Foodmate
Product Brochure

Leading Manufacturer and service provider of functional food ingredient in China

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Foodmate

Foodmate Co., Ltd. came into existence in 2012, our plant is situated at the Jiu-jiang City which is known for its natural beauty while the operation center sits in the economical hub of China – Shanghai. It' s an integrated solution provider with expertise in the production, R&D, sales of hydrocolloids, Proteins, zero calorie sweeteners and microcapsule vanilla for a range of food applications covering nutraceuticals, meat processing, bakery as well as beverage businesses. We are committed in realizing a healthy nutritious food product for our partners by utilizing advanced technological concepts and product with superior performance.

Company Briefing

Technology Superiority

R&D Center

Industry-Academy Cooperation

“High-tech Enterprise”

Multiple-Patent Holder

Research & Development Centre

Shanghai R&D Center was established in 2017, now it has a staff team of 20+ technicians, dedicated to provide new products and know-how to counter the pain points in industrial applications, the center has contributed over 200 solutions for our client bases around the globe.

Equipped with state-of-the-art equipment and instruments, the center also gets funded by the company for 6% of the total sales revenue to ensure its competitive edge and its leading position in the business.

About Us

01

Mission

Enriching lives through healthy nutritional ingredients.

Vision

To become the world leader of healthy nutritional ingredients.

Value Proposition

Technology drives our innovation, and our service captures markets.

Commercial Center in Shanghai

Manufacturing Center in Jiangxi

30,000 sq㎡ production facility
18,000 tons annual production capacity
100,000 Class Clean facility

About Us

2012
Founding of Foodmate

・Foodmate started its production of gelatin and related products in Jiu-Jiang Jiangxi Province.

2015 - 2020

・Certified by authority and agencies with food safety certifications such as ISO9001, HALAL, FSSC22000 etc.

・Becomes "National High-tech Enterprise"

・Co-founding of research labs with Top Universities such as Jiangnan University and Nanchang University.

・The Laucnch of “Ekosweet”, sugar free sweetener in China

2022
New Plant | New Product | New Brand

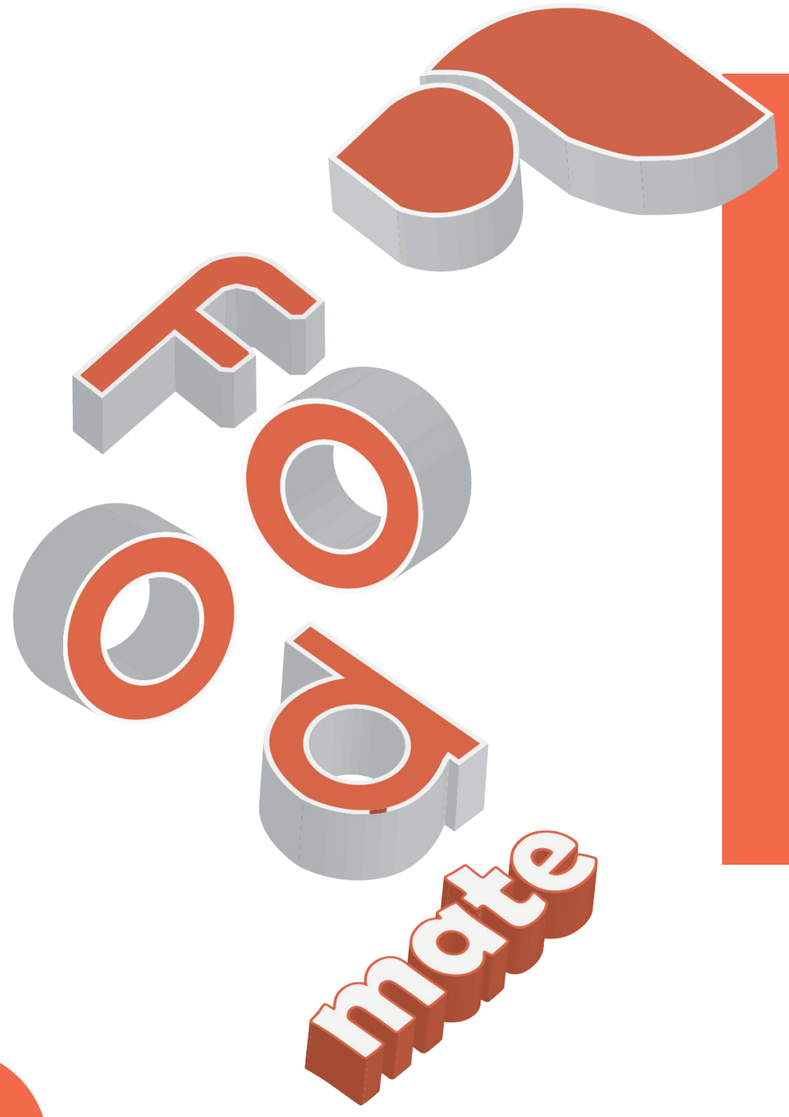
・Phase II plant in Jiangxi fully operational

・Launch of new products:

・Functional Proteins, Microcapsule vanillin, Cold soluble Gelatin

・Launch of the new brand logo

2024—— The construction of phase III plant
Expansion of product portfolio
2026—— Obtain “Provincial Enterprise Technology Center”
2030—— Serving 100 world-class brands
Obtain “National Enterprise Technology Center”
Forging 15 leading new products in China



Our Strengths

- Technology Superiority
- Food Safety & Quality Superiority
- Service Superiority
- Marketing Superiority

Industry-Academy Cooperation

The most critical resource in technology development is talents.

Foodmate implements a strategy that put R&D talent at the highest priority where we partner with leading academy such as Jiangnan University and Nanchang University to build co-research lab that reflects the highest level of integration of industrialization and academic achievement. In order to materialize the company's ambitious future, a youthful, professional R&D team is built to fulfill the core tasks with advanced technology.

National “High-tech” Enterprise

Promulgated in 2018 by Department of Science & Technology, Department of Finance, Taxation Administration of Jiangxi Province.

2021 Annual "Jiangxi Export Famous Brand" Enterprise

Recognized by the Department of Commerce of Jiangxi Province as the leading export enterprise brand in the industry.

2021 Annual Jiangxi “SRDI” Small and Medium-sized Enterprises

Awarded the certificate of "SRDI" small and medium-sized enterprises issued by the Department of Industry and Information Technology of Jiangxi Province.

2021 Scientific Progress of Jiangxi Province

First Prize

Awarded the First Prize of Scientific Progress by Jiangxi Provincial Government.


江西省科学技术奖
证 书
为表彰江西省科学技术奖获得者，特颁发此证书。
项目名称：新型高品质鱼蛋白胶制备关键技术及应用研究
奖励等级：江西省科学技术进步奖一等奖
获 奖 者：江西福美泰生物技术有限公司
证书号：J-21-1-04-D03


江西省科学技术奖
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获 奖 者：张鹏
证书号：J-21-1-04-R10

Food Safety

A Certified with ISO9001, FDA, HALAL, FSSC22000

B Regular training on food safety and quality control related topics for the whole staff

C Process control of food safety and quality implemented

D Impurity and foreign matter control

E Allergen control

F GMO control

G Supplier Admission Management

H Chemical residue and contamination control

I Seal-tampering prevention package

J Product traceability

K Full CCTV monitored production site

Quality Superiority

Scientific and Completed Product Tracing System

Raw material inbound check

Supplier qualification check
Regulation & legal check
Tests on key parameters

Process Control

CCTV monitored process
Set critical control point to minimize potential quality threat

Finished Product Check

Key parameter verify System
Batch quality pass rate≧99.9%

Qualified Certifications

Certified with ISO 9001, HALAL, FDA, FSSC22000 etc. to make sure our solutions are safe and better choice for client across the entire world.

Service Superiority

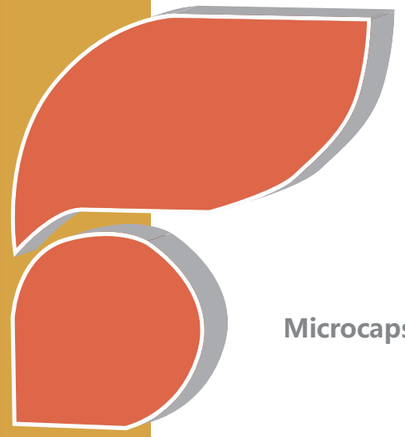
1. Professional sales team + logistic support team
2. Highly efficient order execution system
3. Real-time responsiveness in 24 hours
4. On-time delivery rate≥95%
5. 3 overseas warehouses with 5000m³ capacity to react seamlessly on day-to-day orders.
6. Comprehensive product consolidation capability

Marketing Superiority

As of today, Foodmate is selling to clients in over 60 countries and regions. We have established long term partnership with global brands in food & beverage business and has been recognized as a reliable suppliers with proven track of record.

4 Product Categories

Hydrocolloids | Proteins | Microcapsule Ingredients | Sweeteners



Hydrocolloids – – – – –
Carrageenan
Gelatin
Konjac Gum
Cold Soluble Gelatin

Proteins – – – – – – – – – – – – –
Collagen Peptide
Functional Protein
Transglutaminase

Microcapsule Ingredients – – – – – – – – – –
FoodVanil™ Microcapsule Vanillin

Sweeteners – – – – – – – – – – – – – – – – –
Zero Calorie Sweeteners

CARRAGEENAN

Carrageenan is a nature polysaccharides hydrocolloid contained in certain variety of red seaweeds. The main raw materials for producing carrageenan are Chondrus crispussea moss and Eucheuma. Good quality carrageenan is a yellowish to snowy white powder with no obvious odor or taste. The gel formed by carrageenan is heat-reversible for which it dissolves when heated up and return to gelling status when cooled down. Its gel strength and viscosity are stable under neutral and alkaline condition.

The gelling traits and elasticity of carrageenan is enhanced and coherent when used with Konjac gum, Locust bean gum, and Xanthan gum. Carrageenan is extensively applied in food, dairy, pharmaceutical, chemical, agriculture, construction and many more special occasions. Moreover, because of its 70% total cellulose content, carrageenan is commonly seen in today's functional foods business as well.

Routine Application

- Jelly Pudding
- Conventional Application Series
- Gummies
- Dairy & Beverage
- Processed Cheese
- Ice Cream
- Crab Sticks
- Pet Food
- Beer Fining

New Application

- Innovative Applications
- Carrageenan for Capsules
- Solid Air Freshener

FoodGel™ series carrageenan is made with selected superior quality seaweeds cultivated in fresh sea water, to make sure the product we offer not only meets the foreign and domestic quality standards but also satisfies or even beyond the expectation of our clients.

Conventional Application Series

FoodGel™ M series uses carrageenan extracted from natural seaweed which forms an even gel with meat protein. It creates an extensive network structure when heated to retain water and reduce meat juice loss in the final products, moreover, this network structure gives meat products great elasticity. Besides, carrageenan prevents the loss of salt-soluble myosin and actin, inhibits the dissolution and volatilization of umami components, limiting the water activity of meat products which prolongs the shelf life of the meat products.

- **Features:**
  - · Improves water and oil retention;
  - · Grants emulsification effect;
  - · Provides an appropriate mouth feel.

Jelly Pudding

FoodGel™ J series uses carrageenan extracted from natural seaweed and high-quality konjac gum made by Foodmate as the main raw materials. It is scientifically compounded and easy to use for making a variety of textures or multi-layered jelly. The mouthfeel is bouncy, tender, slippery and more.

Features:
· Crystal clear texture
· Low water separation
· Good flavor release

Gummies

FoodGel™ SC series uses carrageenan extracted from purenatural seaweed as the main raw material and compounded with other functional ingredients scientifically. It is easy to use and versatile in applications such as fruit and vegetable cakes, soft sweets, fudge, chewy candies etc.

Features:
· Crystal clear, attractive appearance
· User-friendly
· No teeth-sticking,better flavor release

Dairy & Beverage

FoodGel™ DB series carrageenan can be compounded with other colloids and emulsifiers and used in neutral milk-containing beverages and vegetable protein beverages. It improves the stability of protein effectively and forms a stable suspension structure by reacting with protein.

Features:
· Extend product shelf life
· Improve texture and mouthfeel
· Better flavor release

Processed Cheese

FoodGel™ PC series carrageenan is used in processed cheese to form a stable network structure by reacting and attaching with protein which improves the elasticity and firmness of the cheese, grants a delicate texture along with improved viscosity and gloss of the cheese.

Features:
· Sound water retention
· Optimize the texture of cheese to give a delicate texture
· Good flavor release

Pet Food

FoodGel™ PF series uses carrageenan extracted from high-quality seaweeds. It is a natural gelling agent which forms an even gel with protein. Moreover, it presents a superior trait of water and meat juice retention as well as good gel elasticity for better palatability.

Features:
· Good thickening and emulsifying effect;
· Improve water and oil retention;
· Inhibit the dissolution and volatilization of umami components, reduce the water activity of the products and extend the shelf life.

Crab Sticks

FoodGel™ F series is a compound made of carrageenan-based Hydrocolloids. It is used in crab sticks, fish fillets, tumbling meat products and other products.

Features:
· High strength, high viscosity, and good adhesion;
· Improve the freeze-thaw resistance of starch;
· Effectively improve the water retention of the product, increase elasticity, smooth and delicious.

Ice Cream

FoodGel™ IC series carrageenan can be used in ice cream after being compounded with other colloids and emulsifiers. Carrageenan forms a stable network structure by reacting with the protein which grants a delicate texture to the final product.

- **Features:**
  · Reduce and inhibit the formation of ice crystals
  · Improve expansion rate and melting resistance of the ice cream
  · Reacts with protein to form a network structure to increase the creamy texture

Beer Fining

FoodGel™ BE series uses special carrageenan extracted from high-quality seaweed. As a natural green food, its safety is recognized by the United Nations Food and Agriculture Organization. There are two types of wort clarifiers: granules and powders. It performs the function of absorbing protein, removal of coagulable nitrogen which grants the beer a transparent and bright body.

- **Features:**
  · Low dosage using, easy to disperse and easy to filter;
  · Improve the non-biological stability of beer effectively;
  · Increase the yield of wort and extend shelf-life;
  · Simple to use, low cost and good performance.

Carrageenan for Capsules

FoodGel™ CP series carrageenan is made by high quality natural seaweed obtained from fresh sea water. It is a natural vegan derived raw material fits the habits of people from different cultural backgrounds and various religious beliefs, for which carrageenan is an ideal substitute for animal-derived capsules.

- **Features:**
  - · Good film-forming characteristics and resistance effect
  - · Provides sufficient strength and gloss of the capsule wall
  - · Disintegrate quickly, safe without side effect
  - · Better stability of the formed capsule: high resistance to brittle at low temperature and deformation at high temperature

Innovative Applications

Carrageenan for toothpaste FoodGel™ TP series carrageenan is an ideal gel and binder to accommodate complicated toothpaste formulars for better thixotropy and dispersibility.

Features:
· Unique thixotropic characteristics,self-fusion after broken.
· Grant the paste a delicate, smooth, water-retaining and viscoelastic body.
· Improving paste stability

Solid Air Freshener

FoodGel™ AF series uses high-quality carrageenan to form a gel with highhardness and resilience which has wide temperature acceptance in comparison to agar gel, Additionally, it also has a clearer, more transparent body as well as advantages such as long-lasting fragrance release, high water retention, and contrac-tion resistance.

Features:
· Good water retention
· Strong gel and good stability
· High transparency, good frost resistance

GELATIN

Routine Application

- Hard Capsule
- Soft Capsule
- Confectionery
- Dairy Products
- Meat
- Beverage Fining

Gelatin is a protein product of natural origin. It usually consists of protein (85%), water (13%), and mineral substance (2%). Being rich in 18 various types of amino acid that are necessary for human body with only exception of tryptophan. Gelatin is regarded as a nutritious food by numerous official institutions.Gelatin is the most widely used hydrocolloid which also being frequently compounded with other water - soluble ingredients to produce foods. According to the different raw materials used and the property of the final product, gelatin production processes can be divided into acid method and base method.

The source of raw materials is mainly skin, bone, scall of porcine, bovine and piscine origin. Gelatin has functional properties such as gelling, film forming, heat reversibility, emulsifying, foaming, etc. and the main quality indicators are bloom strength, viscosity, turbidity.

Hard Capsule

Mainly made of gelatin with high requirements on its physical and chemical properties. We are capable of accommodating our customers' specific gelatin needs with products of various parameters. By strictly controlling the transparency and microorganisms, our products have excellent disintegration and fluidity with smooth and beautiful appearance.

Soft Capsule

Mainly made of gelatin or compound combined with gelatin and other ingredients such as glycerin or suitable pharmaceutical excipients. We offer a variety of gelatin portfolio to meet soft capsules needs of clients in pharmaceuticals, nutraceuticals and other industries.

Confectionery

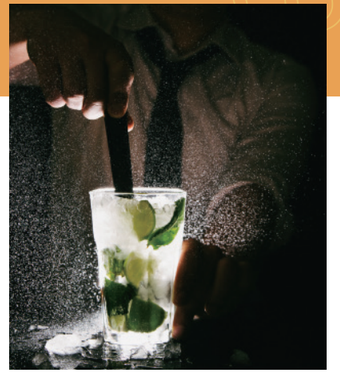
Gelatin is one of the most important ingredients in the confectionery industry. Gelatin is high water absorbent and maintains a stable structure of the product. When gelatin particles dissolved in water, the internal molecules form a network structure which locks water and sugar so that the candy remains relatively stable. In comparison to starch and agar, gelatin is more tenacious, elastic and transparent. Gelatin can be used in making QQgummies, marshmallow, nougat, fruit jelly and other products. Gelatin jelly pudding has elastic and soft taste, bright and smooth appearance and transparent texture.

Dairy Products

Gelatin is an ideal partner of milk. It is often used in the production of formula milk, aerated milk products, low-fat milk etc. Gelatin can be used as a fat substitute, and the use of gelatin and polysaccharides bring out dairy product' s best taste and texture, so as to maximize their functional properties. Widely used in yogurt, processed cheese and cream, gelatin plays the role of anti-whey precipitation, emulsifier, stabilizer and milk foaming control.

Meat

As a natural food ingredient, the use of gelatin in meat improves the texture of product, boosts mouthfeel of the meat products and extend the shelf life. In addition, gelatin can also be used as emulsifier in some of the products. Gelatin used in broth, cooked hamburger patties, aspic, sausages, canned meat to increase the protein content of these products.



Beverage Fining

Gelatin can be used as a clarifying agent in beer, red wine, fruit wine, fruit juice beverages and other products. It forms flocculation and precipitation with the impurities when added into beverages, the flocculent gelatin particles co-precipitates with the turbidity without and sunk to the bottom. Once filtered, it leaves minimum negative impact on taste of the drink.

KONJAC GUM

Konjac is a perennial herbaceous plant in the Araceae family. It is a healthy food with low heat energy, low protein and high dietary fiber. The main ingredient is glucomannan (KGM).

Konjac has been on the Chinese dietary for more than 2000 years and still is today. It' s been widely used in food production and processing industries such as vegetarian and meat substitutes, noodles, jelly desserts, and meat products today for its hydrocolloids traits.

Routine Application

- Konjac noodles and other vegetarian food
- Baking and pastry products
- Meat products
- Jelly Desserts
- Health products and nutritional supplements

Konjac noodles and other vegetarian food

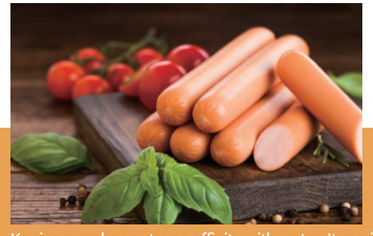
Konjac can form a thermal irreversible gel under high temperature and alkaline conditions. It is low in fat and calorie and rich in dietary fiber. It has a unique taste, strong chewability and a feeling of satiation. It can be made into, vegetarian abalone, konjac noodles ,rice and other bionic food.

Konjac is a kind of natural dietary fiber with low calorie and low fat. It can help people to keep slim, regulate intestinal health, and lower blood glucose and fat, improve the role of human immunity. Konjac gum is mainly used in meal powder, capsule, tablet, chewing candy, beverage and various food.

Health products and nutritional supplements

Baking and pastry products

Konjac has high viscosity, strong water absorption, cohesiveness and water retention. It improves the texture and structure of baking. The taste is soft and elastic, and the noodles do not slur the soup.



Meat products

Konjac gum has a strong affinity with water. It can increase the water holding capacity of meat. And it can also increase the viscosity of the system. Konjac reacts with protein, improve the adhesion between muscle protein and meat, and form a strong three-dimensional space structure -- gel. Water will not be lost in large quantities in the process of heating, sterilization, shearing and so on.

Jelly Desserts

When konjac powder is heated with carrageenan, it can form a thermo-reversible gel with high transparency. Konjac gum enhances the gel strength, improves the texture and structure of carrageenan , has better water retention and lower water separation.

Cold Water-Soluble Gelatin

The Main Purpose: Meat Adhesive | Thickener

Product Introduction

Conventional gelatin does not fully dissolve in water under room temperature, only when the gelatin water solution is heated above 30℃, the dissolving starts. The gelatin water solution forms gel gradually while cooling off.

Foodmate presents a new type of cold water-soluble gelatin for specific circumstance which requires gelatin to be fully dissolved in water under 10℃.

Meat Adhesive

Superior bonding effect

Cold Water-Soluble Gelatin has superior bonding effect. Can be used on almost all meats such as mutton, beef, pork, chicken, fish, etc., and presents little trace of bonding.

High heat resistance

Finished products are resistant to high-temperature cooking, frying and easy to cut.

Improving product quality

On top of that, its water binding capacity give the finished product, whether it' s made with raw meat or heated, outstanding mouthfeel after cooking, maintaining a fresh look of the final product.

Reduce costs

Using the product would bring benefits including but not limited to yield increasing of minced meat, cost reducing etc.

Reduce costs

In comparison to conventional gelatin, the Cold Water-Soluble Gelatin is cost saving & easy due to its cold-water solubility which requires no extra step of heating up.

Thickener

High security

It' s a healthier choice to other thickeners because it is made from collagen.

What is Collagen?

Collagen is the most abundant protein in the human body. It is found throughout connective tissue and plays many important roles in the body.
Collagen is essential for skin structure and blood clotting, as well as acting as a building block for bones, skin, ligaments, tendons, and muscles. Collagen functions as the "glue" that holds everything together.

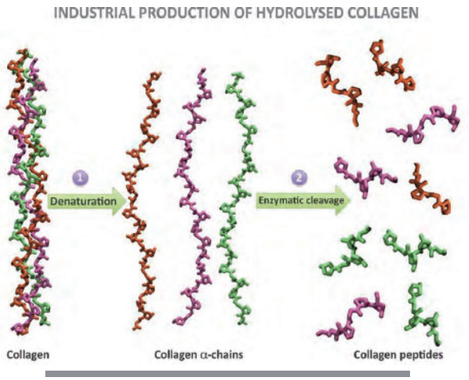
30%
of the total protein in human body is Collagen

3 KG
is how much collagen in an adults' body weighs

All major organs
contain collagen

A main component
of extracellular matrix

How Do We Produce Collagen Peptides?



Generally, collagen molecules are denatured and partially hydrolysed to form gelatin (100kDa).
Gelatin can then be decomposed into small peptides using specific enzymes with cleavage activity (proteinase).
The molecular weight distribution of collagen peptides usually span in the range 0.3 - 8 kDa.
Due to the low molecular weight, there are several advantages of using collagen peptides with respect to native collagen:

- collagen peptides is highly digestible;
- collagen peptides is easily absorbed and distributed in the human body

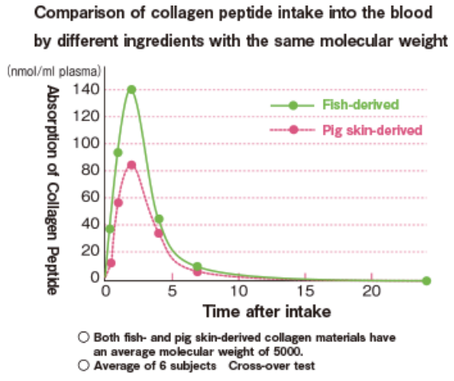
Product Categories

- BeautiPep™ for Skincare
- PrimePep™ for Bone Health
- ArthrPep™ for Joints Healthy
- ShapeFit™ for Body Shaping
- PepFit™ for Sports

BeautyPep™ Benefits for Skin

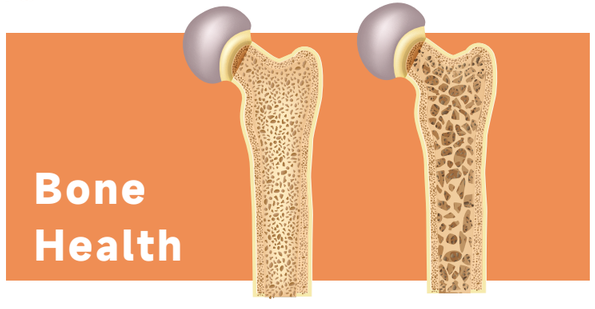
There are 28 different types of collagen but 80-90% of collagen in the human body are types Ⅰ,Ⅱand Ⅲ. The skin is made up primarily of type Ⅰ collagen, but type Ⅲ is needed to support type Ⅰ. Foodmate BeautiPep™ contains both type Ⅰ and type Ⅲ collagen.

Foodmate BeautiPep™ is a pure, low-molecular-weight fish collagen peptide extract□ed from fish scales and fish skin, and processed into a form that is easily absorbed by the human body. This is this pure white powder. It has been shown that fish-derived collagen is absorbed about 1.5 times better than pig skin-derived collagen.Easily absorbed by the body thanks to its low molecular weight.



PrimePep™ Benefits for Bone

The organic mass of the bone matrix comprises about 90% of type I and 5% of type V collagen the remainder being bone-specific phospho-and glycoproteins such as osteopontin, bone sialo□protein, osteocalcin, osteonectin, and others



ArthrPep™ Benefits for Joints

Clinicaly proven Collagen peptides can be used to prevent the degradation of cartilage and thus to prevent discomfort and joint pain while maintaining collagen levels inside the cartilage. Collagen peptides used in Collagen ArthrPep™ restore Bone Mineral Density to a normal level and maintain lean muscle mass.
ArthrPep™ reduces fast inflammation that is causing pain in the joints and helps with the natural production of collagen. Latest research has shown that the MSM helps relieve pain, especially in cases of osteoarthritis, rheumatoid arthritis, muscular pain and tendinitis.

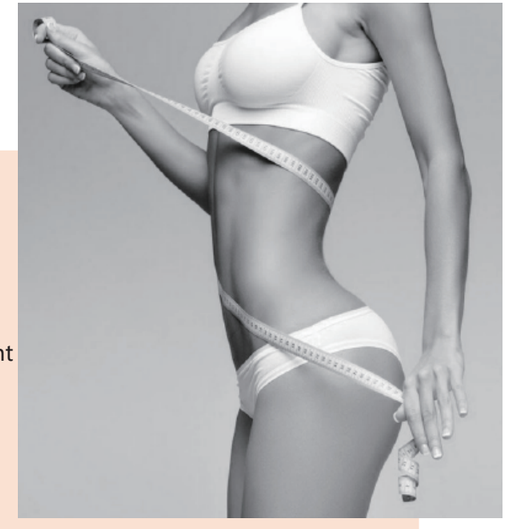
ArthrPep™ Benefits

- People who exercise often
- People with joint problems
- Athletes
- People recovering from injuries
- People who regularly strain joints
- Overweight people with sedentary
- People looking to maintain healthy joints and strong bones

ShapeFit™ Benefits for Body Shaping

The organic mass of the bone matrix comprises about 90% of type I and 5% of type V collagen the remainder being bone-specific phospho-and glycoproteins such as osteopontin, bone sialo□protein, osteocalcin, osteonectin, and others.

Enhancing muscle-building and fat-reducing effects. Collagen peptides help muscle fibers increase and thicken, and can reduce the size of fat cells.



- Promotes weight management
- Increases satiety
- Helps to lose or maintain weight
- Easily digestible protein
- Excellent bioavailability
- Multiple nutritional benefits
- Muscle regeneration
- Connective tissue support (for joints, tendons, ligaments)
- Reduces joint pain

PepFit™ Benefits for Sports

From professional athletes to health-conscious consumers, today ' s active buyers are looking for more ways to up their game. With PepFit™ collagen solutions, you can give them a way to accelerate recovery, support connective tissue， and reach the next performance level.

Collagen peptides for a healthy lifestyle
TYPE I COLLAGEN PEPTIDES

Bringing joint health a step closer
TYPE III COLLAGEN PEPTIDES

The perfect solution for protein enrichment and application versatility
2000Dal

WHAT IS Foodpro™ B ?

Foodpro™ B —— Functional Proteins

- Functional animal protein is prepared from pig skin or cowhide. Most of its protein is collagen egg. It is a kind of functional animal protein produced by heat treatment and mechanical processing using the world's advanced technology.
- It is combined with hot water. The hybrid collagen is unfolded. After cooling, the collagen re-forms a three-dimensional network structure, which can bind and lock more water. The addition of this type of protein to meat products can increase the product yield, enhance the taste, and improve the texture. Improve product sliceability.

Foodpro™ B

- Foodpro™B is derived from bovine collagen, which is derived from cowhide that has been declared suitable for human consumption through pre- and post-mortem inspections. Foodpro™ B is a functional protein with high protein content and low fat content. Foodpro™ B provides a maximum water binding capacity of 1:20. It has fine particles and excellent dispersibility in cold water. Due to its unique functionality, the protein has the characteristics of strong cold curing and bonding.

Advantage:

*Improve texture and elasticity

*Increase the cost of use

*Improve taste

*Keep hydrated

*Increase production rate

*Improve sliceability

*Improve taste

*Easy to use

Gel and emulsifying properties of Foodpro™ B

Foodpro™ B has excellent water retention properties and is mainly used in high-pressure injection and emulsified meat products. Foodpro™ B can not only be used as a food ingredient, but also can be used in conjunction with other water-retaining products, especially with ProBinder™ MS.

Category	Foodpro™ B	Fat/Oil	T＞80℃	Salt/Phosphate
oil	1	10\15	10\15	+
Fat	1	10\15	10\15	+
Hot oil	1	10\15	10\15	+
Hot fat	1	10\15	10\15	+

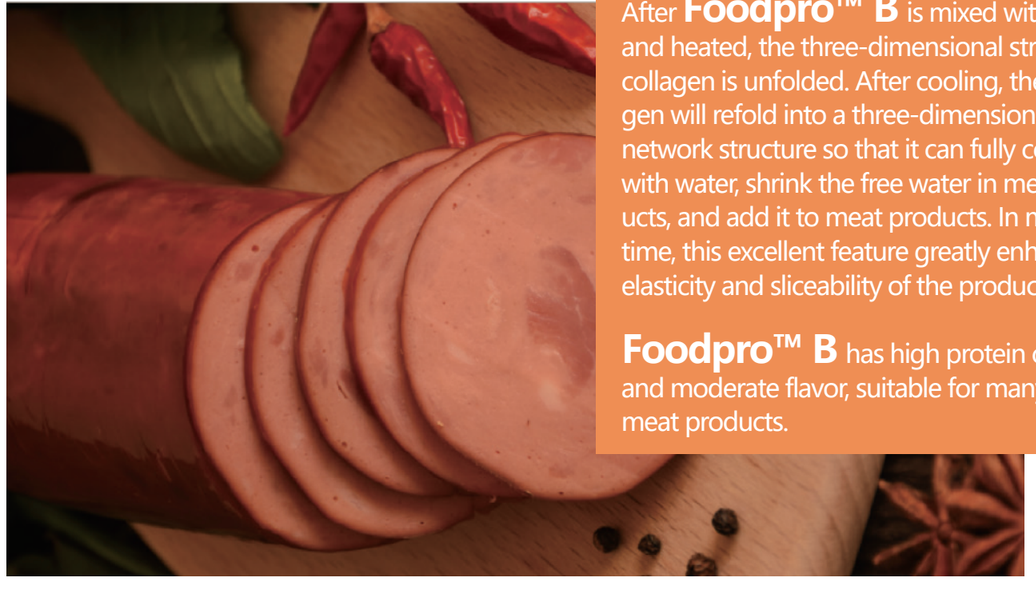
Foodpro™ B: water=1:15

Foodpro™ B: water: oil=1：15：15

Combined effect with other systems

When Foodpro™ B is used in combination with other systems, it will generally bring about synergistic effects. Below the table, + means normal, ++ means good, +++ means very good,-means no synergistic effect, /according to product type.

Foodpro™ B	TG	ISP	Carrageenan	Alginate	Fiber	Starch
Brine	+++	+++	+++	-	/	+++
Hold Water	+++	++	+++	+++	++	++
Solubility	+++	++	++	+	/	+
High temperature emulsifying power	+++	+++	+	++	+	++
Low temperature emulsifying power	+++	++	-	+++	-	-
Thermal stability	+++	+	-	+++	-	+
Low temperature gelation	+++	++	+++	+++	++	++



After **Foodpro™ B** is mixed with water and heated, the three-dimensional structure of collagen is unfolded. After cooling, the collagen will refold into a three-dimensional network structure so that it can fully combine with water, shrink the free water in meat products, and add it to meat products. In medium time, this excellent feature greatly enhances the elasticity and sliceability of the product.

Foodpro™ B has high protein content and moderate flavor, suitable for many types of meat products.

Application example — Emulsified sausage

Mortadella, Frankfurter Type

Frankfurt sausage is a fine emulsified product that has been smoked and cooked. Frankfurt sausages are usually eaten hot. In this formulation, Foodpro™ B is used for dry addition to provide firmness, structure and thermal stability. Due to the thermal stability, the final product maintains a firm texture and bite feel.

Foodpro™ B fat 1:10:10 emulsion preparation:

Pre-made fat emulsion with Foodpro™ B (1:10:10)

1. Add fat to the chopping pot and chop.
2. Add Foodpro™ B.
3. Add ice water and chop until a uniform bright emulsion is formed (minimum temperature is 12°C).
4. Put the emulsion into the tray and cool it for later use.

RAW MATERIALS	RATE
4# pork meat	22.00%
MDM-Chicken	25.00%
Foodpro™ B fat 1:10:10 emulsion (prefabricated)	18.00%
Foodphos PC300	0.30%
Table salt (0.6% sodium nitrite)	1.80%
Spices	0.60%
Ascorbic acid	0.05%
Potato starch	4.00%
Skimmed milk powder	2.00%
Foodpro™ B	2.15%
Ice /water	24.10%
TOTAL	**100.00%**

20% Injection Cooked Ham

The injection of a large piece of whole ham contains 20% saline injection of Foodpro™ B. Foodpro™ B provides a firm structure to improve sliceability. Foodpro™ B can reduce cooking losses.

Raw	Rate
3# pork meat	83.33%
Ice/water	13.32%
Foodphos PJ300	0.30%
Table salt (0.6% sodium nitrite)	1.50%
Sodium Ascorbate	0.05%
Glucose	1.00%
Foodpro™ B	0.50%
Total	100%

WHAT IS TRANSGLUTAMINASE ?

—— ProBinder™

Transglutaminase, also known as transglutaminase (TGase), is a monomeric protein with an active center composed of 331 amino groups and a molecular weight of about 38,000. It can catalyze the intramolecular and intermolecular covalent cross-linking of protein and polypeptide. So as to improve the structure and function of the protein, the properties of the protein such as foaming, emulsification, emulsification stability, thermal stability, water retention and gel capacity, etc.

[Typical Application]

Meat

- Sausages
- Meatballs
- Steak

Dairy Products

- Yogurt
- Cheese

[ProBinder™ application method]

① Liquid slurry:

② Dry mixing or mixing with other powder products:

③ Powder coating method:

Foodvanil™

Based on vanillin

In 1874, Dr. M. Halman and Dr. G. Tayman in Germany successfully synthesized vanillin which is the first flavouring synthesized by human beings and the most widely used spice so far.

Over200℃,the loss of vanillin is 90%.How to mprove the thermal stability of vanillin,keep the aroma of vanillin for a long time , and reduce the use-cost? After three years of esearch and development, we have success ully developed Foodvanil which slowly releases the aroma of vanilla beans at high temperatures.

Advantage

- **Use-cost reduced by 15%**
- **High temperature stability**

"Double shell "microcapsule technology can be more resistant to high temperature and slowly release the aroma.

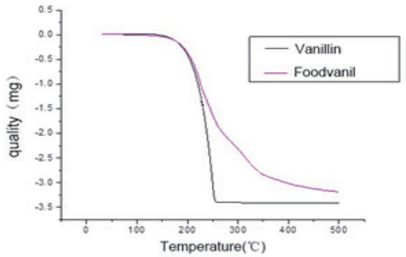
- **Easy to use**

The use method in food is the same as vanillin. Simple and easy to use.

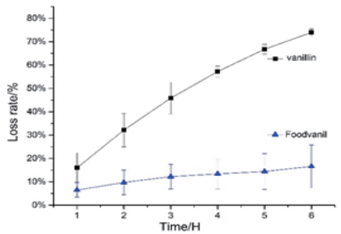
Foodvanil™ uses Dual-shell technology

The stability of vanillin at high temperature can be improved by embedding unstable vanillin in microcapsules.In this way, vanillin's volatilization is greatly reduced, and vanilla aroma is more stable and rich.

Spherical microcapsules can protect the stability of vanillin under high temperature baking conditions and reduce vanillin volatilization.



Vanillin is completely Volatilized in 150-250°C.
Foodvanil™Vanillin is volatilized until 500°C.



Four hours later in 105°C, vanillin is volatilized 58%，but Foodvanil™Vanillin is volatilized 13%.

Foodvanil™

Zero Calorie Sweeteners

Foodmate is a professional formula technology service provider for food and beverage customers with the "three reduction" program of reducing sugar, calorie and fat.The R&D team of EKOSWEET focuses on sweet technology research for more than 10 years and has applied for more than 100 related patents.In the food to meet the “delicious” premise, through formula technology to achieve sugar, calorie, fat reduction of health needs.

Sugar Cube
EkoSweet™ 9501C

Ingredients:

Erythritol, Stevia

Product advantages:

1. 100% natural ingredients
2. Stable structure
3. Increase the sense of ritual

Application: Coffee, Tea

Sugar substitute sachets
EkoSweet™ 9210

Main ingredients:

Stevia, Sucralose, Erythritol, Inulin

Values:

1. More convenient to use
2. Natural Health Products
3. No after-taste

Application:

Table-top, Coffee, Baking

EkoSweet™ Baking special sugar substitute

Main ingredients:

Erythritol, Allulose, Monk Fruit Extract, Stevia

Application:

More specialized complex home or commercial bakery products

Product advantages:

1. Reduce your sucrose intake without changing your habits
2. Solve the coloring problem of sugar substitutes
3. Solve water retention and emulsification
4. 100% natural ingredients

www.foodmategroup.com Foodmate

Sugar Substitute Series
EkoSweet™ 9501, 9551, 9651

Ingredients: Erythritol, Stevia, Monk Fruit Extract

Product advantages:

1. Reduce your sucrose intake without changing your habits
2. Crystal clear appearance
3. 100% natural ingredients

Application: Home Baking, Cooking

Brow Sugar Substitute
EkoSweet™ 9551

Main ingredients: Erythritol, Monk Fruit Extract

Product advantages:

1. Reduce your sucrose intake without changing your habits
2. Crystal clear appearance
3. 100% natural ingredients

Application: Cookies, Chocolate, Coffee.