

National Health Commission is officially established today

Cross-border E-commerce Transaction Exceeds 3 Trillion Yuan!



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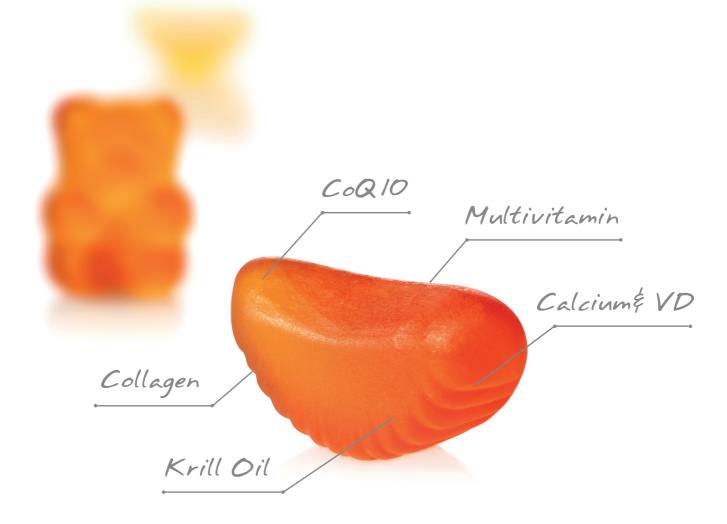
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National Health Commission is officially established today

March 27, 2018







The staff took pictures in front of the door plate of National Health Commission.

On noon, March 27, staff members took pictures with the door plate of the newly established National Health Commission.

According to Xinhua News Agency, the National Health Commission was officially established on March 27. The official website name, "National Health and Family Planning Commission," has been renamed the "National Health Commission," and the website's executive information column has been updated, with Ma Xiaowei as the director and party secretary.



In the new round of restructuring of the State Council, the duties of the National Health and Family Planning Commission, the leading group office of the State Council on deepening the medical and health sectors reform, and the office of the National Commission on Ageing, the leading performance responsibility of the Framework Convention on Tobacco Control by the Ministry of Industry





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Highlights

and Information Technology, and the management responsibilities of occupational safety and health supervision of the State Administration of Work Safety have merged into the new National Health Commission.

The main duties of the National Health Commission are to formulate national health policies, coordinate efforts to deepen the structural reform of the medical and health sectors, organize to set up the national system for basic drugs, supervise and administer public health, medical services, and health emergency, be responsible for family planning management and services, and formulate response measures and policies for ageing of the population and combination of medical and elderly care services.

On March 19th, Ma Xiaowei was named director of the National Health Commission at the 7th plenary session of the 1st session of the 13th National People's Congress. The relevant official of the Central Organization Department announced the central government's decision on the establishment of the National Health Commission and its leadership position at the conference for leaders of the National Health Commission on March 22nd.

According to today's updated information on the Commission's official website, the leadership team includes Ma Xiaowei, director and party secretary of the National Health Commission, Cui Li, Wang Hesheng, Zeng Yixin, deputy directors and party members of the National Health Commission, Ma Ben, team leader and party member of the discipline inspection group of the Central Commission for Discipline Inspection at National Health Commission, and Wang Jianjun, party member and president of China National Committee on Ageing.



According to official data, Ma Xiaowei was born in December 1959 in Wutai County of Shanxi Province. He joined the Communist Party of China in October 1982 and began working in August 1977. He studied at the department of medicine of China Medical University from April 1978 to December 1982. After graduation, he served successively as the chief of the science and education division and secretary of the general office at Ministry of Health, associate professor, researcher, vice president, director, and party secretary of the First Affiliated Hospital of China Medical University, vice president of China Medical University, and director-general and party secretary of Liaoning Health Department, etc. Ma Xiaowei worked as the deputy director and party secretary of the Ministry of Health in October 2001, and was appointed deputy director and party member of

the National Health and Family Planning Commission in April 2013.

News source: The Beijing News, official website of National Health Commission Image Source: Network

An interpretation of new "CFDA" responsibilities

Recently, the Central Committee of the Communist Party of China issued the "Plan for Deepening the Reform of the Party and National Institutions."

In addition to our previous understanding of the contents of the plan, what has been further defined in this document?

The new "CFDA" responsibilities: responsible for the registration, supervision and management of pharmaceuticals, cosmetics, and medical devices.

The document shows special foods such as health foods will not fall within the responsibilities of the newly-established China Food and Drug Administration, and the registration of health foods, formerly under the responsibility of provincial food and drug administrations, should be assigned to provincial-level market supervision administrations.

The "Plan" clearly requires, "(50) to integrate and form a market supervision comprehensive law-enforcement team. Integrate industrial and commercial, quality inspection, food, medicine, prices, trademarks, patents and other law-enforcement responsibilities and teams. Set up a market supervision comprehensive law enforcement team directed by the State Market Regulatory Administration.... The enforcement of drug trading and sales and other activities shall be uniformly undertaken by the comprehensive law enforcement teams of market supervision in cities and counties."

It's imperative to integrate the grassroots administration of industry and commerce, quality supervision, food and drug administration with law-enforcing departments, and the supervision of the production and distribution of local health foods will be the responsibility of the market supervision comprehensive law enforcement team.

Names of the leading group of the State Market Regulatory Administration are released

Bi Jingquan (former director general and party secretary of CFDA) is named party secretary and deputy director of the State Market Regulatory Administration.

Zhang Mao(former party secretary and director general of the State Administration for Industry and Commerce) is named director general and deputy party secretary of the State Market Regulatory Administration.

Jiao Hong (former deputy director of CFDA) is named director general of the State Drug Administration.

Li Li (former Jiangxi's vice-governor) is named party secretary of the State Drug Administration.

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CFDA approves 751 nutritional supplements

CFDA "domestic health food" database recently released a total of 751 new approvals for nutritional supplements labeled with "national food and health reference G2017" on its official website.

289 health food manufacturers have been approved

Here is a summary of the approved data by classification and the statistical results:

1.The 751 nutritional supplements announced come from 289 health food manufacturers.

2.Sirio Pharma Co., Ltd. received the largest number of approvals this time, a total of 37 new products; By-Health Co., Ltd. took the second place, with a total of 18 new products approved; Guangdong Weishiya Health Food Co., Ltd. has 14 new products approved, ranking third.

For the list of companies with approved products, please refer to the attachment at the end of the document.

More new products will be announced later

According to the survey, the approval dates of the health foods announced this time are from June to July of 2017.

In August last year, Shuzheng Health reported that the Health Food Review Center examined nearly 2,000 health foods from May to July of 2017, of which more than 1,500 products were approved. The passing rate was about 70%.

Judging from this, more new health foods are likely to be announced later.

List of health food is facing an overall renewal

Shuzheng Health's predicts that after this release of 751 new health foods, the top 10 products on the list of approved health foods (health food list) will undergo major changes, and this list may face a big shake-up!

Stay tuned for the upcoming health food-related statistics released by Shuzheng Health later.

Top 10 Health Food Manufacturers		
Sirio Pharma Co., Ltd	37	
BY-Health Co., Ltd	18	
Guangdong Weishiya Health Food Co., Ltd	14	
Aland (Jiangsu) Nutraceutical Co., Ltd	13	
Beijing Alan Science and Technology Co., Ltd	10	
Jiangsu TMG Daziran Bioengineering Co., Ltd	10	
Wanbao Jiayou(Beijing)Technology Co., Ltd	10	
Beijing Shiji Hehui Pharmaceutical Technology Co., Ltd	10	
Red Maple Leaf Biotechnology Co., Ltd	9	
Jilin Wangda Biotechnology Development Co., Ltd	9	
Guangzhou Basha Health Foods Co., Ltd	9	

Sun Meijun, CFDA: Anti-fraud measures for health food industry

On the National Implementation Conference of Control and Regulation of Food and Health Food Frauds and Misleading Promotions held November 16-17, Sun Meijun, deputy director of CFDA attended and pointed out the following:

Each food and drug supervision department shall begin spot checks and inspection on key categories of food and health food, focus on investigation and handling of health food fraud and false propaganda, and applying practical and innovative working methods.

First, the basis of regulation should be consolidated. Full coverage of production unit and inspection-required content should be ensured by improving the coverage and depth of management network, focusing on weak points, and promoting deeper inspections.

Second, effective measures should be taken, meaning conducting the inspection onsite, punishing the individual, and making the information open to the public.

Third, a long-term mechanism should be established. The focus should always be on implementing the entity responsibility of manufacturers and third-party platforms, leading them to operate honestly and legally.

In addition, we should take the opportunity to enhance our inspection ability and infrastructures, and to improve our level of supervision, sampling and detection, case handling and enforcement of law, and forewarning communication.

16 verification and evaluation institutions received permissions from CFDA, and third-party institutions accounted for 70%

On November 17th, the Filing Work Information Management System of Special Food Verification and Evaluation Technical Institution on the CFDA official website indicated that 16 verification and evaluation institutions had received permissions. Eleven of them are third-parties (enterprise), and only five of the 16 are public institutions, which respectively belong to government systems of disease control, quality inspection, etc.

(see appendix for the complete list)

Regarding the regions, Guangdong has the largest number of approved institutions (five), followed by Shandong (three), and Shanghai (two). For Anhui, Beijing, Heilongjiang, Hubei, Shannxi and Zhejiang, each has one approved institution.

On health food clinical tests, the filing system indicated that only United Nation Quality Detection Technology Co., Ltd has been permitted so far, but its categories of specific clinical test programs are still unknown.

It is said that in the future 58 public institutions and more third-party institutions will join the Filing Work Information Management System of Special Food Verification and Evaluation Technical Institution.

Appendix:16 verification and evaluation institutions permitted by CFDA

Appendix:16 verification and evaluation Institutions permitted by CFDA

Filing Number	Company Name	Province	Region
TY 11161011	Anhui Top Way Testing Services Co., Ltd	Anhui	Xuancheng
TY 11171014	Pony Testing international group	Beijing	Haidian
TY 11151001	Guangdong Provincial Center for Disease Control and Prevention	Guangdong	Guangzhou
TY 11151007	GuangZhou Yijian Medical technology Development Co., Ltd.	Guangdong	Guangzhou
TY 11171013	China National Analytical Center, GuangZhou Guangdong Institute of Analysis	Guangdong	Guangzhou
TY 11171012	SGS Guangzhou	Guangdong	Guangzhou
TY 11151004	Centre Testing International Group Co., Ltd. (CTI)	Guangdong	Shenzhen
TY 11171018	CTI Heilongjiang	Heilongjiang	Haerbin
TY 11171016	Hubei Institute for Drug Control	Hubei	Wuhan
TY 11161008	CTI Qingdao	Shandong	Qingdao
TY 11151006	Qingdao ZW Security Test Co., Ltd.	Shandong	Qingdao
TY 11171019	SGS Qingdao	Shandong	Qingdao
TY 11161010	United Nation Quality Detection Technology Co., Ltd	Shannxi	Xi'an
TY 11151002	Shanghai ZW Security Test Co., Ltd.	Shanghai	Songjiang
TY 11151005	Shanghai Institute of Quality Inspection and Technical Research (SQI)	Shanghai	Xuhui
TY 11151000	IQTC NINGBO	Zhejiang	Ningbo

The National Health and Family Planning Commission released an important document on aging: Big opportunity for Geriatric Health Assessment

The National Health and Family Planning Commission released *The Division of Tasks of the 13th Five-Year Plan for Healthy Aging* on its website on November 2nd. This is China's first division of key tasks based on the national top strategy of healthy aging.

Enhancing healthy education for the aged. Educational activities concerning fitness, disease prevention and recovery for the aged, science and art, mental health, professional skills, family finances, etc. should be organized.

Making efforts on disease prevention for the aged. Efforts should be made in managing and providing service to the aged in terms of their health, which is one of our national basic public health programs. At the same time, we should properly adjust physical examination items and contents.

Promoting the service of mental health and caring for the aged.

Launch prevention and intervention plans for elderly mental health, and provide daily caring and mental support to poor, empty nest, disabled, dementia, family-planning special families and elders who live alone.

Pushing forward the service combining medical care and pension schemes. Establish and improve the cooperation mechanism for medical organizations and pension agencies, encourage various kinds of contracted services and cooperation.

Enhancing academic research about elderly health. Conduct large scale cohort studies, including the index, standard, and method of judging and predicting elderly health, and wearable technology and equipment for supporting elderly health. Explore the progress and law of Geriatric Syndromes, and the technology, guide and standard of its preventions, and construct a network for elderly health management.

CFDA Sampling Checks 176 Batches of Health Foods with Heightened Inspection on Imports

On October 10th CFDA released the results of a sample survey on 176 batches of health foods, with 174 batches qualified in the sample survey.

Figures showed the qualified products in the sample survey came from 47 enterprises, of which three with the most batches of samples in the survey are domestic agents of imported health food: Guangzhou K Lex Health & Nutrition co., Ltd. (11 batches), Shanghai Zhengwen Biotechnology Co., Ltd (10 batches) and Shanghai Kaike Biotechnology Co., Ltd., different in that domestic manufacturing enterprises mostly ranked top on the list of the previous sample surveys.

Meanwhile, there were two batches of sub-quality products in the result sample survey announced (According to the National Food Safety Standard, the products with several items below the standard are confirmed unqualified).

1. The Weilaisi aloe capsules sold by Shenzhen Yongantang Pharmacy Chain Co., Ltd., manufactured by Guangzhou Sankang Health Product Co., Ltd., were found to have a moisture value of 10.30%, 14% higher than the enterprise standard (no more than

9.0%), and molds and yeasts value of 2.8×103 CFU/g, 55 times more than the national standard Inspection (no more than 50CFU/g). The inspection institution is Shenzhen Institute for Drug Control.

2. The Nuspower calcium & vitamin D chewable tablet (orange flavor), sold by Fujian Kanglida Pharmaceutical Chain co., Ltd., Fuzhou No.16 Branch, manufactured by Guangzhou Saijian Biotechnology Co., Ltd., were found to contain lead (in Pb) of 1.0mg/kg, twice the enterprise standard (no more than 0.5mg/kg). The initial survey institution is the Food and Drug Quality Inspection Institute of Fujian Province, and the re-examination institution is Fujian Inspection and Research Institute for Food and Drug Quality, and the re-inspection institute is the Inspection and Quarantine Technology Center of Guangdong Entry-Exit Inspection and Quarantine Bureau.

Several actions were taken on the unqualified products examined in the sample survey: China Food and Drug Administration has asked Guangdong Food and Drug Administration to order the manufacturing enterprises to make a thorough investigation of product flow, recall disqualified products and analyze the cause for

a correction; and asked Guangdong Food and Drug Administration and Fujian Food and Drug Administration to order the units related to intermediate links to take immediate measures, such as removing from shelves, to control risk. The provincial-level food and drug regulators where the producers and marketers of unqualified foods are located must announce the risk prevention and control measures to the public within seven days from the date the notice was released, and report the verification and disposition to China Food and Drug Administration within three months, as well as make it public within three months from the date the notice was released.

Several TCMs applying for new food ingredients

By Ren Jing

China officially carried out the Administrative Measures for the Safety Review of New Food Raw Materials on October 1, 2013, which defined the new food raw materials as those not traditionally consumed in China: animals, plants and microorganisms; the materials that are separated from animals, plants and microorganisms; the food materials whose original structure has been changed; and other newly developed food raw materials.

The categories of new food raw materials approved and published 2008-June 2017

Product category		Quantity	Of the total approved (%)
	plant	26	22.2
Animals, plants and microorganisms	probiotics	17	14.5
meroorganisms	fungus and algae	9	7.7
The materials that are separated from animals, plants and microorgan- isms	lipid	31	26.5
	carbohydrate	17	14.5
	amino acid, peptide and proteins	9	7.7
	others	4	3.4
The food materials whose original structure are changed and other newly developed food raw materials		4	3.4
Total		117	100

According to Herbridge, most of the new food raw materials approved by the National Health and Family Planning Commission of China since 2008 are the materials separated from animals, plants and microorganisms (61 in total), accounting for 52.1% of the total; the second place goes to the animals, plants and microorganisms (52 in total), accounting for 44.5%. Some of the new food raw materials approved in this category are also TCM materials. The Herbridge statistics are summarized as follows:

1) Ginseng

Ginseng belongs to traditional Chinese herbal medicines and has a history of application in the country for thousands of years. It has also been widely used in the fields of medicine and food with the



identity of "medicinal and edible plant." According to the definition of new food raw materials (new food raw materials not traditionally consumed in China), ginseng is not qualified to apply as new food raw material. In 2002, ginseng was included in the *List of Items That Can Be Used for Health Food*, which provides that listed raw materials are only for the production of health food, which again limited the application of ginseng. The 32nd Session of Codex Alimentarius Commission (CAC) reviewed and adopted the international standard "Ginseng Food" in 2009, which stipulated that cultivated ginseng may be used for food. Seeing the international recognition of ginseng's identity as food, China, as a leading global producer of ginseng, must keep up with the times. In August 2012, cultivated ginseng was approved as a new food raw material.

Announcement No.17 of 2012: New food raw material ginseng

Chinese name	Ginseng (cultivated)		
Latin name	Panax Ginseng C.A.Meyer		
Basic information	source: Cultivated ginseng grown for five years or less Species: Araliaceae, Panax edible parts: roots and rhizomes		
Intake amount	≤3g/day		
Other items in need of clarification	 Health and safety criterions should be in line with the relevant national standards. Unsuitable for pregnant women, nursing women and children under 14. Unsuitable groups and intake limit should be labeled and noted in the instructions. 		

Regulation

Ginseng tissue adventitious roots and mountain tissue adventitious roots later applied for new food raw materials, of which the examinations were terminated by NHFPC due to their substantial equivalence to ginseng (cultivated ginseng), which was approved as new food raw material in 2012. The former can be produced and managed as the food raw materials.

2) Cordyceps militaris

Cordyceps militaris was first discovered in Jilin Province, China in 1958. The reason why it is named cordyceps militaris is that it was considered to be the same genus as cordyceps after iden-



tification. Cordyceps militaris is mainly produced in the provinces of Yunnan, Jilin, Liaoning and Inner Mongolia, and is born on the pupae of the lepidoptera living in the topsoil of coniferous forests, broad-leaved forests or mingled forests. Cordyceps militaris, which can be artificially cultivated in batches with the silkworm and tussah pupa, have the similar pharmaceutical and pharmacological effects to that of the wild species or better. In March 2009, cordyceps militaris was approved as a new food raw material. In May 2014, the intake amount, quality index and requirements and the scope of application of cordyceps militaris were changed in Announcement No. 10 of 2014 by NHFPC.

Announcement No.3 of 2009: New food raw material cordyceps militaris

Chinese name	Yongchong Cao		
Latin name	Cordyceps militaris		
Basic information	Source: cultivated fruiting bodies of cordyceps militaris Species: subclass of ascomycete, claricipitaceae, cordyceps		
Manufacturing technique	Inoculate the culture of cordyceps militaris in the culture medium for an artificial cultivation, harvest fruiting bodies of cordyceps militaris before drying and other steps		
Intake amount	≤2g/day		
Unsuitable groups	Infants, children and those allergic to edible fungus		
	character Golden fruiting body		
Quality require- ments	fruiting bodies of cordyceps militaris	100.0%	
	adenosine	≥0.055%	
	polysaccharide	≥2.5%	
Other items in need of clarification	Usable range: Direct consumption, alcoholic beverage, can, seasoning, beverage		

Announcement No.10 of 2014: New food raw material cordyceps militaris after change

Chinese name	Yongchong Cao
Latin name	Cordyceps militaris

Basic information	Source: cultivated fruiting bodies of cordyceps militaris Species: subclass of ascomycete, claricipitaceae, cordyceps
Manufacturing technique	Inoculate the culture of cordyceps militaris in the culture medium for an artificial cultivation, harvest fruiting bodies of cordyceps militaris before drying and other steps
Other items in need of clarification	1.Unsuitable for infants, children and those allergic to edible fungus. Unsuitable groups should be labeled and noted in the instructions. 2. Health and safety criterions should be in line with the relevant national standards.

In addition, cordyceps guangdongensis, which was found, artificially and industrially cultivated by the research team led by Professor Li Taihui, a microbial fungus expert from Guangdong province, has also been formally approved as a new food raw material.

Announcement No.1 of 2013: New food raw material cordyceps guangdongensis

Chinese name	Militaris		
Latin name	Cordyceps guangdongensis		
Basic information	Source: artificially cultivated fruiting bodies of cordyceps guangdongensis Species: subclass of ascomycete, claricipitaceae cordyceps		
Manufacturing technique	Inoculate and culture the bacteria of cordyceps guangdongensis, harvest the fruiting bodies before drying		
Intake amount	≤3g/day		
Other items in need of clarification	1.Unsuitable for infants, children and those allergic to edible fungus. Unsuitable groups should be labeled and noted in the instructions. 2. Health and safety criterions should be in line with the relevant national standards.		

3) Loquat leaf

Loquat leaf is a commonly used TCM material that removes heat from the lungs to relieve cough, downbears counterflow and checks vomiting. It is used in the treatment of cough with lung heat,



circulation of vital energy in the wrong direction, dyspnea with rapid respiration, stomach heat and retching counterflow, vexation heat and thirst. Loquat leaf was approved as a new food raw material in December 2014.

Announcement No.20 of 2014: New food raw material loquat leaf

	*
Chinese name	Loquat Leaf
Latin name	Eriobotrya japonica (Thunb.) Lindl.
Basic information	Species: Rosaceae, Eriobotrya Edible part: Leaf
Intake amount	≤10g/day
Other items in need of	Health and safety criterions should be in line with the relevant national standards

4) Cyclocarya paliurus leaf

Cyclocarya paliurus leaf has an effect on clearing away heat and toxic materials, and quenching thirst. Modern scientific experiments found that cyclocarya paliurus leaf contains a variety of effective compo-



nents, including polysaccharide, triterpene, saponin, and flavone, and also contains multiple precious trace elements such as amino acid, vitamins, germanium, selenium, chromium, vanadium, zinc, iron, and calcium. Cyclocarya paliurus leaf is suitable for the groups suffering from chronic diseases such as hypertension, hyperlipemia and hyperglycemia due to its functions of boosting immunity, antioxidation and anti-aging. The plant was approved as a new food raw material in November 2013.

Announcement No.10 of 2013 New food raw material cyclocarya paliurus leaf

Chinese name	Cyclocarya Leaf		
Basic information	Source: Juglandaceae cyclocarya paliurus(La ion name: Cyclocarya paliurus) Edible part: leaf		
Other items in	1.Edible method: Brewing		
need of clarifica-	2.Health and safety criterions should be in line		
tion	with the relevant national standards.		

5) Male flower of Eucommia ulmoides

Eucommia ulmoides is a dioecious tree. The male flowers of Eucommia ulmoides are the blossoms of its male tree. The male flowers of Eucommia ulmoides are valuable resources of medicinal pol-



len in China. Scientific research has found that the male flowers of Eucommia ulmoides contain a variety of effective plant ingredients, including lignins, iridoids, phenylpropanoids active substances (such as geniposidic acid, chlorogenic acid and aucubin), pinoresinol diglycoside flavone, alkaloid, amino acid, polysaccharide and many mineral elements (Zn, Mn, Cu, Fe, Ca, P, B, Mg, K, etc. The variety of active ingredients are remarkably effective for liver health, kidney nourishing, defaecation, sleeping, and reduction in hypertension, hyperlipemia and hyperglycemia. The plant was approved as a new food raw material in May 2014.

Announcement No.6 of 2014: New food raw material male flower of Eucommia ulmoides

Chinese name	Male flower of Tu-chung		
English name	Male flower of Eucommia ulmoides		
Basic information	Source: Cultivated male tree of Eucommia ulmoides (Eucommia ulmoides Oliv.) Edible part: Male flower		
Intake amount	≤6g/day		
Other items in need of clarification	1.Unsuitable for infants, young children and pregnant women. Unsuitable groups should be labeled and noted in the instructions.2. Health and safety criterions should be in line with the relevant national standards.		

6) Tissue culture of Saussurea involucrata

Saussurea involucrate: Tissue culture of Saussurea involucrata





Saussurea involucrata is

a well-known specialty in Xinjiang, distributed in the northern and southern hillsides of Tianshan Mountains, the Altai Mountains and Kunlun Mountains of Xinjiang, with an altitude of 4000-5000 meters above sea level. It's a good Chinese herbal medicine used for the treatment of irregular menstruation, toothache, rheumatoid arthritis, erectile dysfunction, abnormal leukorrhea, metrorrhagia and other diseases. As a result of excessive digging and picking in recent years, Saussurea involucrata has become endangered. The state has long banned natural Saussurea involucrata for use in health food.

The tissue culture of Saussurea involucrata, the product of cell culture under artificial control with the selected seeds of wild Saussurea involucrate, contains various functional components, such as flavone, polysaccharide, chlorogenic acid and syringin, etc. It is rich in nutrients, with 28.8% of protein, 0.96% of fat, 25.6% of total sugar, 16.0% of starch, 10.0% of cellulose and trace elements essential to human body. The tissue culture of Saussurea involucrata is significantly effective for women's health, anti-inflammation and analgesia. A long-term use of the tissue culture of Saussurea involucrata can also enhance immunity, delay aging, resist radiation, prevent heart disease, cancer and other diseases. The tissue culture of Saussurea involucrata was approved in 2010 as a new food raw material.

Announcement No.9 of 2010: New food raw material tissue culture of Saussurea involucrata

Chinese name	Tissue culture of Saussurea involucrate			
English name	Tissue culture of Saussurea involucrata			
Basic information	Source: callus	of feverfew Sauss	urea involucrata	
Manufacturing technique	The mass-like particles in the process of subculture under the certain conditions with subculture seeds, which is the callus obtained from the dedifferentiation of in vitro tissue of Saussurea involucrata, or the powder obtained from drying and crushing the particles			
Intake amount	The fresh \leq 80g/day , the dried \leq 4g/day			
Unsuitable groups	Infants and pregnant women			
		The fresh	The dried	
	Character	Purple red mass- like particles	Purple gray powder	
Ossalitas manasima	Protein	≥1%	≥20%	
Quality require- ments	General flavone	≥0.4%	≥7%	
	Moisture content	≤96%	≤10%	
	Ash content	≤1 %	≤10%	
Other items in need of clarification	Unsuitable groups and recommended intake amounts should be labeled and noted in the instruction.			

TCM materials in line for the application of new food raw materials

At present, TCM materials must be among the catalogue of the "medicinal and edible plant" or apply for new food raw materials before becoming ordinary food. As people's health care consciousness grows, raw materials in the catalog of "medicinal and edible plant" are not able to meet the growing demands of the healthy industry. Some enterprises have

positioned targets to the TCM materials, which are expected to be added to ordinary foods to improve selling points and added value. In addition to the above-mentioned TCM materials that have been approved as new food raw materials, some of the applications have been terminated after investigations, and more TCM materials are lining up for good results.

application time	Name of raw material	Effective component	Resource state	state	
May 2012	Culture of dendrobium huoshanense	Dietary fiber, dendrobium huoshanense polysaccharide	Tissue culture	Pending approval	
September 2013	Dendrobium officinale	Crude polysaccharide		The state solicited opinions on it as a new food raw material in April 2016, with no result	
April 2016	Flower of dendrobium officinale	Crude polysaccharide		Pending approval	
January 2017	Leaf of dendrobium officinale	Crude polysaccharide, reducing sugar, protein		Pending approval	
April 2017	Dendrobium devonia- num Paxt	Crude polysaccharide	Cultivated	Pending approval	
unknown	protocorm of dendrobi- um officinale	Crude polysaccharide		The state solicited opinions on it as a new food raw material in November 2012 and April 2016, with no result.	
July 2013	Forsythia suspense leaves	Phillyrin, Forsythiaside	Wild	Pending approval	
July 2017	Forsythia suspense leaves	Protein, amino acid, trace elements, total phenols	Cultivated in the wild or artificially cultivated	Pending approval	
March 2017	Guizhou gastrodia elata	Guizhou gastrodia elata	Cultivated	Pending approval	
July 2017	loquat flower			Pending approval	
June 2016	Luzhou Gulin Pentho- rum Chinese Pursh powders	Quercetin, general flavone, protein	Cultivated	Pending approval	
2013-2015	cordyceps sobolifera	Polysaccharide, Adenosine	Cultivated fruiting bodies	Applied three times in 2013 and 2015, with no result	
July 2015	Desert cistanche deserti- cola	Phenylethanoid glycosides, crude polysaccharide, pro- tein	Cultivated	CFSA has passed the technical reviews of the expert committee in August 2016 and solicite public opinions, with no result.	
October 2013	Cistanche tubulosa powder	Protein, sugar	Natural	Pending approval	
January 2010	Fine powder of cistanche tubulosa	Phenylethanoid glycosides, echinacoside, Vitamin C, potassium, sodium, calcium, iron, zinc and other various trace elements	Natural	Pending approval	
June 2011	Anoectochilus formosanus	Protein, total sugar, amino acid	Cultivated	To be approved in July 2013, with no result.	
September 2013	Anoectochilus formosanus	Total protein, total sugar, crude fat	Naturally collected	Pending approval	
September 2012	Linearstripe rabdosia herb	General flavone	Cultivated	Pending approval	
April 2012	Angelica sinensis	Carbohydrate, dietary fiber, protein, minerals	Cultivated	Pending approval	



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Regulation

March 2012	Radix polygoni multi- flori preparata powder	Stibene glucoside	Raw materials grown in the region of Songshan Mountain	no result		
2012	Spreading hedyotis herb	Dietary fiber		Applied twice in 2009 and 2012, with no result.		
December 2011	Lysimachia davurica	Protein, amino acid, berber- ine, palmatine, coptisine, epiberberine		no result		
October 2009	Carthamus tinctorius	Hydroxysafflor	Cultivated	no result		
October 2009	Virgate wormwood herb	Dihydroxycoumarin, chloro- genic acid, P-hydroxy-acetophenone	Cultivated	no result		
June 2015	Stalks and leaves of panax notoginseng	Crude protein		Reviews ended. Managed as the special local food.		
January 2011	Stalks and leaves of panax notoginseng	Total saponins	Cultivated			
May 2015	Panax notoginseng bud	Crude protein				
November 2010	Gynura procumbens	Dietary fiber, calcium, iron, vitamins, etc.		Reviews ended. Managed as the regular food.		
January 2011	Powder of panax noto- ginseng flower	Crude protein	Cultivated	no result		
July 2015	Mulberry leaf extract	1-DNJ		Reviews ended. Substantially equivalent to mulberry leaf (A list of items that are both food and drug in the Announcement No.51 [2002] of the Ministry of Health). Managed as regular food.		

As seen from the table above, dendrobium officinale and panax notoginseng are the ones that applied the most. Except the powder of panax notoginseng flower that remains without result for the time being, the rest of the species of panax notoginseng have been terminated and considered substantially equivalent to the ordinary food due to the long history of consumption in Yunnan and other places in China.

Dendrobium, hard to be neglected, covers a complete range of applications including materials from dendrobium officinale to dendrobium devonianum Paxt, from flowers to leaves, from protocorms to cultures, none of which is approved.

Bright prospects lie ahead, but hurdles remain

In spite of successful applications of ginseng, cordyceps militaris and other materials that have been approved as new food raw materials, an encouragement to the applicants under the bright prospects of the health industry, the way for the TCM materials to becoming new food raw materials still has twists and turns.

Safety, the top priority

The Administrative Measures for the Safety Review of New Food Raw Materials specifies that the new food raw materials should have the characteristics of food raw materials and conform to nutritional requirements, which are non-toxic, harmless, and do not have any form of harm whether acute, sub-acute, or chronic or have other potential hazards to human health.

New food raw materials

With the characteristics of food raw materials

Conforming to current nutritional requirements

Non-toxic and harmless

Without any potential hazards to human health

Many TCM materials have a long history of utilization but lack evidence for safety. A large number of test and research supports are required, all of which are essential. But there is one thing I don't understand. The TCM materials need to prove their safety without toxicity and a long history of local consumption through certificates issued by health departments. Though saving experiments, it is not in line with the definition of new food raw materials — "new food raw materials refer to the materials that are not traditionally consumed in China" — making TCM materials be seen as ordinary foods. How to find a balance between them leaves the applicants' enterprises in a difficult situation.

Resources need to be protected more than utilized

TCM materials also run into a big resource problem when applying for the new food raw materials. The natural products of the raw materials such as cistanche, penthorum chinense pursh and anoectochilus formosanus are in shortage for medical use, not to mention support for the food sector. Therefore, some of these raw materials take their cultivated products as the applicants. Ginseng, cordyceps militaris, tissue cultures of Saussurea involucrata, which have been approved as the new food raw materials, are all the products of artificial cultivation or modern biotechnology. It's a protection of resources, as well as an example of the further development of the TCM materials.

Whether it is new food raw material waiting for good results, or the TCM material to be applied for the new food raw material, safety issues top the list of considerations, while second place goes to the use and protection of resources. This is how TCM materials go further and smoother on the road to new food raw materials.



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- Ginseng extract
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- Resveratrol

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- Stevia extract
- Hesperidin
- Kudzuvine Root extract

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Kangmei Pharmaceutical increases capital to its subsidiary MCKIN

On March 20, Kangmei Pharmaceutical (600518) announced it planned to make a capital increase in cash of ¥45 million to its wholly-owned subsidiary Shenzhen MCKIN Industry Co., Ltd. (hereinafter referred to as "MCKIN"), with a registered capital of ¥50 million after the increase and 100% of shares held by the company. The capital increase will be mainly used to expand the operation scale of MCKIN and increase its capability of foreign investment and business development in order to meet the needs of expanding sales in health products, according to the announcement. Sales growth of the subsidiary's health products would be beneficial to the establishment of the company's terminal health food brand and the improvement of the company's overall profitability.

Real Nutriceutical introduces U.S. LSC block chain technology for health food traceability

On March 18 Real Nutriceutical released the U.S. LSC block chain technology for the field of traceability of health foods in New York. Real Nutriceutical has become the fourth global partner of U.S. LSC following Japan, Australia, and the United Kingdom. Real Nutriceutical will apply LSC block chain technology to a full range of applications in various aspects such as health food supply chains, production tracking, transportation and sales, and set up new industrial standards for the health food industry based on LSC block chain technology and improved data operating mechanisms. In addition, the U.S. LSC held a press conference in China in late March to open up the establishment and application of the LSC global health ecosystem in China.



Da V Store and Nestlé Nutrition reach a cross-border strategic partnership

On March 19, Da V Store officially signed a strategic cooperation agreement with the cross-border sector of Nestlé Nutrition of Nestlé Global. This time, Da V Store will carry out further cooperation with Nestlé Nutrition's global cross-border sector in direct purchasing of overseas selections and acceleration of global direct purchasing to enhance the overall user experience and jointly explore new models of future Chinese household consumption. Meanwhile, Nestle Nutrition's

baby formula, baby food, and baby nutrition, etc., will be available on the Da V Store platform in a direct-supply mode. The users of Da V stores will also be able to find Nestlé Nutrition baby products sold globally on the platform. In the future, the two parties will bring more quality products of Nestlé Nutrition's global to users of Da V Store through a series of in-depth cooperations and help online activities such as "Da V Mother and Baby's Quality Day," held recently.

Hainan Yedao Group's President gives big ideas on market forum

Ma Jinquan, president of Hainan Yedao Group, released big ideas March 20 on the theme of "Building a Leading Brand for New Types of Healthy Wine" at the 7th China Wine Market Forum sponsored by Jiuyejia media. He said that in 2018, Hainan Yedao will continue to exert efforts

to strengthen its brand, build effective teams, and support strategic systems to create a "healthy wine enterprise," and take fast steps to break into the health care wine market. According to Ma, the company has formulated a marketing strategy plan based on the state of development of the company.

Appendix:

Table1: Variation in the market capitalization of enterprises with health food as the main business in one week (Unit: 100 million RMB)

No.	Abbreviation of the enterprise	Stock code	Mkt Cap by last week's close	Mkt Cap by this week's close	Variation in the current Mkt Cap	
1	By-Health	300146	248.7	248.7	0.00%	
2	Kingdomway	002626	116.2	99.9	-14.03%	
3	Xiwang Food	000639	89.5	80.2	-10.39%	
4	Jiao Da Only	600530	43.2	40.3	-6.71%	
5	Sinolife United	03332.HK	9.3	9.2	-1.08%	
6	Besunyen	00926.HK	5.3	5.1	-3.77%	
7	Real Nutriceutical	02010.HK	3.2	3.1	-3.13%	
8	AUSupreme	02031.HK	2.5	2.5	0.00%	

By-Health stock is currently suspended.

Table2: Variation in the share prices of enterprises with health food as the main business in one week (unit: RMB/share)

No.	Abbreviation of the enterprise	Stock code	Closing price last week	Closing price this week	Variation in the current share price
1	By-Health	300146	16.93	16.93	0.00%
2	Kingdomway	002626	18.85	16.21	-14.01%
3	Xiwang Food	000639	16.25	14.56	-10.40%
4	Jiao Da Only	600530	5.54	5.17	-6.68%
5	Sinolife United	03332.HK	0.98	0.97	-1.02%
6	AUSupreme	02031.HK	0.34	0.33	-2.94%
7	Besunyen	00926.HK	0.32	0.31	-3.13%
8	Real Nutriceutical	02010.HK	0.20	0.19	-5.00%

By-Health stock is currently suspended.

Table 5: Variation in the share prices and market capitalization of major chain drugstores in one week

				3	\mathcal{C}			
No.	Abbreviation of the enterprise	Stock code	Closing price this week	Variation in the current share price	Mkt Cap by this week's close	Variation in the current Mkt Cap	Proportion of medical insurance pharmacies	Number of Stores
1	Yixintang	002727	25.68	-0.19%	145.8	-0.21%	77.60%	5,009
2	LBX	603883	68.43	0.07%	195.0	0.10%	77.90%	2,039
3	Yifeng Pharmacy	603939	55.77	8.08%	202.3	8.07%	62.30%	1,890
4	Dashenlin	603233	54.06	9.59%	216.2	9.58%	66.04%	2,754
5	Renmin Tongtai	600829	10.39	-6.31%	60.3	-6.22%	-	312

Health products companies attention please! Here comes the giant in Q4.



Recently, China Resources Sanjiu Medical & Pharmaceutical Co., Ltd (hereinafter referred to as "CR Sanjiu") disclosed that the company will launch new health products in Q4,2017 including vitamins, minerals, and natural extracts, etc., covering the mainstream category of the health-products market. In mid-September, CR Sanjiu spent nearly RMB400 million to acquire a 65% stake in Shandong Shenghai Health Products.

According to CR Sanjiu, the company's self-diagnosis and treatment businesses now includes OTC business, OTX business and the health business of "999" brands. The overall development idea is to cultivate the brand's OTC business, expand the business of health and OTX, and upgrade the business from OTC leader to self-diagnosis and treatment industry leader.

Shandong Shenghai Health Products Co., Ltd. owns a total of 45 domestic health food products (see the attached complete list), including 16 nutrient supplement products, 29 functional health food products including two bi-functional products, covering nine kinds of health func-

tions such as immunity enhancing (18 products), reducing blood fat (three products), improving sleep (two products), relieving physical fatigue (two products), improving memory (two products) and losing weight (one product). Currently Shenghai is still stepping up for dozens of blue cap transferee issues, thus their actual number of products is likely over 80.

"Red Bull Variables" attracted all parties to fight for market share

Functional drinks again draw giants to battle.

After Yi Bao, Amway also formally announced would compete in China. The industry's rapid growth is behind Amway's entry, as well as the problems growth caused.

According to the 2016 review of sports and energy drinks released by Mintel, the global energy beverage market showed strong growth of 10% in 2015, with the United States, China, the United Kingdom, Thailand and Vietnam being the top five countries in sales. China is thriving in growth rates, with up to 25% in 2015, almost four times the U.S. market. Previous market survey data show that compared with the developed countries in the world, China's per capita consumption of functional beverages is only 0.5 kg per year. Compared with the world's per capita consumption of 7 kg, there is still more room for growth. But at the same time, the homogeneity of the market is also getting worse.

Amway XS entered the market in high-profile

In order to layout the functional beverage market, Amway acquired the XS brand in 2015. According to Amway's data this functional beverage brand, which was introduced to China just a few days ago, sold 10 million tins in the 29 hours after its launch.

According to David, XS co-founder and global vice president, XS sales in China reached twice the annual sales volume of Amway in the Korean market on the first day of its public offering in China. At present, China has replaced Japan as XS's second largest market.

However, different from the traditional beverage channels, XS came into China through Amway's direct-sales channels. Amway is not the only company promoting beverages in the field of direct sales. Earlier, Nu Skin had launched its g3 energy drink in China, and Infinitus was also promoting Runhe series of functional drinks. However, these brands are mostly promoted with a concept of juice, while Amway's newly launched products are different.

Is the Red Bull dispute the incentive?

To the outside observer, one important reason why XS only thinks of the Chinese mainland market after launching in 51 countries and regions in the world is that Red Bull, a functional drink in the Chinese mainland market, is falling into an unprecedented variable situation.

On September 12, China Red Bull packaging provider ORG announced that they have received a litigation ruling of suspension of their lawsuit with T.C. Pharmaceutical Industries Co., Ltd (trademark holder of Red Bull). However, reporters from SMW called the securities department of the company as investors, and the reply was that the lawsuit of T.C. and Reignwood Group (the actual operator of Red Bull in China) is ongoing. ORG and T.C. will also make a decision after the lawsuit of T.C. and Reignwood Group in Thailand is finalized.

In fact, the data disclosed by ORG is becoming proof of the market potential of functional drinks in China. Public information shows that the 10-year cooperation agreement between ORG and Red Bull was signed on February 10, 2012. From 2008 to 2016, Red Bull 's purchased value from ORG increased from RMB771 million to RMB4,975 million, surging 6.5 times.

According to statistics from the China Food Industry Association, retail sales of beverage products in China reached 217.5 billion yuan last year, up 10.5% over the previous year, and its growth rate dropped by 4.3% over the previous year. However, the market share of tea drinks, functional beverages and healthy drinking water increased year by year.

Against this background, in May and July of this year Wahaha and C'estbon specially launched the sports drinks brand, "SURAN," the newmagic drink.

However, Amway has always insisted that its introduction of XS products is intended to raise recognition of the XS brand among young people. The brand is popular among young people around the world, helping Amway direct-sales channels attract young marketers and continue to strengthen the connection between the company and young entrepreneurs.

Li Ka-shing is also among the players. In fact, while the Red Bull trademark dispute continues, Li Ka-shing already was in the process of laying out the mainland China market with the functional drink Celsius before XS was ready to enter China.

Public information shows that on July 31 this year, the United States Nasdaq listed Celsius Holdings announced that it will enter the Chinese market, and plans to distribute throughout the country, entering the Chinese market as a lifestyle brand through the e-commerce dealer, Qi Feng Food Technology (Beijing) Company, Ltd.

It is reported that Celsius entered the Hong Kong Market through a distribution agreement with Watson Group, and sells in retailers such as 7-11, AEON, International, Fusion, TASTE, and PARKnSHOP Supermarket. At the same time, Celsius has set up a new holding company in Hong Kong, hiring a number of high-level executives with working experience in Red Bull Asia in order to dominate the expansion of the entire Asian market.

A. C. Nielsen data shows that in 2009-2014, the compound annual growth rate of China's functional beverages reached 31.6%, and it is expected that by 2019 the scale will reach 101.3 billion yuan. Analysis at that time recognized that, as a subdivision of functional drinks, Celsius discovered a good selling point for the Chinese market, promoting metabolism and fat reduction.

Hidden anxiety behind the intensified competition

According to data from A. C. Nielsen, Red Bull's market share was 68% in January-August 2016. In other words, Red Bull's current variables are causing all parties to fight for their share of the pie.

However, for some brands, how to deal with the aging brand and the problem of homogenization of competition may already be an unavoidable problem.

Company News

Take "Mai Dong" for example. French food giant Danone's earnings report shows that in China, "Mai Dong" sales in the fourth quarter achieved year-on-year growth, but due to the impact of inventory in the market restructuring, the yearly sales decreased. Danone also said that this transformation will continue in 2017 and Danone will continue to make targeted investments, commit to protecting market share and ensure future growth while protecting the profitability of "Mai Dong."

Mead Johnson Greater China coaching change

Four months after being acquired by ReckittBenckiser, Mead Johnson Greater China welcomed a new president. On October 10, Mead Johnson announced the appointment of Enda Ryan. Ryan disclosed that after the launching of the new policy of milk powder, Mead Johnson will sink products to more third- and fourth-tier cities.

Ryan said in an interview that, at present, China has become one of Mead Johnson's most important markets. In China, the second child policy, the arrival of the milk-powder registration system, and the promotion of consuming upgrades are providing new market opportunities for dairy companies.

Relevant industry data analysis shows that the annual newborn population from 2017 to 2020 will reach 20 million. In the next five years infant formula milk powder enterprises, including Mead Johnson, will reach an annual growth rate of 7% to 10%. China has become the most dynamic and competitive market in the world.

The implementation of the new milk powder policy, regarded as the strictest ever, not only means that the China infant formula milk powder industry has stepped into a new era, but also means that enterprises will enter a more brutal shuffling period.

By October 8, 2017, 378 formulas of 128 series of 46 enterprises were registered, and nine of the three brands of Mead Johnson were approved.

Ryan said that after the launch of these new policies, half of the more than 2,000 existing infant formulas will disappear because they will fail to meet market requirements, and the third- and fourth-tier markets will draw "staking" of big brands.

Insiders believe that Mead Johnson should seize this market opportunity to improve performance.

In the past two years, Mead Johnson's performance continued to decline in its major areas. Even the important Chinese market's performance is not satisfactory, endangering its market position. Financial reports show that in 2015, the company net income was 2.039 billion US dollars, down by 7.6%, and Asia net income fell by 11%; the 2016 net income is \$1,856 billion US, down by 3%, and Asia fell by 9%.

In June of this year, when British FMCG giant ReckittBenckiser completed the acquisition of Mead Johnson, Mead Johnson started its operation as an independent business unit of ReckittBenckiser. Enda Ryan said that at present the merger of the two sides is proceeding smoothly, and Mead Johnson's operations have not been affected.

Reckitt hopes to expand the market scale in China through Mead Johnson, while Mead Johnson will also expand the market with the help of Reckitt's resource system and online marketing capabilities. "In the future, Mead Johnson's performance growth will exceed the industry average growth," Ryan said.

Enda specially introduced his business strategy after he took office. The strategies will be based on the changing needs of Chinese consumers and preferences for innovation, providing different services for e-commerce, maternal and child stores, supermarkets and other channels, and continuous launching of new products. In addition, providing tailor-made services for "80s" and "90s," the new-mothers market has also become a major direction for Mead Johnson.

"Rebuild a Wahaha:" Zong Qinghou returns to health care products business

Zong Qinghou, who has been looking for opportunities to "rebuild a Wahaha," favors health nutrition products, which helped him make his fortune.

According to Economic Daily, Wahaha intends to develop TCM therapeutic products and health food products according to the requirements of the National Nutrition Plan (2017-2030). Wahaha also plans to complete development and launch of a series of product in 3-5 years, including categories such as enhancing immunity, improving cardiovascular and cerebrovascular health, nutrients supplementation, improving sleep quality, and bone health.

Wahaha's first pot of gold came from the health care products industry. At that time, Zong Qinghou, a Zhejiang-based school factory

manager, happened to get a formula for children's nutrition and digestion. He came up with the slogan, "Drink Wahaha, good appetite," for the product Wahaha nutritional drink. Three years later, sales of this children's nutrition liquid topped 100 million.

Now, healthy nutrition products once again become the market Zong want to explore. He believes that consumer demand for food is shifting to health and wellness.



32 Zong qinghou photo

According to the China Industry Information Report, vitamins, minerals and dietary supplements are the top three health products categories in China's total consumer spending. In 2014, the scale of the health products industry in China was 161 billion and is expected to exceed 500 billion in 2020. The growth rate of China's health products market is also accelerating, with a compound annual growth rate of 15% in 2012-2014, almost doubling the previous three years.

On the other hand, the health products industry itself is chaotic. Some companies do not attach importance to product quality, and sales largely depend on high-intensity and false advertising. But for Wahaha, China's health product industry is not yet a monopoly, which presents an opportunity.

Moreover, Wahaha also urgently need to launch powerful new products to improve performance.

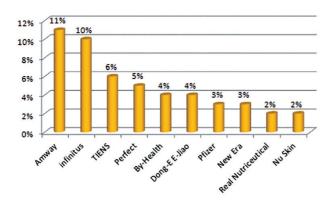
In November last year, Wahaha launched 18 new products in seven series during its sales conference, such as "Jiao Su"Enzyme drink, MIAO yogurt, Wahaha fruit and vegetable yogurt, Wahaha healthy porridge, and so on. Products such as AD calcium milk, nutrition fast line, and Wahaha mineral water are only childhood memories.

"In the recent a few years, over-centralization, inflexible marketing, lagging behind of product development and swinging of channel construction strategy had caused a series of negative state of team and brain drain, causing shaken confidence or leaving of dealers, and collapse of first and second line market," Dou Xiaoqiang, CEO of Zhice Fangyuan Consultancy told Interface News.

Wahaha's performance fell in recent years, and once fell below 60 billion yuan, the annual sales red line. Zong has been looking for new opportunities to recreate a Wahaha.

Broad prospects of the health care products market have given Wahaha those new opportunities.

However, at present, the top 10 Chinese health products companies have taken 50% of the share, including Amway, BY-HEALTH, Dong-E-E-Jiao and so on. Compared with the majority of these companies that rely on the direct-sales model, it is hard to say if Wahaha can squeeze into such a relatively established market by using the traditional sales channel network.



At present, the top 10 Chinese health products companies have taken 50% of the share.

Sales revenue of Xi Wang's health products exceeds that of its main edible oil business

October 20, Xi Wang released Q3 report of 2017 showing in the first three quarters a revenue of about 4.281 billion yuan, and a net profit of about 202 million yuan. Among them, the third quarter alone has achieved a revenue of 1.4 billion yuan, with a year-on-year increase of 75.46%, and a net profit increase of 184.51%. At present, its nutritional supplements revenue and profits have exceeded the main business, edible oil.

Xi Wang explained in its previous performance forecast that due to Q3's incorporated revenue and the profit of Kerr, a Canadian company acquired last year, the company recorded a substantial increase in revenue and good profit growth in the corn oil sector in Q3.

Data show that Kerr is a well-known Canadian sports nutrition and health food distributor, which was bought last year by Xi Wang Food and Chunhua Capital at \$730 million US (about 4.8 billion yuan) in a wholly-owned acquisition. After the Kerr merger, Xi Wang's nutritional revenue and profits have exceeded the main cooking oil business. The sport nutrition section has become Xi Wang Food's pillar industry. In the first half of 2017, monthly sales of the Tmall flagship store increased by 100% over the same period of last year. The Xi Wang 2017 semi-annual report also shows that the nutrition supplements section revenue reached 1.665 billion yuan, with a gross profit margin of 43.74%, while the vegetable oil section revenue was 10.22 billion yuan, with a gross profit margin of 33.8%.

Xi Wang Food said that the next step will be efforts to achieve a smooth transition of management and rapid development of Kerr through effective control and full authorization.

MuscleTech achieves successful online sales and expects further improvement

Kerr's products have a strong brand name in the North American market. Kerr will formally enter the Chinese market after the completion of a consolidated financial statement. Xi Wang will also continue to increase marketing efforts to expand the domestic market, building a base for the brand, and enhancing product visibility by participating in international fitness events such as the Nike Fitness Festival and a series of other activities. Xi Wang has also signed a strategic cooperation agreement with WEDER-TERA and Ali health, which has greatly enhanced domestic brand awareness and sales volume of products in the weight management and sports nutrition supplement business. Muscle-Tech continued its high performance with Tmall, Jingdong and other online channels, as well as offline fitness institutions. With the concept of weight management and sports nutrition continuing to penetrate, sports and fitness and other healthy lifestyles have become more normalized. The company's marketing investment in China will accelerate its transformation into performance. In the next two years, the company will continue to acquire the remaining equity interest in Kerr, and this part of its business revenue is expected to accelerate.

Annual performance is getting better

The Fourth Quarter Outlook: The company has gotten approval for designated placement and is now at the stage of a road show, which is expected to be completed in mid-November. Hence in 2018 it is expected that the company can reduce the financial costs of 85 million yuan. The Employee Stock Ownership Scheme is also steadily advancing and is expected to be completed before the end of the year. Impact of the group's Qi Xing issue is nearing an end, short financial bonds are successfully issued, and the capital chain is worry-free.

Another kind of food that is no longer counterfeit

The National Health and Family Planning Commission issued the Letter of the General Office of the National Health and Family Planning Commission on the Notification of Standards Applicable to Flax-seed, seemingly ordinary but big news for those engaged in the health products research. It started with the crackdown on counterfeits.

A high-profile "counterfeiting"

In November 2016, in a legal case in Beijing about "flaxseeds" added as ingredient in imported food, the court decided in favor of the whistleblower, who received the refund and a compensation worth 10 times of the payment for goods. In another case in January 2017, Zhangjiagang Fulinmen Big Family Foodstuff Co., Ltd. was reported to produce substandard foods with "flaxseed" as an illegal ingredient. The whistleblower believed that flaxseed, which is not specified in any regulation or in any list, belongs to traditional Chinese medicine listed

in the Chinese Pharmacopoeia 2015 (Volume I) and requested an investigation of the manufacturer.

Flaxseed, a popular raw material for professional counterfeit hunters, has long been a subject of concern, with many debates over whether it can be used as a food raw material. What was the response of the regulators? "It cannot be used as an ordinary food ingredient."

- In 2016, the NHFPC stated in the Reply of the General Office of the National Health and Family Planning Commission on Adding Flaxseed to Ordinary Food that flaxseed is mainly used for oil manufacture in China, and the NHFPC did not receive the application of flaxseed as the new food ingredient or carry out relevant safety reviews, with the implication that flaxseed cannot be used as an ordinary food raw material for business sales.
- In May 2017, Shanghai Municipal Commission of Health and Family Planning responded in the document *On Issues Concerning the*



Use of Flasseeds that flasseed is not included in the "list of new food ingredient and ordinary foods" in China, and consulting the NHFPC for further information is recommended and its reply shall prevail.

The regulators handled matters impartially: flaxseed was not on the list of medicinal and edible foods or new resource foods according to the regulations of that time. Without the safety assessment, flaxseed could not be recognized as ordinary food, hence the use of it in ordinary foods was considered as counterfeiting.

Things are finally worked out

On December 26, 2017, the NHFPC issued the Letter of the General Office of the National Health and Family Planning Commission on the Notification of Standards Applicable to Flaxseed to specify that directly edible flaxseeds apply to the National Food Safety Standards on Nut and Seed Foods (GB 19300-2014) and should be labeled with "Edible When Cooked" or other similar consumption tips. This means that "counterfeit" food once added with flaxseed have become legal! As netizens commented humorously: "This is another kind of food which is no longer counterfeit." Some online commenters said that the NHFPC finally did something concrete and things have been worked out.





The Letter also explains the safety evaluation and management advice on directly edible flaxseeds and flaxseeds, with the focus on the safety evaluation of cyanogentic glycosides in directly edible flaxseeds. According to health guidance values of cyanide set by FAO / WHO JECFA and Chinese dietary figures by CHNS, cyanide from cooked flaxseeds has a very low health risk to the general population in China. Heating, microwave processing, cooking and other processing methods can reduce the amount of cyanogentic glycosides in flax-seed and related products, and increase the safety of flaxseed. It is safe to consume flaxseed (powder) directly based on currently available data. Therefore, it is suggested that directly edible flaxseed be used in line with the National Food Safety Standards on Nut and Seed Foods (GB 19300-2014) and the manufacturers and traders label the directly edible flaxseeds with "consumed after cooking" or other similar consumption tips.

Regarding the implementation of GB 19300-2014, it is just more advice from the NHFPC that there is another standard related to flaxseed currently, which is GB T8235-2008 (flaxseed oil). Herbridge learned that the Inner Mongolia Autonomous Region Commission of Health and Family Planning has set up a project to establish the Local Food Safety Standards on Cooked Flaxseed (Powder) with a subsidiary of Yili Group as the drafter. Due to numerous complaints in Shanghai and Beijing about one of its energy bar products with added flaxseed, Yili Group needs to take up the weapon of "standard" to "defend its sovereignty." Once the standard is released, whether implemented or not, it will be another favorable evidence for flaxseed being an ordinary food.

Secret weapon of superfoods

Flaxseed is a reddish-brown seed and one of the earliest fiber crops in the world. Don't be fooled by the petite size. There are many "secret weapons" hidden inside.



Unique fibers

Flaxseed contains a high amount of fiber, which is water-soluble and able to be gelated. This fiber promotes digestive health and helps prevent uncomfortable symptoms such as abdominal distension and constipation, as well as maintaining healthy cholesterol levels in the human body. Some studies have confirmed that fiber in flaxseed can reduce the ratio of bad-to-good cholesterol. Just two tablespoons of milled flaxseeds deliver 15% of your daily need of dietary fiber.

Excellent antioxidant power

DNA in human cells is vulnerable to free radical attacks, thereby leading to various diseases. At this moment we need antioxidants to help protect our bodies. Flaxseed is rich in polyphenols, mostly lignans, a unique phytonutrient which is seven times more abundant in flaxseed than in sesame seed, ranked in the second place. Lignans and linolenic acid can reduce the risk of certain diseases (such as inflammation, Parkinson's disease and asthma) by helping to stop the release of certain pro-inflammatory substances.

Studies in animals and humans have found that lignans lower levels of pro-inflammatory substances. Flaxseed helps prevent heart attacks and strokes by reducing inflammation related to the build-up of fatty plaque on arteries.

Abundant α-linolenic acid

Flaxseed is rich in omega-3 fatty acid, mainly α -linolenic acid (ALA), which may transform into other omega-3 fatty acids in the human body. This enables flaxseed to benefit the heart, brain and nervous system, and fight inflammation.

The concept of superfood was first raised by physicians engaged in diet therapy in the U.S. in 1980. Superfood is defined as "a natural nutrient-rich food with higher nutrition than ordinary foods and with lower calories, and considered to be beneficial for health," which has something in common with the ancient Chinese thought of homology of medicine and food. The definition of superfood by Japan Superfoods Association is as follows: 1) It is nutritionally balanced and has higher nutritional value than general foods or contains a lot of prominent nutrition and healthy components; 2) It is a type of food between general food and health food with both the functions of food materials and healthy products. From whichever definition we can see that the key measuring standard for superfood is comprehensive and balanced nutrition. Flaxseed is a well-deserved superfood.

International markets and regulations

Flaxseed, as a superfood, sells as well as chia seed in the Japanese market. According to the data released by Flax Association of Japan, domestic demand for flaxseed in Japan reached 10,000 tons in 2016, 10 times the 2014 figure of 1,000 tons in as short as two years.

In 2009, FDA reviewed and approved the security data of flaxseed and flaxseed powder, which are administered as GRAS (GRN No. 280). In 2014, Health Canada approved the health claim that whole flaxseed reduces cholesterol and said that flaxseed is rich in omega-3 fatty acid and fiber, and can be consumed either directly or after grinding, with a higher nutrient utilization for the latter. Nearly 300 flaxseed-based products are estimated to be launched in the U.S. and Canada. In addition, flaxseed is used to feed hens to produce eggs containing higher level of omega-3 fatty acid that are favored by the market. At present, flaxseed is widely used in the food industry in such items as biscuits, muffins, oats, energy bars and the like.

Development of whole industry chain of flaxseed

Flaxseed can now be eaten as a food. However, what producers of flaxseed oil should consider more is how to use flaxseed in a comprehensive manner. The domestic development of flaxseed now mainly targets omega-3 fatty acid. The byproducts after oil manufacture are sold as feeding stuff. An overall development of flaxseed lignans, proteins, flaxseed gum(polysaccharide) and other products should be taken into consideration as well. We still have a long way to go in the research and application of this product as a type of food.

India extends the use of existing labels for special foods

On March 16, the Food Safety and Standards Authority of India (FSSAI) issued File No.12(2)2017/FBO Representation/Enf/FSSAI and the guidance documents permitting the use of pre-printed packaging materials, and extended the service life of existing labels for special foods such as health foods.

After considering opinions from various interested parties, it was decided to allow

the use of existing labels for special foods for the use of health foods, nutritional products, foods for special diets and special medical purposes, foods containing plants or vegetable drugs, probiotic foods, foods containing prebiotics, and new food. The transition period is until June 30, 2018 and should comply with the relevant provisions of the Food Safety Standards (2016).



Grape Seed Extract - A Natural Active Component to Prevent Alzheimer's Disease

By BannerBio Nutraceuticals Inc.

Alzheimer's disease (AD) is a chronic neurodegenerative disease that usually starts slowly and worsens over time. As one of the most common types of dementia, it bothers even more people than any other neurodegenerative diseases. The treatment effects of AD are unsatisfactory because there is no effective cure for AD up to now.

Most experts support that Neurotic plaques(NPs) and neurofibrillary tangles(NFTs) are the two most characteristic pathologic hallmarks of AD. The consequences are mainly caused by plaque accumulation of abnormally folded amyloid beta protein and tau protein in the brain. The plaques (called Ab) inhibit the functions of enzyme and the utilization of glucose by selectively builds up in the mitochondria in AD-affected brain cells. Under normal condition, the production and

decomposition of Ab are balanced. Only when the genetic mutation or overexpression of APP gene happens under special circumstances, the abnormal aggregation of Ab will be induced which latter leads to the destruction of the cell membrane. With the enhanced cell permeability, a large proportion of Ca2+ rush into the cells and successively activate calcium-dependent enzymes, protease and lipase, finally induce apoptosis, or programmed cell death.

Since 1998, more than 100 treatments targeting at the cytopathic effects of

AD specialized in abnormally folded amyloid beta protein and tau protein have been studied. However, none of them worked. It is widely accepted that several different underlying pathogenic mechanisms to-



gether promotes the occurrence and development of Alzheimer's disease. Among all the exacerbating factors, the dysfunction of the bloodbrain barrier (BBB) disturbs the outflow of amyloid beta protein in the AD-affected brain, leading to various inflammatory reactions that inhibit the penetration of medicines into human brains. Therefore, it is an essential ability for drugs to cross the BBB to properly function in AD-affected brains.

Cooperating with a medical school in the US for more than six years, BannerBio Nutraceuticals Inc. has been investigating the effects of GrapsTract®-Oligos (*A special type of grape seed extract with high proportions of short chain OPCs*) on Alzheimer's disease. Their previous study demonstrated that GrapsTract® was able to protect neutrons through various pathogenic pathways of Alzheimer's. After feeding 200mg/kg/d GrapsTract® for 7 days, rats were perfused with PBS. Rat brains were separated, homogenized for LC-MS/MS analysis. Accumulated GSE metabolites were found in rat brain which meant that GrapsTract® could penetrate BBB. The hippocampus is a part of the brain which is responsible for cognitive function and disorders in AD. Further studies indicated the metabolites of GrapsTract® enhanced the basal synaptic connections in the CA1 area of hippocampus slices. Research on promoting the molecular mechanism of LTP showed the

increase of Ser133-phosphorylation level caused by brain-targeted polyphenol metabolites. LTP was reinforced by the combination of cAMP and CREB signals. Besides, tau protein kinases were activated to prevent excessive phosphorylation of tau protein which fixed the synaptic transmission.

In the meanwhile, the results of "Pharmacodynamics Study on Effects of Grape Seed Extract to Prevent Alzheimer's" by BannerBio Nutraceuticals Inc. and Guangzhou University of Traditional Chinese Medicine indicates that GrapsTract® can effectively inhibit the formation and accumulation of Ab plaques, enhance the spatial memory of rats with AD and delay the AD-related deterioration of cognitive functions. In the cell experiments, the survival of cells with Ab 25-35 induced-injury was increased when treated with GrapsTract® as it helped decrease LDH release and reduced apoptosis. The study demonstrates the protective effects of GrapsTract® on PC12 cells with Ab 25-35 induced-injury.

At present the research on effects of GrapsTract® to prevent Alzheimer's are still in the stage of animal studies and cell experiments. Although there are plenty of puzzles to be solved before stepping into the clinical stage, the fact that GrapsTract® is able to penetrate the brain-blood barrier of the brain with neurologic disorders does offer us a glimmer of hope for preventing and curing Alzheimer's disease.





On March 14th, Besunyen Holdings Co., Ltd. (hereinafter referred to as "Besunyen") released its 2017 performance report. According to the report, Besunyen realized revenue of 543 million yuan in 2017, a year-on-year increase of 5.5%. And profit attributable to holders of the company was 4.086 million yuan, compared with a loss of 68.714 million yuan in the same period of 2016.

It is worth noting that there are other health product companies whose performance in 2017 were booming. Up to now, almost all of the companies in this field who have released 2017 performance reports, preliminary earnings estimates or forecasts have seen growth.

Looking back at the health product market in 2017, what is the competition structure and what are the new opportunities in the next few years?

Companies that turn a profit

According to industry analysts, Besunyen's performance has been growing well, but in 2016 it experienced a sharp decline with a net loss of 68.714 million yuan. Today's performance recovery is due to certain adjustments of the company.

The financial report shows that in 2017, Besunyen insisted on the expansion of new products, new crowds and new areas, and continued to develop the OTC chain and terminals in depth. While maintaining the stable development of the two tea products, it has also launched new products such as Orlistat Capsules and its Mei Yangyang enema product.

Meanwhile, By-Health also enjoys a performance recovery. According to By-Health's 2017 financial report, the company achieved annual revenue of 3.11 billion yuan, a year-on-year increase of 34.72%; and a net profit of 766 million yuan, a year-on-year increase of 43.17%. In 2016, By-Health achieved a net profit of 535 million yuan, which means a year-on-year decline of 15.78%.

Insiders believe that By-Health has been a leader in the health products industry, and 2016 was the first time that its net profit declined. The rebound in 2017 was due to its achievements in creating "big medicine system," "big single product strategy," "branding of e-commerce," developing the business of Jianzhibao, the joint venture company, and laying out the sports nutrition market.

By-Health and Besunyen accurately met the current consumer demand for health products and made their own strategic adjustments. For example, in the past, Besunyen's development mainly relied on overwhelming advertising, but today it begins with consumer education and guidance to increase consumer stickiness.

Significant market progress

It is worth noting that almost all health-products companies that have released their 2017 performance reports, preliminary earnings estimates or forecasts have all achieved a lot of performance.

Specifically, besides Besunyen and By-Health, the performance forecast of Xiwang Food shows that it is expected to achieve a profit of 280 to 300 million yuan in 2017, a year-on-year increase of 107.69% to 122.53%; the preliminary earnings estimate of Xiamen Kingdomway Group in 2017 shows that its 2017 revenue was 2.085 billion yuan, with a year-on-year increase of 25.37%, and its net profit was 476 million yuan with a year-on-year increase of 58.76%. Only Sinolife United estimate a profit decline by 80% in 2017.

In this regard, Zhu Danpeng believes that the health products industry has fully enjoyed the benefits of consumption upgrades in the past few years. In 2016 many companies were still in the layout stage. In 2017, a large number of enterprises have obtained the dividends of scale and profits brought about by layout and investment, and the overall performance is good.

From the perspective of the market as a whole, after several years of rapid development, the size of the entire health product market has continued to increase. According to statistics, the five-year CAGR (compound annual growth rate) of the output value of China's health products industry from 2012 to 2016 was 22.6%, and the output value of 2016 reached 262.11 billion yuan, about six times that of 2009, and growth was very rapid.

According to statistics, by the end of 2016, China approved more than 16,000 health food products, and more than 2,500 health food production companies have provided jobs for more than six million people.

As more and more companies try "crossover" by entering health products mar-

ket, the market size expands, consumer groups increase, and consumer demand increases. In the context of the sluggishness of many other market segments, health products market seems prosperous, and is expected to attract more companies in the future.

Indeed, information shows that in September 2015, Biostime acquired an 83% stake in Australia's vitamin production company Swisse for approximately HK\$7.667 billion. On July 19, 2016, Biostime announced that it would acquire the remaining 17% of Swisse shares, which means completion of 100% control of Swisse. In August 2016, Grass Green Group, which is part of New Hope Group, successfully acquired Australian NaturalCare (ANC), an Australian health product company. On December 22, 2017, Feihe announced the acquisition of VITAMIN WORLD for US\$28 million. It can be seen that it is very common for non-health products companies to try "crossover" on health products business, which makes the health products market even bigger.



In addition to the expansion of market capacity, the entire health product market has indeed made significant progress. The market is improving and market progress in 2017 is very clear. The specific performance is reflected in more mature and rational consumer demand, companies' strengthened supply capacity, and more stable supervision by the government.

Moreover, consumers have converted the misconception that health products were taken as pharmaceuticals into a balanced nutrient intake that improves health. Consumers are more rational and mature. Besides, what companies supply to the market has turned from a single supply of blue cap (health food) products to service platforms that provide consumers with more product choices, such as providing overseas health products for Chinese consumers through cross-border e-commerce; Additionally, from product access, production quality to regulated publicity, new regulatory measures are more scientific and more easy for landing; e.g. the health foods filing management system has promoted industrial investment to release industrial potential, and government supervision has become more robust since the launch of the system.

The industry foresees a bloody battle

In addition, from the point of view of the industry structure, as more and more companies enter the health products market, the entire health products market has become more competitive. With companies such as Ausnutria, Xiwang Food, Biostime buying overseas health products brand



and entering the Chinese market, confrontation between Chinese and foreign companies in the health products market has become fierce.

The real bloody battle between Chinese and foreign companies is expected to occur in 2019. By that time, competition between the Chinese and foreign camps will intensify in terms of brand influence, category layout, product quality, marketing promotion and consumer group service systems.

In addition, there will be more opportunities in the health products market in the future. According to analysis by insiders, current consumer health awareness has improved. However, their selections of brands are still largely blind choices and not well-targeted. After 2018, the health product market will be further subdivided. Health products for subdivisions such as different genders, different age groups, and different nutrient elements will emerge, and health products companies will still have a lot to do in various segments of the health products market.

Lin Ruhai, vice president of the Besunyen Group, said that there have been some changes in the food and drug supervisory departments related to the management of the health products industry in China, and that many regulations related to health products promulgated in 2016 will also be carried out gradually in 2018. It is expected that the market will become more regulated in the future, which is both an opportunity and a challenge for health product practitioners.

The health products market has also changed in channels. Some of the conventional sales channels are facing gradual decline. At present, the total market shares of health products in direct sales, conference marketing and pharmacy channels have declined respectively, and the lost shares have been taken by new forms of business, mainly cross-border e-commerce, Wechat business and various professional promotion models.

Apart from the increased share of e-commerce channels and the decreased share of traditional channels, the share of pharmaceutical chain channels will increase in the future, and growth will be faster than that of mono-drugstores.

Although the health product market is growing, health products companies are under great pressure. According to analysis by industry insiders, the pharmaceutical and health products industry is subject to multiple pressures such as the impact of production costs and the two-invoice system, and competition in the industry is becoming increasingly fierce. On July 13, 2017, the Department of Food Safety of the State Council and other nine departments jointly issued the Notice on Issuing Remediation Plan of Food and Health Products Fraud and False Publicity to propose stricter requirements on the quality and safety of health foods.

China's high-end traditional tonics sell cold in the first quarter

Dong-E E-jiao, with an annual profit of over \(\frac{4}{2}\) billion, has recently gone viral on Moments of Wechat, due to changes in accounting estimates. The donkey is living longer and is more "valuable" after "retirement," affecting only \(\frac{4}{3},255,500\) in profits. The market condition of traditional tonics such as donkey-hide gelatin, bird's nest, and dendrobe is running into a "cold spring" in this warm spring season. Dietary supplements are becoming hot items both online and offline.



Dong-E E-jiao: Donkey is living longer and is more "valuable" after "retirement"

Dong-E E-jiao lately issued a notice of changes in accounting estimates of the company. It was considered unreasonable to define the working period of a breeding donkey as five years. The actual situation saw donkeys work for 10 years; donkeys used to become worthless after working for five years, leaving only 5% of the book value, but in fact the donkey has a net residual value rate of 60% when it's old and "retired." This change in accounting estimates does not have a high impact on the company's profit, only \(\frac{1}{3}\),255,500.

The company explained that: "The donkey breeding used to be small and most of it was used for research and development, so the period of depreciation was short, basically five years. There are more productive donkeys after breeding in recent years, and the proportion of research and development is relatively small. Therefore, the period of depreciation is almost 10 years based on the normal growth cycle of donkeys." The company stated that the residual value rate of 5% is the standard in the vast majority of the current breeding industry. However, the donkey is rather special. After reaching the end of the service life, the rate is much higher than 5% according to the present market price of the donkey meat and skin.

Traditional tonics in off-season

The reporter noticed that the market condition for several high-end traditional tonics is somewhat "chilly," no matter donkey-hide gelatin, bird's nest or dendrobe. "The Gu Yuangao, with donkey-hide gelatin as the main ingredient and one of the products that sell well in retail pharmacies, has also obvious low and peak seasons. It's turning into the off-season as the temperature rises after New Year holidays. Sales have declined, whether for personal use or gifts, but it basically falls in the normal range. An industry source said the price of donkey-hide gelatin kept rising in the past years. The sales rely mainly on the "sticky" old customers. Lots of donkey-hide gelatin enterprises have begun to develop derivatives to attract young customers and to produce more snacks to attract new consumer groups.

It's still difficult to sell bird's nests in retail pharmacies. A head of a local pharmacy said the bird's nest is not the leading category and is in stock in the long term without being recommended until customers inquire.

Dendrobe, once popular, is another product in the off-season. "The price of dendrobe and maca was driven far too high by speculation a few years ago, but the effect of

maca was soon questioned. However, dendrobe retains its value, but the price has gone down to reasonable levels without any speculation."

A high-speed expansion of the nutritional supplement market

At the same time, nutritional supplements are becoming hot sale items. Recently, By-Health's annual recently released report reported a 30% year-on-year increase in revenue last year and a net profit of ¥766 million, a year-on-year jump by 43.17%. By-Health has returned to the highgrowth track, revealed that the company's Keylid Glucosamine achieved more than a 160% growth rate last year. The company's sport nutrition brand segments also grabbed a notable share of the online market.

H&H Group seems happy as well because it has earned a lot from the takeover of Swisse, a well-known health food brand in Australia. According to H&H Group, the sales of Swisse in China accounted for about 26.5% of its entire revenue in the first three quarters of last year.

Amway made its health shaping product Nutrilite Carb Bloc available on overseas shopping platforms on March 21. The company is gradually improving its health shaping product line. Amway's performance in China made a bound last year, exceeding previous expectations for performance.

"The sports nutrition, fitness nutrition and beauty nutrition markets are all experiencing a high-speed expansion and a higher level of market segmentation," industry observers said. Nutritional supplements are no longer as monotonous as they used to be. Instead, each of them has made a unique move to meet the individual needs of the urban customers. Their ability to capture the core appeal of various customer groups has led to a high and fast market acceptance. "In this regard, it is worthwhile to be learned by the traditional tonics. It is not always the same product that nourishes hundreds of different people."

Cross-border E-commerce Transaction Exceeds 3 Trillion Yuan!

The purchase of overseas health products through cross-border e-commerce has become the preferred consumption pattern for the young and middle-aged population, as well as a mature retail format of health products. Merger and acquisition

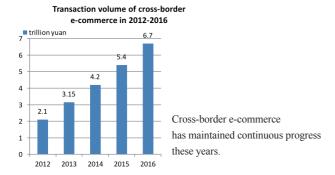
of foreign brands has also become the major investment direction of industrial capital. The new policies, which respect consumers' rights and interests, adapt to market laws, and take into account investment security may make for good governance.

Figures showed cross-border buyer population grew by 82.6% in 2016! As a new motivator, how powerful is cross-border e-commerce?



Cross-border Shopping: Buy, buy, buy! How Much Driving Forces does Cross-border E-commerce Have?

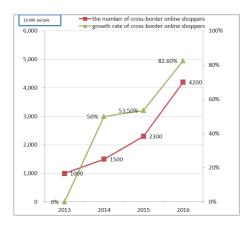
1. How powerful is cross-border e-commerce? Transaction volume of cross-border e-commerce in 2012-2016



China's cross-border e-commerce transaction reached 3.6 trillion yuan in the first half of 2017, a 30.7% increase from the same period of last year, which means cross-border e-commerce imports and exports will become a new source of growth in China's foreign trade.

Structurally, the export e-commercial enterprises accounted for more than 80% of the total cross-border e-commerce in 2016, while the proportion of import e-commercial enterprises were rising gradually. Cross-border e-commerce import and export transactions reached 1.2 trillion yuan in 2016, making a new record of the transaction volume reaching over 1 trillion yuan.

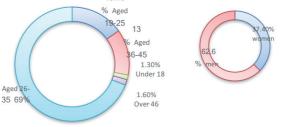
2. Who makes cross-border online shopping with you? 2013-2016



The number of cross-border online shoppers is expected to reach 59 million in 2017.

Ai Haitao (a fan of cross-border online shopping) is a 28-yearold white-collar worker who lives in a first-tier city of China. Though he's a man, he loves shopping on foreign websites. "Come on into my bowl!"





3. Which are the leading pilot areas of cross-border e-commerce?

China has become the world's most active country in terms of cross-border e-commerce.

There have been 13 cross-border e-commerce comprehensive pilot zones across China (Tianjin, Hefei, Dalain, Suzhou, Guangzhou, Qingdao, Ningbo, Chongqing, Zhengzhou, Hangzhou, Shenzhen, Shanghai, Chengdu), which explored plenty of experiences.

Performance Report of 13 Cross-border E-commerce **Comprehensive Pilot Zones**

The imports and exports transaction exceeded 100 billion yuan in the first half of this year, more than twice of that from the same



Sales Channel

period of the last year. Over the past two years, China built more than 400 new third-party platforms and more than 20,000 new cross-border e-commerce import and export enterprises, which helped produce more than two million new jobs.

4. What favorable policies do cross-border e-commerce platforms benefit from?

Since 2013, the State Council has introduced a series of favorable policies to enhance the clearance efficiency of cross-border e-commerce, promote international cooperation in e-commerce, support the establishment of comprehensive pilot zones for cross-border e-commerce, and carry out the supervision policy for the transition period.

The state Council's Main Policies on Cross-border E-commerce in 2013-2016

policy	Release time
Opinions of the State Council on Implementing Relevant Policies of Cross-Border E-Commerce Retail Export	August 2013
Several Opinions of the State Council on Supporting the Steady Growth of Foreign Trade	May 2014
Several Opinions of the State Council on Accelerating the Cultivation of New Competitive Advantages for Foreign Trade	February 2015
Official Reply of the State Council on Approving the Establishment of the China (Hangzhou) Cross-Border E-Commerce Comprehensive Pilot Zone	March 2015
Opinions of the state Council on Vigorously Developing E-commerce and Accelerating the Cultivation of New Engines of Economy	May 2015
Guiding Opinions of the state Council on Promoting Healthy and Fast Development of Cross-Border E-Commerce	June 2015
Guiding Opinions of the state Council on Promoting Fast Development of Rural E-commerce	November 2015
Official Reply of the State Council on Approving the Establishment of Cross-Border E-Commerce Comprehensive Pilot Zones in Tianjin and Other 11 Cities	January 2016

The executive meetings of the State Council made decisions on September 20th, 2017, to select a number of cities with good basic conditions and great potential for development to build new

comprehensive pilot zones and extend the regulatory policy for the transitional period of cross-border e-commerce retail import for one year to the end of 2018.

Data sources: China e-Business Research Centre Edited by: Zhang Tongtong, Xuan Lingling



From "Good to Drink" to "Drink Well" Vegetable Protein Drinks Share a 100 Billion Market Vegetable Protein Leads the Way of a New Health Fashion with Rapid Market Growth

Along with people's pursuit of life quality and increasing demands on health, nutrition and a healthy diet becomes more significant than good taste, which will direct consumption upgrade of the drinks industry toward nutritional and healthy functions in the future, a transformation from "good to drink" to "drink well." Compared with other beverages, vegetable protein beverage has obvious advantages: a better nutrition structure and guaranteed source than animal protein. For these reasons, people favor low-fat and cholesterol-free plant protein resources.

This is reflected in the development trend of the beverage industry. Vegetable protein drink is the fastest-growing industry of all sub-sectors of drink industries since 2007, generating a revenue of ¥121.72 billion in 2016, with a CAGR of 24.5% in 2007-2016 and a

8.79% increase in the share of beverage industry to 18.69%, according to Analysis Report on 2017-2022 Market Demand and Investment Planning of Vegetable Protein Beverage Industry in China released by Qianzhan Industry Research Institute.

As carbonated beverage and dairy drink industries run into the bottleneck with problems of outdated product varieties, weak performance of channels and frequent security issues, the beverage market keeps developing toward "healthy" drinks such as vegetable protein drink, tea and water, etc. The vegetable protein beverage industry is expected to maintain a growth of more than 20% in the next few years, taking the lead in the entire beverage manufacturing market. The market size of vegetable protein drink is estimated to reach ¥258.3 billion in 2020, a continuous rise in the share of beverage industry to 24.2%.



Drinks Fields

Table1: comparisons of beverage industry subdivisions (unit: 100 million yuan, %)

Market size (100 billion yuan)			Market share (%)			2020 prospect forecast			
	2007	2016	Growth rate (%)	2007	2016	growth percentage	Market size	Market share	Average annual growth rate
beverage production	1709	6511	16.02%	100%	100%		10670	100%	13.1%
vegetable protein drink	169	1217	24.51%	9.90%	18.69%	8.79	2583	24.2%	20.7%
tea drink	266	1295	19.23%	15.56%	19.89%	4.33	2281	21.4%	15.2%
drinking water	294	1354	18.50%	17.18%	20.79%	3.60	2442	22.9%	15.9%
drinking powder	148	567	16.09%	8.66%	8.71%	0.05	783	7.3%	8.4%
fruit and vegetable juice beverage	381	1224	13.85%	22.28%	18.79%	-3.49	1580	14.8%	6.6%
soda	451	854	7.35%	26.41%	13.12%	-13.29	1000	9.4%	4.0%

Vegetable protein Drink Industry Sees Fierce Competition Subdivision Industry Leading Enterprises Develop into Comprehensive Enterprises

From the perspective of the competition, the Chinese vegetable protein drink industry has a low concentration in the overall aspect but a high concentration in subdivisions. At present, Yangyuan Drinks

is the largest vegetable protein drink company with a market share of 8.34% in the country, BlueSword, Yinlu Group, Coconut Palm and Chengde Lulu ranked from number two to number five respectively, with a total share of less than 3.5% in the market. The top 10 enterprises in the vegetable protein drink market account for a small share of 24.43% of the industry.





Table 2: market structure of vegetable protein drinks (unit: 100 million yuan, ton, %)

	Date of estab-		Comparison of vegetable protein drinks of all brands in 2015				
brand lishment Brief in		Brief intro	Main varieties	Sales (100 million yuan)	Output (ton)	Market share (%)	
Yangyuan Drinks	1997	IPO application in process	Walnut milk as the main product, walnut peanut milk, nuts milk, almond juice, etc.	91.16	1013870	8.34%	
BlueSword	2003	unlisted	Viee series, nuts drinks	37.00	489509	3.38%	
Coconut Palm	1998	unlisted	Coconut palm brand coconut juice as the main product	29.89	388173	2.73%	
Chengde Lulu	1997	SZ.000848	Almond juice as the main product, wal- nut milk, nuts and walnut milk, peanut milk	27.03	325692	2.47%	
Daliyuan	1992	HK.03799	Peanut milk	19.65		1.80%	
Vitasoy	1991	HK.0345	Vitasoy series	16.05		1.47%	
Yinlu Food	2000	unlisted	Peanut milk as main product	14.50		1.33%	
VV Food	1994	SH.600300	Soymilk series, Tianshanxue dairy products series,	5.59	104439	0.51%	
China Green	2002	HK.00904	soymilk series, walnut milk, peanut milk	4.07	248618	0.37%	
Huierkang	1992	unlisted	Peanut milk	2.19	189848	0.20%	
Top 10 in total			247.13	/	22.60%		
vegetable protein drinks in China			1093.43	/	100.00%		

Drinks Fields

However, from the perspective of industry subdivisions, such as almond milk, coconut juice, walnut milk and others, Coconut Palm "coconut

juice," Lulu "almond milk," Yangyuan "Six Walnuts Milk," Yinlu "peanut milk" and other leading brands occupy more than half of the shares each.



Table 4.Transformation of leading enterprises of vegetable protein drink to comprehensive enterprises

Brand	Main business and products	Major sales areas	Development Strategy	
Coconut Palm	Coconut juice, mineral water, fruit juice, etc.	South China, East China, etc.	Comprehensive drink company	
Chengde Lulu	Vegetable protein drink	North China, Northeast China, etc.	Specializes in vegetable protein drinks	
Yinlu Group	Peanut milk, Mixed Congee, Nestle coffee, etc.	South China, North China, Southwest China, etc.	Comprehensive food and drink company	
Yangyuan Drinks	Walnut milk, walnut and peanut milk, walnut and almond milk, etc.	North China, Southwest, China, etc.	Specializes in walnut drinks	
Vitasoy	Soya drink, tea drink, fruit juice, snacks, etc.	Hong Kong and Macao as main regions, has expanded to mainland China and overseas	Comprehensive drink company	
BlueSword	Vegetable protein drink, mineral water, low wine	Southwest China, East China, etc.	Comprehensive drink company	
Dali Garden	Snack food, beverage	East China, South China as main regions	Comprehensive food and drink company	
VV Food	Food, beverage, grain and oil, wine industry, tea, etc.	North China, East China, and Central China as main regions	Comprehensive food and drink company	
China Green	Fruits and vegetables, grain and oil, aquatic product, poultry meat, tea, etc.	South-East coastal areas, East China as main regions	Comprehensive food and drink company	
Huierkang	Jelly series, Icy Series, mixed congee series, tea series, fruit juice series, yogurt series, milk series, etc.	South-East coastal areas	Comprehensive drink company	
Nanfang Food	Leading brand pf Black sesame soup, launch black sesame drink	South China, Jiangxi province, East China, etc.	Expert in black Sesame sector	
Blackcow Food	Soy milk powder, soybean milk, soya flour, instant cereal mix, sesame soup, walnut powder, peanut milk, etc.	East China and Central China as main regions	Comprehensive food and drink company	



A special section produced by the United Natural Products Alliance

Chinese botanicals as U.S. dietary ingredients: Meeting FDA's GMP requirements

Also:

- U.S. herb sales reach \$7.45 billion
- China chamber helps companies build health businesses
- The consumer demand for 'clean-label' supplements

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As your industry partner, UNPA will help you reach your strategic business goals. The United Natural Products Alliance (UNPA) is an international association representing more than 100 leading natural products, dietary supplement, functional food, and scientific and technology and related service companies that work together to create collaborative problem solving and to enhance market opportunities for its members.

UNPA offers the following key services:

ADVISORY/CONSULTING SERVICES

- Foreign/U.S. investments
- Mergers & acquisitions
- Key contact introductions
- Market intelligence
- Due diligence
- Product R&D
- Business reports
- Scientific & technical services
- Product distribution
- U.S. operations: manufacturing, warehousing, etc.
- Product liability insurance
- Marketing services (translation, materials development, etc.)

BUSINESS DEVELOPMENT

- Distribution
- Analytical testing for vetting ingredients
- Financial consulting/investment
- Marketing services: consumers, trends, purchasing habits
- "Made in USA": How to bring top brands and services to China
 - ...plus much more!

REGULATORY ADVISORY SERVICES

- Food and Drug Administration/Federal Trade Commission/Environmental Protection Agency/Department of Agriculture
- Import requirements
- Food Safety Modernization Act (FSMA), including PCQI/FSVP



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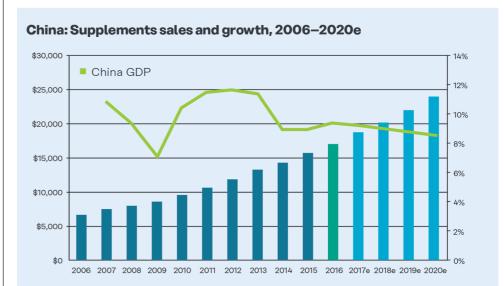
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Supplement sales in China reach \$17.2 billion in 2016



The Chinese market for dietary supplements is outpacing the country's GDP growth. Reaching \$17.2 billion in 2016, a 9.3 percent annual increase, the Chinese market is growing at a much faster rate than the global growth rate of 5.7 percent.

Source: Nutrition Business Journal (\$mil., consumer sales)

China not yet meeting population's TCM needs

While China continues to make progress in meeting the demands of its population for Traditional Chinese Medicine (TCM), according to a report released by the State Administration for TCM, it is not yet able to meet this demand.

China is undergoing its fourth pilot program to survey the national resources of TCM. Since 2011, the program has surveyed about half of the country's administrative divisions, including 1,300 counties thus far. In addition, China has established more than 200 seedling nurseries for growing TCM herbs.

Under President Xi Jinping's Healthy China 2030 blueprint, the Chinese are moving forward with plans to build more TCM clinics and hospitals throughout the country.

According to newly published data, approximately 15 percent of Chinese patients were treated at TCM clinics in 2017. Wang Guoqiang, head of the State Administration for TCM, said the administration planned to build at least one TCM clinic or hospital in every county.

-Nutraingredients-asia.com

Probiotics on the verge of exploding in China

Growth in probiotics is outstripping all other categories in the United States, but on the other side of the world, the market is only just beginning to develop.

In a presentation to the China Health Industry Technology & China Microecological Health Conference, George Paraskevakos, executive director of the International Probiotics Association, and Loren Israelsen, president of the United Natural Products Alliance, discussed the burgeoning boom in the probiotic sector in China. While the majority of probiotics are consumed in the form of yogurt and other fermented products, Chinese consumers are beginning to turn to dietary supplements, as well.

"It is crystal clear that probiotics are on the verge of exploding in China," said Israelsen. "The potential market is vast. Currently consumer education is super low and domestic production is inconsistent."

"The need for standards, quality, external support and advice into the China market is wide open, and I think welcome," Israelsen added. —Nutraingredients-usa.com

China's Feihe International acquires Vitamin World

Chinese dairy and infant formula specialist Feihe International has completed its acquisition of U.S. retailer Vitamin World for an undisclosed sum.

Feihe and Vitamin World will begin immediately to expand the 40-year-old brand into the Asian markets. Vitamin World currently has 156 retail stores throughout the United States and its territories in Guam, Puerto Rico and the U.S. Virgin Islands.

"We are extremely fortunate to have such a strategic partner that not only truly understands our industry, but has the vision and ability to help Vitamin World rapidly gain significant global expansion," said Michael Madden, CEO of Vitamin World.

-Nutraingredients.com

GNC's alliance with Chinese firm to boost brand, market

Harbin Pharmaceutical Group Holding Co., which operates under the name Hayao, has formed a joint venture with GNC to manufacture, market, sell and distribute GNC-branded products in China. The Chinese pharmaceutical company will also invest \$300 million in the struggling retailer and become its largest single shareholder.

GNC is making inroads into the Chinese market via this strategic partnership with one of the leading pharmaceutical firms. Hayao is described as a major Chinese company involved in all facets of pharmaceuticals, from research and development to manufacturing and sales. The board will expand to 11 members, with five members from Hayao and five from GNC, plus returning GNC CEO Ken Martindale. —**Pittsburgh Post-Gazette**

Understanding WeChat is critical to success in Chinese e-commerce, says CHPA director

Exporters of dietary supplements into China need to be familiar with that country's dominant social media platform, WeChat, if they want to thrive, according to Jeff Crowther, executive director of the U.S.-China Health Products Association (CHPA).

Just as in the U.S., social media in China is ubiquitous. Many westerners are connected through channels such as Twitter, LinkedIn, Instagram and of course, Facebook. Many use large review sites such as Yelp or Trip

Advisor and shop online at Amazon. But for all of the reach these sites enjoy, it is nothing compared to the reach WeChat has earned in China, with more than 900 million users per day. WeChat facilitates almost anything a consumer would want to do online in China, Crowther said. For any business wishing to expand its influence and reach in the Chinese market, Crowther asserts, WeChat needs to be a part of the strategy.

-Nutraingredients.com

2018 Trade Shows & Conferences

International Conference on the Science of Botanicals

April 9-12 • Oxford, Miss.

SupplySide East

April 10-11 • Secaucus, N.J.

Medicinal and Health Product Hall Guangzhou Chinese Commodity Import and Export Fair

May 1-5 • Guangzhou, China

Vitafoods Europe

May 15-17 • Geneva, Switzerland

Dietary Supplements Regulatory Summit

May 16 • Washington, D.C.

World Tea Expo

June 11-14 • Las Vegas, Nev.

IADSA 20th Anniversary Week

June 19-21 • London

SupplySide China

June 28-30 • Guangzhou, China

Institute of Food Technologists 2018

July 15-18 • Chicago, Ill.

NBJ Summit

July 16-19 • Rancho Palos Verdes, Calif.

Vitafoods Asia

September 9-11 • Singapore

Natural Products Expo East & All Things Organic

September 12-15 • Baltimore, Md.

China International Import Expo

November 5-10 • Shanghai, China

SupplySide West

November 6-10 • Las Vegas, Nev.

For more information, visit www.unpa.com/events

U.S.-China research partnership on ginseng a sign of new backing for TCM, sources say

The funding of a U.S.-China research partnership focusing on ginseng in healthy aging and immunity is a sign of growing investment behind, and interest in, TCM, according to experts in the field, including from the American Botanical Council (ABC) and the American Herbal Pharmacopoeia (AHP). Both organizations are UNPA Memorandum of Understanding Partners.

Fusheng Pharmaceutical Company Co. LTD, a major pharmaceutical company in Dalian, China, is continuing to fund a research project at Johns Hopkins University studying the effects of the ginsenoside Rg3, a triterpene

saponin that is extracted from Panax ginseng, on aging and immunity. Fusheng, the leading manufacturer of Rg3 in the world, has committed funding through 2019.

"There has been a development happening in the past 10 or 12 years in China to look at the production of modern pharmaceutical drugs from TCM extracts," said ABC founder and Executive Director Mark Blumenthal. "Rg3 is one of many ginsenosides found in Asian ginseng and American ginseng. This could potentially stimulate more research and could push back on other ginseng extracts."

Roy Upton, founder and executive director of AHP, noted that when Chinese researcher Tu Youyou won the 2015 Nobel Prize in Medicine, it convinced the Chinese government to support further research into TCM.

"Unfortunately, in the East, there is a sense that Chinese herbal medicines or the research that goes into them are inferior to Western drugs and so, rightfully or not, there is a desire to conduct Chinese herbal medicine studies according to what they feel reflects the gold standard in medical research," Upton

said.—Nutraingredients.usa.com

U.S. 2016 herbal supplement sales increase 7.7 percent

By Stephen DeNorscia

Consumers in the United States spent an estimated 7.7 percent more on herbal dietary supplements in 2016 than in the previous year, according to the recently published *HerbalGram* "Herb Market Report." The report, published by The American Botanical Council (ABC), highlighted the fact that the total sales exceeded \$7 billion for the first time and was the 13th consecutive year of growth in the dietary supplement industry.

The year saw the second-highest growth rate for retail sales of herbal supplements in more than a decade. U.S. consumers spent an estimated \$7.45 billion, an increase of approximately \$530 million from 2015.

In addition to the 7.7 percent increase in total sales of herbal supplements for 2016, retail sales increased for the eighth consecutive year in each of the three primary market channels: mass market, natural and health food retail stores, and direct-to-consumer. Mass-market sales growth is estimated to be 11 percent and totaling \$1.3 billion. Retail sales within natural and health food outlets increased by 6.4 percent, with sales of \$2.5 billion, while direct-to-consumer sales recorded an increase of 7.3 percent, with an estimated sales volume of \$3.6 billion.

The report, which tracks U.S. retail sales data compiled from multiple sources within the natural products industry, also focused on the top-selling herbal supplements within the mass market and natural channels. For the fourth consecutive year, horehound (Marrubium vulgare, Lamiaceae) was the top-selling herbal supplement in mainstream retail outlets in the United States. Sales of horehound supplements, which include cough drops and lozenges with horehound as the primary ingredient, totaled \$125.5 million in 2016. The category logged a growth rate of approximately 9.3 percent on an estimated sales increase of \$10.7 million.

Wheatgrass (*Triticum aestivum*, *Poaceae*) and barley (*Hordeum vulgare*, *Poaceae*) experienced the strongest mainstream sales growth in 2016, with a 131.9 percent jump in sales from 2015.

Three other ingredients experienced mainstream sales increases of more than 50 percent: boswellia (Boswellia serrata, Burseraceae—up 118.7 percent), turmeric (Curcuma longa, Zingiberaceae—up 85.5 percent), and fenugreek (Trigonella foenum-graecum, Fabaceae—up 52.1 percent). This growth is less pronounced than the sales increases seen in 2015, in

which mainstream sales for each of these herbs more than doubled from 2014.

Within the natural and health food retail channel, turmeric was the top-selling herbal supplement for the fourth consecutive year, with sales of \$47 million in 2016. This represents a 32 percent increase in sales, which was the third-highest increase of any of the 40 top-selling herbs in this channel.

Since 2011, sales growth of combination herbs has outpaced that of single-herb supplements, and this trend continued in 2016. Combination-herb supplement sales in all channels grew 10.1 percent from 2015, and single-herb supplement sales increased by 6.1 percent.

The report suggests that consumers, from casual shoppers in mainstream retail outlets to core consumers of natural products, are continuing to turn to plant- and fungi-based options for their health care and self-care. The shift in sales of specific ingredients points to evolving preferences for more single-herb supplements.

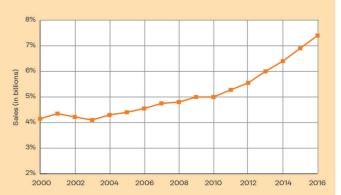
To access the full report, visit http://cms.herbalgram.org/herbalgram/ issue115/hg115-herbmarketrpt.html

Total U.S. retail sales of herbal supplements

	2014	2015	2016	% change from 2015
Mass market	\$1.116	\$1.204	\$1.336	+11.0%
Natural & health food	\$2.186	\$2.356	\$2.506	+6.4%
Direct sales	\$3.139	\$3.363	\$3.609	+7.3%

The mass-market channel saw the largest growth in herbal supplement sales for 2016, underscoring growing consumer acceptance of herbs for health care and self-care.

Source: Nutrition Business Journal (\$bil.)



The "Herb Market Report" shows that 2016 was the 13th consecutive year of growth for herbal supplement sales in the U.S.

Packaging trends to help meet consumers' 'green' expectations

THE SCIENCE OF PACKAGING

By Brent Anderson

Personal beliefs and a collectivist culture will shape 2018's top packaging trends, as many consumers are becoming more conscious of their own behaviors, according to market research company Mintel.

Because of this, dietary supplement brands are utilizing packaging to help make connections with their consumers, especially when it comes to connecting on a "green" level and conveying a brand message around environmental issues. Why? Mintel's "Global Packaging Trends 2018" report states that consumers are beginning to better "understand the balance between their own health and that of the environment ... demanding greener, healthier life solutions from brands."

Here are two ways for brands to address these trends through their printed packaging.

Eco packaging

Environmental issues have been a focal point in the news media and public consciousness over the past few years, drawing passionate responses on all sides of the discussion. Increasingly, consumers are aware that their daily purchasing decisions impact the macro environment. Remember the checkout question: "Paper or plastic?" That's why packaging's role in sustainability is most apparent in the area of the materials used.

Folding cartons and labels can be produced with post-consumer recycled materials and sourced through sustainable-certified paper suppliers with SFI

(Sustainable Forestry Initiative), FSC (Forest Stewardship Council) or PEFC (Programme for the Endorsement of Forest Certification) oversight.

Likewise, plastics can be sourced from suppliers with programs to recover and reuse materials from the ocean. Companies, such as method home and Coca Cola, prominently feature this messaging to tell a story about their brand and mission.

So, what can brands do to further their commitment to eco packaging? Utilizing recycled materials is one option. Another often overlooked option is StretchPak, which provides an alternative to the traditional rigid clamshell or blister plastic. The StretchPak reduces plastic usage by utilizing a thin, PVC-free film paired with a printed card, all while providing product visibility and protection.

Extended copy requirements

For supplement brand holders or copackers, keeping up-to-date with regulatory requirements on packaging can be daunting, especially for brands

that are selling internationally. As these companies face increasing

requirements for information on their packaging and look to reduce the complexity of managing country-specific stock-keeping units, extended-content packaging is growing in application.

Multipanel labels, for example, can extend copy space on primary labels from between 200 and 1,600 percent. This enables primary packaging to

contain all of the necessary regulatory information and/or multiple languages, while utilizing existing manufacturing equipment and label applicators. There are also options for expanding content areas on or within a folding carton, which include fifth- and sixth-panel cartons, as well as combination packaging, such as Nosco's Lit-a-Sure.

Fifth- and sixth-panel cartons extend copy area with a header card that folds over and tucks into itself. The Lit-a-Sure option, on the other hand, offers the ability to pre-attach instruction package inserts to a carton. This eliminates the need to manually insert instructions on the packaging line and allows for automated scanning, verifying the presence and correct item number for each insert and carton combination.

Nosco is a printed packaging company offering complete packaging and individual solutions to companies in the dietary supplement market. For more information, contact Natural Health Market Leader Brent Anderson, banderson@nosco.com, 847.504.6409.





Sirio Pharma: On the cusp of global supplement trends

Dietary supplement companies looking to create products and do business internationally face a daunting task to understand not only regional trends and markets, but also all of the regulatory and quality requirements from market to market. Choosing a contractmanufacturing partner is a viable option to help provide some of this market intelligence.

Sirio Pharma is a Shantou, Guangdong, China-based, integrated contract manufacturer for the dietary supplement industry. The company is one of the few that offers global operations with development and manufacturing capabilities spanning all dosage forms, from softgels and nutraceutical gummies to functional beverages. The forward-looking company has 24 years of professional experience in supplement manufacturing, quality management and product R&D.



Rui Yang

In this Q&A with UNPA Asia Report, Rui Yang, Sirio's chief science officer and executive vice president, discussed the importance of quality, the global dietary supplements market and staying ahead of

innovation, science and market trends.

UNPA Asia Report: Sirio Pharma has a strong quality mission. What are some of the key quality assurances that you have in place?

Rui Yang: For us, quality is a constant motivation, not a destination. Starting as a pharmaceutical business, Sirio appreciates the strict controls needed when it comes to quality management from the sourcing of raw materials, along the entire supply chain to the end market. Standardized quality assurance of all products, combined with continuous monitoring and optimized processes, is a central component of our quality management. In this way, Sirio guarantees safe, high-quality products for its customers around the globe.

Additionally, Sirio utilizes effective quality management monitoring throughout the entire production process to prevent any contamination or deviation from quality standards.

UAR: What are some of the biggest challenges of doing business in many different markets?

Rui Yang: Regulations vary from country to country. We must get familiar with different markets'

regulations to support our customers with their global business. In addition, customers from different markets are in need of different products and services. Therefore, we must understand local market trends, maintain close and frequent communication with customers and offer products and services that exceed their expectations.

UAR: Contract manufacturers are often ahead of the curve in product manufacturing trends. What are some of the current trends you see?

Rui Yang: We all see that consumers want personalized products, something new and a more convenient package. Furthermore, they want products supported by nutraceutical science, that are more food-like and not a burden to take. As a contract manufacturer, our aim is to bring something new and attractive to customers to support their growth and

industry development. We continuously



UAR: How can you help U.S. companies that want to manufacture and distribute products in China?

Rui Yang: The Chinese market develops very quickly, and the potential is tremendous. China's cross-border business provides U.S. companies with convenient conditions to enter the Chinese market. However, China's regulations, distribution, consumer structure and product portfolio differ from that in U.S. We understand those issues and have the ability to give U.S. companies advice, help them avoid risk and find advantageous strategies.

For more information, visit http://en.siriopharm.com.





UNPA announces new China partnership agreement and executive member

Association welcomes CCGB as a new member and CCCMHPIE as its newest MOU partner

By Frank Lampe

In its continuing efforts to create long, lasting relationships with organizations and companies in China, to promote Sino-U.S. trade and to assist in improving the quality of the ingredients and products from China, the United Natural Products Alliance (UNPA) has announced the signing

of a memorandum of understanding (MOU) partnership with the China Chamber of Commerce for Import and Export of Medicines and Health Products (CCCMHPIE). (See related article, page 11).

The partnership agreement with CCCMHPIE additionally aims to facilitate the development of the Traditional Chinese Medicine, dietary supplement and natural health products industries in both China and the United States.

The CCCMPHIE agreement joins 14 other MOU partnerships, which allows UNPA to



MOU partnerships help UNPA organize its key objectives and work plans.



organize its key objectives and work plans through partnerships that bring expertise, influence and trusted reputations. By laying out its joint objectives via an MOU, UNPA is able to serve the needs of its members and its industry stakeholders with greatest effect and efficiency.

"We are very impressed by the CCCMHPIE professionalism, the speed at which it works and its clear maturity and experience in dealing with foreign governments, trade associations and scientific and technical bodies," said Loren Israelsen, UNPA president.

"It is the working equivalent of the U.S. Chamber of Commerce plus the Department of Commerce interface between government and industry," he added. "We have several specific activities we are working on together, including two big trade shows and one international trade fair sponsored by the Chinese government. This will be a very productive MOU relationship for UNPA and the U.S. dietary supplement industry."

New executive member

Additionally, UNPA is pleased to welcome Lu Chenguang Biotech Group Co. Ltd., based in Quzhou, China, as its newest executive member. The firm operates under the trade name CCGB.

The company, founded in 1998, produces a wide range of ingredients, including

natural colors, natural spice extracts, essential oils and nutritional products, such as lycopene, lutein, green coffee bean, grape seed extract, red yeast rice powder, capsaicin, ginkgetin and astaxanthin, among others. CCGB exports its products to Europe, North and South America, Australia, the Russian Federation, Japan, Korea, India and Southeast Asia.

"We are pleased to welcome CCGB to the UNPA family," said Israelsen. "I have visited CCGB's primary facility—which is impressive—and have gained great respect for its commitment to our industry, to sustainable agriculture practices and its desire to advance as a leader on the global stage."



Meet the UNPA staff: Loren Israelsen



Loren Israelsen

When Loren Israelsen was a young man, he lived in Asia. And while there, everywhere he went, he met people with a reverence for the natural world and respect for their elders and who openly accepted a young

foreigner. This left a lasting impression on him that he carries to this day

That experience is one of the reasons why Israelsen is so passionate about working to bridge the natural health traditions and industries between China and the United States and to build long-lasting partnerships that will benefit consumers in both countries.

Israelsen is a lawyer by training, and it was in his capacity as in-house counsel for Nature's Way Products, one of the early Utah dietary supplement companies, that he saw how urgent it was to create a legal category within the federal government to protect

consumers' access to vitamins, herbs and all other dietary supplements.

This engagement led Israelsen, Nature's Way and seven other Utah supplement companies to form the Utah Natural Products Alliance in 1992 to address this growing problem. The association's name was changed to the United Natural Products Alliance (UNPA) in 2005 in recognition of the organization's national and international membership base.

Due in great part to their collective efforts, the landmark Dietary Supplement Health and Education Act, known as DSHEA, was passed and is credited with creating the modern dietary supplement industry in the United States.

Twenty-six years later, Israelsen still leads UNPA as president. The organization now represents more than 100 best-in-class companies around the world, with a focus on regulatory and legislative advocacy, education and best practices.

He continues to be an ardent advocate for strong quality standards and bringing together organizations from around the world, particularly from China, to create a community of honorable, highly regarded businesses that respect their cultural traditions while serving natural health consumers everywhere.



UNPA is headquartered in Salt Lake City, Utah



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- . Food Regulation and Registration in China
- Omega-3 Workshop
- · Children's Nutrition
- NDI or GRAS?
- Transparency in Labelling & Country of Origin Labelling
- Clean Label

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Beijing Tong Ren Tang: Interpreting TCM for a new generation

Many companies strive to bring products based on ancient Chinese medicinal wisdom into the modern era, but few have been around as long as Beijing Tong Ren Tang Chinese Medicine Company Ltd.

Founded in 1669 to provide Chinese medicines for emperors and royal families, the company is now a Hong Kong-based retailer and wholesaler, with more than 2,000 Chinese medicine and healthcare products, a business spanning 20 countries and annual revenues of more than U.S. \$161.3 million. With the growing importance of Traditional Chinese Medicine around the world, the company is uniquely positioned to propel awareness and usage of these products to an increasingly receptive global audience.

But adapting ancient products over three centuries to make them relevant in the modern global market is no easy undertaking.

The company's historical pedigree is like few others. Beginning in the 8th year of the Emperor Kangxi of the Qing Dynasty, noted imperial physician Dr. Yue Xianyang set up the Tong Ren Tang Drugstore in Beijing. His philosophy, and the company's name, is based on the expression of Tongren, derived from the Book of Changes by Confucius, about the concepts of harmony and selflessness.

Spanning three centuries



Edna She

In keeping with this philosophy, the company states both an economic and cultural mission—to develop, manufacture and sell products, as well as serve the people by educating them to live in a healthy

way, noted Edna She, regulatory affairs specialist for the company.

She attributes Tong Ren Tang's success to the fact that it has stayed true to its roots, while also managing to innovate and adapt to modern demands and standards.



Pictured: A Tong Ren Tang wellness center (above) and a manufacturing facility (right).

Employees of the company, she explained, understand that they have to respect these traditions but don't necessarily have to stick with everything.

"We have to innovate new products, but not forget the origins as we manufacture high-quality and effective products. For example, She noted that the company's herbs are processed using 20 kinds of work operations and 52 processing methods that follow ancient code, while combining modern pharmaceutical technology for quality standards (the company has production lines that are certified under Australia Therapeutic Goods Administration and European GMP standards).

A widening platform

The strategy has worked well in China, Hong Kong, Macau and Taiwan, and Tong Ren Tang's recognition is now growing throughout Southeast Asia and Australia. The company has become a leading Chinese medicine product retailer and now sells more than 800 products overseas in more than 100 pharmacies. Among its best sellers are Kunbao Pill, a popular formula for women to ease menopause symptoms, and Ganmao Qingre Granule, which is used in relieving cold and fever.

In 2014, the company broadened its health services with the introduction of Chinese wellness centers to provide onestop medical and wellness treatments for young, upscale consumers, who are receptive to Chinese medicine and personalized treatment programs.

As its awareness rises in Asia, She said the company is setting its sights on business development in Europe and the United States. With the growth of American and European interest in both physical and mental balance from natural products, she said, "we see the most potential for development in these markets."

For more information, visit https://www.tongrentangcm.com/en/index.php.



China health products chamber plays varied role for domestic, foreign companies

Chamber's broad mandate helps foreign companies establish business, serves as industry advocate

By Karen Raterman

Over the past decade, China's market for medicines and health products has seen double-digit growth, making China not only one of the largest global markets for these products, but also one of the fastest-growing markets in the world. The China Chamber of Commerce for Import and Export of Medicines and Health Products (CCCMHPIE) is, perhaps, the trade association that has helped to facilitate this market expansion. Its mission is to promote international trade and cooperation in medicinal and health products, facilitating both import and export.

The United Natural Products Alliance recently signed a Memorandum of Understanding Partnership with CCCMHPIE (see article, page 8).

Founded in May 1989, CCCMHPIE operates directly under the Ministry of Commerce of China. It currently boasts a diverse membership of more than 2,400 companies, including most of the major manufacturers and trading companies of pharmaceutical and health products in China, and it covers a wide range of products, from Traditional Chinese Medicine and pharmaceuticals to nutraceuticals, functional cosmetics and health products.

The group has a broad mandate. First, it helps international companies build, sustain and grow their businesses in the country. Through its vast network of membership and extensive coverage of geographic areas throughout China, the agency assists foreign companies to successfully export their products, establish their business locally and source products in China.

"For international companies, the greatest barrier is that they don't have sufficient knowledge about the Chinese market, the law, regulations and standards in China," said Zhongpeng Zhang, director of the National Technical Service Center for Trade at CCCMHPIE. "To enter the Chinese market, companies have to understand the policy environment, market needs and habit of use in China." It is also helpful to understand the history of health products in China, features of traditional health products and future market development in China, he added. CCCMHPIE can be a partner in gaining this knowledge.

Ongoing regulatory efforts, including Blue Hat

CCCMHPIE is active on the regulatory front, as well, working to formulate and implement government policies regarding the import and export of medicines and health products. The association serves as the voice of industry, representing concerns of business to all levels of government. The group lobbies the government on trade issues via a number of channels, including face-to-face

meetings with governmental departments and participation in government task forces and special committees, as well as conducting original research. CCCMHPIE also takes part in bilateral and multilateral talks between the Chinese and foreign governments on medicinal products.

One of the most difficult tasks for companies entering the China market is its Blue Hat certificate program, which requires a "registered" or "filed" approach, depending on the type of ingredient used in the product. CCCMHPIE can provide important insights on this program, such as which products can be filed and which must be registered, Zhang noted. "In accordance with regulations on registering and filing health foods, the following products can be filed," he



CCCMHPIE conducts seminars and workshops for companies on policy interpretation and market analysis.

said. One group is health foods, whose ingredients have been listed in the catalog of health food ingredients. The second is first-time imported health food that falls into the category of nutrients, such as vitamins and minerals. "The first-time imported health food should have the nutrients of supplementary vitamins and minerals included in the catalog of health food ingredients. The others should be registered," Zhang explained.

The trade group is also entrusted by the Chinese government to handle a broad spectrum of additional functions. It organizes the tendering of export quotas for medicinal and health products and implements government programs to assist small- and medium-sized Chinese companies in their effort to break into international markets, as well as develop government strategies to create export bases for medicinal products.

Belt and Road Initiative

One of the initiatives that the Chamber is participating in is a broader program in China called the Belt and Road Initiative, which is considered one of the biggest foreign spending programs since that implemented after World War II. The program is designed to promote trade growth, energize two-way investment and support inclusive and sustainable development by creating relationships between "Belt and Road" countries,

including countries in Southeast Asia, South Asia, Central and Western Asia, the Middle East, Africa, and Central and Eastern Europe.

According to CCCMHPIE, participants in the initiative recognize the importance of promoting a more dynamic, inclusive and sustainable economic globalization and work to resist protectionism, as well as promote unimpeded trade cooperation.

As a part of these initiatives, CCCMHPIE develops specific trade strategies for industry. This includes organizing and participating in trade fairs throughout the year, including the Medicinal and Health Product Hall at the Guangzhou Chinese Commodity Import and Export Fair, the second largest fair in the world.

The Chamber will also be involved in a new forum in 2018, announced by President Xi Jinping at the Belt and Road Forum last year. The China International Import Expo will take place Nov. 5-10, 2018, at the National Exhibition and Convention Center in Shanghai. The forum will target participants with advanced medical equipment, biopharmaceuticals, health products and cutting-edge biotechnology. The Medical Equipment and Health Care Products hall will focus on products such as medical equipment, bio and pharmaceuticals, nutrition and supplements and welfare and elderly

care products and services. The expo will also include seminars and workshops on policy interpretation, market analysis, new products and technologies, as well as supply and demand matchmaking and technical consultation on market access, among other topics.

Quality standards and guidance

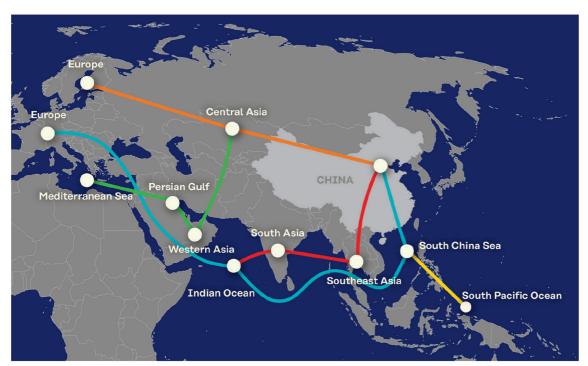
In addition to creating platforms for Chinese and foreign companies to connect, one of CCCMHPIE's key responsibilities is to formulate quality standards for export products, such as its "Green Trade Standards of Imported and Exported Medicinal Plants and Preparation." This program has been adopted by the government and now has widespread international recognition.

The organization is also a leader in providing prompt and effective guidance to Chinese companies facing anti-dumping and countervailing measures. In the past several years, Chinese medicinal products have been a major target for anti-dumping allegations. CCCMHPIE has successfully helped its members defend legitimate interests in trade disputes.

Overall, CCCMHPIE plays an important and active role in promoting the commercial credibility of its members. It recommends exemplary companies and their product to overseas buyers, using a system of evaluation that has helped

> to create a credible environment for doing international business.

> For more information, visit the CCCMHPIE website: http://www.cccmhpie.org.cn/English/default.aspx.



China's Belt and Road Initiative seeks to build inclusive trade practices between Asia, the Middle East, Africa and Eastern and Central Europe.



By James Neal-Kababick

Since 2007, the U.S. Food and Drug Administration (FDA) has implemented the final rule for current Good Manufacturing Practices (cGMP) of dietary supplements, which established that botanical ingredients used as dietary supplements must meet requirements for strength, identity, purity and potency and be free from reasonably anticipated contaminants, such as pesticides, solvents, pathogens and heavy metals.

In subsequent years, U.S. manufacturers have expanded their testing requirements for dietary ingredients used in supplements to conform to this rule. This has caused a great deal of confusion for many botanical importers as they have been faced with increasing demands for documentation and data to support ingredient quality.

This article will address the most important initial test that all manufacturers of dietary supplements must conduct or have done on their behalf—identity testing—and look at the unique challenges of Chinese botanicals from this aspect.

Challenge of Chinese botanicals

China benefits from one of the oldest botanical healing modalities—Traditional Chinese Medicine (TCM). In TCM practice, a large number of plant, animal and mineral drugs are used to treat patients. One of the commonly accepted practices of TCM is botanical substitution. That is, when one botanical is not available for a treatment plan, a different botanical with the same type of properties may be substituted within reason. This is often the case when practitioners are in different regions or attempting collection in different seasons.

The practice of species substitution, while perfectly acceptable in TCM, is not allowed in the United States under the current regulations. In the U.S., all botanical ingredients must be listed by their Latin binomial and include the plant part used. The exception to using the Latin binomial is the use of a secondary common name. The regulations reference Herbs of Commerce for secondary common names associated with specific Latin binomials.

Perhaps the most disastrous result of species substitution was in the late 1990s. About 100 patients in Belgium developed end-stage renal failure and many also developed kidney or bladder cancer. The causality was linked to the substitution

of Stephania tetrandra with Aristolochia fangchi. The manner in which the botanical was utilized was not keeping with traditional TCM methods, where the plant would have been used in a decoction, resulting in less user risk. There are other examples of species substitution in the U.S., as well. Suffice to say that while this practice is allowed within the scope of TCM, it must never be practiced when marketing botanicals in the U.S. market.

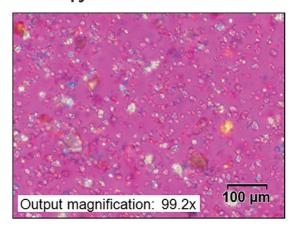
Another common problem arises from confusion over TCM names. Many

botanicals may have similar and easy-toconfuse Chinese names. Take the prior example. When a company asks for Fang Ji, they probably want Han Fang Ji (Rx. Stephania tetrandra) but may be getting Guang Fang Ji (Aristolochia fingchi). These misunderstandings are usually not intentional but arise from confusion over what is being sought by the buyer.

Identity testing

Under the dietary supplement cGMPs, FDA states that at least one identity test must be conducted to ensure proper identity. However, one test may not be enough. It may depend on issues surrounding the botanical offered. The most commonly utilized methods in the United States for identity testing are macroscopic examination, microscopical examination and high performance

Stephania microscopy polarize-light microscopy with first-order red filter



Stephania sample showing atypical calcium oxalate crystals, which indicates Aristolochia spp adulteration.

thin layer chromatography (HPTLC). However, both microscopy and HPTLC require specialized training and years of experience to master.

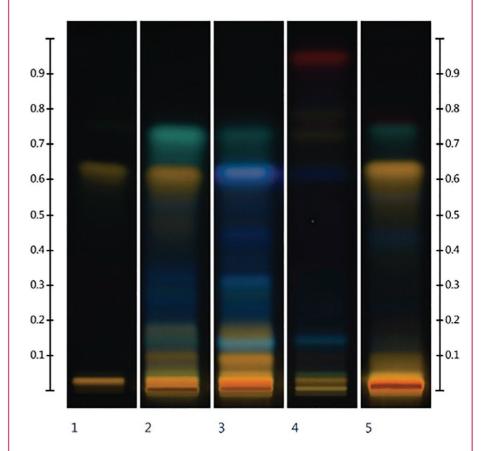
In the case of whole botanical material (whole ginkgo leaf, for example), macroscopic examination—comparing the physical appearance to the profile for authentic material—would be adequate. However, when a botanical is processed further into a tea cut or powder, macroscopic examination is not adequate. The use of microscopy and/or HPTLC is a good choice here. There is a trend toward utilizing both, as one test will detect things that the other misses and vice versa.

Identity of an extract is more complicated, especially TCM extracts, since many are made using traditional decoction techniques that render a chemical profile different than a lab-prepared, methanol-extracted botanical. For that reason, it is important to know how the extract is prepared. This requires good communication between seller and buyer or their laboratory. The laboratory must prepare references that are consistent with the extraction process utilized by the manufacturer.

Additionally, if excipients, such as maltodextrin, lactose, cellulose powder or dicalcium phosphate, are utilized, this must be declared. For example, if astragalus extract is prepared using the decoction method and dried on maltodextrin, then the identity test should be for water-extracted astragalus dried on maltodextrin and not just for astragalus. The additional metric of the carrier needs to be confirmed by microscopy and perhaps by Fourier-Transform infrared spectroscopy.

When a product is a standardized extract, it gets even more complicated. Take, for instance, gingko standardized to 24-percent flavonoid glycosides and 6 percent terpene lactones. Identity is not just for ginkgo leaf but also for ginkgo leaf extract and, in particular, for a 24/6 extract. One has to consider the limitations of the identity test and whether or not a single test will ensure proper identification. In this case, an HPTLC profiling method capable of detecting

Ginkgo aglycone profile by HPTLC showing adulteration of sample



Lane 1: standard, Lane 2: adulterated sample, Lane 3: authentic extract, Lane 4: authentic leaf, Lane 5: Sophoroa japonica leaf. Note the large yellow band and minor yellow band from sophora (Rf 0.62, ~Rf 0.5), along with other bands indicative of ginkgo extract. This indicates a ginkgo extract adulterated with sophora extract.

admixture with free aglycones, including those from sophora spp., is needed. Thus, both a standard HPTLC glycoside profile and an aglycone profile are desired and illustrate when a single ID test is not sufficient to ensure proper identity.

Establishing stateside partners for quality control

In many cases, it may benefit the vendor to establish a relationship with a stateside expert, such as a natural products testing laboratory or university, to determine acceptable testing protocols to meet cGMP regulations. Having U.S.-based laboratory data can benefit the seller and increase confidence in the botanical ingredient being sold. Further, by working with a partner in the U.S., who understands your products and how they are made, can really help when problems such as conflicting laboratory results arise.

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industry. He is recognized globally for pioneering work in phytoforensic science and the advancement of analytical techniques for dietary supplement analysis. For more information, visit www.floraresearch.com.



The growing impact of the clean-label movement on the supplement category

Manufacturers seek botanicals and natural additives to meet consumer demand

By Karen Raterman

It is increasingly clear that consumers around the globe want "clean" ingredients, that is, ingredients with no artificial preservatives, sweeteners, flavors and no colors from artificial sources, in the products they purchase, as well as transparency about those products. As this trend spreads globally, it is also expanding to new product categories—and supplements and nutraceuticals are no exception.

But understanding what this means for a specific product or brand is difficult because there is no universal definition of a clean-label product, and the term means different things to different consumers.

Defining clean label

Research firms Nielsen and Label Insight have worked to put some parameters around the clean-label trend, noting four key segments:

- Products that are free from artificial ingredients, such as colors/ flavors, sweeteners and preservatives
- Products that are free from undesirable ingredients
- Products that contain recognizable and fewer ingredients
- Sustainable products, including those that are non-GMO, certified organic, sustainable, fair trade and humane.¹

There is also growing evidence that these clean-label attributes are having a big impact on product purchasing behavior. According to the

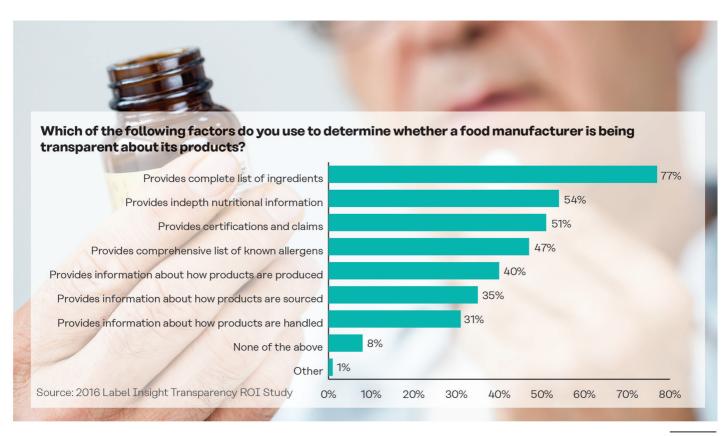
Nielsen Transparency Insight study, 73 percent of consumers say they feel positive about brands that share information on the "why behind the buy," and 68 percent say they are willing to pay a premium for products that don't contain ingredients they perceive negatively.

Clean labels for supplements

It is also evident that demand for transparency is moving beyond food and beverages into new segments, such as dietary supplements, pet products, cosmetics and personal care.

"If you take any hot-button issue that would drive consumer influence and purchasing decisions, you have to peel back whatever key ingredients are being used and look at it through a new filter," said Steve Peirce, CEO of ingredient supplier Ribus. "People are now picking up all kinds of products and looking at the ingredient list. They want to be able to pronounce what's on the label and have some idea where these ingredients are coming from."

According to the Transparency Insight study, use of transparency-related claims in supplements and personal care products is expanding and reached double-digit growth between 2016 and 2017. Organic supplements lead the growth at 25 percent, while "natural" presence in supplements saw 11 percent growth, and natural and botanical extracts in personal care jumped 13 percent.³



The shift toward new categories is having a significant impact on supplement ingredients, from active ingredients to excipients. For example, botanical ingredients, which already are perceived to be "clean," are now seeing use in new product segments and as a potential alternative to animal-based proteins.

Botanicals have clean image

As consumers seek more protein in their diets, manufacturers are looking for new protein sources, which is leading to the use of botanical ingredients, such as fava beans and pumpkin-seed protein, in functional foods.

"If you don't want to use animal-based proteins in a product, these are good, viable options," said Randy Kreienbrink, vice president of marketing for BI Nutraceuticals. "I would say botanicals are pushing the envelope in all of these areas. Science, clean label and transparency are all growing, and there is more validation for herbs and these different uses," he added.4

Animal proteins in supplements and nutraceuticals are an area ripe for a cleanup, noted Jeffrey Brams, general counsel and vice president of product development, science and international, for supplement maker Garden of Life. "Collagen as a category is enjoying a huge renaissance for energy," he said. "But the way most cows and chickens are farmed, it's challenging for an ethical brand to get behind an ingredient with collagen. There is definitely an opportunity to create farming practices that are sustainable and non-GMO, as well as ingredients without soy, hormones and all the other aspects we care about in the meat and poultry aisle. It would be nice to see cleaner ingredients showing up in collagen supplements, bone broth and other products." 5

"68 percent are willing to pay a premium for products that don't contain ingredients they perceive negatively."

New focus on binders, excipients

As the clean-label trend gains momentum, supplement manufacturers are also looking to replace traditional additives, such as binders, excipients and emulsifiers, with more natural alternatives. And while the supplement industry has had a few years to observe market trends and seek non-GMO substitutes, for example, the spotlight has now turned toward manufacturing processes and a careful review of additives.

Brams noted that the clean-label phenomenon is long overdue, especially in the supplement category. It's not hard to make a tablet, he said, but the industry has been using the same technology and the same binders and excipients for many years. "Shouldn't the products we provide be different from what you can get in the over-the-counter and drug aisles of stores?" 6

Garden of Life didn't manufacture tablets for years because it couldn't find additives that met its standards. Brams explained that Garden of Life's ingredients have to be fully traceable, certified organic and Non-GMO Project Verified. "It requires discipline, but we are several steps further down the road."⁷

Ingredient companies such as Ribus are working to replace additive ingredients by developing rice-hull-based options, such as its Nu-Flow and Nu-Rice, which serve as binders and flowing agents. It also offers a new, rice-based substitute for magnesium stearate called Nu-Mag. Like Nu-Rice, it is a blend of rice extract, rice hulls, gum Arabic and sunflower oil to provide a lubricant similar to stearic acid. All the Ribus ingredients are label friendly because they are made from rice-bran extract.⁸

Transparency demand exists beyond food and beverages Vitamins, Minerals and Supplements 25% 20% 15% 10% 5% 0% Organic **Probiotics** Natural Presence Annual dollar growth (%) with transparency claims **Personal Care** 20% 15% 10% 5% 0% Natural not Natural no Natural. artificial botanical artificial colors fragrances extracts Annual dollar growth (%) with transparency claims Source: Nielsen Product Insider, powered by Label Insights, 52 weeks ended April 15, 2017.

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Talk furthur about Health Products Bring health support to Consumer by Scientific evidence



