

## NBJ Spotlight: Ingredient Supply

### Traceability Tools | GLG's Stevia | Is Folic Acid Safe?

### Meeting Your Herbs, and Your Fish Oil Too

*As supply quality issues grow, Gaia Herbs and Ascenta Health bring sophisticated traceability tools online to assuage consumer, retailer concerns*

In testimony before the U.S. Senate this May, the **Government Accountability Office** (GAO) published the results of its investigation into herbal dietary supplements. By focusing on products often targeted to elderly consumers—ginseng, garlic and ginkgo biloba—the GAO hoped to expose some of the deceptive sales tactics at play in retail aisles across the country, as well as test the efficacy and safety of the supplements in question. Through its investigation, the GAO found trace levels of heavy metal toxins, including lead and mercury, in 37 of the 40 supplements tested, though no single product tested by the GAO reached levels significant enough to pose an immediate health hazard.

Regardless of those findings and the actual scientific value of demonstrating soil-level toxicities in soil-grown products, the GAO report—and subsequent media and Congressional attention paid to it—once again raises important ingredient quality and traceability questions for the dietary supplement industry.

#### Gaia: 'We Have Nothing to Hide'

**Gaia Herbs** is one herbal supplement company attempting to address those questions head on with a new consumer-focused ingredient-tracing initiative called *Meet Your Herbs*. The program, which is being heavily promoted by Gaia, represents a long-time commitment to ingredient quality and integrity for the company. Gaia Herbs maintains a 250-acre organic farm in North Carolina where it cultivates more than 50 medicinal herbs. Stroll across the grounds and

you might find echinacea purpurea in blossom or fields of verdant wormwood and skullcap. Since 1986, Gaia has led the industry in sustainability practices and ingredient purity, a position that sets the company right where it needs to be as regulations and media scrutiny begin to challenge less diligent manufacturers to match its high standards.

Gaia is currently in the midst of a re-branding campaign, much of it built around the new traceability tool at the heart of *Meet Your Herbs*. With *Meet Your Herbs*, a Gaia customer can enter an ID number found on the packaging of every product the company sells and learn detailed information about the sourcing of ingredients and quality controls in the manufacturing process for that particular product.

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—Rene LeClerc,  
Ascenta Health

"We launched *Meet Your Herbs* because it became very clear to us, as we were assessing the marketplace, that consumers and healthcare practitioners were all being confronted with questions about the origins and safety of dietary supplements," said Greg Cumberland, vice president of strategic initiatives at Gaia. With a commitment to organic agriculture, wildcrafting and ethically sound business practices, Gaia knew it was capable of answering those questions in meaningful ways, Cumberland added.

With *Meet Your Herbs*, Gaia classifies its manufacturing practices into three information categories: purity, integrity and potency. Say a consumer buys *Adrenal*

*Health*, Gaia's most popular product and an adaptogenic response to stress management that contains rhodiola root and ashwagandha as its core ingredients. That consumer, with just a few clicks on the Gaia website, can dig into a detailed chain of custody documenting the entire lifecycle of the ingredients in that product. In fact, every botanical in the product can be traced back to its master batch using Gaia's *Meet Your Herbs* web interface.

*Meet Your Herbs*' purity information includes specifics about sourcing—where the botanical originated and certifications it might carry—and horticultural practices related to the source bioregion. The integrity module of the program conveys information about extraction methods and the processes by which Gaia transforms the raw herbal material into a component extract. The potency section provides detailed validation of the strength representations made on the label, including pertinent biomarkers and testing methods. To wrap it all up, Gaia presents a certificate of compliance, signed by laboratory personnel, to provide customers with even more faith in the efficacy and safety of the products they bought. According to Keri Marshall, Gaia's medical director and a naturopathic doctor, "*Meet Your Herbs* allows the consumer to experience the process that we go through—how we verify genus and species, how we verify there's no contamination or adulteration, how we assure there's no heavy metal toxicity or pesticide residues."

This level of transparency is rather novel for the overall dietary supplement industry, but it is old hat for Gaia. Thanks to the company's long-standing commitment to organic certification, Gaia has always had documentation in place about source verification. Yet, the herbal supplement company's ability to validate quality extends into its non-organic ingredients as well because wildcrafting and ecological harvesting carry their own verifiable protocols and requirements. "We have nothing to hide and

everything to gain,” said Marshall. “We really want to be able to share our story, because our efforts to initiate *Meet Your Herbs* started many years ago.”

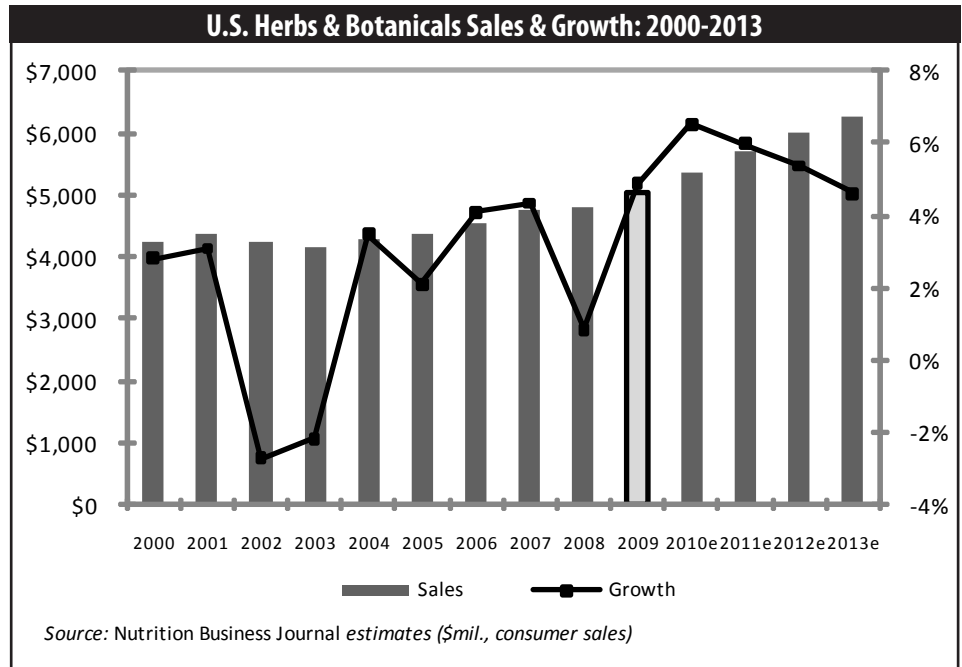
Twenty-three years ago, Ric Scalzo, founder and president of Gaia, chose to make purity, integrity and potency guideposts for the development of his nascent botanicals business. Twenty-three years later, those core ethics are proving to be highly marketable and a good way to set Gaia apart from many other herbal supplement companies, Marshall added.

### Ascenta: ‘Let Us Show You’

Of course, traceability is not just important for garlic and schisandra. Fish oil supplements—which generated \$976 million in sales in 2009, according to NBJ research—carry their own quality concerns for consumers, who are being bombarded with messages about the potential toxicity and oxidation associated with fish oil. **Ascenta Health**—based in Nova Scotia and maker of *NutraSea*, Canada’s leading fish oil brand—has developed its own web-based traceability tool called *Pure Check* to assuage those concerns.

With *Pure Check*, Ascenta provides real-time access to independent, third-party testing for every batch of product it makes, something Rene LeClerc, vice president of sales, believes is unique to the category. “People can’t believe that we are this transparent, putting everything out there for our competitors to see and for our consumers to see,” said LeClerc. “*Pure Check* is simply a philosophical belief that we make a high-quality product, and we believe it’s the best product on the market. We’re going to show you that it is what we say it is.”

The company organizes its quality control data into three buckets: label claim, oxidation and purity. With label claim, Ascenta provides strength representations of EPA and DHA, and the data often exceed dosages marketed on the bottle. Oxidation tests measure the freshness of the product and the care with which it was manufactured, reporting compound levels of peroxides, and value levels of p-anisidine and totox.



The company measures these results against the **Council for Responsible Nutrition’s** (CRN’s) maximum limits, as set by its Voluntary Monograph on Long Chain Omega-3s. Purity tests speak to toxicity and contamination by measuring dioxins and furans, PCBs and dioxin-like PCBs (such as lead, cadmium, mercury and arsenic). Again, these values should compare favorably to maximum limits set by CRN or the **World Health Organization**.

The *Pure Check* platform launched in June 2007 and is now front-and-center on Ascenta’s website. It features heavily in all of the company’s packaging, marketing materials and advertising. Tests results are conveyed online in a consumer-friendly format, with succinct explanations of the more arcane terminology involved and bar graphs to visually demonstrate the company’s commitment to ingredient quality. Ascenta is able to present this data because the company makes its own product—something many large retail brands cannot match because they co-pack ingredients from different suppliers.

LeClerc sees *Pure Check* as the primary way for Ascenta to distinguish itself in the crowded and competitive U.S. market for fish oil supplements. “I don’t have one batch of product in the marketplace anywhere where you cannot get the third-party report for that batch

on our website. That is by far the most powerful point of difference for our line,” said LeClerc. With 45% of the Canadian health food channel already in its pocket, cracking the U.S. market is a top priority. “It’s a special time for us in the U.S.,” noted LeClerc, who described the company’s growth prospects as “sipping from a firehose of opportunity.” When he speaks to buyers inundated with me-too fish oil products, LeClerc said that he hears a uniformly positive response to his company’s clear and impactful approach to quality. “*Pure Check* is a breath of fresh air,” he said. “Buyers tell me, ‘You’re driving the category. You’re building the category. You’re bringing in new consumers.’”

### When Traceability Goes Viral

According to Alexandra Orozco, Ascenta’s marketing director, more than 10% of *NutraSea* customers now use *Pure Check* to validate the quality components of their purchase. Gaia’s traceability tool is too new to provide meaningful statistics as yet; but given the marketing campaign surrounding the platform, clicking customers are very likely to come. In looking at web-based traceability as a marketing trend gaining traction across the nutrition industry, Gaia’s Greg Cumberland offered the following: “You are going to continue to see this as a trend among companies that have nothing to hide. You are beginning to

see it more broadly already in organic dairy and organic beef.” In fact, **White-Wave Foods** plans to introduce its own traceability tool in September, allowing consumers to enter a UPC code on the company website to learn more about where and how the soybeans in their *Silk* soymilk were grown. Sara Loveday, marketing manager at WhiteWave, sees it as a way to tell *Silk*’s “crop-to-cup story.”

Just how valuable might such traceability be? In compiling the research that led to *Meet Your Herbs*, Gaia’s branding group surveyed 2,100 retailers and consumers. “One of the most amazing numbers that came out of that survey,” according to Marshall, “was that 83% said they would prefer a brand or a company that offered traceability. They wanted proof. They wanted absolute proof and certainty in what they were getting.”

Several common threads link Gaia’s and Ascenta’s approaches to traceability. These include a fearlessness of transparency; an honest relationship with the consumer; a strategic business commitment to quality from the onset; early adoption of verifiable quality controls for core ingredients; and a savvy willingness to share their competitive strengths online.

Another common thread is both companies’ desire that the overall industry adopt similar approaches to transparency. After all, a rising sea lifts all ships. “We want to force a divide between the companies that want to operate this way, and those that don’t,” LeClerc said. “I hope that we can bring more people to our side.”

#### NBJ Bottom Line

**Gaia Herbs’ *Meet Your Herbs* and Ascenta Health’s *Pure Check* programs put both companies in good standing for the potential fallout to come from heightened scrutiny of supplement manufacturers. Those companies that make safety and quality priorities will have to adapt less, if at all, to a stricter regulatory environment and should be rewarded for their good behavior, as transparency and disclosure increasingly lead to market differentiation.**

## GLG Life Tech Poised to Meet Growing Demand for Natural Sweeteners

*NBJ visits the global stevia producer in China to experience the company’s ‘seed-to-shelf’ manufacturing*

In June, Carla Ooyen, *Nutrition Business Journal’s* director of market research, joined a group of journalists hosted by **GLG Life Tech** on a seed-to-shelf tour of the company’s stevia growing, extraction and refining operations in China. For its 2010 crop, GLG is working exclusively, for the first time, with its own proprietary stevia seeds, which are being used by 250,000 Chinese farmers across 10 provinces to provide 100% of the company’s supply of stevia leaf. After flying into Shanghai, the group traveled to China’s heartland to visit factories and farmers engaged in GLG’s stevia production.

Located in one of GLG’s primary growing regions five hours west of Shanghai, GLG’s facility in Mingguang is one of the company’s key stevia processing facilities. The process starts with bales of dried stevia leaves and ends with a dried concentrated extract. About an hour north of the Mingguang facility, GLG operates a stevia seed base and research facility in Bengbu. Here, stevia is naturally crossbred to maximize the plant’s taste profile, disease resistance, hardiness, mass and content of Rebadioside A (which is one compound within the stevia plant that provides sweetness). Everyone on the tour was given the chance to taste a stevia leaf straight from a field plant and experience the sweetness of the raw product.

Heading another six hours northeast and back to China’s eastern coastline, the group toured the GLG Runhao refining facility in Qingdao, where the stevia processing is completed through a series of filtration and refinement techniques. The final commercial grade stevia produced at this facility contains a Reb-A content of about 97%. Here, the group was able to taste the finished product

and experience the intense sweetness of the pure RA97 extract and compare it with the more pleasant taste of stevia mixed with sugar or erythritol.

Jim Kempland, vice president of marketing for GLG Life Tech, joined the journalists on the trip. *NBJ* had the opportunity to ask Jim about GLG’s operations and the future of the stevia market.

### **NBJ: How did GLG enter the stevia market?**

**Jim Kempland:** Our CEO and chairman, Dr. Luke Zhang, is a fourth-generation business leader of his family’s enterprise. He has a PhD in pharmacology from **Vanderbilt University** and assumed his role in the family business about 15 years ago. Dr. Zhang began looking into companies and industries that he believed could improve the overall diet and health of human beings. One company he investigated was doing basic stevia production and extraction. Based on his findings, Dr. Zhang determined that this was a viable business that had the potential to benefit consumers, given the current consumption of high-caloric products that contain sugar and the fact that stevia is an all-natural product. Dr. Zhang bought that company in 1999 and began doing agronomic research on how to propagate high-value varieties of stevia.

Several years ago, **Cargill** also began evaluating stevia and came to the conclusion that stevia had significant potential as a natural sweetener and that the company would partner with someone to greatly increase the global capacity of stevia production to meet the needs of food and beverage manufacturers. In July 2007, GLG and Cargill signed an agreement that developed into a multi-decade supply agreement and strategic alliance signed in May 2008. Currently, Cargill is GLG’s largest customer, sourcing a minimum of 80% of its global stevia needs from GLG. The **U.S. Food and Drug Administration (FDA)** granted stevia GRAS (generally recognized as safe) status in December 2008 with Cargill’s GRAS application. Over the course of the last two years, we have been focused not only on the development of