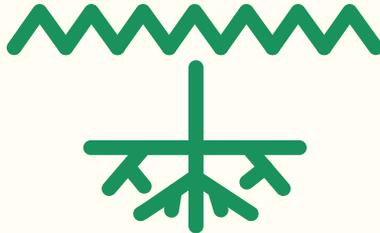


ESSENZA

dalla natura al gelato



THINK NATURAL

Clean Label Natural Gelato, free from additives



HISTORY

Essenza is a family-run company based in Modena, in the north of Italy. We are based in the area known as “Food Valley” representative of Emilia Romagna, the Italian region with the highest number of PGI (Protected Geographical Indication) food products.

Essenza has a precise idea about ‘gelato’: it needs to be handcrafted, natural, composed by noble raw ingredients and with a great taste (coming from the natural ingredients you are going to use it).

Starting from that, we developed a 100% vegetal nucleus for ice cream, made by proteins and fibres, coming from natural elements, often the result of reuse coming from other manufacturing processes.

The result is a brand-new and really innovative product that has great healthy benefits and nutritional values. Essenza mix is completely clean label: there are no additives or emulsifiers (not even natural additives) and is completely E-free.



GOALS

Our company mission is based on **continue research and development** of innovative and high-performing raw materials and ingredients featuring both a high technological value and a fully natural processing. Our products can be used in the Ice Cream/Gelato making, Pastry and Bakery sectors, to create finished products that respect and follow the “gelato artigianale” tradition without

neglecting technological innovations in the natural, clean label and free-from ice cream sectors.

Our research focuses every day more on using sustainable raw materials, matching natural elements with sustainability. Moreover, one of our main focus is sugar reduction into gelato, through innovative fibres systems.



WHY CHOOSE US

1

- completely natural ingredients: only Vegetable Fibres and Proteins, natural polymers and enzymes
- no additives used
- No palm oil used, no hydrogenated fats
- short and clean label
- no hydrogenated fats, no aroms, gluten-free, no monodiglycerides, free from allergens, no gums (neither natural gums too)
- hydrocolloids substitution
- sugar reduction
- fat-replacer
- animal proteins reduction

2

- we use a small number of ingredients, accurately chosen, and featuring high-tech elements
- no selective-selection has been made on our raw materials

3

- workable at cold temperature
- developing multiple processes in both ice-cream, patisserie and bakery
- the ice-cream maker can easily communicate and describe ingredients to the customers, the clean label and technological features are really good and up-to-date communication pillars
- usage and versatility of our vegetable mix of fibres, that can be used in ice-cream making, pastry and baking industries – not also artisan way but also big company and continuous systems machines
- emulsifying fibres, that can create texture and gelly structure



- the few ingredients present in the nucleus ensure an authentic taste which enhances the raw material
- not altered taste experience
- easily digestible



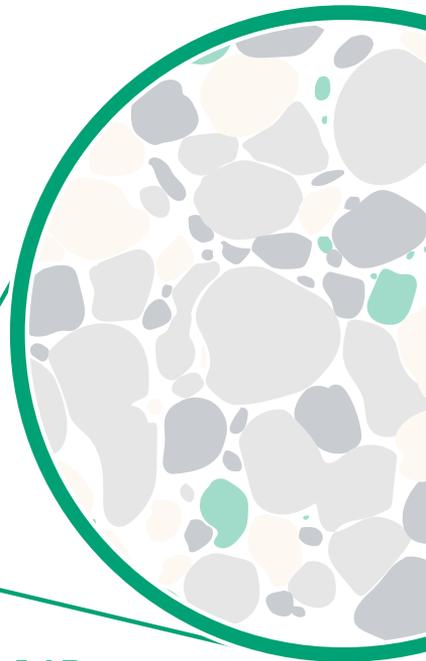
- product customization: our offer can be specifically designed, to satisfy customers' requests, for a complete product personalization
- laboratory into the Scientific Campus into Parma University, where we make research, test and we develop our ingredients
- creation and development of various projects, through network with other companies (from our industry, or related sectors)



OUR LABORATORY

Together with our technological partners – since some year, we are developing together with them our researches on innovative ingredients that could be used on ice cream making (also for an industrial and continuous system) – we made up a testing laboratory into the Scientific Campus in the Parma University.

In this space, our main focus 'research and development' take shape: into this laboratory we have the chance to make tests, make trials, evaluate performances during time, consider in a scientific and analytic way all the changes and modifies that happen to the ice-cream, in this space we experiment our new ingredients.



GELATO LAB

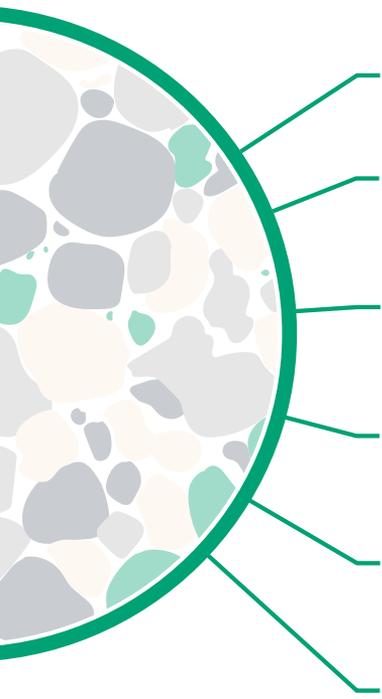
**@PARMA UNIVERSITY CAMPUS
FOR DEMO AND MEETING**

University environment allow us to have new ideas every day, to start new challenges; in addition, we always have at our disposal brand-new machines and facilities.

Also, this laboratory give us – and also to our customers, potential clients and guests – the chance to make live-trials, make test

with their own recipes, make comparisons and evaluations on results.

This space can be used also to organize live demonstrations with commercial agents and/or distributors, to manage gelato school classes, training, meetings and customized consultancy.



CLEAN LABEL

SUGAR REDUCTION

**VEGETABLE FIBERS
AND ENZYMES**

VEGAN GELATO

**FREE FROM EMULSIFIERS
AND ADDITIVES**

FAT REPLACERS

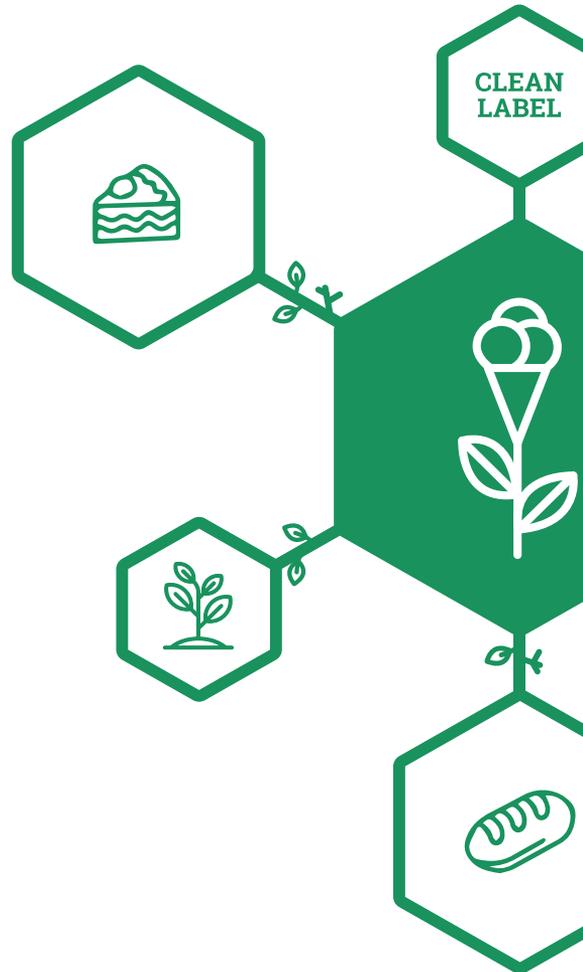


THE INGREDIENTS WE USE

Our research focuses on plant fibres coming predominantly from polysaccharides, in particular are fibres that: can emulsify and - at the same time - stabilise emulsions containing both vegetable and animal fats; can, even in small amounts, bind large amounts of water; have gelling and thickening properties, i.e. they can form irreversible gels; allow us to fully replace traditional hydrocolloids and emulsifiers, thus working with a 100% clean label; give the product a good texture and improve it; can increase and improve the product's shelf-life; that could decrease or delay crystallization long-term; that could reduce total sugars into ice cream; that could replace fats; that are completely allergens free.

We have researched a series of vegetable proteins (that have also the additional property of incorporating air) with the aim of eliminating any product of animal origin.

Each of these elements can be activated and used both hot and cold.



AN
EL





SUGAR REDUCTION: LESSenza

First of all, we would like to describe the range of our products, starting from the innovation we have been studying for some time. During our research on fibres, we started studying the issue of sugar reduction right from the beginning. During many tests we noticed that fibres could be very interesting for replacing a part of the sugars that are usually added to ice cream. We did not take polyalcohols into consideration. We really wanted to think out of the box.

We know that sugar is generally considered as an essential element of anything sweet, something that defines its taste, but our goal was to use sugar for mere technical objectives. In fact, in our recipes, sugar is used for its anti-freezing capacity, but we tried to give ice cream a different level of sweetness.

The ice cream created with LESSenza is a new frontier in the sweet taste experience. We conducted a tasting survey among the visitors of our internal laboratory and the result was that ice cream with a standard % of sugar (after tasting Fiordilatte ice cream with only 10% added sugars) was considered to be 'excessively sweet'

and the low-sugar Fiordilatte version was preferred by over one half of the people involved, with respect to the usual percentage.

We obtained these results with a product we called LESSenza (playing with the English term 'less'), a semi-solid syrup made of long and dense fibres, visually similar to honey, but with the essential difference that it exclusively consists of innovative natural fibres extracted by using a new (patent pending) technology.

The syrup plays the technological role of sugars, even though it contains no sweetening molecule: it is sugar-free (therefore, not a browning agent), with no flavour and no flavouring substances, soluble in water, without allergens, with a viscosity that changes with temperature changes.

The technical characteristics of this syrup are very interesting: the first ice crystal is formed at -28°C, 100g of product develop 160Kcal (for comparison, 100 grams of sugar contain 403 Kcal), and it has a high Brix value (due to the dry residue of its inner fibres) and a 25% humidity. The ice cream made with this syrup can be preserved at standard temperatures for a long time. The ice cream maintains excellent characteristics and texture even if preserved at lower temperatures than usual (-18°C).

It can be mainly used as:

- **Total sugar reducer** - as a cryo-protector with a lower freezing point, which delays the crystallization of ice cream;
- **Ice cream improver** - added on top, it gives longer texture and creamier results with a more interesting and fuller mouth feel; in addition, we noticed a better incorporation of air.

In addition to the syrup, that can be considered as an ingredient in itself, we

decided to study a base with individual pre-balanced ingredients (one for creams and one for sorbets) to offer tested results. However, the base can also be customized manually with different levels of sugar reduction.

The usage of this base is strictly linked to the usage of the vegetable fibres syrup

LESSenza – CREAM BASE

LESSenza – SORBET BASE

For its technical characteristics, this product is also interesting in confectionery and bakery as a wetting, texturizing, thickening, and filling agent.

Finally, it is a sustainable product because it has been obtained by reprocessing of waste products.



RANGE OF ESSENZA NUCLEUSES

Thanks to our constant research and extensive laboratory tests, we have deepened our knowledge and use of extremely innovative vegetal fibres, which are as effective, or even more, than the most common stabilisers. Compared with the latter, however, our fibres are more easily digestible and have better technical specifications for what concerns both the texture they give the product and their ability to preserve the finished product.

We offer a wide range of high performance nuclei, which differ by the dose and the type of heat treatment used: each of these nuclei can increase the product's viscosity both in cold process and pasteurised

products, as it has gelling properties in aqueous solutions, and emulsifying properties when used with fatty matrices of animal and vegetable origin. As a result of that, our nuclei react optimally to thermal shock, thus curtailing the effect of the 'melting' phenomenon. Our solutions can be used both for home-made artisanal gelato and industrial-scale production and they give excellent results also when making syrups.

Each of our nuclei is completely natural, gluten-free, allergen-free, vegan, without any additives and without added sugars.



OUR OFFER

ALMA ESSENZA - CREAM BASE 50

Starting from our nuclei, we have further enriched the ingredients, adding vegetable fibres we have researched and tested. Recommended to make an incredibly silky textured and creamy gelato while retaining full freedom to customise one's recipe as the product is not flavoured.

ALMA ESSENZA - SORBET 50 BASE

Nucleus enriched with absolutely innovative vegetable fibres, for a correct air intake and to obtain a high performing, silky texture, with an incredibly warm taste. It can also be used for fruit-centrifuge based products and for vegan gelato flavours containing fats, thanks to its excellent emulsifying capabilities. Excellent resistance to acidic (low Ph) environments.

BASE VEGETATO - 50 VEGAN

To study this basis, we focused on the identification of fibres with marked emulsifying properties and selected fibres that were

subsequently enriched with a part of sugars, so that we could also create flavours with fats, but totally vegetable and without using milk derivatives. We obtained excellent results regarding texture, creaminess and fullness of flavour, as well as heat to the palate, with low doses. This base can be used with water (we always use it to enhance flavour), but also with milk and vegetable drinks.

LESSenza can be used in various combinations with excellent results in terms of sugar reduction.

Lactose-free, vegan-friendly.

ALMA ESSENZA - CREAM 100 BASE

The Alma Essenza 100 Base's foundation are the vegetable fibres contained in the Essenza nuclei which, together with powdered milk guarantee a creamy, well-textured and palate-warming product. This new version of the Base features improved ingredients and is designed for the needs of the Gelato makers, that normally use higher-dosage Bases but wish to approach Natural Gelato without changing their working method completely.



OUR RECIPES MADE INTO BASES

BASE DEDICATED TO LEMON & CITRUS FRUITS

A perfect balance of sugars, together with our fibres mix, has allowed us to develop a special base specifically dedicated to lemon and citrus flavoured sorbetto, to help gelato makers overcome the difficulties of making creamy, round-tasting sorbetto. A pre-weighed base, just add juice (Lemon, Orange, Tangerine, etc) and water.

COMPLETE VEGAN BASE

Pre-weighed solution, custom tailored to develop a vegan flavours containing no products of animal origin, featuring fatty matrices and to add creaminess, texture and warmth to the palate. Suitable both for water based, milk based and vegetable fats (cocoa butter, sunflower oil, etc) based tastes.

COMPLETE BASE FOR SORBETS WITH PULPY FRUITS

As compared to the neutral base, this is a balanced base with sugars and fibres, dedicated to all the fruits that contain

more solids to obtain the right point of sweetness with each fruit with an excellent creaminess, naturally without any flavour or dye or additive. It enhances the flavour of fresh fruit, so we recommend high doses of fruit, although the process is obviously customizable.

BASE DEDICATED TO THE DARK CHOCOLATE SORBET

Our vegetable fibres, a blend of sugars and Venezuelan cocoa powder are the components of this base created specifically for dark chocolate sorbets. The research focused on identifying the fibres that could guarantee the best performances compared to the fats and the fibres contained in cocoa. Just add a measure of water, cocoa mass or dark chocolate - we recommend our 85% cocoa "Amazonas" (from Venezuela) for a full, thick taste.

It's available the version without cocoa powder added, so we give the chance to work with just cocoa mass.

COMPLETE BASE FOR MILK CHOCOLATE

Pre-balanced base with cocoa powder (our proposal contains Venezuelan cocoa). Recommended with 74% or 85% cocoa to obtain an intense chocolate taste with gentle notes of milk and cream. The right balance for taste and texture is obtained with emulsifying fibres.

COMPLETE BASE FOR CREAM FLAVOURS

Pre-balanced base with sugars and milk powder, to be used with the simple addition of necessary fluids and the characterizing flavour. Designed to develop the entire line of flavours, and metered to improve the taste of milk (since we do not use flavours). It offers a warm taste to the palate and leaves a very clean and fresh mouth feel, with recognizable and distinguishable flavours, highly digestible.

EXTREME BASE

We stressed fibers as much as we could, reducing the fat % in gelato formulation (touching the 2,60%), having a base with really performing fibers, able to completely replace added fat and lowering the total

sugars too, until 15,5%. We obtained great results, from a structure, softness and mouth feeling point of view; we were able to recreate the sensation of a traditional gelato (with the standard % of fats and sugars) but with less sugar and no added fats. This base is available in various dosage: ask to our technician staff.

SOFT YOGURT

Our fibres mix is really multi-purpose and it is also used in the bases dedicated to “soft” products such as yogurt. The major innovation of our base is that it contains no ascorbic acid, which we have replaced with a citrus fruit fibre to give you excellent taste and flavour and at the same time a completely clean label.

SOFT LOW-SUGAR CREAM

Product designed for soft ice-cream machines. Its innovation lies in the product technology, since it reduces sugars up to a 10% total added. Excellent creaminess and taste, clean label. Customizable for all flavours obtained with a creamy base.



TECHNICAL PRODUCTS

FIBERCREAM

'Improver', designed as a support in the formulation, ready to be used in different dosage – considering the final result you would like to obtain; perfect for both creamy flavours and sorbet ones; it enhances the volume of the icecream, improving the structure and the texture – most of all if used with our vegetable fibers mix and bases.

Mainly suggested to be used in the sorbet creation, it brings solids without giving sweetness; available in various dosage.

ESSENZIALE

Essenziale is a very particular mix of fibres with low molecular weight and very high solubility that makes it optimal whenever you need to make a product with higher fibres content. It further increases creaminess and texture, warming up the product and increasing air intake. One of its most peculiar uses is as a partial replacement for sugars and milk powder in some specific processes; its neutral aroma and taste is another of its key features; another one is that it is usable in both hot and cold processes.

LINDA

A long chain fibre, completely soluble, Inulin's core feature is its ability to stabilise water, giving the product a full, thick and robust taste, like the taste of products containing fats.

Inulin's emulsifying power is particularly high when used with animal origin fats, it stabilises the product's texture and its preservability.

FIBER MIX

Designed to make fruit variegates that do not crystallise and remain quite fluid when used on gelato, avoiding the unpleasant "opaque" effect; thanks to this it can fully replace pectins and agar-agar to obtain a fully clean label product. In addition to that it is also used in the processing of poached fruit, coulis, sweet sauces such as zabaglione or creams with a fat inside, thanks to its emulsifying capabilities. It is also a whipping agent, therefore useful to make mousses; it can replace starches in gluten-free products.



Products cut and customised on a single-case basis



ESSENZA FROM THE SCRATCH

ESSENZA-GEL

This natural fibre has a stabilizing and thickening function. Its texture is similar to that of rubber and the most common hydrocolloids; however, it is very useful when an additive has to be completely replaced, and increases the stability of water-in-oil solutions. It has viscosifying, emulsifying and foaming properties, which favour the incorporation of air. Moreover, it lowers the freezing point and is mostly soluble in both cold and warm water.

ESSENZA-FAT

Soluble and insoluble vegetable fibre product with a dual function: it emulsifies and stabilizes animal and vegetable fats matrices, on the one hand, and it has a binding and jellying effect in free water, on the other hand. It can be used either cold and in pasteurisation, as it replaces chemical emulsifiers and hydrocolloids. This product helps recreating a solid vegetable fat (similar to margarine, but without additives), thus miming the effect of saturated fats. It also has an interesting use in ice cream, reducing its dripping.

CRYSTAL-LESS

Vegetable fibre with a high binding power in free water. It affects water retention in cold conditions, so it can replace hydrocolloids and increase viscosity. If used in the production of ice cream, it reduces and delays the creation of ice crystals. In confectionery, it slows down the aging of bakery products (also without gluten).

PROTEIN-LESS

Enzyme preparation which allows to reduce the animal proteins that are generally added to the ice cream (e.g. milk powder or milk proteins or eggs), as it develops links between the available proteins and creates macro-structures which improve the texture of ice cream without adding additional proteins.



PASTES & VARIEGATES

OUR PASTE PROPOSAL

Our range of pastes, suitable for gelato, ice cream and pastry making, combine excellent raw materials, no flavourings or colour additives.

Our range includes both pure pastes (Hazelnut, Pistachio, Almond, Peanut, etc) and pastes with an additional processing that features our vegetable fibres blends, such as Salted Caramel and Coffee.

Our range includes also some of the most renowned Italian products, such as Avola Almonds, Sicilian Pistachio, PGI Piedmont Hazelnut, Sorrento Walnuts and also coconut paste and pumpkin seed paste.

CREAM FLAVOURS VARIEGATES

The fibres mix is also used in the creation of cream flavour (non-fruit) based variegates. We offer 100% clean label solutions featuring excellent raw materials and without flavourings, colour additives or preservatives; we developed a line with unusual and “gourmand-like” combinations, based on cocoa beans, and also variegates with dried fruits, superfood, caramel, coffee, sesame and berries. Some of our products have no added sugar but rather feature natural sweeteners such as yacon or lucuma.

We update and tweak our range constantly, contact us to know which products are available.

FRUIT FLAVOURS VARIEGATES

The Essenza variegates contain only organic-grown fruits grown in farms that are part of a cooperative company in the Emilian Apennine, and are used not just for gelato making but also in some pastry and confectionery applications (for example, semifreddo filling).

This guarantees better product quality and a tighter control over the production chain (so-called short production chain) making local-grown fruit the true protagonist of our variegates.

The taste of fruit is exalted and enhanced by the other genuine, simple ingredients of these products: sugar, fruit, a fibres blend and lemon juice to further reinforce the flavour. Essenza's choice is an Ethical one: no colour additives, preservatives, flavours and no thickeners or pectin, because we want to give you the true idea and taste of Fruit in a Jar.

We update and tweak our variegates ranges constantly, both because we are always on the lookout for tasty, delicious matches (for example: Figs with Cacao and Cinnamon, or even Apple with Ginger), and because we always use seasonal fruits and ingredients.



CHOCOLATE

COCOA

We have selected a range of chocolates, coming from Venezuela but also from Ecuador, Peru, Jamaica, Madagascar and African mainland countries.

Our Venezuelan chocolate is obtained by processing different varieties of Trinitarian (Criollo/Forastero hybrid) cocoa:

“Carenero Superior, Sur del Lago and Rio Caribe”; thus combining the best qualities, on the one hand, the Criollo’s fruity, exotic and spicy taste nuances; on the other, the robust taste of the “Forastero”.

As part of our chocolate range we have also developed an emulsifier-free line: it is about 85% Amazonas Venezuelan chocolate, which is fully lecithin free.

Chudenchù

100% pure Venezuela cocoa mass. The liquor (or cocoa paste) is obtained by grinding the cocoa seeds, after being separated from its shell, heat-treated (toasted).



Kakaw

Venezuela Dark Chocolate 74%. With a strong aroma and deep flavour layer, from honey to fresh tropical fruits and nuts.



Cacahuatl

Milk Chocolate with Whipped Cream 38%. Very delicate chocolate with a smooth but full taste, with the addition of whipped cream.



Amazonas

Venezuela Dark Chocolate 85%. Lecithin free.



Theobroma

Cocoa Powder. Obtained from the mechanical pressing of the liquor (or cocoa mass), subsequently subjected to a grinding process.



Bizia'a

White Chocolate. Bizia'a is a creamy chocolate with about 50% of Cocoa Butter. It gives off Natural Vanilla and Fresh Milk aroms.



Maracaibo

Venezuela Dark Chocolate 61%. Ideal for creating “straciatella” flavour.





OUR OFFER FOR PASTRY MAKING

ALMA ESSENZA PASTICCERIA NUCLEUS

Nucleo Pasticceria is a Nucleus for pastry use with which we aim to replace and eliminate current emulsifiers such as E471 and E472, while also guaranteeing an improvement in Pastry and Bakery products' quality (including vegan products).

The ingredients of this nucleus, like the blend of Baobab pulp, Maranta starch and other natural extracts that counter oxidation make it a product with highly enhanced organoleptic properties, strong, well-defined tastes, a product that gives a softer, more fragrant structure to any dough or mixture. The most distinguishing trait of the Nucleo Pasticceria is that it boosts preservability of leavened dough and thus increases shelf life and simplifies storage and preservation modalities.

Our tests and experiments have demonstrated that this nucleus can, for example, increase shelf life and preservability of biscuits by a week or more without making them lose their overall fresh and fragrant appearance, taste and feel. Further tests on the Nucleo Alma

Essenza Pasticceria have shown amazing result especially on the making of sponge cake, shortcrust pastry and focaccia bread; for example sponge cake after one week in the fridge without a cellophane film still was incredibly soft.

Another example: in our researches we have also focussed on croissants: Nucleo improves their crunchiness and taste, greatly enhancing and defining it.

In addition to that our croissant researches have also demonstrated the Nucleo's ability to increase preservability of both the dough (even blast-chilled dough) and the croissants without any type of decay. As regards processing times and economy (savings) we can confirm that thanks to the amazing preservability of all Nucleo-made products it makes it possible to prepare large amounts of dough thus saving time. In addition to that this nucleus allows users to handle different baking times on different products at the same time without ill effects on the final result: we think this is the truly relevant innovation. Lastly, the Nucleo's ability to absorb humidity greatly reduces processing times thus saving time and reducing costs of dough making.

STABIL-FIBER FOR CREAM FLAVOURS

Vegetable fibre compound, designed to stabilize cream structures (even vegetable ones), but also chantilly custard cream, or cream flavours containing mascarpone or ricotta - thanks to its ability to keep air and water bound together, thus providing a solid and well emulsified texture.

*Special thanks to Nicolò Vellino
- Gelateria Dolci Sfizi, Macomer (NU).*

HOT CHOCOLATE

We have designed a ready-made mix for hot chocolate, thickened with our vegetable fibres mix: you only need to add dark chocolate and water or milk. This mix, in addition to the fibres also contains our Venezuelan cocoa powder 10/12, and a mixture of sugars.

The hot chocolate, called Xocoatl by the Mayan populations is at its best when made with Amazonas 85% dark chocolate.

*Special thanks to Nicolò Vellino
- Gelateria Dolci Sfizi, Macomer (NU).*

ESSENZELLA

We have applied our research on Vegetable Fibres to a great classic like the Gianduja cream spread: our version is absolutely innovative, fully allergen-free (except for Hazelnut, basic ingredient of the recipe), no milk derivatives and no additives are used, but simply a mixture of ingredients such as Piedmont IGP Hazelnuts, 85% Venezuelan Chocolate (lecithin-free), sugar and our Fibres mix to emulsify the cream.

A truly spectacular treat for your palate, available both in small jars for home use, and in larger ones for use in Gelaterias and Pastry shops.

MILKY ESSENZELLA

Essenzella is available also in the version Milk and Hazelnut cream, without any cocoa added, for an ice-cream usage as distinctive flavour.

Ask us about all the different spreadable creams we have devised and developed!

“Percorreremo insieme le vie che portano all'Essenza”

“we will travel together the paths that lead to the essence”

Essenza S.r.l.

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