# nutras/urce

Pharmaceutical and Nutraceutical Services

### Support claims. Gain market access.

Your partner in bringing products to market with strong science and regulatory confidence – from concept to claim

### About Nutrasource

Nutrasource Pharmaceutical and Nutraceutical Services is a full-service contract research organization (CRO) that helps health companies bring products to market with strong science and regulatory confidence.

Through our vertically-integrated service platform, Nutrasource is your one-stop shop for international regulatory, clinical, and product testing solutions for dietary supplements, pharmaceuticals, and everything in between.

As your virtual R&D department, we will help you tackle your toughest scientific problems so you can sell safe, effective, high-quality products to improve healthcare globally.

#### 2001William Rowe launches omega-3 2004 diagnostic test with Dr. Bruce J. Holub The International Fish Oil Standards (IFOS) testing and certification program launched internationally; 12 full-time regulatory and corporate management staff hired First clinical trial published in a peer-reviewed journal 2005 2003 New 5,000-square-foot clinical trials The company facility built; clinical trials team added expands services to include global dietary supplement product testing First food health claim application submitted 2008 to Health Canada; the company takes on a The company creates divisions new brand image, logo, for Nutrition and Nutraceutical and company name: Research, Clinical Trials, and Product



Nutrasource Diagnostics Inc. founded; Omega Score test enters U.S. and Canadian markets

Analytics and doubles its staff

Nutrasource



#### **Our Story**

Established in 2002 as an omega-3 diagnostic test provider, Nutrasource has since grown from a single desk to a global CRO employing over 100 staff across four sites in North America.

Over the past nearly two decades, Nutrasource has invested in the latest research infrastructure and top scientific talent to meet our clients' needs as the health products industry evolves.

By focusing first and foremost on the needs of our customers, we are proud to have helped hundreds of clients develop, launch, and market health products across the globe.

**ONDI MEXICO** 

### 2011

Nutrasource expands to include pharmaceutical consulting solutions; the company now has over 50 employees

### 2014

U.S. regulatory firm, GRAS Associates, is acquired; services expand to include full food safety and regulatory consulting services; 10th anniversary of IFOS

GRASS ASSOCIATES Food Safety Regulatory Service A Natrassource Company

### **2017**

The company celebrates its 15th anniversary and takes on new corporate identity: Nutrasource Pharmaceutical and Nutraceutical Services.

NUTRASOURCE

GRAS

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Pharmaceutical and Nutraceutical Services



**2016** IGEN GMO certification program launched in North America; clinical trials team adds 6 fulltime employees

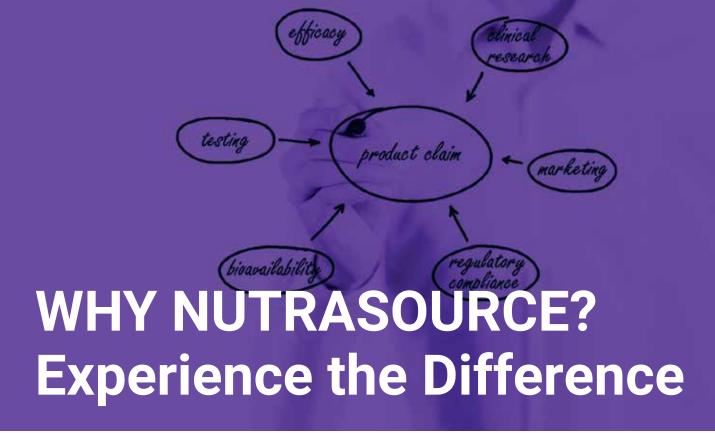
2018-

Diteba laboratory expansion begins to double testing capacity; Nutrasource looks to a bright future helping its clients commercialize their innovations

Diteba, a pharmaceutical laboratory, is acquired; 35 analytical chemists and pharmaceutical scientists hired to meet demand for topical drug testing



2013



Nutrasource brings the capabilities and scientific acumen of an international CRO while delivering the high-quality results you'd expect from your own team.

No other consulting firm in the dietary supplement sector brings together more expertise in nutrition, regulatory affairs, and pharmaceutical science to help our clients achieve compliance and gain market entry.

Working with Nutrasource, you will benefit from:

- > A wide range of solutions for any stage of the product life cycle and supply chain
- > Customizable service packages tailored to your organization's needs
- > A "pharma-lite" approach for optimum regulatory compliance
- > Integrated, interdisciplinary project management teams
- > Strategic consideration of regulatory, clinical, marketing, and intellectual property implications
- Global experience in a variety of markets, from functional beverages and probiotics to pharmaceutical omega-3s













#### THE NUTRASOURCE APPROACH: Starting with the End in Mind

Companies face many barriers to market entry, including budget, timelines, and pressure to be innovative. Often, the greatest challenge is figuring out what you want to say about your product—and what you *can* say—based on what it contains, how it works, and where you want to sell it.

# At Nutrasource, we start with the end in mind—the desired label claim—and work backwards to develop a strategic solution to achieve your objectives.

Through our "pharma-lite" approach, we adopt key aspects from the pharmaceutical industry to provide our clients with opportunities for prolonged market access, additional claims, further regulatory classifications, and future development opportunities.

To accomplish this, we work with Sponsors from the initial idea stage through to the final project report to determine exactly what is required and how the research program should be designed to meet the client's goals. A comprehensive proposal is developed which outlines the Sponsor's objectives, budget, and how Nutrasource will deliver on these requirements. A project kick-off meeting is held to determine scope, deliverables, and timeliness as well as key documents including the project management plan, communication plan, data management plan, statistical analysis plan, and publication plan.

With input from the client's marketing and scientific groups, we build on our vast experience to develop claims strategies based on risk, regulatory precedent, current market gaps, and competitive positioning in different jurisdictions.

By starting with the end in mind, our team has successfully completed thousands of projects for a wide range of clients by harnessing the power of Nutrasource's end-to-end capabilities, committed teams, and transparent partnership environment.

### Explore our solutions to learn how we help companies gain market access – from concept to claim.

#### Through our concept to claim approach, we will help you:

#### Innovate

#### Strategize

your claims, regulatory approach, and market positioning to map a robust pathway forward

#### Research

the scientific evidence then plan and execute a clinical research program to generate supporting data

#### Synthesize

results to substantiate claims and secure regulatory approvals that achieve return on investment

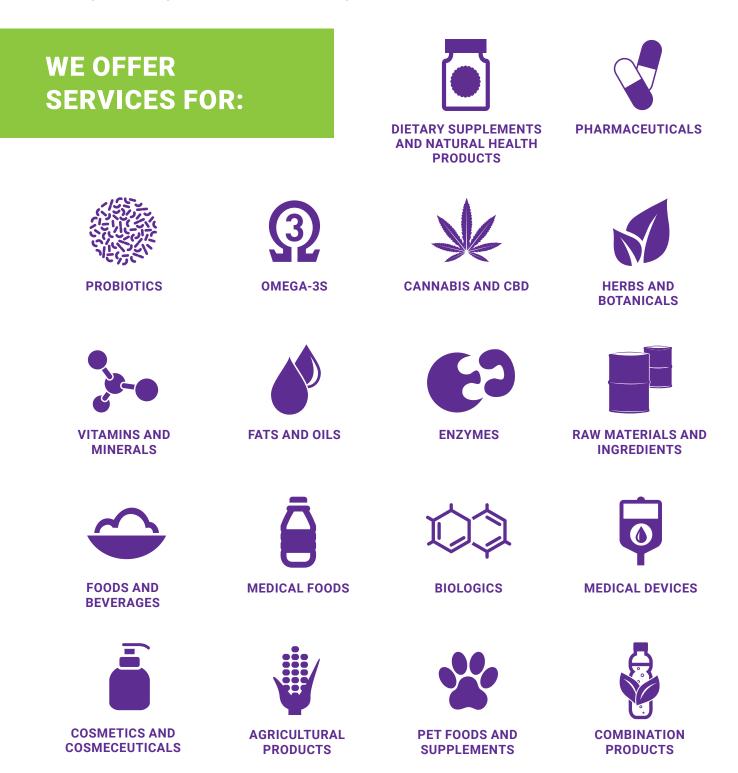
#### Launch

your product and gain a competitive advantage while improving global healthcare

### **MARKETS WE SERVE**

We have in-depth experience in a broad range of health product markets – from foods to pharmaceuticals and everything in between.

Our experienced team will guide you on the pathway to market by assessing and resolving gaps in your strategy to ensure your product is supported by robust scientific evidence.



# **SOLUTIONS WE PROVIDE**

Nutrasource provides full regulatory, clinical, and testing services for all types of health products at any stage of the R&D process, product life cycle, or supply chain globally.

#### Through our customized project management approach, our experts will work collaboratively with your team to find a solution customized to your business goals, timelines, and budget.

Our team brings over 120 years of combined experience in nutritional science, clinical trials, and pharmaceutical development. Our top priority is to ensure you have confidence in your product's safety, efficacy, and quality so that you can sell more in an increasingly competitive marketplace.

### Research & Development

- Project management teams focused on your unique products and objectives
- End-to-end solutions for all consumer types and markets

#### **Clinical Trials**

- Pharmaceutical-level trials for optimum quality and results
- Seamless regulatory integration

### Claims &

#### **Certi** ications

- Global marketing tools that showcase transparency
- Label claims supported by real science
- Third-party certification
  programs



#### Regulatory Strategy

• Forward thinking solutions that maximize market potential

#### Testing Solutions

• The latest technologies and equipment for characterization, identification, and standardization

### PRODUCT DEVELOPMENT STRATEGY: Unlock Your Product's Potential

At Nutrasource, we take a project management approach to build strategic, focused product development plans that include an assessment of the risks and benefits of potential regulatory routes, scientific literature reviews, non-clinical and analytical testing, and an analysis of potential health and marketing claims.

#### Our product development services include:

- > Project Management
- > Theoretical Product Review
- > Clinical Development Strategy
- > Pre-Clinical Program Management
- > Dietary Supplement to Drug Strategy

## **REGULATORY CONSULTING: Gain Global Market Access**

The regulatory requirements for health products are constantly evolving. Knowing how your product might be affected by the latest changes—whether it's on the market now or still under development—can be a challenging task for any company.

Our knowledgeable team will guide you through the complex regulatory framework so you can gain market access quickly and efficiently.

#### **Global Regulatory Solutions**

- > Compliance Consulting
- > Health Claims Substantiation
- > Scientific Literature Reviews
- > Product Classification
- > Nutrition Facts Panel Review
- > Technical Label Review
- New Drug Submissions (NDS) and New Drug Applications (NDA)
- Abbreviated New Drug Submissions (ANDS) and Abbreviated New Drug Applications (ANDA)
- > Biologic License Applications (BLA)

#### **Canadian Regulatory Solutions**

- > Natural Health Product (NHP) Licensing
- Temporary Marketing Authorization (TMA) Applications
- > Master File Submissions
- Natural Health Product (NHP) Site Licensing
- > Drug Establishment Licensing

#### **U.S. Regulatory Solutions**

- > Generally Recognized as Safe (GRAS)
- > New Dietary Ingredient Notifications (NDIN)
- > Medical Food Applications
- > Dietary Supplement Facts Panel Review
- > Novel Food Notifications
- Food Colouring and Additive Petitions



### CLINICAL TRIALS: Support Claims With Robust Science

Your product has potential to improve human health globally. Bring your innovations to life and access the lucrative health products market through clinical research.

At Nutrasource, we bridge the gap between pharmaceutical CROs and the nutrition research industry to provide you with the clinical trials solutions you need in the most cost-effective manner possible.

With an experienced team and access to more than 250 clinical trial sites across North America, we have completed over 100 clinical trials to help our clients achieve their market launch objectives.

### OUR CLINICAL TRIAL EXPERIENCE INCLUDES THE FOLLOWING HEALTH INDICATIONS:



#### Gastrointestinal

- Gastroesophageal Reflux Disease (GERD)
- > Bowel function/laxation
- > Irritable Bowel Syndrome (IBS)
- > Crohn's disease
- > Leaky Gut



#### **Hepatic function**

> Non-Alcoholic Fatty Liver Disease (NAFLD)



#### Metabolism

- Pharmacokinetics and bioavailability
- > Lipid metabolism
- > Glucose metabolism
- Weight loss and weight management
- > Metabolic syndrome



#### Cardiovascular

- Cholesterol
- > Hypertension
- > Metabolic syndrome



#### **Cognitive function**

- > Alertness
- Memory
- Stress



#### Bone and joint health

- > Osteoarthritis
- > Bone Mineral Density



#### Women's health

- > Menopause
- > Vaginitis
- > Urinary tract infections (UTIs)
- > Hair growth

### **d**

#### Men's health

- > Testosterone
- > Erectile dysfunction (ED)
- > Hair growth

### **G**

#### Respiratory

- Cold and flu
- > Allergy



#### AS YOUR CLINICAL TRIAL PARTNER, NUTRASOURCE WILL HELP YOU:

#### **Strategically Design Your Trial**

- > Clinical Project Management
- > Clinical Trial Design
- > Feasibility Studies

#### **Achieve Regulatory Authorizations**

> Clinical Regulatory Affairs

#### **Optimize Your Trial Execution**

- > Early Clinical Development
- > Phase II/III Clinical Trials
- > Phase IV Clinical Trials
- > Rescue Studies
- > Site Selection and Management
- > Monitoring
- > Data Management

#### **Analyze & Report Your Results**

- > Bioanalytics
- > Medical Affairs and Pharmacovigilance
- > Biostatistics

#### **Maximize Clinical Service Solutions**

- > Full-Service Solutions
- > Functional Services
- > Pharmacy
- > Archiving
- > On-Site Clinical Trials Services

### ANALYTICAL & BIOANALYTICAL TESTING: Gain a Competitive Advantage

Ensuring your ingredients and products comply with safety and quality standards is critical to any market launch strategy. Evidence supporting your product's high quality—whether through a marketing claim, certification mark, or QA/QC documentation—helps set you apart from competitors.

We provide high-standard analytical and bioanalytical testing services in compliance with global regulatory authorities including the U.S. FDA and Health Canada for all categories and dosage forms.

#### **Confirm Potency & Characterization**

- > Active Ingredient Testing
- > Nutrition Analysis
- > Physical Property Testing
- > Species Identification

#### **Verify Purity & Stability**

- > Stability Testing
- > Microbial Contaminant Testing
- > Heavy Metals Testing
- > Herbicides and Pesticides Testing
- Radiation Testing
- Oxidation Testing
- > Allergen Testing
- > Stability Studies

#### Support Your Pharmaceutical Development

- > In Vitro Release Testing (IVRT)
- > Analytical Method Development
- > Quality Control Release Testing
- > Formulation Validation Support Testing

#### Substantiate Your Unique Product Claim

- Assay Method Development, Validation, and Transfers
- > Preclinical and Clinical Bioanalysis
- > Large Molecule Analysis
- > Metabolite Identification

#### LABORATORY EQUIPMENT LIST:

- > RT-PCR, Digital-PCR
- > HPTLC
- > HPLC-UV, HPLC-RI, HPLC-ELSD
- > LC-MS, LC-MS/MS
- > GC-FID, GC-MS
- > ICP-MS
- > HRMS
- > UPLC/MS/MS
- > GFC
- > UPLC-UV, FI, ECD
- > Capillary Electrophoresis (CE)
- > ELISA (Immunochemistry)
- > Gel Image Analysis System
- Stability Chambers fully validated Rees Scientific Centron Monitoring System<sup>®</sup>

#### ICH STABILITY STORAGE CONDITIONS

- > Customized conditions
- > Photostability (UV and daylight)
- Available space for expansion to meet any stability requirements
- > 25°C/60% RH
- > 30°C/65% RH
- > 40°C/75% RH
- > 5°C, -20°C, -80°C

## **CERTIFICATION PROGRAMS:** Stand-Out On The Shelf

For clients looking to target the end consumer—the retail customer—label certifications are an effective marketing tool.

Nutrasource offers testing-based certifications supported by quality science to help brands showcase the safety, efficacy, and quality of their products.

Product categories include omega-3 fatty acids, probiotics, and foods and dietary supplements that may contain genetically modified organisms (GMOs).

- > International Fish Oil Standards (IFOS) Program fish oils
- International GMO Evaluation and Notification (IGEN) Program non-GMO for dietary supplements
- > International Probiotics Testing Program (IPRO) probiotics





#### IFOS

Launched as Nutrasource's inaugural certification program in 2002, IFOS allows marine oil companies to test and certify their products based on the highest quality, safety, and purity standards in the world. No other certification program tests fish oils by individual lot number, making it easy for shoppers to find what they are looking for. www.ifosprogram.com.



#### IGEN

IGEN offers a testing-based solution for dietary supplement companies to certify products based their non-GMO status. This provides consumers with transparency in making informed GMO choices based on real scientific data. www.igenprogram.com



#### **IPRO**

IPRO allows probiotics manufacturers and brands to certify their products based on third-party verified testing results to increase consumer confidence and improve decision-making in the probiotics market.



# Ready to commercialize your innovations?

CONTACT OUR TEAM TODAY TO DISCOVER YOUR PATHWAY TO MARKET.





#### Nutrasource

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