

High Energy!

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Using natural ingredients to perk up consumers.

As a nation, we are overtired. According to a survey conducted by the National Safety Council, 97 percent of Americans have at least one of the leading risk factors for fatigue, which include working at night or in the early morning, working long shifts without breaks and working more than 50 hours per week. The survey also found that 43 percent of respondents said they do not get enough sleep to think clearly at work, make informed decisions and be productive.

With lack of sleep and fatigue comes finding ways to get energy up throughout the day. Copious cups of coffee and/or energy drinks are often ways people try to get through the day. But consuming too much caffeine can come with side effects like anxiety, insomnia, digestive issue, high blood pressure, among others. Further, there are a vast number of reports and studies about the negative effects energy drinks like Red Bull can have on the body.

“People are constantly adding more things to their to-do lists—whether that means attempting to squeeze an 80-hour work week into five days, or trying to complete a variety of complex, disjointed tasks all by the end of the day,” said Mallory Junggren, senior director of marketing for Nutrition 21, LLC in New York. “People are doing so much now, that having low energy levels really isn’t an option. As these individuals continue to become busier, their knee-jerk reaction is to reach for something fast and easy that will instantly enhance their energy levels—but as these people become more educated about the substances they are ingesting, they are also becoming more ingredient conscious, and not so quick to grab a highly-caffeinated product.”

Barbara Lehner, PM, nutritionist with vis vitalis gmbh in Austria (STAUBER is the exclusive distributor of the company's PANMOL ingredients) agreed. "Too little time for movement, sports and preparing healthy meals, while too much pressure to perform have been a distressing development over the last years. More and more people feel a lack of energy, due to industrialized food coming along with low uptake of vital and essential micronutrients, responsible for the physical and mental energy metabolism. The feelings of being tired and burnt out are the logical consequence."

With that, many consumers are looking for natural alternatives that give them energy, without the negative side effects. "Consumers are seeking clean sources of enhanced energy, performance boosters, and protein all derived from natural, healthy foods like fruits, vegetables and greens," explained Andrew Wheeler, vice president of marketing for Illinois-based FutureCeuticals. "There has been growing concern in recent years over synthetic caffeine due to the negative side effects. And mega dosing of synthetic caffeine from energy drinks has led to safety concerns, thus the consumer demand for a healthier, balanced, more natural caffeine source has soared."

The market for ingredients for natural energy is also beneficial for athletes of all abilities, from the weekend warrior to professional athlete. "Men and women of all ages and athletic ability purchase natural energy supplements," noted Bruce Brown, president of Natreon, Inc. in New Jersey. "People have been seeking energy through natural sources for most of human history, but in the 1980s-2000s exercise enthusiasts were the primary focus of the industry. In the past decade, the weekend and wellness warriors have driven the marketplace, which has increased the need for novel delivery forms and a movement away from only focusing on exercise enthusiasts and the body building demographic.

"The weekend warriors continue to expand as wellness and active lifestyles are becoming a central component of community building and engagement," Brown continued. "They have evolved into a broader demographic cutting across gender and age and inclusive of all activities from generally living a healthy lifestyle, yoga and Pure Barre to long distance endurance races, team sports and CrossFit tribes. Innovative new products are emerging to address the wide spectrum of consumer needs cutting across all demographics."

Natural Ingredients

While there are a number of products on the market that promise a jolt of energy to the user, they also can come with a "crash," which often makes the consumer feel worse off than before they used them. "It's clear that there is an entire subsection of consumers who are looking for a natural, sustained energy boost without any of the heart rate or blood pressure risks that can accompany stimulant-laden products," Junggren noted. "Stimulants, including caffeine, can cause those who consume them to experience an initial, 'effective,' strong burst of energy—unfortunately, however, this is commonly followed by increased heart rate, a 'jittery' feeling, and the inevitable crash, which may even cause energy levels to plummet below where they first started."

Natural energy ingredients, on the other hand, "by the virtue of being derived from nature, act in harmony with our body chemistry, thus being more effective, because we evolved with respect to the flora and fauna in our surroundings," said Brown.

The list of long-standing ingredients for natural energy includes green tea, coffee beans, ginseng, acai, natural caffeine and vitamins B and C.

"Caffeine is the best-known energy ingredient, not only because it is present in several natural sources and traditional foods like coffee, guarana and tea, but also because its properties and

metabolism has been widely studied,” said Teresa Negra, business development manager for Lipofoods in Spain (STAUBER is the premier distributor for Lipofoods). “There are several scientific studies about its benefits as well as about its side effects and recommended intake dosages. Caffeine-containing food products and supplements are scientifically demonstrated to enhance the athletic performance in endurance sports. Recent studies also show that caffeine intake boosts muscle power and strength.”

FutureCeuticals’ Coffeeberry Energy, an exogenous energy source, is the company’s proprietary combination of organic caffeine and unique polyphenols from whole coffee fruit that delivers standardized levels of natural caffeine energy.

Lipofoods offers NewCaff, a microencapsulated natural caffeine to mask its bitter taste and provide a sustained release of the active in the blood. The product is completely natural, according to the company.

Negra noted that adaptogens like ginseng, ashwagandha, rodiola and cordyceps have also become popular in the natural energy space because their function is not only to boost energy, but also to restore the balance of physical and mental stress. “Emerging adaptogen extracts can be good alternatives to reduce the caffeine intake in some cases. For example, ginseng could be a good option to reduce caffeine in case you need to improve concentration and memory, but there is not enough scientific evidence to support its effect on sports performance.”

Natreon’s most successful natural energy ingredient is Sensoril ashwagandha, and its more recently coveted natural energy ingredient is PrimaVie shilajit. According to the company, Sensoril boosts energy levels and improves sleep quality while simultaneously reducing stress, synergistically increasing your natural energy from all angles. Sensoril is an adaptogen that supports healthy endothelial function and lipid profile as well as mental cognitive health, mood, fatigue and vitality.

PrimaVie shilajit naturally increases energy and endurance among its numerous other health and performance benefits. PrimaVie also works synergistically with exercise to increase collagen synthesis and decrease hydroxyproline (a biomarker of collagen break down) resulting in decreased recovery time and more energy to exercise sooner.

In addition to adaptogens, Negra noted that magnesium supplementation is recommended to get this balance between vitality and recovery. Lipofoods will be launching MAGSHAPE microcapsules, a highly concentrated source of magnesium for an active lifestyle in 2019. “MAGSHAPE microcapsules is a highly concentrated magnesium source which can be used in many different applications due to its stability, flowability, compressibility and pleasant taste,” she explained. “It permits formulations with high magnesium content so more magnesium gets into bloodstream to deliver its health benefits. MAGSHAPE microcapsules can contribute to having an appropriate muscular function and an adequate energy level for a better performance.”

B complex vitamins are a family of water-soluble vitamins that include thiamine (vitamin B1), riboflavin (vitamin B2), niacin (vitamin B3), pantothenic acid (vitamin B5), pyridoxine (vitamin B6), folate (vitamin B9), and cobalamin (vitamin B12). Each has a slightly different function but B vitamins help the body convert calories from the foods we eat into energy.

vis vitalis gmbh offers two main, patented ingredients for natural energy: PANMOL NADH, the biologically active form of niacin, as well as the Organic PANMOL B-COMPLEX, a complete combination of biologically active B-vitamins from quinoa sprouts.

“Especially NADH, the most powerful B vitamin regarding the energy metabolism, is very sensible against sun, air, gastric acid or oxidants,” explained Lehner. “Therefore it is a challenge to combine biologically active vitamin B3 with other ingredients and create effective and useful supplements for the consumers. PANMOL NADH is due to a special patented, natural coating—electrochemically and physically stabilized. It can be combined with other (non)active ingredients and shows high efficacy due to its resistance to gastric acid.”

PANMOL B-COMPLEX not only contains the eight known vitamins of the vitamin B group, but also a multitude of organically bound and biologically active B vitamins, providing a full spectrum for the body to maintain its energy production metabolism. According to the company, compared to isolated, single, synthetic substances, this holistic, natural complex of “B vitamin team-players” uses synergies to show more effectiveness in the human metabolism.

In addition to Coffeeberry Energy, FutureCeuticals offers ElevATP, an endogenous source (helps the body do what it already does, but better) is a natural complex (ancient peat and a proprietary apple polyphenol extract) clinically shown to increase ATP. Functionally, elevATP has been shown to improve strength, power and performance in resistance-trained athletes, and it is approved as a Natural Health Product by Health Canada, according to Wheeler.

“ElevATP has been clinically shown to increase serum levels of mitochondrial adenosine triphosphate (ATP), the energy currency of the body,” Wheeler added. “This is not exogenous ATP or a precursor, but rather an ingredient that helps the body provide higher levels of ATP via its own internal mechanisms. In this way ElevATP is healthy, non-stimulatory energy.”

Nutrition 21 offers two ingredients for natural energy, Nitrosigine and Lepidamax. Nitrosigine is a dietary complex of bonded arginine silicate that significantly boosts nitric oxide levels, a key factor in generating blood flow and vasodilatation in the body. “By decreasing arginase levels, an enzyme that breaks down arginine, Nitrosigine provides the body with a well-absorbed, long lasting form of arginine,” explained Jim Komorowski, the company’s chief science officer. “Nitrosigine is also a bioavailable source of silicon, a trace mineral that supports the flexibility of blood vessels. Together, these nutrients work to increase nitric oxide levels, and in-turn, improve vasodilation and blood flow. Through this mechanism, Nitrosigine may increase blood flow to sensitive tissues, such as working muscles and the brain, providing them with the nutrients and oxygen needed for optimal performance, mental focus and recovery.^{1,2}

A new ingredient from Nutrition 21, Lepidamax improves end points linked to enhanced male performance, specifically in the areas of energy production, strength and sexual function, Junggren noted.

“In a pre-clinical study, Nutrition 21’s Lepidamax was shown to increase skeletal muscle energy metabolism by enhancing a process known as mitochondrial biogenesis,” added Komorowski. “To examine the molecular mechanism behind the energy-enhancing effects of Lepidamax, various mitochondrial markers were measured following exercise. Results showed that the markers increased in the Lepidamax group compared to control. These results support the beneficial effects of Lepidamax on enhancing endurance and energy metabolism and indicate that Lepidamax also has a unique mechanism to support physical endurance.³

Self-determined Users

Consumers are not only looking for natural ingredients—they want clean ingredients that are certified and tested. “Consumers are becoming more and more self-determined, especially in terms

of product transparency,” said Lehner. “They need to know if the supplements they are taking up meet their requirements (e.g. characteristics such as organic, vegan, gluten free) and moreover, they question product labels, origin and similar. We think it is our prior responsibility to ensure consumers truly get what they expect and therefore support manufacturers by providing the most possible transparency and play off ‘fake ingredients,’ unfortunately also being present on the current market.”

“First and foremost, consumers are seeking scientifically studied products,” added Natreon’s Brown. “Using scientific research and clinical studies we develop ingredients that are safe, satisfactory and effective. We only develop ingredients that are scientifically proven to help rather than giving the consumer what’s popular. Consumers are intelligent, and when the evidence backs up an ingredient the sales will follow.”

Lipofoods makes its supporting scientific research available to all its partners representing the company’s brands all around the world. In addition, Lipofoods makes its research available to its customers so that they can use this information for their own marketing materials and more importantly, to give them the scientific support they need.

At Nutrition 21, ingredients go through rigorous pre-clinical and clinical trials in order to validate their safety and efficacy, as well as to better understand how their end-points impact overall human performance. In addition, the company develops and equips its customers with dedicated CARSE (competent and reliable scientific evidence) documents that include independently verified claims from experts linked to specific end-points tied to each of its specific ingredients. “Customers can then utilize these claims in their marketing materials to better position their products while still making impactful and true benefit statements to their end customers,” Junggren noted.

As the natural energy category shifts more toward natural, the growth potential seems endless. “Today, the category is just in the nascent stages of recreating itself,” Brown concluded. “It is clear that there will still be a market for caffeine-based energy shots; however, this segment of high caffeine containing products is tiring as consumers transition to natural and holistic ways to improve health.” NIE

References:

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For More Information:

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