



Efficient Prebiotics For Gut Health

App Stachyose®



XI'AN APP-CHEM BIO(TECH) CO., LTD.

APPCHEM® is the Drafting Unit of *China Extracting Business Standard of Stachyose*

ABOUT US

BASIC INFORMATION

CORPORATE NAME: XI'AN APP-CHEM BIO(TECH)CO.,LTD

ESTABLISHED TIME: APRIL 23RD,2006

LISTING LOCATION: NATIONAL EQUITIES EXCHANGE AND QUOTATIONS

LISTING DATE: JUNE 8TH, 2016

NEEQ: 837285

TOTAL SHARE CAPITAL: 28 MILLION SHARES

THE HOST BROKERAGE: INDUSTRIAL SECURITIES

BUSINESS SCOPE: R&D, production and sales of all natural functional active ingredients for nutraceuticals, pharmacy and personal care.

QUALIFICATION



CORE COMPETENCE



MANUFACTURING PROCESS

In comparison with other brand stachyose, APPCHEM adopts more advanced technology to significantly enhance its production efficiency and scale and further ensure its advantage in cost over others.



PRODUCT QUALITY

Owing to the distinctive technology, APPCHEM provides a kind of stachyose with purity up to HPLC90% and highly approved in appearance, taste and efficiency.



DOUBLE PATENTS

While holding the manufacturing patent, APPCHEM also carried out the protection of its use patents. To boost product competitiveness, "product purchasing for patent authorization" mode is workable for key end-product customers.

STACHYOSE

About Stachyose

Stachyose is a naturally occurring tetrasaccharide in vegetables, which is expressed as fructose-glucose-galactose-galactose.

Its solubility in water is 130 g (at 20°C), melting at 101 °C, dehydrated at 115°C in vacuum and anhydrous material melting at 167 °C to 170 °C

The Properties of Stachyose

- 01 100% naturally extracted, no other chemical ingredients used during production.
- 02 Refreshing taste and 22% sweetness of sucrose.
- 03 Excellent stability in heat and acid environment, and compatible well with other food ingredients.
- 04 Easy to use, pure white appearance, excellent solubility.

Application of Stachyose

Adding into cake, biscuits, moon cakes, rice and other food, can maintain moisture, change the rheological characteristics of dough

Working as active factor to absorb gastrointestinal toxic substances and pathogens, improve the body resistance to disease, enhance immunity system, widely used in medicine

Baked Food

Pharmacy

Liquid Food

Special Food

Develop new functional foods by adding into lactic acid beverages, vinegar beverages, beer and other beverages, less dose with significant effect and no damage to its appearance and original flavor.

STACHYOSE

Stachyose can neither be hydrolyzed by digestive enzymes nor depend on insulin for metabolism, therefore, it's suitable for people with special needs

Target Users



Young people

Get rid of toxin and beautify skin, prevent the occurrence of intestinal diseases due to stress and other factors



Elder people

Promote mineral absorption, improve and regulate blood sugar, blood pressure and blood lipids



Infants and Children

Prevent and alleviate infants' constipation and diarrhea condition, enhance immunity system



Pregnant Woman

Regulate intestinal micro-ecology, promote the absorption of calcium and other minerals, and prevent osteoporosis as well



People with antibiotic treatment

Recover from intestinal flora disorders caused by antibiotic treatment

With a long-term research and practice collected, we found that stachyose is particularly suitable for **infants** and **elder people**

THE BENEFITS OF STACHYOSE

The Benefits for Stachyose on infants and children

Improve the constipation and diarrhea; promote calcium, iron, zinc and other minerals and vitamin absorption; enhance immunity; prevent eczema; prevention of small bowel colitis (NEC).

Constipation and diarrhea are among the most troublesome problems for parents and the common treatments include Smectite and Medilac-Vita. However, "Every medicament has side-effect" and for infants themselves, intestinal micro-ecological development is not mature enough and differs from each other, so these conventional medicines will easily cause constipation, diarrhea and even worsen the conditions when being taken improperly.

Fortunately, Stachyose is already approved as the "ordinary food" and works well for dual-directional regulation on infantile constipation and diarrhea.



STACHYOSE

- Promote intestinal peristalsis, improve the constipation condition
- Inhibit the formation of pathogens and toxins treat diarrhea

The Benefits of Stachyose on elder people

Stachyose could better reduce cholesterol, triglyceride and low-density lipoprotein cholesterol levels while raising high-density lipoprotein cholesterol level, so it performs well on onlipid-lowering.

Stachyose could prevent blood sugar going up and control the fluctuation within a small range effectively.

In addition, studies shows that stachyose can also reduce the diastolic blood pressure (mechanism stays unclear but may be related to the proliferation of Bifidobacterium).

Promote the absorption of calcium, Magnesium and other minerals and vitamins.

Promote calcium, Magnesium and other minerals and vitamins absorption

Lowering blood pressure, Lowering cholesterol, Lowering blood sugar

Promote the row of lead; Improve constipation



STACHYOSE POSITIONING

Dairy Products – The Best Carrier for Stachyose

The use of prebiotics or probiotics in products is family within the industry is a routine, and the relevant manufacturers have a higher awareness and acceptance of such substances.

Therefore, the use of highly efficient stachyose instead of the conventional prebiotics (oligofructose, inulin, galactooligosaccharides, etc.) or probiotics (*Bifidobacterium lactis*, *Lactobacillus paracasei*, *Lactobacillus acidophilus*, etc.) Product will not bring cognitive technical barriers to manufacture.

Stachyose has a unique advantage over conventional prebiotics

STACHYOSE

Oligo
Galactose

Enzymatic conversion

Through regulating microecology
to perform the immunity effect

New resources food

Pure nature extraction separation

Through micro-ecological regulation,
and immune factors generated from
Decomposition to perform the immune effect

Ordinary food

Inulin

No use for infants and
young children are forbidden

More gas generated

New resources food

Applicable for all people

Less gas generated

Ordinary food

Fructooligo
saccharides

8 days to take effect

More gas generated

Nutrient supplements

5 days to take effect

Less gas generated

Ordinary food

Xylose

No use for infants and
young children are forbidden

Through micro-ecological regulation,
and immune factors generated from
decomposition to perform

New resources food

Applicable for all people

Through micro-ecological regulation,
and immune factors generated from
decomposition to perform

Ordinary food

**Stachyose is more natural, safer, more widely available,
and less uncomfortable with the production of gas**

THE ADVANTAGE OF STACHYOSE

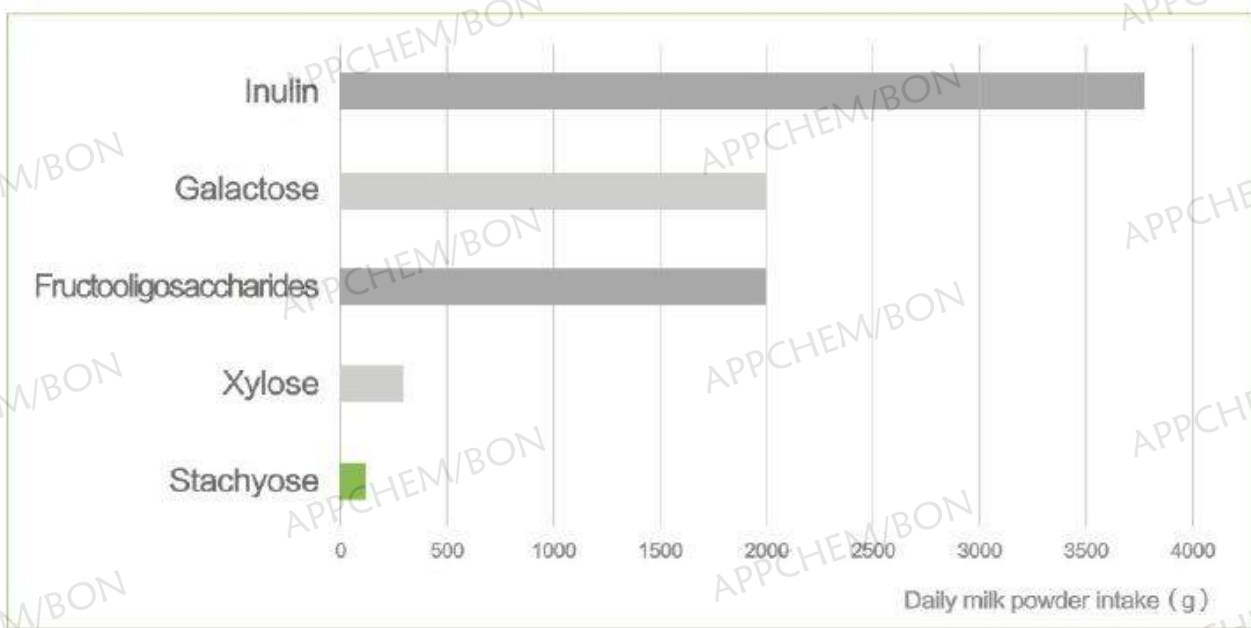
Significant advantage in facton and usage



THE ADVANTAGE OF APPCHEM STACHYOSE

The diary products we take daily,only those contain stachyose.

Prebiotics usually takes 0.1–0.4% proportion in the diary products,as per the content of 0.4%, the effective amounts of diary products,we take daily are as follows:



This is someone else's pain point, but it is our burst point!

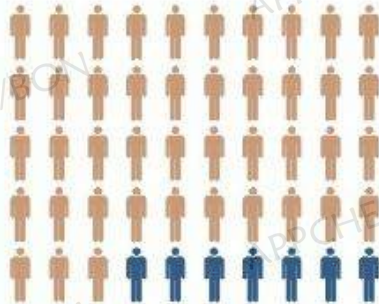
ABOUT INTESTINAL HEALTH

INTESTINAL HEALTH IS A BIG PROBLEM

Intestine Health Survey

Time: 2012
From: Online

Scope: National
Number: 14,000



Intestinal problems

Skin problems such as Color of skin dark pigmentation and acne, etc. 15%

Easy to get sick 8%

None of the above 5%

low spirits 16%

Diarrhea, abdominal distension 23%

Loss of appetite, bad breath 16%

Constipation 19%

Causes of intestinal problems

None of the above 11%

Long-stay in a closed, unventilated environment or air-conditioned room 21%

Taking antibiotics regularly 11%

Long-term use of computers, mobile phones and other electronic equipment 31%

Lack of exercise 26%

High-intensity work pressure, irregular diet and rest habits, smoking, abuse of antibiotics, environmental pollution and other issues become the culprit to damage the health of the intestinal tract and is eroding people's health.

INTESTINAL HEALTH GLOBAL ACTION

JAPAN

JMHW approved OLIGO for specific functional health food, which is legal to serve the meals for primary and secondary school students

UNITED STATES

Food and Drug Administration (FDA) approved OLIGO as a recognized safety (GRAS) food ingredient, and NASA designated it as an astronaut essential food

GERMANY

"National Health Handbook" pushing the effectiveness of OLIGO health care, advocate people for life

EU

EU approved it as a mediator to control the overall level of cholesterol

INTESTINAL HEALTH, HOW CAN WE DO?

Taking prebiotics is a well-established method of solving intestinal problems.

There are many types of conventional prebiotics, such as stachyose, oligofructose, inulin and galactooligosaccharides. However, there are significant differences in their effectiveness.

The study and our long experience found that taking "stachyose" is the most effective and fastest solution!

Efficient Prebiotics For Gut Health

Today



From the point of view of age,
younger better than elder !



From the point of view of health,
health better than sick!



From the point of view of time,
today better than tomorrow!



XI'AN APP-CHEM BIO(TECH) CO., LTD.

+86-29-88346301 www.appchem.cn sales@appchem.cn

C601, Gazelle Valley, No.69, Jinye Rd., Xi'an, Shaanxi, 710077, China.