Dietary supplement manufacturers often run into formulation and production challenges when trying to manufacture or reformulate products to meet clean-label requirements. The Clean Label Alliance is a group of industry leaders that have banded together to help ease manufacturers’ transition to clean-label production.

About 80 percent of US consumers want to know which ingredients are in the products they consume, according to the 2018 Supplements/OTC/Rx Trends Database (SORD) report [1]. Additionally, a survey commissioned by Lonza and carried out by the Natural Marketing Institute revealed that 54 percent of US consumers say they prefer to buy dietary supplement products that are derived from natural sources, representing a 59 percent growth between 2013 and 2018. In short, consumers are looking for clean-label products.
The term “clean label” originated in the food industry and has no established legal or industry definition. A product is considered to be clean label if it is comprised of natural ingredients and components that are free of artificial additives. According to some researchers, the clean-label trend has driven the food industry, and now the nutraceutical industry, “to communicate whether a certain ingredient or additive is not present or if the food has been produced using a more 'natural' production method” [2].

The FDA has not issued an official statement or regulation regarding clean-label standards, but according to former FDA commissioner Scott Gottlieb, consumers “want clean labels that are readable and understandable. Manufacturers are taking this consumer preference seriously, and FDA has a role here as well. We’re considering what changes could make ingredient information more consumer friendly” [3].

Despite the lack of regulatory guidance, a group of industry leaders has stepped in to assist manufacturers in switching to clean-label production and ingredients. The Clean Label Alliance was founded by Ribus, Lonza, Bosch, Natoli, and Biogrund “to offer assistance and guidance to dietary supplement companies by providing top-of-the-line resources and solutions to efficiently produce clean label supplements” [4]. Alliance member companies provide their assistance, free of charge, to dietary supplement manufacturers that require help in formulating and manufacturing products with clean-label ingredients. Getting assistance is as simple as going to the Clean Label Alliance website, filling out a form, and waiting for a member company representative to reach out with a solution.

Tablets & Capsules spoke with the Clean Label Alliance founding members about the group’s history, its goals, and the future of clean label.

**Why did your company become a founding member of the Clean Label Alliance?**

**Steve Peirce**, president of Ribus: As a supplier of organic and natural rice-based ingredients, Ribus has always been interested in providing the dietary supplement industry with alternatives to synthetic products such as magnesium stearate. Consumers are asking for clean-label supplements, but many manufacturers don’t have the knowledge or expertise to make the switch to clean-label ingredients on their own, so they’ve turned to suppliers for guidance. These five companies came together to form this alliance to offer technical support to producers and their operators to learn how to use clean-label ingredients.

**Dale Natoli**, president of Natoli Engineering: At Natoli, we continuously strive to develop groundbreaking solutions and improvements in the manufacture of quality tablets. We realize the great opportunities for collaboration as a member of Clean Label Alliance and see it as a means to offer our support to the industry.

**Simon Cashmore**, business development manager at Bosch Packaging Technology: As a leading supplier of encapsulation equipment in the nutraceutical market, Bosch wanted to be part of the Clean Label Alliance initiative to help our consumers in this niche area of clean-label production.

**Paul Davis**, quality service engineer at Lonza Consumer Health & Nutrition: Ultimately, Lonza’s decision to join the Clean Label Alliance stemmed from our ongoing commitment to be a consumer-centric company. It was important for us to be part of an initiative that would enable us to help solve customer problems quickly and easily and improve access to solutions that can enable more companies to make the transition to clean label.

**Felix Specht**, managing director at Biogrund: Biogrund wants to support its customers by developing new clean-label products for the market. Providing clean-label solutions requires a combined knowledge of the properties of raw materials, formulations, machinery, and regulation, which are the combined areas of expertise for the founding Clean Label Alliance members.

**What are the goals of the Clean Label Alliance?**

**Peirce**: Our goal is to provide technical advice to dietary supplement manufacturers and machine operators from concept to formulation to manufacturing. Most requests can be taken care of over the phone or through email. I like to think of it as industry helping industry.

**Specht**: The Clean Label Alliance brings together top industry leadership to fully equip dietary supplement manufacturers to make clean-label products. We can provide clean-label ingredients for existing projects as well as assist in reformulation or development of new formulations.

**Davis**: By making clean-label solutions more accessible, we can help the industry meet consumer demands. We want customers to know that the Clean Label Alliance is here to act as an enabler, supporting companies to more effectively and efficiently develop clean-label solutions by providing advice and assistance to support the clean-label transition process or connecting customers to reliable equipment, ingredient, or capsule suppliers.

**What are each company’s responsibilities as a Clean Label Alliance member?**

**Specht**: Every founding member has its own expertise. Our focus is to exchange currently used raw materials by developing clean-label products using natural and organic ingredients.

**Peirce**: We provide natural and organic alternatives to synthetic excipients so dietary supplement manufacturers can produce clean-label tablet and capsule nutraceuticals. We also offer formulation assistance when needed.

**Cashmore**: As a member company, our role is to support our customers technically from a machine standpoint as well as supporting the overlap into formulation, processing, and other parts of troubleshooting.
Ribus was founded in 1992 as a functional ingredient manufacturer, the company now supplies natural and organic rice ingredients to food, beverage, dietary supplement, and pet food companies worldwide, including clean-label excipient alternatives. Its clean-label product portfolio includes Nu-Flow anti-caking agent and flow aid, Nu-Mag lubricant, and Nu-Bind binder.

Biogrund was founded in Taunusstein, Germany, in 1999 and provides color coating for the pharmaceutical and nutraceutical industries at its organic and GMP-certified manufacturing plants. With locations in Germany, Switzerland, the US, and Russia, Biogrund supports the food supplement and pharmaceutical industry in the development, formulation, and production of solid oral dosage forms. The company's tailor-made and ready-to-use special powder mixtures for film coating, sugar coating, coloring, and tableting provide optimal coating results and fast processing times.

Bosch Packaging Technology was founded in 1974, though its history stretches back to 1963 in Karlsruhe, Germany. Today the company provides processing and packaging equipment to pharmaceutical and dietary supplement manufacturers around the world.

For over 45 years, Natoli Engineering has been an industry leader in tablet compression, offering tooling, tablet presses, and replacement parts as well as providing technical training and support to its customers.

Lonza Consumer Health & Nutrition acquired Capsugel in 2017 and offers products and services from custom API development and manufacturing to innovative dosage forms for the consumer health and nutrition industries. Its product offerings include clean-label ingredients and plant-based capsule technologies.
Davis: We assist customers with formulation input, training, consultation, machine operation, and how to work with new clean-label excipients. It's also our role to build awareness of clean label as a consumer-driven need and educate companies in the dietary supplements industry on the availability of the Clean Label Alliance's services.

Natoli: In support of and in collaboration with Clean Label Alliance partners, Natoli provides the appropriate technical resources related to customized tablet designs, tooling designs, and compression studies for clean-label products to assist our clients in the dietary supplement industry.

How do your clients benefit from your company being a part of the Clean Label Alliance?

Specht: As a founding member, we provide our expertise to realize the client's projects. By being part of the Clean Label Alliance, we can also offer our customers direct access to other industry experts who are leaders in the clean-label space.

Cashmore: Our customers benefit from the wealth of knowledge that is available. We have equipment suppliers, process experts, formulation experts, and capsule experts under a single entity. It is advantageous to have multiple skill sets to assess a problem and find a solution.

Davis: An important thing for our customers to remember is that the Clean Label Alliance's services are entirely free. As companies switch to a clean label, we offer consultative advice and formulation insight to help improve productivity and operational efficiency.

How do you hope to see the Clean Label Alliance grow or expand?

Davis: As the Clean Label Alliance grows and the clean-label movement continues to gain traction, our goal is to continue developing solutions that will grow our service base and help companies comply with evolving consumer expectations. While we are always open to collaborating with new, like-minded companies, for us, expansion and growth is about what we can do to bring new solutions and innovations into the clean-label arena and support the industry in its transition towards greater transparency.

Natoli: We hope that the dietary supplement industry will value the Clean Label Alliance as a key resource for technical support with regard to product and process development, efficiencies, and troubleshooting.

Specht: We do hope that the Clean Label Alliance becomes the first choice for clients that are seeking clean-label solutions and that we can service more companies to better serve the entire industry.

Peirce: Right now, we are learning by doing. Since the alliance went public in November 2018, we have helped more than a dozen companies in their pursuit of manufacturing clean-label dietary products. We would like to see small- to mid-size manufacturers that are not already clients of the founding member companies reach out for help during the formulation stages of their clean-label manufacturing. Currently, we are planning to expand the Clean Label Alliance's assistance beyond North America into Europe, starting at the Vitafoods show later this year.

What are some challenges facing the alliance?

Specht: For the founding members, our challenge is to provide resources like manpower, laboratory testing, product development, and solutions for customers looking for clean-label alternatives.

Natoli: A perennial challenge for manufacturers is to continue to source clean-label products that will effectively work with nutritional formulas.

Peirce: Manufacturers may not be aware of the full range of clean-label ingredients and excipients that are available. Not only do we have the responsibility to inform them of these products, but we also need to guide them on how to use them. One of our clients called and asked why our clean-label binder wasn't working, and it turns out that they were using too much of it. Another called because they used our clean-label lubricant and weren't reaching the production speeds they desired, so our Clean Label Alliance partner Bosch was able to tell them how to adjust the equipment.

Davis: It's important that, as companies become more internet-based and globally present, we ensure that our services are available to customers wherever they are in the world, and that our solutions adhere to global regulatory requirements. We see this, however, not so much as a challenge but as an opportunity, and we aim to remain aware of those needs as they evolve and adjust accordingly.

What is the future of clean label?

Natoli: The future depends on the affordability of clean-label products and their acceptance by mainstream consumers that have become more cost conscious in their selection of dietary supplements.

Davis: In its infancy, clean label was about simplifying ingredient lists and reducing the number of components used to manufacture products. Now, consumers are demanding transparency throughout the supply chain and are asking where ingredients and materials were sourced. Clean label is no longer just a conversation; it's a movement that will continue to expand and evolve in line with changes in consumers' lifestyles and aspirations.

Specht: The demand for clean-label products will increase tremendously in the near future, and we need to be prepared to provide the support and expertise that the industry will require.

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