

AMB Wellness is a Raw Material supplier only

## AMBIOME™ 50FX ALOE FERMENTED

The functional foods market has experienced a rapid rise in the last few years because of the increased interest of consumers in adopting a healthy lifestyle. The application of probiotics and prebiotics together with non-dairy ingredients like fruits, vegetables, cereals, legumes, and agro-food waste for developing pro- and symbiotic beverages and powders has gained particular interest. The drying techniques not only enhance the shelf life of the powdered product and provide better storage and bulk handling facilities but also fulfill consumer's need being a convenience product. The disadvantages exhibited by dairy products like lactose intolerance, allergies to milk, veganism, etc., allow non-dairy probiotic beverage-based powders to offer a form of substitute.



AMBIOME™ 50FX
A HIGHLY
BENEFICIAL
FUNCTIONAL
INGREDIENT FOR
USE IN
BEVERAGES AND
OTHER FOOD
PRODUCTS

AMB Wellness has launched AMBIOME™ 50FX, a fermented aloe vera ingredient, for use in the food, confectionery, and beverage industries. AMBIOME™ 50FX is produced through a spontaneous fermentation process that utilizes the natural microorganisms found in the aloe vera plant. During this fermentation, the microorganisms metabolize the sugars and glycopolysaccharides in the aloe vera, transforming them into beneficial probiotics and short-chain fatty acids (SCFA). These SCFA are more readily absorbed by the gut microbiome compared to the original aloe vera compounds. The fermentation process enhances the bioavailability and functionality of the aloe vera's bioactive compounds, making AMBIOME™ 50FX a highly beneficial functional ingredient for use in beverages and other food products.

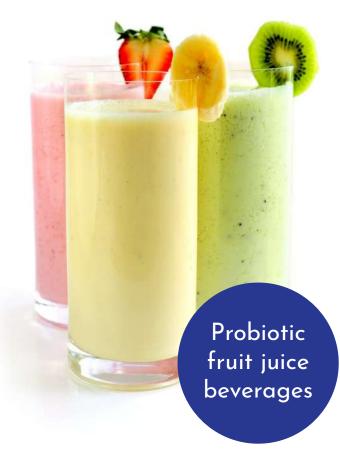
Fermented Aloe Vera exhibits a white-pale color in powder form with a distinctive mild Aloe Vera flavor and delicious aftertaste of lactic acid, others SCFA and some Organic Acids, making it more palatable to consumers. 100% soluble in water to form a clear liquid, heat-resistance, and suitable for various food applications. When Aloe Vera is fermented, naturally occurring bacteria break down sugars and other complex organic compounds, producing lactic and other organic acids. These organic acids help to preserve vegetables and give them a tangy and sour flavor.

This marketing material is only a commercial reference and intended for the addressee, anyone who receives this information by mistake is bound to confidentiality. All displayed images and registered brands are property of its owners, only shown a commercial references and examples.



Aloe Vera has a long history of being revered for its preventive and therapeutic properties, acknowledged by countless scientific research worldwide. Aloe Vera is one of the ten botanical extracts most used worldwide, owing to its extensive historical usage and wide array of therapeutic benefits. Its continued popularity stems from its potential to promote overall health and well-being. One of the key attributes of Aloe Vera is its adaptogenic properties, which enable the body to better handle physical recovery. It is commonly sought after for its ability to enhance the immune system, increase energy levels, enhance supply of nutrients, contribute to overall vitality, increasing absorption of other nutrients, supporting digestion, boosting the immune system, promoting healthy skin, and aiding in detoxification. Aloe Vera is also renowned for its anti-inflammatory and antioxidant effects, which can safeguard cells from damage and help prevent the onset of chronic ailments. Aloe Vera is often employed to support healthy aging.

Approximately 60% of consumers globally have incorporated more plant-based foods into their diets, and there are market trends of natural plant-based beverages. There is a trend in the global market size for



plant-based functional fermented beverages, not just from milk fermented as yogurt, but also from natural fruit juices bottled, can, or other presentations, like the developing plant-based milk categories such as soy milk, walnut milk, coconut milk, almond milk, oat milk, and mixed plant-based milks not exclusively from animal milk sources.

# AMID THE SURGING TREND OF PLANT FERMENTATION, THERE IS AN URGENT NEED FOR NUTRITIONAL INNOVATION



Despite the surge in plant-based fermented consumption, as kombucha tea fermented, there are challenges in nutritional innovation. In the post-pandemic era, consumers are increasingly seeking products with higher nutrition content in their daily diets. Flavor remains a critical factor influencing product repurchase rates. Fermented probiotics fruit juice-based beverages often face challenges in this regard and can be solved with AMBIOME™ 50FX.

This marketing material is only a commercial reference and intended for the addressee, anyone who receives this information by mistake is bound to confidentiality. All displayed images and registered brands are property of its owners, only shown a commercial references and examples.







#### FEATURES OF AMBIOME™ 50FX

- Appearance: Uniform powder ranging white-pale to light yellow.
- Flavor: Possesses the distinctive flavor of Aloe Vera with acid notes characteristic of fermentation.
- Water Solubility: Easily soluble in water.
- Non-GMO.
- Low microbiological count.
- 100% Soluble.
- Available both, conventional and organic.

### APPLICATIONS OF FERMENTED **ALOE VERA:**

#### USED AS A FOOD INGREDIENT IN:

- Dough for bakery.
- Confectionary, chocolate or candies, and other confections which are made of sugar.
- Beverages, fruit juice or smoothies.
- Frozen dessert (Ice cream).
- Squash, Jam and Jellies.
- Fortification of dairy products.
- Probiotic drinks





#### **ALOE VERA FERMENTED IS A NUTRITIONAL INNOVATION** SOLUTION FOR FRUIT JUICE BEVERAGES.

Direct contact:

Fermentation can be used to increase the nutritional value of various foods such as vegetables & fruit, berries, tea and medicinal herbs. During fermentation, these foods undergo chemical changes that break down complex organic compounds into simpler, more bioavailable forms that are easier for the body to digest and absorb. Aloe Vera is a plant that can boost both nutrition and flavor in fruit juice beverages.

> This marketing material is only a commercial reference and intended for the addressee, anyone who receives this information by mistake is bound to confidentiality. All displayed images and registered brands are property of its owners, only shown a commercial references and examples.



AMB Wellness presents a novel solution for nutritional innovation in plant-based Aloe Vera. The company specializes in Aloe Vera raw materials, refining them with innovative offers for food companies. There is growing interest in exploring novel fermentation processes and substrates to create innovative flavor profiles. These endeavors have led to the development of novel fermented products with unique flavors and enhanced nutritional properties.

AMBIOME™ 50FX SCFA's and Organic acids are an excellent choice to enrich your food and beverages giving a functional and delicious twist content from lactic acid and other SCFA and organic acids. SCFAs are important for digestion because they feed the cells of the colon and promote the growth of beneficial bacteria and stimulate transcriptional activity for the making of enzymes.

Aloe Vera fermented become many times more efficient after fermentation. Bioactive compounds can help to enhance the medicinal properties of the Aloe Vera and ensure that they are more easily absorbed by the body. Fermentation is a natural process that can be used to increase the nutritional value and health benefits of various foods such as vegetables, fruits, teas and medicinal herbs.

Only small amounts of fermented product are needed. Due its powder form can be diluted in water or fruit juice adjusting lactic acid in dilution of 0.5%, 1%, 1.5% or 2.0% Aloe fermented solids, producing an emerging probiotic beverage and adjusting the perfect taste of every country, it is environmentally friendly, sustainable, and has a short production cycle, low carbon emissions, and requires minimal agricultural land, aligning with green development principles. AMB Wellness, a major global supplier of Aloe Vera, adheres to non-genetically modified principles, ensuring its nutrient compounds of Aloe Vera meet non-GMO claims, HACCP, FFSSC, and Organic certified standards.



From a nutritional perspective, Aloe Vera offers a comprehensive profile of nutritional compounds, addressing both wellbeing and flavor. Importantly, Aloe Vera AMBIOME™ 50FX contains natural nutrients such as vitamins, minerals carbohydrates, proteins, polysaccharides, phytosterols, lipids/fats, aminoacids as well as enzymes, and antioxidants phenolics, flavonoids, supporting a healthy life in humans. Our AMBIOME™ 50FX product is designed to meet the requirements of users with a deep interest in the value of a healthy life, using 100% natural, pure ingredients for beverage applications. All live bacteria were disactivated with high hot temperature and then, to obtain probiotics mentioned and not mean any health risk or cross link contamination in production facilities. Aloe Fermented compared with kombucha flavor, AMBIOME™ 50FX taste delicious and boost the acceptance of fermented applications market.

This marketing material is only a commercial reference and intended for the addressee, anyone who receives this information by mistake is bound to confidentiality. All displayed images and registered brands are property of its owners, only shown a commercial references and examples.





Studies show that adequate dietary macro- and micronutrient intake promotes health and wellbeing and slows the onset and progression of disease. However, most diets are deficient in these important nutrients due to their general lack of convenient availability in readily available forms. Human nutritional health and well-being are entirely dependent on plant foods, either directly or indirectly through consumption by animals. Plant foods provide almost all essential vitamins and minerals and several other health-promoting phytochemicals. Humans require a diverse, well-balanced diet containing a complex mixture of both macronutrients and micronutrients, such as protein, carbohydrates, fats, vitamins, and minerals, to maintain optimal health and good appearance. Few supplements today rival the complete nutritional benefits of this plant.



Nutrients are chemical substances that come from the foods you eat. They provide the energy needed for metabolic processes in your body and for maintaining a constant internal environment. Fermented active ingredients, such as those found in Aloe Vera gel, are a focus for offering nutrient-rich substances.

With the upgrading of consumption, consumers are more inclined to consume low-sugar, sugar-free, and low-fat products, and pay more attention to the impact of products on the environment. These consumption trends have brought many challenges to product innovation. AMB Wellness, with the commitment to offer always novel solutions, adapting to customers 'demands have been developed a novel fermented Aloe gel juice characterized to combine the health benefits of native probiotic bacteria within the Aloe Vera plant itself.

The biotransformation of the bioactive compounds from the Aloe Vera during the spontaneous fermentation was assessed. Native bacteria were able to grow on the Aloe Vera extract. Lactic acid and short-chain fatty acids (SCFA) together with organic acids compounds were quantified in the Aloe Vera through fermentation. The novel produced Aloe Vera Juice showed great potential for functional beverages. Fruit-based products are largely consumed due to, in part, the consumer's perception of these products as healthy and convenient perceived as similar or even with better health benefits than the raw fruits that originated them.



The introduction of AMBIOME™ 50FX fortifies fruit juices and other food products, as functional and savory ingredient, led to the unwanted off-notes in the products, AMB Wellness brings innovative comprehensive solutions to customers from the aspects of nutrition, taste, and environmental protection. Yogurt is one of the most important products associated with fermentation, with beneficial attributes due to the fermentation process. Taking advantage of the fact that over 60% of people have lactose intolerance with dairy products. AMBIOME™ 50FX is an alternative to a healthy drink. Aloe Vera is a nutrient-rich treasure that delivers a host of benefits.

This marketing material is only a commercial reference and intended for the addressee, anyone who receives this information by mistake is bound to confidentiality. All displayed images and registered brands are property of its owners, only shown a commercial references and examples.

AMBIOME Spontaneous fermentation process of the Aloe Vera Polysaccharides, Fructans and Acemannan (acetylated glucomannan) was made using its own isolated native strains: Lactobacillus species (L. plantarum, L. casei, Lactobacillus fermentum) and Bifidobacterium spp. (B. catenalatum, B. bifidum, B. longum, B. animalis spp. lactis), Pediococcus pentosaceus, Weissella cibaria , giving as a results Probiotics/metabolites as: Lactic Acid, Citric Acid, Succinic Acid, Malic acid, Fumaric Acid, Keto-Glutaric Acid, Acetic Acid, Butyric Acid, Formic Acid, Glycolic Acid, Propionic Acid, Pyroglutamic Acid, Pyruvic Acid And Quinic Acid.





Probiotics/Metabolites obtained from spontaneous fermentation of Aloe Vera using its own native strains.	% w/w
Lookin Arid	<b>NUT</b> 50/
Lactic Acid	NLT 5%
Citric Acid	NLT 9%
Succinic Acid	NLT 2%
Malic acid	NLT 12%
Fumaric Acid	NLT 0.5%
Keto-Glutaric Acid	NLT 0.8%
Acetic Acid	0.05 – 1.50
Butyric Acid	0.01 – 0.03
Formic Acid	0.01 – 0.04
Glycolic Acid	0.01 – 0.06
Propionic Acid	0.01 – 0.03
Pyroglutamic Acid,	0.02 – 0.10
Pyruvic Acid	0.02 – 0.10
Quinic Acid	0.01 – 0.08

AMBIOME<sup>™</sup> 50FX is allergen-free, lactose-free, and gluten-free derived from the eco-friendly fermentation process, an innovative Aloe Vera source that contributes to taste enhancement of fruit juice beverages and nutrition-boosting, can enhance fruit notes flavor and balance the mouthfeel and overall taste. Wholly better: Naturally optimizing taste in healthier savory foods.

ind to



Ingredients that can enhance taste and contribute to cleaner labels are on-trend, as consumers pay more attention to the health and naturalness of their food. Stand-out ingredients include plant-based soluble Aloe Vera fermented extracts and reduced stocks to replace the loss in mouthfeel and taste in reformulated beverages, also helps to determine how it carries flavor and how long it lingers in the mouth, other critical aspects of the taste experience.

With AMBIOME™ 50FX, you can convert a regular fruit juice beverage, ice cream, teas, bakeries, candies into one that coats the mouth and delivers a velvety, longer-lasting taste experience. In case of beverages have a clean upfront taste experience. The beverage bottling industry has been focusing on the development of functional food products, which are beverages that can beneficially affect specific functions of the human body beyond adequate nutritional effects, leading to improved health and well-being and/or reduced risk of disease:



- [1]. Functional food products are manufactured through the addition of exogenous natural compounds, probiotics, or other microorganisms able to produce biogenic compounds.
- [2]. Regarding functional foods that include probiotic microorganisms, non-dairy fermented drinks appear as beverages of great interest, as they represent an alternative for specific consumers, such as lactose intolerants and vegetarians, among others. Currently, Aloe Vera has been used in the development of differentiated products with functional potential, such as beverages. Its chemical composition makes it an excellent substrate for microorganisms' growth, such as probiotics.



Taste is king, but not the only consideration. Healthfulness is increasingly relevant as on-pack labeling schemes like the Nutri-Score expand across Europe. Aloe Vera is well known for wellbeing benefits. AMB Wellness with technological challenges as they can give texture, mouthfeel and help carry flavors of fermented Aloe Vera. Fermentation is a huge key to enhancing taste in fruit juices, smoothies, confectionary applications. Aloe Vera fermented can deliver depth of taste but also particular tonality, but fruit juice delivers more tonality and more enhancement of the overall fruit beverages, formulators of beverages industry can make more delicious and richer fruit juice drinks. It's a good deal to preferred food matrix components on nutritional and functional properties of fruit-based products.

This marketing material is only a commercial reference and intended for the addressee, anyone who receives this information by mistake is bound to confidentiality. All displayed images and registered brands are property of its owners, only shown a commercial references and examples.







AMBIOME™ 50FX not only enhances the taste of plant-based foods but also improves their nutritional quality, making it a win-win for reformulating fruit juices. The newly launched AMBIOME™ 50FX is a sustainable source of beneficial compounds that contribute to the nutrition in plant-based beverages. It also improves the flavor and could mask off-notes. The beverage bottling industry has been focusing on developing functional food products, such as beverages that can beneficially affect specific functions of the human body beyond adequate nutritional effects, leading to improved health and well-being and/or reduced risk of disease.





Fermentation can also help plant-based analogs achieve a more realistic taste, traditional fermentation can bring the typical depth and sharpness to beverages fruit juice-based. The rise of plant-based fermentation-derived Aloe Vera ingredient will help to bring cleaner and leaner declarations. Further down the line, fermentation will provide a whole new array of food opportunities to be transformed into new delicious and nutritious products, also observes that stocks are picking up steam with core reductions used to give natural depth. AMBIOME™ 50FX as an ingredient will help increase taste in a natural and culinary way but the new category director for beverage industry adds that brands must take a holistic approach when formulating plant-based products. This includes the taste and healthfulness which contribute to the eating experience.

AMB Wellness anticipates that processors will take advantage of the power of fermentation flavor for Non-Dairy products to elevate the alternative probiotic plate and make it even more flavorful. Moreover, combinations of different fruits juices will bring a more appealing zip and mouthfeel, coming closer to authentic flavors like fresh fruits.

The biotransformation of bioactive compounds from the Aloe Vera juice was assessed during fermentation with AMBIOME™ 50FX, the concept of clean label, products that use as few and as natural ingredients as possible with minimal processing, has proven to be more than a passing fad.

This marketing material is only a commercial reference and intended for the addressee, anyone who receives this information by mistake is bound to

AMB Wellness
Plant Based Blopolymers





A recent market study in 2021 found that 67% of European consumers have been more attentive to natural ingredient claims. Meanwhile, 71% of European consumers are concerned with food and ingredient sourcing. AMB Wellness is certified by Kosher, Halal, Organic and Fair trade by Ecocert, by the EU organic certification agency. Look ahead to the future of optimizing taste, with healthier solutions, that are more natural and more environmentally sustainable ingredients will come out on top.



AMBIOME<sup>™</sup> 50FX gives manufacturers a healthy and nutritional option in food and beverage development. It is a clean label option in line with people's demand for sustainable, and healthier food choices, providing a well-rounded mouthfeel and making it more pleasant. By adding AMBIOME<sup>™</sup> 50FX 50FX powder form in end products can bring out light-intensified lactic acid, prolonged lingering taste, and enriched nutritional contents. Aloe fermented raw material reveals the original fruit character of fruit juices, helps to improve natural flavors without any compromise on taste. Moreover, AMBIOME<sup>™</sup> 50FX 50FX can boost immunity in functional drinks thanks to the rich content of polysaccharides and multiple nutritional contents while giving a full-bodied mouthfeel.

Worldwide consumers are increasingly aware of fruit-based products' health benefits and for that fruit and fruit-based products consumption is on the rise. Fruit containing products such as confectionaries, dairy products, bakery, frozen desserts, non-alcoholic beverages have been constantly entering the market. The demand for fruit products is shaped by a variety of market forces. A combination of factors such as wellness, indulgence, convenience, ethnicity, value, and demographic forces acting interdependently or independently, influence consumption patterns and demand for food products. In the wave of global carbon neutrality, the plant-based market is poised for sustained high growth. However, addressing current challenges in plant-based fruit juice R&D, AMB launched novel Aloe fermented as groundbreaking solution to enhance nutritional value and improve flavor. It opens new possibilities for innovation in plant-based, ensuring a brighter future for food industry.



For more information, visit our website www.amb-wellness.com or contact our global sales manager Oscar Lozano at email oscar@amb-wellness.com or by WhatsApp +52 1 871 315 4092.

This marketing material is only a commercial reference and intended for the addressee, anyone who receives this information by mistake is bound to confidentiality. All displayed images and registered brands are property of its owners, only shown a commercial references and examples.





