



THE NATURAL ROUTE FROM CORE TO COATING

Manufacturers are looking for more efficient and consistent manufacturing performance while meeting increasing consumer demand for label-friendly ingredients and the complex regulatory requirements of the food space.

Dr Kevin Robinson recently caught up with **Kelly Boyer** to find out how Colorcon is addressing these issues

Colorcon, a world leader in fully formulated film coating systems for more than 50 years, continues to innovate and, last year, launched a new line, Nutra, Natural Advantage Film Coatings to address the market challenges commonly faced by the nutritional industry, such as masking unpleasant tastes and odours, making swallowing large tablets easy, providing protection for fragile cores and improving the shelf-life of moisture/oxygen-sensitive tablets.

When it comes to overcoming unpleasant flavours and odours, Nutrateric Nutritional Enteric Coating System has already become the natural choice. With supplements such as fish oil, garlic concentrates, peppermint extract and probiotics, an enteric coating allows the

consumer to benefit from reduced adverse side-effects such as fishy burps or an upset stomach.

Says Kelly: “It was about a year ago that Colorcon launched the Nutra Advantage portfolio of excipients for the nutritional and dietary supplement market. Whereas the industry is familiar with the original Opadry coating line, my goal in developing Nutrafinish was to create the same kind of brand identity and value-add in nutraceuticals that we have with our pharmaceutical coatings.”

“Opadry has been used in nutritional applications ... but our intent was to separate the two because the nutritional market has different needs and continues to grow at a

significant rate; and, traditionally — at least from Colorcon's business standpoint — it's been focused within the US and certain Asian geographies. Now, however, we're seeing a lot more activity in South America, Europe and the growing importance of key drivers such as clean label, natural colours and so on."

"So, we felt it was best to brand all these offerings (that we have) under one umbrella to create that special identity for dietary supplement coatings. As such, our customers know that when they buy a Nutrafinish film coating, all the components in that formulation are carefully selected to meet the regulatory compliance requirements of their specific market."

QUALITY GUARANTEE

Talking about the quality of the Nutrafinish range, Kelly confirms that they're all made in the same Colorcon facilities as the standard pharmaceutical Opadry coatings and so the production process is essentially the same. "The only difference is that, from a formulation standpoint, you select from more food-grade ingredients. And as our customers know, the regulatory compliance requirements for dietary supplements are extremely complicated and vary from region to region, etc., possibly even more so than the pharmaceutical market. Yet, they can be reassured that any of the coatings produced under the Nutrafinish brand will 100% comply with local standards, no matter what country or continent they're working in," she says.

Despite oral solid dosage forms being the most common and popular delivery vehicle for both pharmaceutical and nutraceutical actives, I asked Kelly about the spectre of pill fatigue and whether Nutrafinish products could help to overcome the general public's growing aversion to tablets. "Within the Nutrafinish brand, there are a number of different formulations and coating categories, including a choice of functional property products. For moisture-sensitive products, for example, Nutrafinish Moisture Protection Coating provides a barrier to moisture uptake, resulting in improved final product quality and in-use shelf-life."

COATING INNOVATION

"Our High Performance solution reduces the coating process time by up to 40% and cuts preparation times in half. Manufacturers gain improved productivity across all types of coating equipment while still delivering a consistent and premium finish. This is ideal for high-volume nutritional/dietary supplement producers that may have continuous coaters."

"And, just recently, in February 2018, we launched Nutrafinish Easy Swallow Coating to aid consumers by making tablets easier to



Kelly Boyer

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swallow — by improving the slip of currently coated (or uncoated) tablets while adding aesthetic appeal. This will certainly help to alleviate pill fatigue, particularly as a lot of dietary supplement tablets are quite large, maybe 1000 mg or more, and being a slippery coating, this will make the OSDs a lot easier to swallow. When you pick up an Easy Swallow coated pill, though, it's dry to the touch, but becomes very slick as soon as it comes into contact with water."

Finally, adds Kelly, the Nutrafinish Sugar Film Coating product is a three-step aqueous system that results in a traditional high gloss finish and rounded appearance, while significantly reducing process time from days to



hours. And, she adds, that although Colorcon hasn't specifically developed a coating for effervescent dosage forms: "Our experience shows that anyone wishing to coat one could do so with our standard dietary supplement coating."

BUILDING BRAND AWARENESS

Usable with the same technology and coating machinery, the formulations are supplied as dry, fully formulated powders that are simply dispersed in water for use and have, Kelly reminds me, been used in the dietary supplement market for some time. "Previously, we've been supplying them under the Opadry range, and although those branded products are equally good for both pharmaceuticals and nutraceuticals, this allows us to focus and produce Nutrafinish products to meet the particular needs of the dietary supplement market. By segregating the two product lines, it'll help us to build brand awareness."

"This has come in very handy in terms of some of the changing regulations. China is going through a period of change in GB compliance (Guobiao national standards) and to meet our customers' needs, we're going through a process of qualifying all our raw materials and making sure that they're GB compliant; it lets our customers in China know that when they buy from the Nutrafinish line, the materials will be GB compliant."

ADDRESSING CONSUMER CONCERNS

Another thing, adds Kelly, is the recent consumer anxiety regarding titanium dioxide (TiO₂) in the dietary supplement market. "We've worked hard to address these concerns and enable manufacturers to use colour to increase consumer appeal without the inclusion of synthetic colourants and using alternatives to TiO₂. At Vitafoods, for example, we showcased our new non-synthetic colour options and demonstrated a bespoke palette that can be achieved by excluding TiO₂."

"This is enabling us to address specific market needs and trends, which is why we consider Colorcon to be solutions provider. If someone wants a TiO₂-free coating, we can absolutely deliver that." The company is making a firm stand as a key supplier to the nutraceutical industry. "It's the same ... but different," says Kelly: "We want to create more awareness of our nutraceutical capabilities; when you market everything under the Opadry brand and try to talk to dietary supplement manufacturers, it can get a little confusing. We can now categorically state that, with Nutrafinish coatings, we are fully supporting this industry, responding to its growth and trends and trying to keep up to speed with the

FOR MORE INFORMATION

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changes that seem to be occurring almost on a daily basis."

So, what's next? Titanium dioxide free is the most recent product solution, says Kelly, and that's the fourth launch in the last couple of years, including the High Performance coating, sugar film coating and the Easy Swallow product. There's clearly a lot going on, but that's not all. The company's Opatint range of preformulated pigmented solutions is ideal for adding market distinction to softgel capsules and gummies, resulting in consistent and reproducible colours and reducing batch-to-batch variability. "And, for tablets, we've gone even further and are launching NutraPure into Europe, the world's first USDA-certified organic film coating," notes Kelly, "which is very much aimed at meeting the industry's needs for clean label ingredients and solutions."

In summary, Colorcon effectively reduces the complexity and time-to-market by providing high quality products with ingredients carefully selected from commonly used food ingredients or approved food additives to meet local regulatory requirements — all backed by superior and dedicated technical support along with regulatory expertise.





Targeting Consumer Appeal



Nutra™ Natural Advantage, coatings developed specifically to meet the needs of today's global nutraceutical supplement manufacturers.

Nutrafinish®, Dietary Supplement Coatings, provide nutritional and consumer health manufacturers with a range of innovative solutions to deliver an elegant finish, while protecting the tablet core and supporting final product stability.

All Nutrafinish® coatings are specially formulated to offer a choice of non-synthetic or “natural” color options to meet the increasing consumer demands for label-friendly ingredients. Nutrafinish® coatings can be formulated to exclude use of titanium dioxide. With Colorcon as your development partner you can avoid regulatory hurdles and speed your products to market.

NEW

Add aesthetic appeal
and make tablets easier
to swallow



From Core to Coating,
Naturally Your Supplier of Choice™
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