring.
- Add sugar B under mild stirring.
- Add slowly cream under mild stirring.
- Heat up to 60°C, then homogenize at 150 bar.
- Heat up to 90°C and pasteurize for 3 minutes.
- Check TSS and pH, if needed adjust to right values.
- Cool down to 85°C and fill.

Aglufiber® FAS is a dietary fiber obtained from citrus fruits after the juice, oils and pectin are extracted.

Instrumental Values of Panna Cotta



- Aglufiber[®] FAS can be used as fat replacer obtaining the same hardness and comparable mouthfeel of standard recipes.

Vegan Low Fat Cream Cheese

Recipe

Ingredients	STD (%)	LOW FAT (%)
Aglufiber® FAS	0.50	1.25
Aglutex® Q88	0.65	0.65
Sodium Chloride	0.50	0.50
Maize Maltodextrin	7.35	11.60
Soy Extract	74.00	74.00
Refined Coconut Fat	17.00	12.00
Total	100.00	100.00
Characteristics	pH: 4.4 - 4.6; TSS: 32 - 34°Bx.	pH: 4.4 - 4.6; TSS: 32 - 34°Bx.

Aglufiber® FAS is a dietary fiber obtained from citrus fruits after the juice, oils and pectin are extracted.

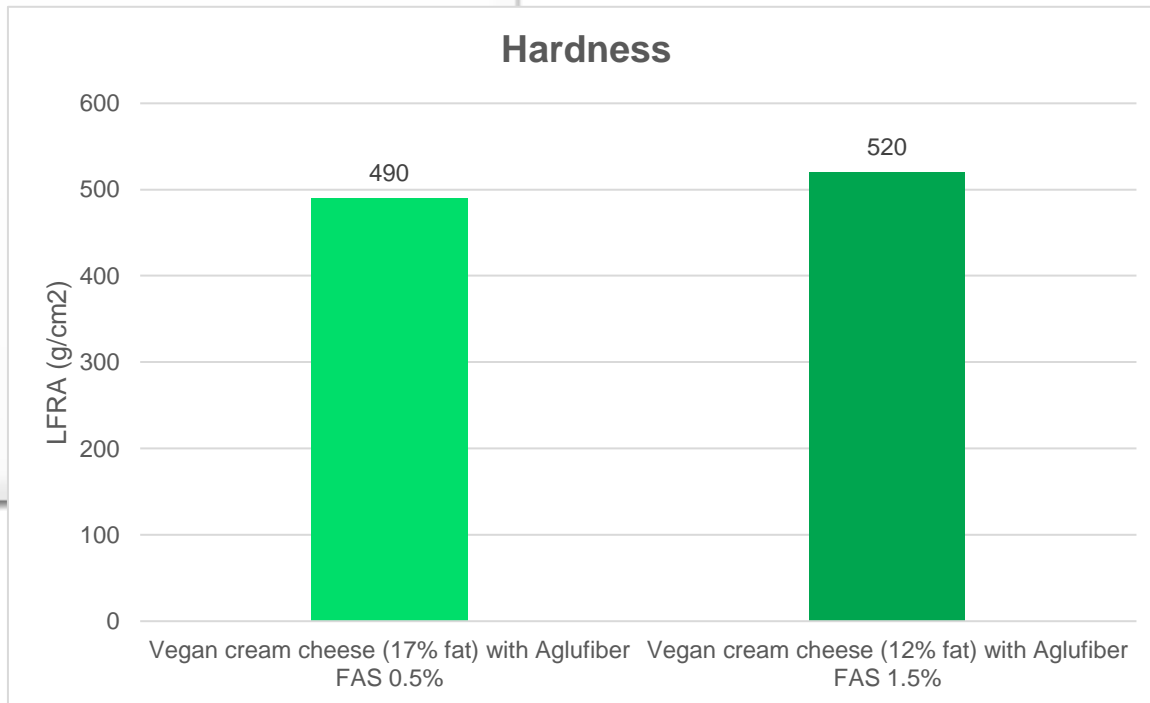
Aglutex® Q88 is a food-grade texturising solution based on tara gum (E417) and carrageenan (E407), standardised with dextrose.

Production Technology

- Dry mix **Aglutex® Q88**, **Aglufiber® FAS**, sodium chloride and maize maltodextrin.
- Disperse in soy extract at 25°C under strong stirring.
- Heat up to 50°C.
- Add the previously melted refined coconut fat under strong stirring and heat up to 85°C.
- Homogenise 100 / 50 bar.
- Fill into the buckets at 80°C.



Hardness of Vegan Cream Cheese



- Aglufiber® FAS can be used as fat replacer obtaining the same hardness and a better mouthfeel.



Thank you!



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