Eurofins, NASC, UNPA

- China Update: Market and Geopolitical Overview
- China Supply Chain Initiative with Eurofins China

October 2020

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UNITED NATURAL PRODUCTS ALLIANCE®

QUALITY SEAL
nasc
NATIONAL ANIMAL SUPPLEMENT COUNCIL®

- UNPA received the Market Development Cooperator Program (MDCP) grant from the International Trade Administration to help fund the effort to address non-tariff barriers in China, especially the Blue Hat system and animal sourced ingredients.
- UNPA/NASC have worked closely with U.S. Commercial Service over the past 3 years. Met with the U.S. Ambassador to China to discuss ways to boost exports of natural health products to China.

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China Market Overview

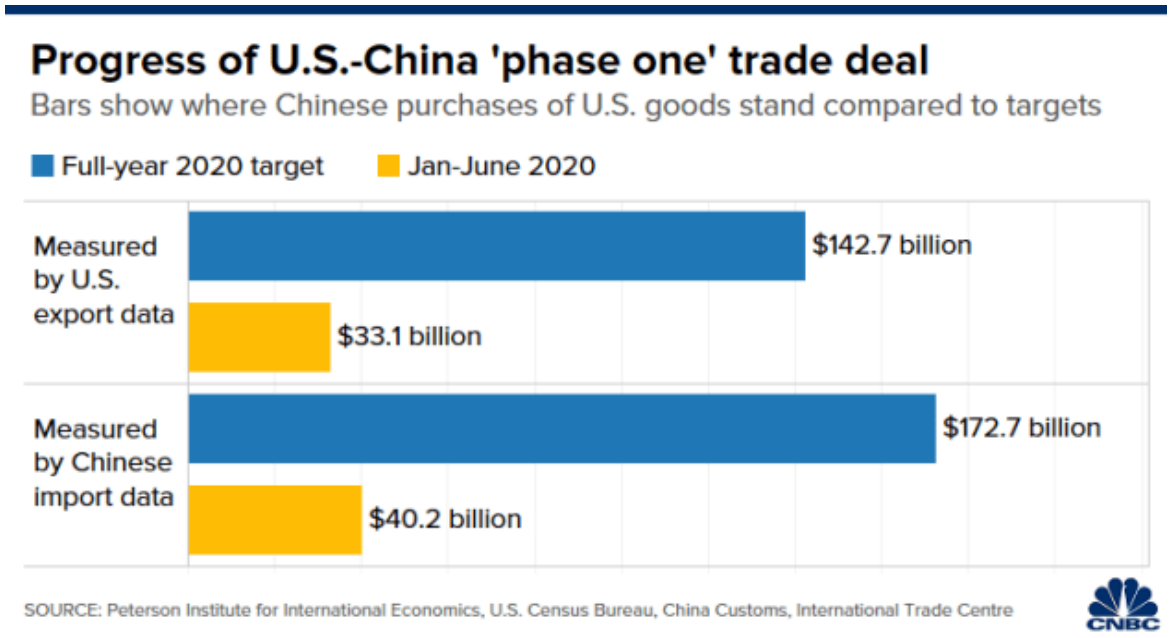
NBJ estimated that the China's supplement market surpass $20 billion in 2019 and is growing at an annual 7.5% - this includes Blue Hat and cross-border ecommerce (CBEC).

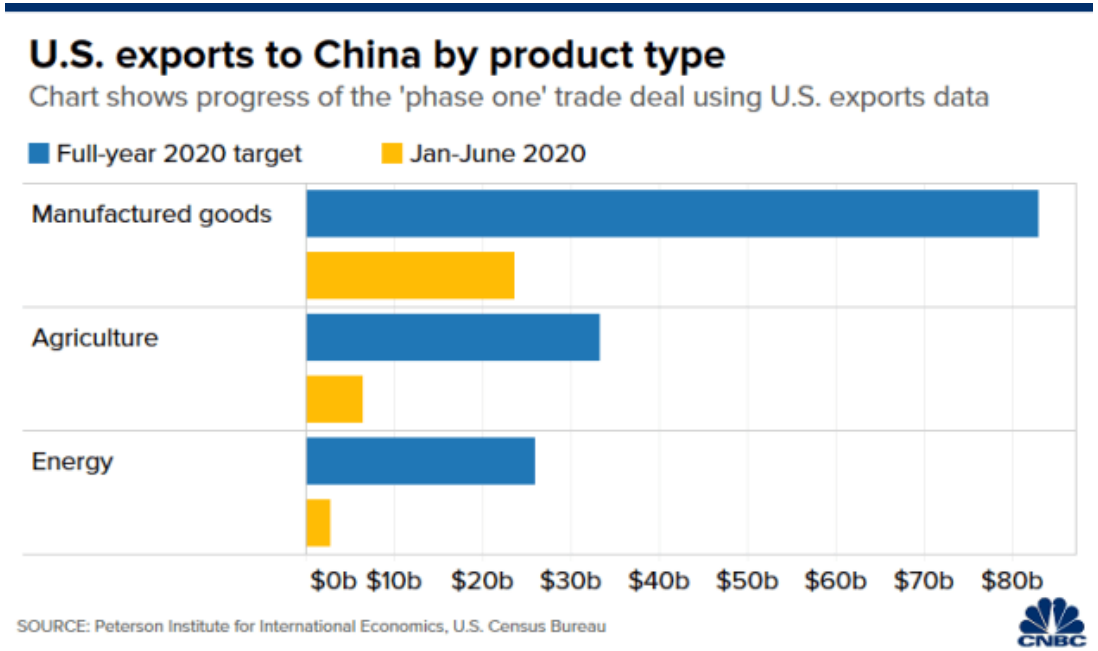
- CBEC market had sales over $3 billion. $300 million in pet supplement sales.

- According to NutraIngredients Asia, Australia in 2018 became the market leader accounting for 22.3% of all NHP imported into China with a growth rate of 60.8% year-on-year. The U.S. NHP industry was the previous market leader and is now in second place with a market share of 20.4% and a growth rate of 39.6% year-on-year.

- International travel into China will be extremely limited until at least mid-2021.

U.S. China - Phase One Trade Deal Status





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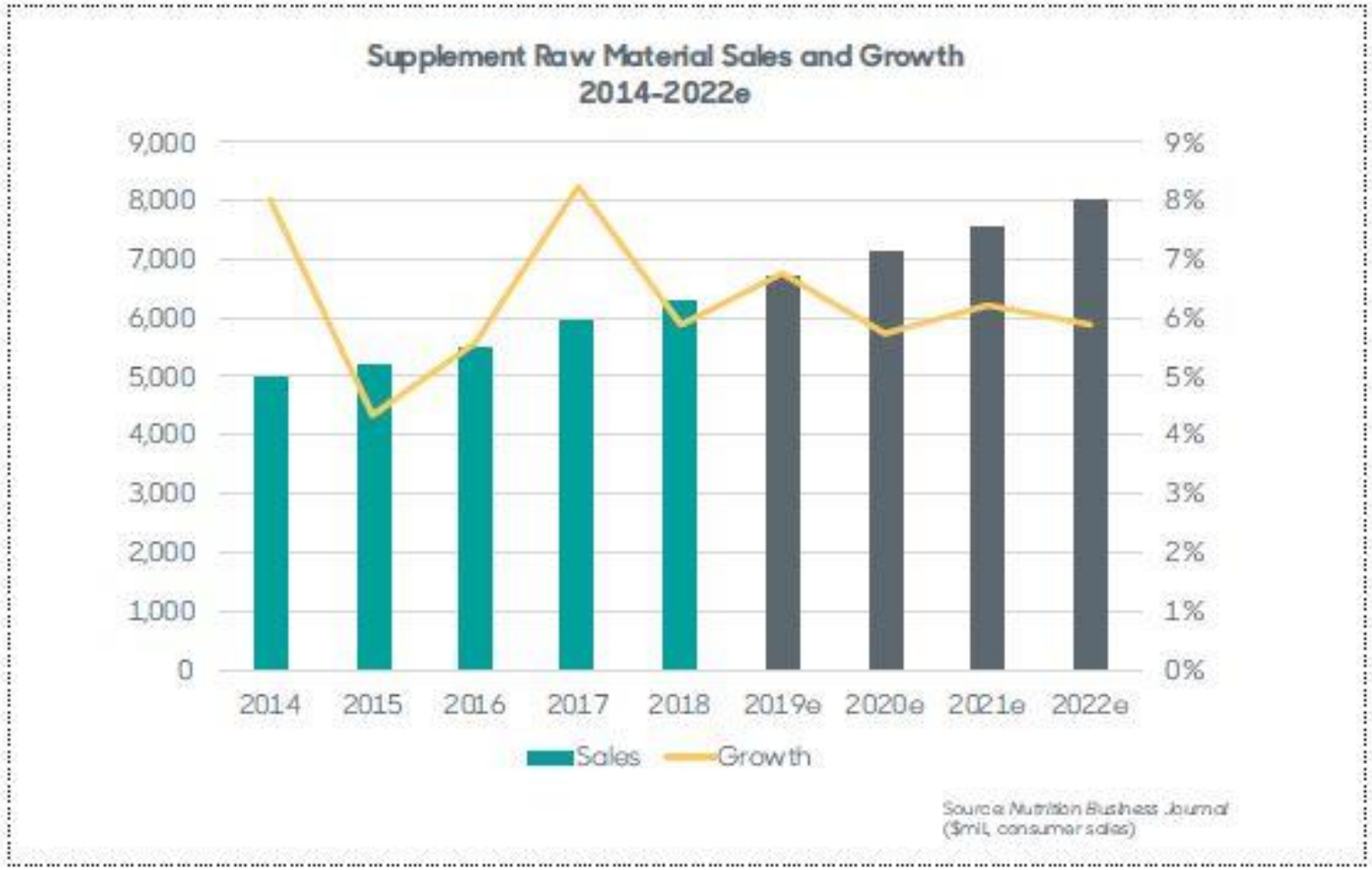
Non-tariff Barrier to U.S. Exports: Blue Hat Registration

Over the past 1.5 years, a total of 1,783 natural health products were approved for Blue Hat registration of which only 33 went to foreign companies; US companies received approvals for 18, which is 1% of the total.

The simplified Blue Hat filing system saw more than 5,000 approvals but only 104 for foreign companies. The filing system can only be used for basic vitamin and mineral supplements (VMS)

Supplement Raw Material Market Reaches $6.3B in 2018

About 75% of raw materials come from China, which is approximately $4.7 billion.



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Critical Issues for US & Chinese Companies

- US Companies to China
  - Competitive Knock-Offs
  - Lack of Market Access – Barriers to Entry (Blue Hat)
  - Counterfeit Products
  - Government Quality Concerns and Traceability
  - Price Stability (the Suitcase Trade, secondary markets)

- Chinese Companies to US
  - Adulteration
  - Multiple Steps in the Supply Chain
  - Expense for Audits / Verification
  - Establishing Relationships
  - Failure to Understand US Quality Requirements
  - Presenting the Company Professionally

Competency and Role of United Natural Products Alliance

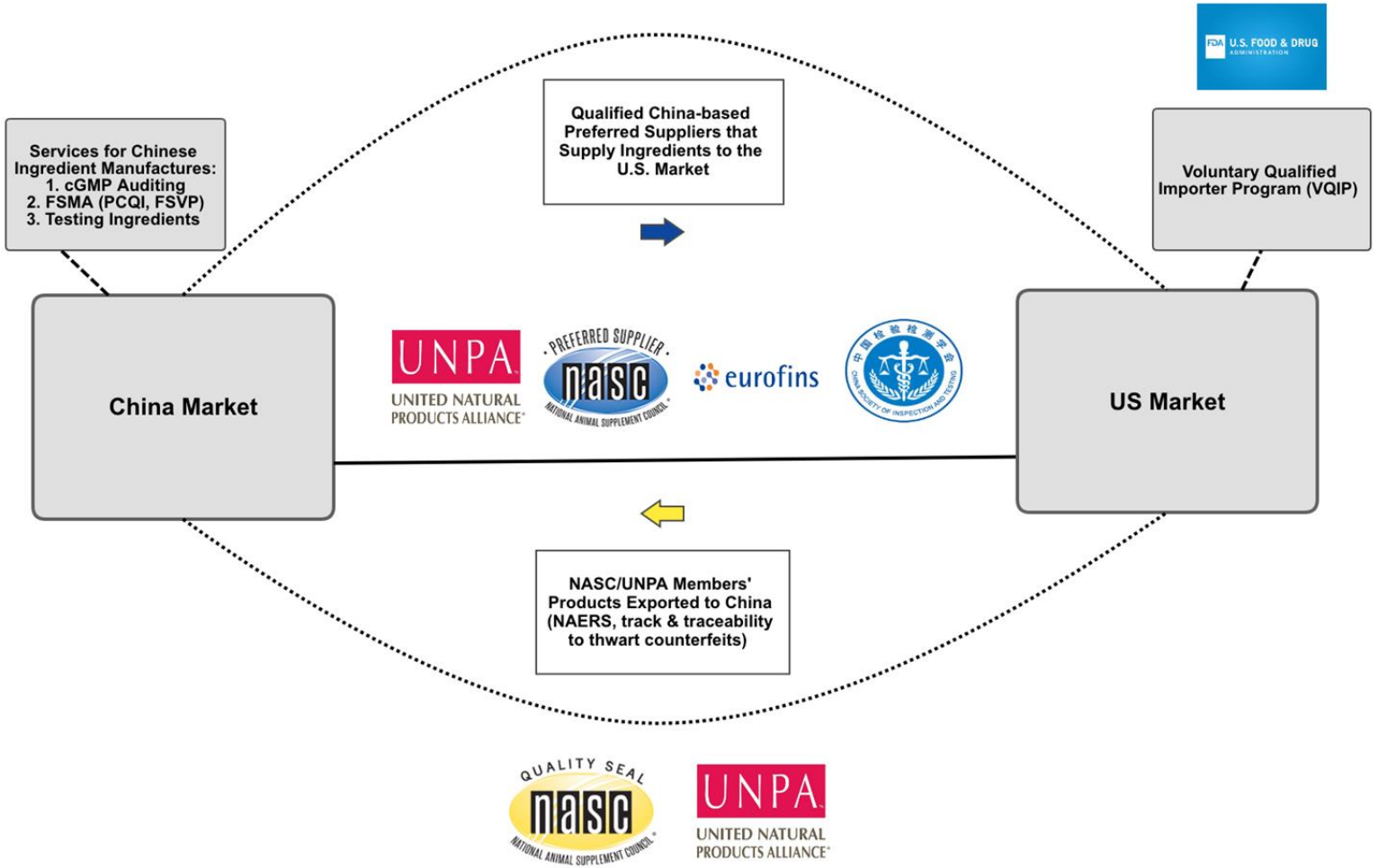
The **United Natural Products Alliance (UNPA)** is an international association representing more than 120 best-in-class natural health products, dietary supplement, functional food, and scientific and technology companies. Founded in 1992, UNPA was instrumental in the passage of the 1994 Dietary Supplement Health and Education Act (DSHEA) statute of United States Federal legislation which defines and regulates dietary supplements.

- China MOU partnership: China Chamber of Commerce for Import & Export of Medicines & Health Products (CCCMHPIE), China Nutrition Food and Health Association (CNFHA)
- MOU with National Center for Natural Products Research (FDA lab)
- Leading industry expert on 111, 117 GMPs
- FSMA training program / cGMP auditing
- UNPA Food Safety Plans for Preventive Controls Qualified Individual (FSMA training)
- Relationship with United States Pharmacopeia (USP) for ingredient standards
- MOU with Informa - SupplySide West, SupplySide East, NBJ Summit, Expo West

UNPA, NASC, Eurofins, CSIT Partnership

- Approximately 75% of ingredients used in the natural health product industry are sourced from Chinese ingredient manufacturers.
- China is the largest export market for U.S. natural health products and supplements.
- Our four organizations will partner together to create a secure supply-chain system that will add much needed transparency to the China supply chain as well as enable China Customs to recognize the UNPA member products and the NASC Quality Seal through an expedited CBEC green channel.
- China Customs and regulators will be able to run ingredient risk reports (based on the NASC system) on products passing through the green channel; Chinese consumers will be able to report adverse events; products will also have an anti-counterfeit insurance.

Complementary Markets



UNPA UNITED NATURAL PRODUCTS ALLIANCE

UNPA, NASC, Eurofins, CSIT Partnership

Our partnership will meet or exceed the regulatory requirements currently established by regulatory agencies in both the US and China, as well as reduce the overall costs of testing, audits, vendor qualification without sacrificing quality verification and vigilance. This will help ensure consumer confidence by the implementation of continuous circular, closed loop monitoring.

Chinese raw materials exported to US

- Ensure the quality of raw materials exported to the US market
- Audit Chinese ingredient manufacturers in accordance with cGMPs
- Ensure compliance with U.S. import regulations and FDA Food Safety Modernization Act (FSMA)
  - ➢ Provide training: Preventive Controls Qualified Individual (PCQI)
- Laboratory analysis of natural raw materials exported to the US market to meet established criteria for purity, strength, potency, composition and potential contaminants.
- Track and trace raw materials.
- Apply for the FDA Voluntary Qualified Importer Program

US Finished Products Exported to China

- Track and Traceability of Products Exported to China - From manufacturing origin, the proprietary system will track and trace products using blockchain encryption to prevent counterfeiting, ensure brand integrity and consumer safety. The system will provide B2B, B2C customers with full chain traceability services including: origin shipment, transportation, inspection and testing, FTZ clearance, warehousing, procurement, product release, and transportation to the end consumer in one comprehensive tracking service.

- Adverse Events Reporting (AER) - Chinese consumers will be able to report adverse events (including product quality, safety issues and counterfeits) into an AER system based on the proprietary NASC system that has been operational for 13 years. The AER system will link tested and certified raw materials and product ingredient information enabling regulators to run ingredient risk reports.
- China Consumer Protection Foundation (Product Insurance) - This foundation will provide the widely recognized March 15th (3.15) consumer protection guarantee for approved products. The consumer guarantee is a product insurance program targeted primarily against counterfeits. UNPA and CSIT will partner with the China Consumer Protection Foundation for the finished product certification which will ensure that consumers can return counterfeit products (if any) purchased through recognized sales channels.
- In addition to addressing the Blue Hat trade barrier, UNPA will also open its own multi-brand Flagship Stores on Tmall, JD, etc. connected to the quality system. The system can also be connected to industry trade shows in China in partnership with US Commercial Service.

Free Trade Zones & CBEC

- China FTZs

- Cross-border Ecommerce (CBEC) Platforms

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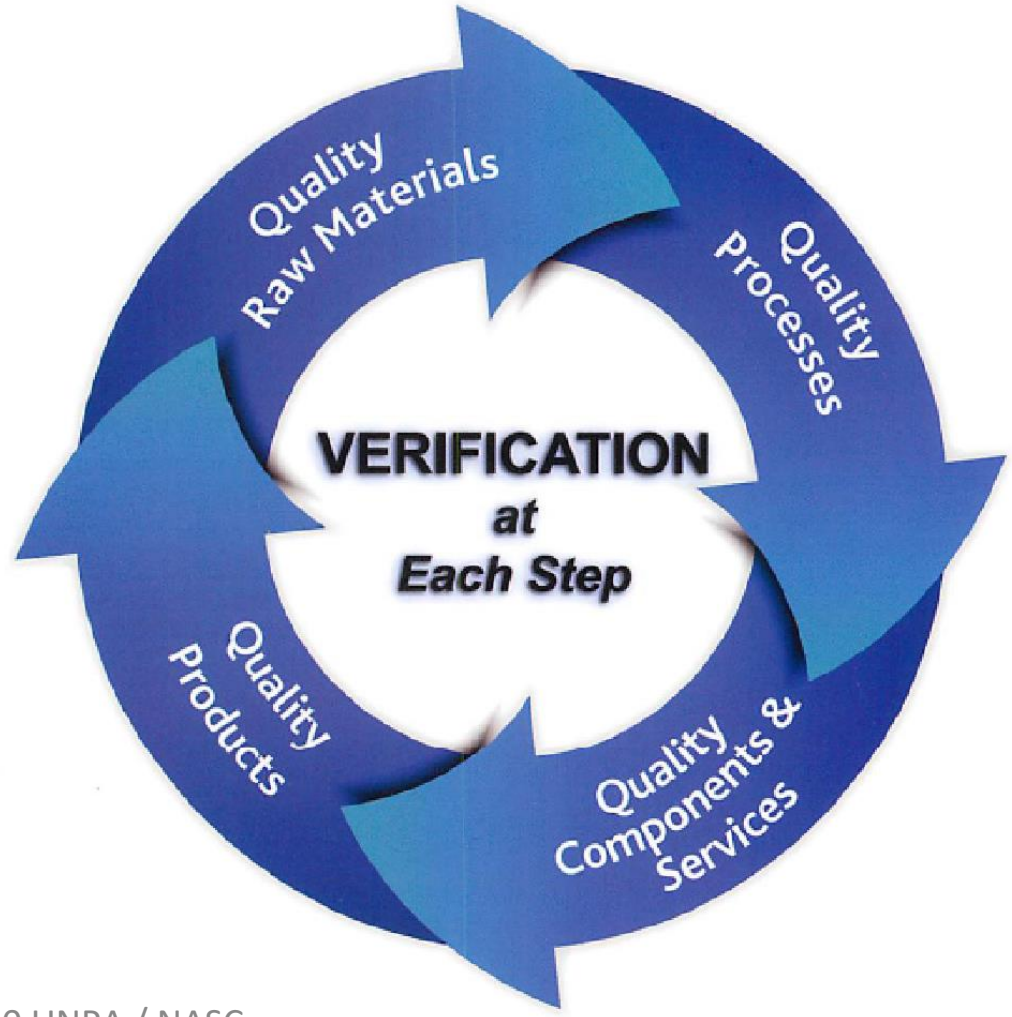
Competency and Role of NASC

The **National Animal Supplement Council (NASC)** is a non-profit trade organization dedicated to protecting and enhancing the health of companion animals and horses throughout the United States. Founded in 2001, NASC is an all-industry association of stakeholders concerned with the issues surrounding the supply of health supplements for animals not intended for human consumption, such as dogs, cats and horses. NASC is the leading association in the world for market segment: nutritional and health supplements for dogs, cats, horses.

- NASC Preferred Supplier Program / Product Quality Platform
- NASC NAERS® Adverse Event Reporting System / Product Quality Platform
- Established cGMPs, labeling templates, allowable claims
- Quality Audit Programs widely recognized in the US and increasing recognition globally
- Leading industry expert on 507 GMPs
- Recognized expertise in compliance, regulatory requirements in North America
- Work and routinely engage FDA/CVM, AAFCO and State Regulators

NASC Preferred Supplier Program



- Keep NASC members ahead of the regulatory curve
- Reduce members' cost for qualifying suppliers and ingredients
- Differentiate quality suppliers from opportunistic companies
- Ultimately increase consumer confidence

NASC Preferred Supplier Program

- Includes:
  - Raw Material Suppliers – Ingredients for human DS products are the same as similar pet supplements
  - Contract Manufacturers – follow 21CFR Part 111 & 117 or 507 for PC and FS
  - Testing Laboratories
  - Other components, products, services: labeling, packaging, legal, insurance ...
- We provide:
  - → C of A's with confirming independent tests
  - → Supplier Profiles
  - → Audit Certificates

NASC Adverse Event Reporting System

- For Finished Products – the Brand (Supplier of Record)
  - NAERS® System – NASC Adverse Event Reporting System
  - Most Advanced System in the World for these types of products
  - Over 30 Billion Bytes of data / over 7,000 active products / over 1,400 unique ingredients in the system
  - Information from label and copy of the label uploaded
  - Number of units shipped is also entered
  - All information is confidential and secured
- Data is combined across the industry to maintain continuous vigilance for both products and ingredients
- It is an “Early Warning System”

One Example of System Ingredient Data

- Chondroitin

National Animal Supplement Council
PO Box 5168
Sun City West, AZ 85376
T: 760-751-3360

NASC INGREDIENT RISK REPORT

The following information is the proprietary property of the National Animal Supplement Council (NASC).

REPORT DATA GENERATED ON: 10/21/2020 04:22 PM

INGREDIENT INFORMATION

Ingredient Name:	Chondroitin - All Forms
No of NASC Registered Products with this ingredient:	1388
Years Ingredient on the Market:	31 Year(s)

USAGE INFORMATION

In Dogs:

Minimum Usage:	0.83 mg/kg
Maximum Usage:	49.66 mg/kg
Straight Mean Usage:	16.29 mg/kg
Weighted Mean:	16.28 mg/kg

In Horses:

Minimum Usage:	0.33 mg/kg
Maximum Usage:	9.08 mg/kg
Straight Mean Usage:	2.39 mg/kg
Weighted Mean:	1.84 mg/kg

In Cats:

Minimum Usage	1.23 mg/kg
Maximum Usage:	58.79 mg/kg
Straight Mean Usage:	18.49 mg/kg
Weighted Mean:	18.95 mg/kg

In Others:

Minimum Usage:	15.83 mg/kg
Maximum Usage:	15.83 mg/kg
Straight Mean Usage:	15.83 mg/kg
Weighted Mean:	15.83 mg/kg

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AEs AND ADMINISTRATIONS

In Dogs:

Year	Adverse Events Reported	Report Rate Per Million Administrations Sold	Serious Adverse Events Reported	Report Rate Per Serious AE Per Million	Administrations Sold **
2004	9	0.19	0	0.00	46,267,606
2005	12	0.21	0	0.00	56,153,695
2006	18	0.19	0	0.00	94,069,881
2007	22	0.21	0	0.00	105,776,914
2008	18	0.14	0	0.00	132,366,918
2009	22	0.19	2	0.02	114,722,908
2010	88	0.61	1	0.01	145,247,771
2011	137	0.94	0	0.00	146,321,266
2012	108	0.58	1	0.01	185,479,158
2013	136	0.74	0	0.00	182,371,626
2014	192	1.07	1	0.01	179,582,338
2015	201	1.06	4	0.02	188,826,734
2016	182	1.03	3	0.02	176,265,768
2017	174	1.03	2	0.01	168,389,974
2018	123	0.65	1	0.01	187,884,744
2019	149	0.80	0	0.00	187,070,339
2020	157	1.14	4	0.03	137,725,152
Grand Total	1747	0.72	19	0.01	2,434,522,794

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REPORT DATA GENERATED ON: 10/21/2020 04:22 PM

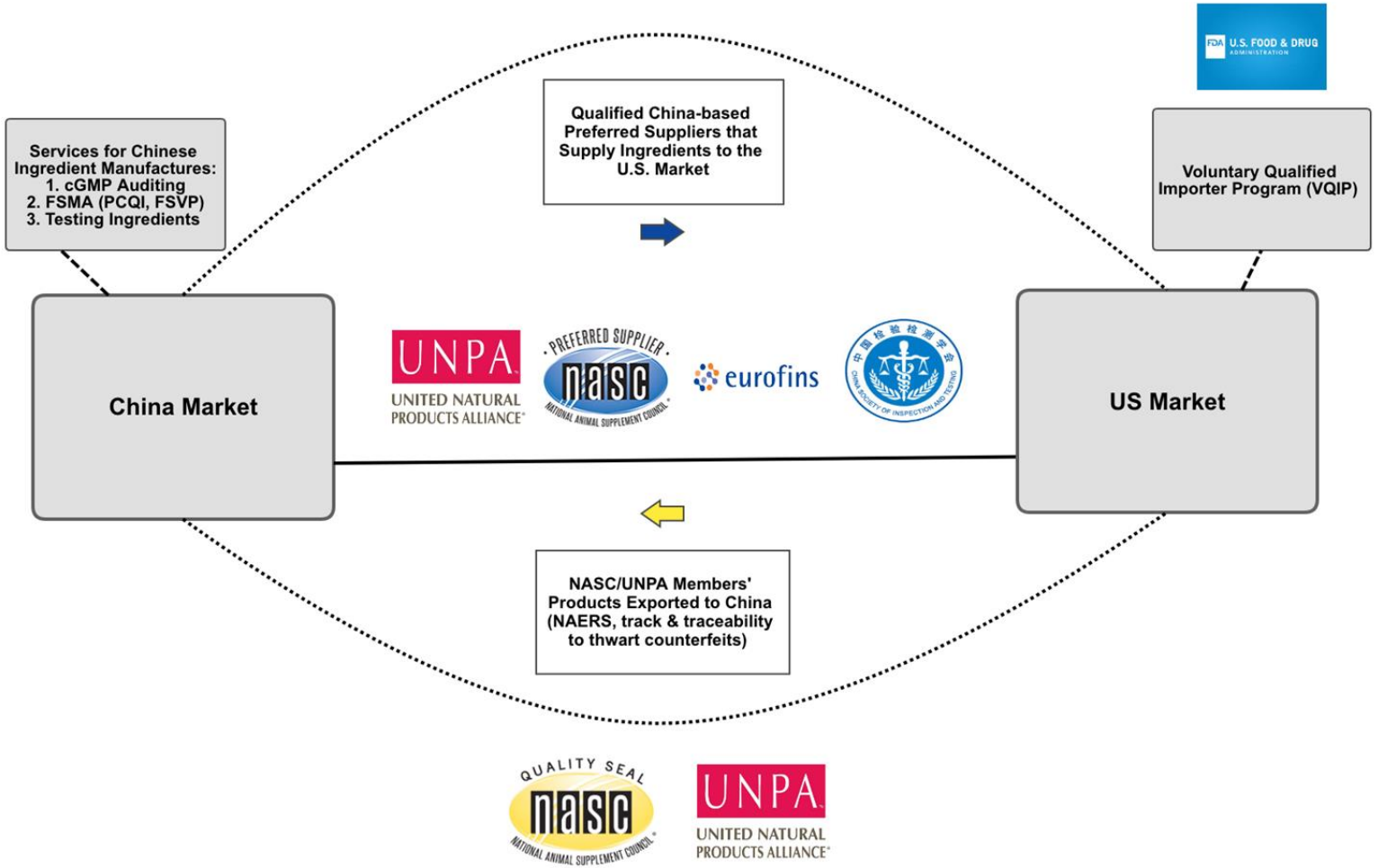
Total:

Year	Adverse Events Reported	Report Rate Per Million Administrations Sold	Serious Adverse Events Reported	Report Rate Per Serious AE Per Million	Administrations Sold **
2004	20	0.24	0	0.00	82,940,764
2005	20	0.21	1	0.01	95,098,972
2006	24	0.17	0	0.00	139,741,918
2007	37	0.24	0	0.00	153,391,038
2008	37	0.20	0	0.00	189,518,643
2009	51	0.31	4	0.02	163,189,530
2010	121	0.62	2	0.01	194,019,735
2011	175	0.90	2	0.01	195,430,256
2012	215	0.91	3	0.01	236,698,195
2013	268	1.11	1	0.00	241,382,022
2014	525	2.21	3	0.01	238,000,329
2015	591	2.40	6	0.02	246,379,919
2016	653	2.84	3	0.01	230,465,628
2017	465	2.12	2	0.01	219,851,205
2018	295	1.24	1	0.00	237,879,794
2019	282	1.19	4	0.02	235,998,792
2020	228	1.34	11	0.06	169,637,903
Grand Total	4007	1.23	43	0.01	3,269,624,640

NASC Adverse Event Reporting System

Adverse Event: "An Adverse Event is a type of Complaint where a patient has suffered any negative physical effect or health problem that MAY be connected to or associate with use of the product."
Serious Adverse Event: "An Adverse Event with a transient incapacitating effect (i.e. rendering the animal unable to function normally for even a short period of time, such as with a seizure) or non-transient (i.e. permanent) health effect. Transient vomiting or diarrhea do not constitute Serious Adverse Events. A purported Serious Adverse Event requires follow-up with a veterinarian. A layperson diagnosis does not constitute a Serious Adverse Event."

Complementary Markets



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SCIENCE AT YOUR SERVICE

Your Partner in Product and Ingredient Quality and Safety

COMPANY OVERVIEW

Eurofins is the **global leader in biological testing** with an unrivaled reputation for unbiased analysis

200,000 reliable analytical methods for characterizing the safety, identity, purity, composition, authenticity, and origin of products

Our **diverse laboratories** navigate seamlessly through a dynamic and ever-changing global marketplace

47K+ EMPLOYEES

800 SITES

45 COUNTRIES WITH LABS

400M TESTS ANNUALLY

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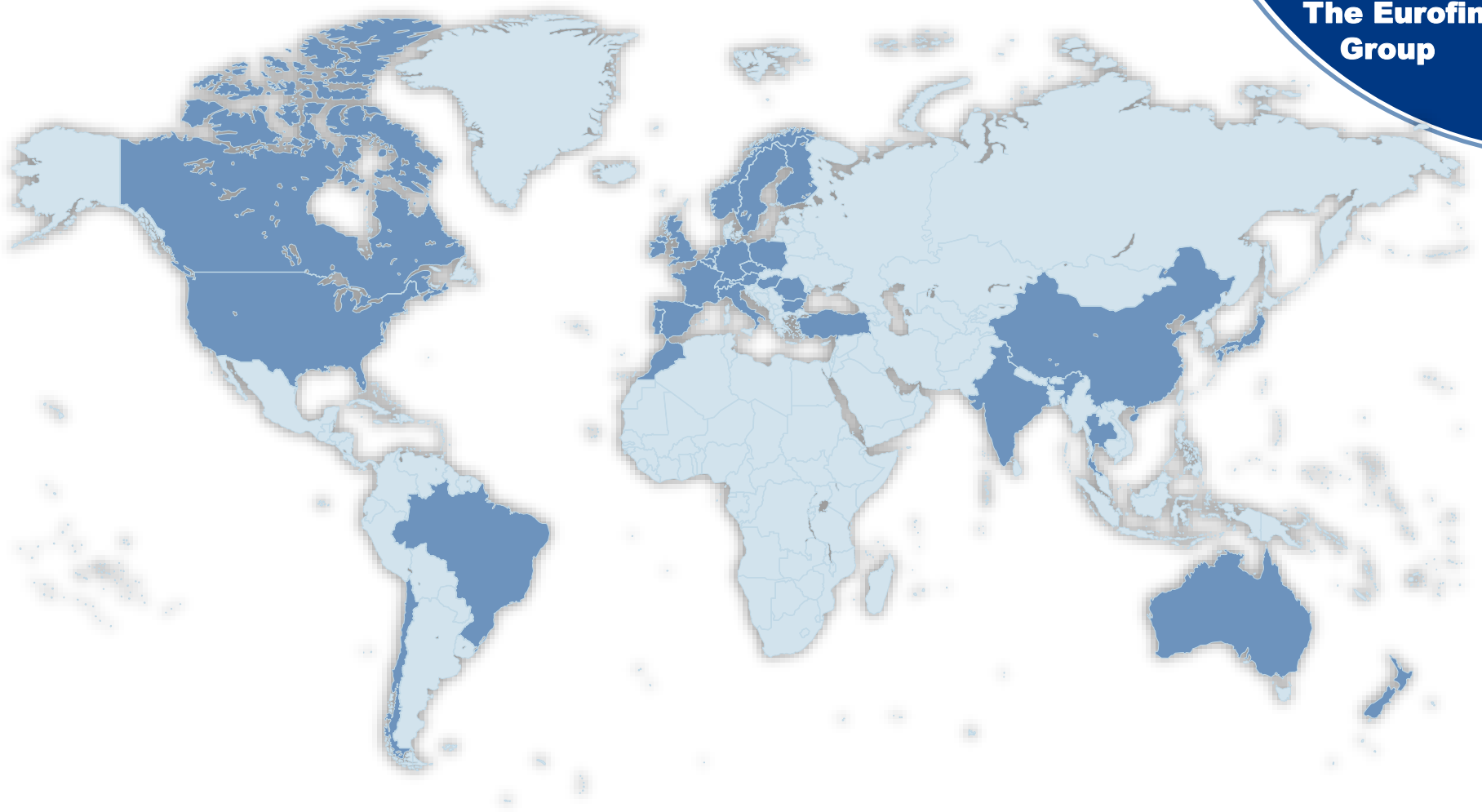
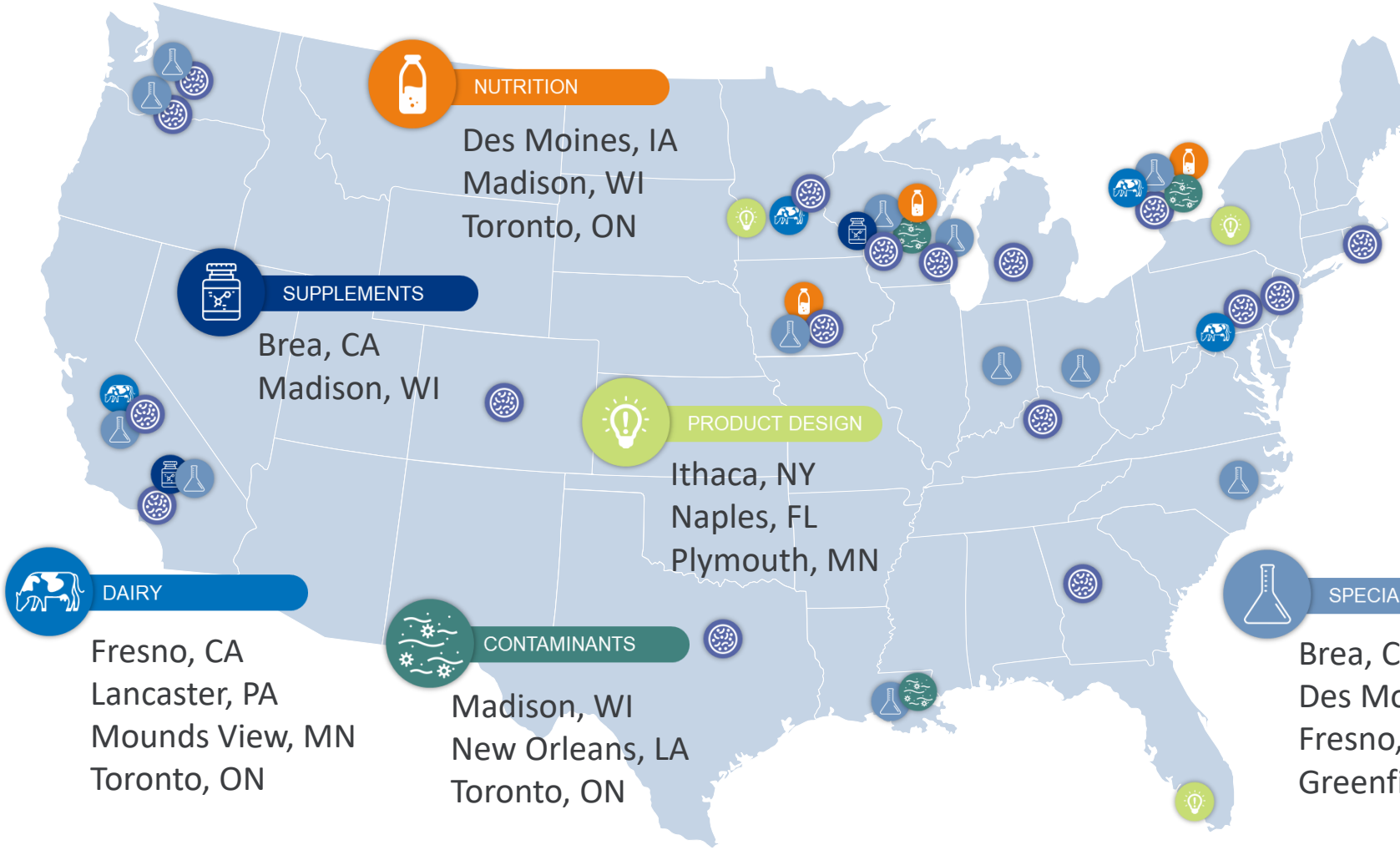
EUROFINS GLOBAL COVERAGE

New Food Assurance International Business Combines Existing Global Offerings Within The Eurofins Group



- AUSTRALIA
- AUSTRIA
- BELGIUM
- BRAZIL
- BULGARIA
- CANADA
- CHILE
- CHINA
- CROATIA
- CZECH REP.
- DENMARK
- FINLAND
- FRANCE
- GERMANY
- HONG KONG
- HUNGARY
- INDIA
- IRELAND
- ITALY
- JAPAN
- KOREA
- LITHUANIA
- MALAYSIA
- NEW ZEALAND
- NORWAY
- POLAND
- PORTUGAL
- ROMANIA
- SINGAPORE
- SLOVAKIA
- SPAIN
- SWEDEN
- SWITZERLAND
- TAIWAN
- THAILAND
- NETHERLANDS
- TURKEY
- UKRAINE
- UNITED KINGDOM
- UNITED STATES
- VIETNAM

FOOD AND SUPPLEMENT TESTING LABORATORIES



NUTRITION

Des Moines, IA
Madison, WI
Toronto, ON

SUPPLEMENTS

Brea, CA
Madison, WI

PRODUCT DESIGN

Ithaca, NY
Naples, FL
Plymouth, MN

DAIRY

Fresno, CA
Lancaster, PA
Mounds View, MN
Toronto, ON

CONTAMINANTS

Madison, WI
New Orleans, LA
Toronto, ON

MICROBIOLOGY

Atlanta, GA
Battle Creek, MI
Dallas, TX
Denver, CO
Des Moines, IA
Fresno, CA
Garden Grove, CA
Horsham, PA
Lancaster, PA
Louisville, KY
Madison, WI
Mounds View, MN
New Berlin, WI
North Kingstown, RI
Toronto, ON
Wenatchee, WA
Yakima, WA

SPECIALTY

Brea, CA
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West Chester, OH
Wilson, NC
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Thank You


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