

long with "What do you do?" and "Where are you from?" the list of all-purpose icebreakers has expanded to include this query: "What are you training for?" For whether it's a Tough Mudder, a tri, or Monday-morning spin class, odds are that you or someone you know is sweating over *something*.

So with all these newly minted exercisers chasing PRs and tracking every erg of output, the number of consumers thinking deliberately about how to fuel their engines has grown—and makers of sports-nutrition

products find themselves facing a whole new set of mouths to feed.

But though today's "weekend warriors" may fancy themselves champions, can a sports bar or protein shake really make a difference in how fast they cross the finish line?

It's a provocative question, and as Bruce Brown, MPH, MA, president, Natreon (New Brunswick, NJ), observes, "Whether weekend warriors push themselves toward personal bests or simply enjoy engaging in exercise in a community environment, optimal performance requires that bodies be ready when needed. And product is emerging to address the spectrum of needs for those who describe themselves as weekend warriors."

## **National Pastime**

The sports-nutrition market was going general strong even before casual competitors started swelling its ranks, but their participation has surely added to the gains.

Consider that Grand View Research expects the global sports nutrition market to hit \$24.43 billion by 2025, reflecting a CAGR of 9.7%. And though this growth "is driven

by increasing consumer awareness, rising interest in healthier food, and the increasing availability of information and access to studios and gyms across the country through fitness apps, we foresee the group of casual, recreational athletes continuing to increase, making the sports nutrition market even bigger year over year," says Georgia Dina Konstantopoulos, communication manager, FrieslandCampina Ingredients Active Nutrition (Paramus, NJ).

The emergence of casual competitors also explains why "the demographics and land-scape of the sports-nutrition category have seen so much change in the past few years," adds Andrew Wheeler, vice president of marketing, FutureCeuticals Inc. (Momence, IL). "These products were previously mostly for bodybuilders and hardcore athletes, and were geared mainly toward men. But the focus has gradually shifted, and sports nutrition is now for everyone, from endurance athletes to weightlifters to weekend warriors."

# **Demanding Demographic**

Just who that weekend warrior is confounds easy description, but observers agree that, en masse, the demographic is driven, demanding, and spans genders and ages, from the Millennial to the more mature.

Adds Konstantopoulos, "Weekend warriors are the busy bees of the workweek who, because of job or family obligations, commit to working out mostly during the weekend."

Help from fitness-tracking devices and social media make that commitment harder to escape, "so it's common for them to engage in the most trending and up-and-coming types of exercises," Konstantopoulos continues: Pure Barre, yoga, Pilates, interval training, gym classes, and outdoor pursuits like swimming, biking, running, triathlons, and mountain biking.

Whatever sport they choose, "These consumers are willing to invest heavily in active lifestyles that match their crowd and culture," says Elyse Lovett, marketing manager, Kyowa Hakko USA (New York City). Equally important, "They're willing to spend a little more on products that meet their high demands for convenience, functionality, and clean labels."

Ermel Manuel, technical sales support manager of adult nutrition at Friesland-Campina, agrees. "Weekend warriors are all about convenience," he says. "They opt for tasty, clean-label, on-the-go products such as beverages, bite-sized bars, cookies, and other snacks that support their fitness goals." Less appealing, he contends, are products that require hands-on preparation, like powdered beverages.

## Don't Go Overboard

Such lifestyle preferences are not lost on sports-nutrition brands, which "are getting savvier" about playing to their emerging audience, says Mallory Junggren, senior director of marketing, Nutrition 21 LLC (Purchase, NY). "They're observing this change in consumers and are investing in and producing products that are more natural, healthier, backed by science and—overall—more relatable to this evolving consumer."

Relatability aside, formulators also recognize that weekend warriors' nutritional needs diverge substantively from those of more traditional elite athletes, "and this is why we see a big difference in product offerings that cater to each group," says Konstantopoulos.

For example, where an ultramarathoner or distance swimmer might struggle to consume *enough* calories, casual athletes aren't so lucky. "Caloric control is an important driver for this group," says Manuel, "with consumers wanting the right number of calories from the right sources." Serving sizes should thus supply sufficient fuel without tipping into excess.

# **Fueling that Fits**

Beyond that, the differences grow starker. "Elite sports-nutrition products tend to focus on four areas: performance, endurance, muscle building, and recovery," says Cliff Barone, global ingredient marketing, Lonza Consumer Health & Nutrition (Morristown, NJ). "But for weekend warriors, recovery is often key, as is support for joint comfort and mobility."

In fact, weekend warriors—especially Millennial ones—have been "the driving force" for joint-health innovation, Barone says. "As Millennials have become more active and receptive to new sports trends,

such as high-intensity interval training—or HIIT—they desire practical, on-the-go products that help prevent injuries and cartilage degradation while supporting muscle recovery and meeting dietary preferences."

He claims that his company's UC-II undenatured type II collagen has a leg up on ingredients like glucosamine and chondroitin because its "unique mode of action suggests that it triggers cell-signaling cascades, using the body's own natural repair mechanism to help rebuild the cartilage that's been eroded in the joints." A randomized, double-blind, placebo-controlled study¹ from 2013 found that 40 mg of the product taken daily supported joint comfort in healthy subjects regardless of age group.

On the recovery front, Larry Kolb, president, TSI USA Inc. (Missoula, MT), emphasizes that for weekend warriors, "The need is faster recovery, less pain on Monday morning, and the ability to feel great and be ready to do it again the next weekend."

But almost by definition, weekend warriors need more recovery support. "Untrained people, or people who train or work out only one to two times per week, have greater exercise-induced muscle damage," Kolb explains. "Because of their lower training level, exercise induces muscle-protein breakdown in weekend warriors to a level that we only see in elite competitors during overtraining."

Hence the need for ingredients like myHMB—a branded form of beta-hydroxy beta-methylbutyrate, a leucine metabolite that the body produces in protein synthesis—which Kolb says "is known to reduce exercise-induced muscle damage and speed recovery."

Lonza's Carnipure L-carnitine tartrate can also ease recovery by ameliorating post-exertion oxidative stress, muscle tissue damage, and muscle soreness<sup>2</sup>, Barone says. Research<sup>3</sup> indicates that it can increase blood flow, while also reducing levels of metabolic-stress markers.

Junggren brings it back to the fact that sports-nutrition ingredients must meet individual athletes' needs. "Elite athletes and bodybuilders are training for significantly longer periods in intense settings while working various muscle groups and body parts throughout every training session,"

# "We find there's growing interest not only in optimizing pre-workout, but in preparing the body days ahead through proper sleep and focus, all of which lead to enhanced output in sport or exercise," says Natreon's Bruce Brown.

she says. By contrast, casual exercisers are "looking to get out, be active, perform, and have fun—but not necessarily to the level and intensity that elite competitors would."

Given the focus, specificity, and duration of elite training, "they're depleting a lot of critical nutrients," she continues. "So it's no surprise they're more likely to take myriad supplements throughout the day, including a pre-workout, intra-workout, BCAA or EAA product, or protein. But a weekend warrior may need only a pre-workout to get started in their activity."

## Protein a Pleaser

Speaking of BCAAs and EAAs—branchedchain amino acids and essential amino acids, respectively—one can't emphasize enough how important protein is to casual athletes, and how important those athletes have been to protein's success.

"Protein-enhanced products are the major beneficiary of the sports-for-everyone trend, with high-protein launches seeing annual growth rates near 30%," says Pam Stauffer, global marketing programs manager, Cargill (Minneapolis). Citing 2018 figures from the Euromonitor database, she says that the domestic protein category looks set to ride a CAGR of 12% through 2022 to hit a total of \$11.7 billion.

Dairy and soy proteins are as relevant as ever, she says, with plant sources—especially pea—increasing in appeal. She says its label friendliness, mild flavor, and functionality in formulations ranging from beverages and bars to powders, snacks, baked goods, and dairy alternatives make it a winner.

Adds Junggren, "For those looking to consume protein post-workout to support muscle growth and recovery, there are other products that can enhance traditional protein powders' effects." Combined with 6 g of whey protein and sweat equity—that is, *exercise*—her company's Velositol complex of amylopectin starch and chromium

"doubles the amount of muscle protein synthesis compared to whey alone," she claims.

But as with all else in life and fitness, there can be too much of a good thing—even protein. Thus, says Kolb, "We have to help weekend warriors translate their consumer needs into products that can meet those needs without overshooting nutritional goals. Most protein products come with extra calories, as they're intended to increase muscle mass, strength, and power, and that's usually not the weekend warrior's goal."

## Think about It

"Protein is always hot across all users," Lovett concedes. "But in the past five years or so, we've seen more awareness and use of ingredients that connect cognitive health to sports nutrition." Ingredients that promise focus, attention, concentration, and mental energy—and that "really give that mental edge that consumers are looking for"—are getting serious buy-in.

Case in point: "Citicoline is made naturally in the body and is a potent brain-health nutrient," Lovett notes. Her company's branded form of the compound—Cognizin—has shown in studies to benefit focus, attention, and mental energy.

Brown and company have noticed attention turning to adaptogens like ashwagandha and shilajit "to help the body and mind adjust to the stressors of modern life and exercise," he says. "We find there's growing interest not only in optimizing pre-workout, but in preparing the body days ahead through proper sleep and focus, all of which lead to enhanced output in sport or exercise."

## **Proof in the Pudding**

But whatever ingredients sports-nutrition formulators choose, they better have proof of efficacy at the ready. Because though weekend warriors may not be the fastest sprinters out of the gate, they're pretty quick at investigating a product's bona fides.

"These consumers are looking for strong science and structure/function claims in their sports nutrition products," Wheeler says. "The 'take it, feel it' products that boost performance, build muscle, hydrate, refuel, recover, and burn fat are widely popular, as is the ability to research the science and claims behind them. Transparency and substantiation are not optional. They're expected—and if you don't deliver them upfront, consumers notice"

So sports-nutrition brands, take heed. "The weekend warrior is, and will continue to be, one of the driving forces in the growth of sports nutrition products," Kolb says. So don't promise what you can't deliver. "Just as Air Jordans don't make you jump like Mike, sports nutrition products won't turn a weekend warrior into an elite athlete."

Kimberly J. Decker writes for the food and nutrition industries from her base in the San Francisco area, where she enjoys eating food as much as she does writing about it.

### References

- . Lugo JP et al. "Undenatured type II collagen (UC-II") for joint support: a randomized, double-blind, placebo-controlled study in healthy volunteers." Journal of the International Society of Sports Nutrition, vol. 10, no. 1 (October 24, 2013): 48
- Volek JS et al. "L-carnitine L-tartrate supplementation favorably affects markers of recovery from exercise stress." American Journal of Physiology, Endocrinology, and Metabolism, vol. 282, no. 2 (February 2002): E474-E482
- Volek JS et al. "Effects of carnitine supplementation on flow-mediated dilation and vascular inflammatory responses to a high-fat meal in healthy young adults." American Journal of Cardiology, vol. 102, no. 10 (November 15, 2008): 1413–1417