



Female athletes are increasingly asking for more research on female athletes, including female resistance training studies.

— Bill Campbell, Ph.D., associate professor of exercise science at the University of South Florida

menstrual cycle in my studies is that I like to be able to extrapolate my results by saying that the outcomes were irrespective of the female's menstrual cycle. Since I did not consider it in my research design, whatever outcome we observe can be expected to happen to the same population, no matter where they are at relative to their cycles."

Campbell said he has noticed female athletes are increasingly asking for more research on female athletes, including female resistance training studies. "I just spoke at a seminar two weeks ago, and a woman about 60 years old told me that not only is there not enough research on women and fitness, but that there needs to be more on women post-menopause as well," he said.

The onus may be on brands and supplement companies to prompt more female athlete nutritional studies. "Since NIH [National Institutes of Health] and federal entities will not fund sport performance studies, it is incumbent on the industry players to do this," Campbell said. "A good example of this is Dymatize." Campbell said he's conducted several studies that have included female populations, including trials funded by Dymatize.

Kalman added health and nutrition companies, whether Pfizer, EAS or any other firm, often have a target market in mind, which influences the researcher's rationale in putting together the study inclusion and exclusion criteria. "I have been involved in studies whereby we target a 50/50 mix of males and females, and others where no specific gender is targeted—the community response is represented in the final study group," Kalman reported. "Mind you, when doing weight loss studies, you typically get three or four women to every one male respond or show interest in being involved, but when doing a muscle-building study open to both genders, the skew is more males."

Smith-Ryan noted NIH now requires researchers to justify why they are or are not including women in their research proposals. "If you're excluding them, it has to be scientifically justified," she said. "For example, prostate cancer—you obviously can't study this in women."

For supplement brand Twinlab, researching female athletes is a no-brainer. "We study the nutritional needs of women to uncover their needs and drive new product innovation to support them better," reported Marc Stover, the company's vice president of sales and marketing.

Ingredient supplier Bergstrom Nutrition has also seen the light on female-specific research. "We ... see nutritional support for women as an underdeveloped market with huge potential and are moving forward with female-focused OptiMSM® research," said Tim Hammond, vice president of sales and marketing at Bergstrom Nutrition. He noted providing supplements that support proper nutrition and maintain hormonal balance may help minimize the effects of the female athlete triad—a combination of low energy availability, menstrual dysfunction (amenorrhea) and decreased bone mineral density (BMD).

Marianne McDonagh, vice president of sales at Bioenergy Life Science Inc., also gave a nod to research. “Women are looking for clean, all natural and effective products that utilize ... scientifically proven ingredients that have true science behind them,” she stated.

When it comes to clinical study populations, though, room for improvement exists. “Unfortunately, the industry has paid little attention to including women in research for sports nutrition thus far,” Majeed explained. “Research often lags behind marketing, and this aspect of the industry has not yet caught on to the fact that there are many active women. However, the scenario is changing as females make up more of the customer base in this segment, which makes them an essential part of future research into the science behind product efficacy and safety. Going forward, we expect more females participating in trials on sports nutrition.”

While palatability is half the battle, supplement users are only going to become repeat customers if a product also works for them, which is where clinically studied ingredients come in.



Hammond concurred, “Sports nutrition research historically focused on male athletes, overlooking the nutritional needs of females in regards to supporting proper metabolism.”

Stover confirmed targeted research is key, noting, “Twinlab has always been about the science not the flash. Using the REAAL example, we’ve secured sports exclusivity for the technology and it’s backed by 24 human clinical studies generated over almost two decades. This body of research covers both genders, all ages, athletes and nonathletes.”

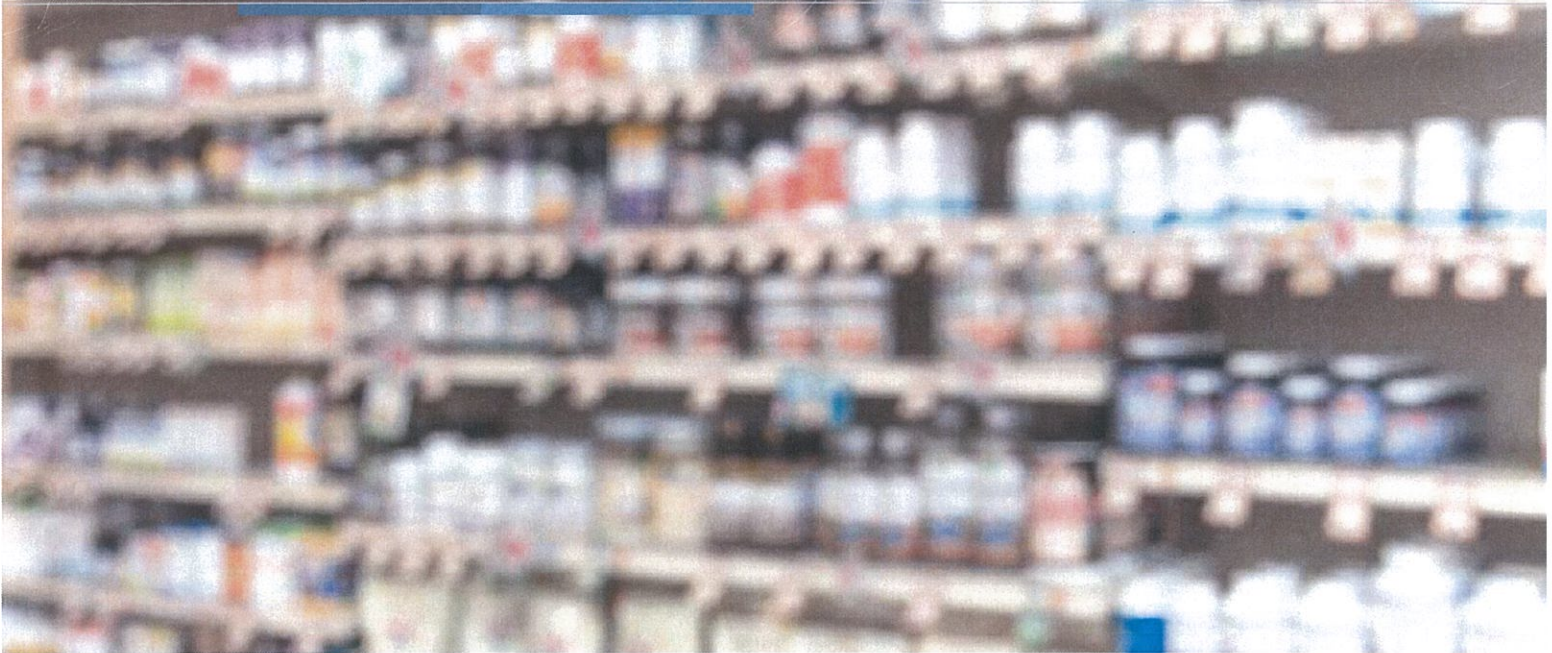
Identifying Trends

Trends in women’s sports nutrition products are as varied as women themselves. Parent credits female Millennials for the increased expectation for high-quality, clean label products, noting young consumers are “looking for sports nutrition products that carry organic and/or natural ingredient statements. We’re also seeing an interest around supplements that support different dietary lifestyles like paleo, keto, vegetarian and vegan.”

Fritz has observed similar preferences. “In addition to the trend toward natural, plant-based products, we have seen an expansion in convenient on-the-go formats like single-serving sachets and stick packs that are easy to travel with and utilize as part of a busy, active lifestyle,” she stated.

McDonagh noted the desire for convenient products resonates with women and men alike; however, she also suggested mint and tablet supplements are particularly suited to women on-the-go.

Delivery Forms and Formulation



With so many options available, Parent asserted, “Brands need to understand the different priorities of the active female consumer and develop unique products that address these demands.”

Imanaka suggested market research can help identify what women care about when it comes to fitness. To that end, he cautioned, “Companies would be shortsighted to only target performance athletes. Recreational or ‘lifestyle’ athletes who are trying to improve their overall health have a huge market share and should not be overlooked when marketing imagery, writing style and product development are being considered.”

Hammond pointed out the sophistication of female athletes shouldn't be underestimated. “Whether competing individually or as part of a team, women are so much more than casual participants,” he stated. “The drive, focus, skill and physicality of female athletes is being highlighted on a global scale. Their success and notoriety provide new female-centric marketing and formulation opportunities beyond just fueling.”

Tom Druke, director of VitaCholine® brand development, Balchem Human Nutrition and Pharma, agreed. “Formulating and marketing to address the needs of active women is a relatively recent development in the sports nutrition marketplace, but a welcome one,” he noted. “Many of the benefits that make sense for women in the gym extend to the rest of their lives, such as the ability to focus, maintain energy, and ensure normal communication between the brain and the muscles within the body.”

Takeaways: Sports Nutrition for Female Athletes

By Steve Myers

The world is half female. At least half of the sporting world is female; however, most products are formulated for men or based on research conducted mostly on men.

There is tremendous opportunity for companies to capture part of this growing category, but it will require an approach that considers and respects the uniqueness of active females.

Research, Research, Research. It is up to brands and manufacturers to request, fund and support increased research on female athletes. “The inane idea that women are more difficult or more expensive to study is pure laziness, in my opinion,” said Susan Kleiner, Ph.D., R.D., owner of High Performance Nutrition LLC and nutritionist for many elite female sports teams.

For instance, researchers like Bill Campbell, Ph.D., associate professor of exercise science at the University of South Florida, purposefully does not plan trials around menstrual cycles. “The reason I do not consider the menstrual cycle in my studies is that I like to be able to extrapolate my results by saying that the outcomes were irrespective of the female’s menstrual cycle,” he explained.

More companies, such as sports nutrition brand Dymatize and ingredient supplier Bergstrom Nutrition, are funding studies on females. Abbie Smith-Ryan, Ph.D., associate professor of exercise physiology and director of the Applied Physiology Lab at University of North Carolina, Chapel Hill, who also conducts studies on females, reported NIH now requires researchers to justify why they are or are not including women in their proposals.

Strong, Not Skinny. Body composition is important to active females, but it isn’t the whole picture. These athletic consumers care about performance, strength, endurance, body composition, iron status, energy, bone and joint health and cognitive function. Ingredients like choline help address energy, cognitive health and neuromuscular function. Younger women are educated and looking for sports nutrition products that represent their values, such as transparency, organic, plant-based and few, natural ingredients.

Don’t Shrink it and Pink It. Sports nutrition products have historically been formulated for men, including products designed to promote growth of big muscles. Most women want to work on muscle tone and build some muscle, but they don’t want to get huge. Thus, taking a male formula and simply putting it into a smaller pink bottle is not enough.

Speaking women’s language and appealing to their sensibilities and priorities is important for formulating, branding and packaging a successful female sports nutrition product. Basing formulation on the latest science on female physiology is a good start. Consider not just health, but social and environmental concerns. Social media, including key female fitness influencers, could be valuable to communicating with this consumer market. Messaging and packaging should reflect strong, confident women, not just skinny-chasing dieters.

