

Deep Dive into Fast-Growing Protein Supplements Sector

by Pete Hardin

In early August 2024, a lengthy report appeared that reviewed consumer products' trends in the Active/Performance Nutrition category. Summary: this category of foods and supplements highlights strong, growing protein demand across a wide spectrum of consumer demographics. Most of that demand is currently derived from dairy, with specific focus on whey-derived proteins.

This 94-page analysis is titled, "Bro, Do You Even Lift? An Investors' Guide to Active Nutrition." The report stems from a year-long research project by John J. Baumgartner – a consumer packaged foods analyst with the Japan-based Mizuho Securities USA LLC. That bank is a presence in the United States.

Growing consumer purchases of foods and supplements perceived to enhance health, nutrition and performance have evolved well beyond "food fad" status. Consumer spending in this category has shifted from discretionary to staple. Upfront, the Mizuho Securities analysis states: "Convenient/Active Nutrition is Mainstreaming & Growth is in the Early Days; Our Top Theme for Growth in Food and Beverage."

Covid-19 helped consumers focus on ingredients labels: Sugar beware! A bar chart compares the dollar value of products with health claims, between 2021 and 2023. "Sugar Free" products' sales more than doubled (6.2% to 13.4%) during those two years. And "No Sugar Added" products' saw dollar value climb from 4.2% to 8.7%.

The Covid-19 experience featured many more U.S. households preparing meals at home ... and folks obviously invested time studying ingredient labels and learning more about nutrition. The Mizuho report noted: "The post-COVID bounce in Nielsen sales confirms our thesis that rising rates of U.S. obesity and diabetes are likely to enhance the importance of diet and spur more consumers to Active Nutrition shelves."

The report concludes: "Consumer interest in protein has reached multiyear highs and is underpinned by research extolling benefits for muscle growth and maintenance, satiety/weight loss, immunity, energy and blood sugar balance. Concurrent advances in food science that isolate protein from other macronutrients (fats, carbs) have led to a significant increase in dietary protein consumption, **our survey suggests that 42% of consumers now maintain a high-protein diet (vs. 24% in 2022).**" (Bold emphasis added.)

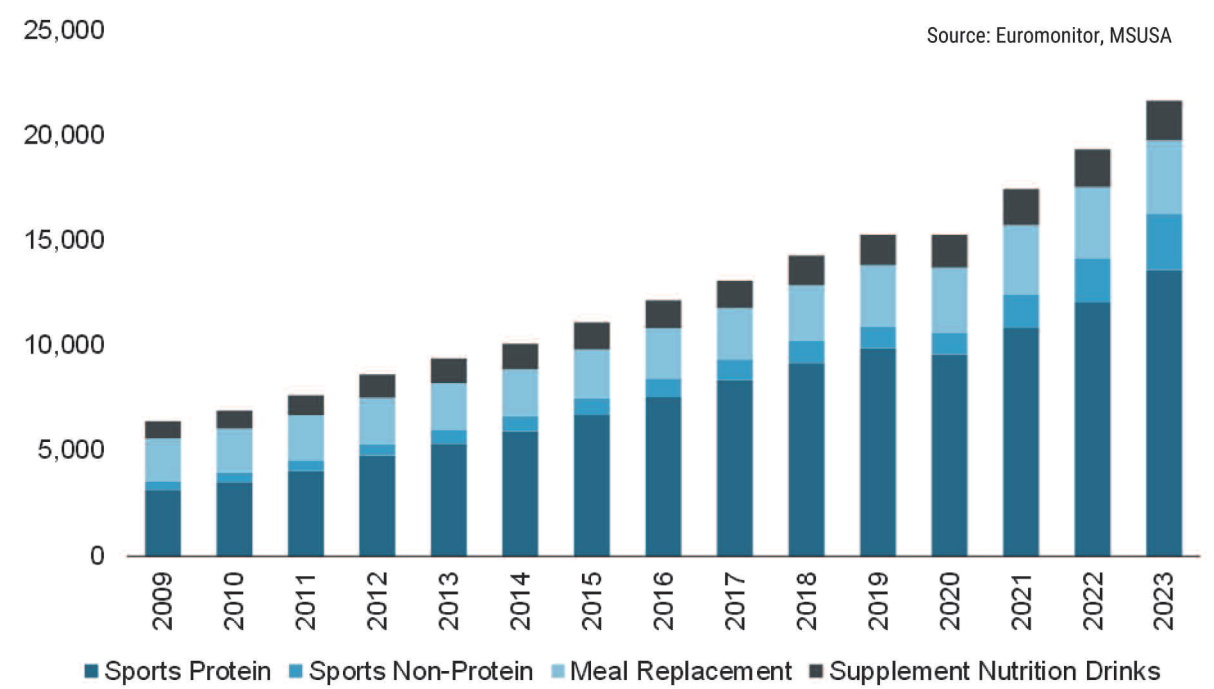
This rapidly growing consumer trend is a "20-yr. U.S. consumer trend towards healthier nutrition [that] consolidates around options with higher protein/lower sugar, convenient nutrition household penetration has reached 75% and resilient price elasticity over the last 18 months ...". This accelerating consumer trend "...punctuates the category's evolution from discretionary item to everyday mainstream staple."

In 2023, retail sales — including E-commerce — in the Active/Performance Nutrition category topped \$20 billion. Since 2009, the combined annual growth rate for the sector has been a spectacular +9%.

What types of consumer products comprise this category? High-protein nutrition shakes are viewed in this sector as having the greatest growth potential, followed closely behind by nutritional powders. Nutrition bars are also included here, although their sales have slid backwards in the past few years.

Mizuho's analysis shows that the Active/Performance Nutrition sector enjoys growth among all age groups and income categories. But millennials — persons born between 1981 and 1996 — may be the age group with the greatest potential for continued growth. The report noted: "In 2023, U.S. online search interest for 'high protein' reached a five-year high and

U.S. Annual Sales of Performance Nutrition Products: by Category in SMM



Annualized sales of the Performance Nutrition products category shows a consistent uptrend dating back 15 years. Since Covid-19 hit in 2020, those annual gains have accelerated nicely in 2021, 2022 and 2023. The Covid pandemic dramatically shaped Americans' food practices and attitudes – including greater attention to health, wellness and nutrition.

over 50% of online mentions were from millennials." Simply stated: consumers in their late 20s/early 30s to mid 40s are leading this lifestyle, food and nutrition supplement trend.

Not all the future opportunities in this category rest with dairy. Plant-derived proteins are viewed as a major future opportunity. In part, that's because to date, plant-derived proteins currently hold a relatively modest market share of the Active/Performance Nutrition sector.

Certain demographics bode well for the Active/Performance Nutrition category. For consumers ages 30 to 60, 60% of that group are regular buyers. But for consumers above 60 years old, only 30% are regular purchasers.

Females are viewed as a marketing opportunity awaiting further enhancement. The Mizuho report states: "For females, just 3% of sports nutrition products are female gender-focused but females comprise 50% of sports participants. We see significant opportunity to address differences in metabolics and nutritional needs vs. males and our survey suggests that sales of female-specific products may prove 50% incremental to the category."

Definitions:

Protein "is the macronutrient serving as a building block for all cells. Protein is important for immunity, oxygen delivery, blood sugar bal-

– Dairy proteins offer future marketing opportunities Protein. Protein. Protein. Protein. Protein. Protein.

Protein – the second leading component in dairy cows' milk (behind milk fat) – is evolving as THE driving force propelling dairy's consumer demand.

Demand for daily protein in foods and supplements is part of a larger shift in the attitudes and food purchasing habits by consumers. These expanding trends include desires for healthier lifestyles, added protein for sports performance and muscle-building, "cleaner" labels for foods, weight maintenance, etc

These marked – in some cases, dramatic – diet and lifestyle changes are reflected in publicly available, dairy data generated by the United States Department of Agriculture. Examples include:

- Double-digit growth during both 2023 and 2024 for cottage cheese.
- Yogurt production rising 4% through 2024's first 10 months.
- Even fluid milk sales during 2024's first 10 months have climbed above year-ago totals. There is no more cost-efficient source of complete dietary protein than a glass of milk.

ance/diabetes management, adequate energy and muscle strength and growth. Protein also increases satiety and feelings of fullness and supports bone health. Studies have also shown benefits for blood pressure."

Protein intake is the top-rated area of questioning that clients ask professionals. Here's a breakdown: Trainers (69%), Dietitians (58%), and Nutritionists (46%).

Performance Nutrition (compiled by Euromonitor) includes:

- (1) sports protein (bars, powders, ready to drink beverages);
- (2) sports non-protein (amino acids, creatine, etc.);
- (3) meal replacements (shakes, powders);
- (4) supplement nutrition drinks (protein, vitamins, minerals)."

Dietary alternatives to weight-loss drugs?

Interest and perceived benefits for recently released weight-loss drugs in the GLP-1 family (such as Ozempic) have perked public interest. It's reported that about 12% of Americans have tried these drugs. However, there are some downsides to the GLP-1 drugs, including loss of about 40% of weight loss drawn from lean mass, including muscle. Other side effects may include reduced bone density. (Editor's note: For persons without insurance coverage for GLP-1

During 2024, the single dairy commodity that's been most directly impacted by and responded to increased dietary dairy protein demand has been the whey complex.

Dry whey (34% protein) kicked off 2024 with prices surveyed by the USDA at 40¢ per pound. But by December 2024, USDA reported the average price for Dry Whey had hit 75¢.

Intriguingly, U.S. output of 34% Dry Whey declined sharply during 2024's second half. Why? Several major whey firms have invested in and brought capacity online to produce whey derivatives of higher protein content, such as Whey Protein Concentrate (70-80%) and Whey Protein Isolate (90%). These high-protein whey derivatives command top-shelf prices. Stronger demand and values for high-protein WPC and WPI primarily traces back to consumer demand for protein supplements.

The protein supplement sector has little splash in the area of government-generated data. That's where the private sector enters the picture ... as is reflected by the extensive report on proteins that's profiled in the larger, accompanying story.

E-commerce enjoys greatest sales gains in this category:

Since 2009 – a low-point in the nation's overall economy – E-commerce (i.e., on-line) sales of Performance Nutrition products have shown the greatest volume gains. Grocery still enjoys the biggest market share of such sales as of 2023 – 44.1%. Grocery's market share was 41.6% in 2009.

But E-commerce saw its 10.3% share of sales in 2009 climb to 33.3% by 2023. The major losers among sales outlets were Health (such as GNC) and Beauty Specialists. That category fell from a 37.8% market share in 2009 down to 14.0% in 2023

U.S. sports protein value share of total wellness products has increased from about 20% in 2009 to a hair over 25% in 2023.

drugs, out-of-pocket costs are prohibitive. That fact opens the door wider for diet- and lifestyle-based focus for weight loss and maintenance.)

The Mizuho report states: "We believe that active nutrition products can benefit GLP-1 users, via supplemental protein and nutrition density, that may mitigate muscle loss and benefit digestion. Industry sources suggest that the consumers most likely to adopt GLP-1 regimens are already light users of protein shakes and that shakes consumption then increases while on GLP-1."

Nutritional beverages: spectacular growth

"... the ready-to-drink shakes segment generated \$4.7B [billion] in 2023 revenue in Nielsen measured channels, and comprised 43% of total active nutrition value sales."

When expanded to include all-outlet channels, 2023 sales for shakes was [about] 6.2 billion, a CAGR [combined annual growth rate] of 17% vs. 2020, and comprised [about] 40% of total active nutrition category sales.

Protein powders: Growth & positive outlook

The second-largest category of products in the Active/ Nutrition sector is protein powders. This high-protein category includes products with dairy proteins (usually whey-derived), as well as plant-based products.

Customers use protein powders for mixing into self-made shakes, or else as a supplemental protein in home-prepared foods.

Ironically, dairy protein-infused powders are perhaps the original product in the entire category marketed in the United States, dating back more than a century – to 1911. That's when body-builder Eugene Sandow unveiled his "High Protein Cocoa" powder that contained 26% protein.

According to the Mizuho analysis, protein powders garnered \$1.3 billion in retail sales in 2023. But E-commerce sales dwarfed that retail figure, boosting the total category's sales in 2023 to an estimated \$5 billion. Since 2020, protein powder sales (all forms) have enjoyed impressive, annual growth.

Two primary segments drive the protein powder category: Health/Nutrition and Performance Nutrition. Those two categories make up 49% and 44% of total sales, respectively.

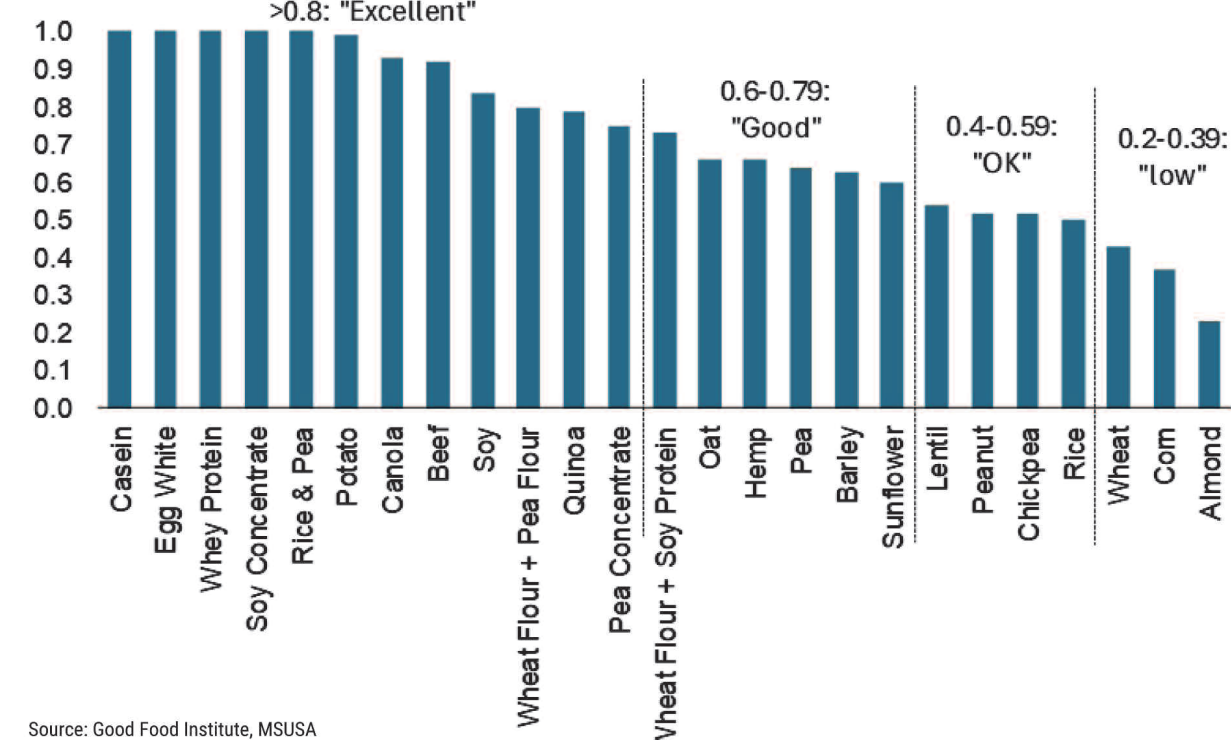
Intriguingly, the Covid-19 pandemic dramatically propelled sales of protein powders, despite significant price increases. Important to note: the accompanying graph shows annual, year-over-year (YOY) percentage changes. The 2022 dip in percentage growth shows reduced YOY positive growth, not negative sales trends.

Copies of Study Available

Persons who wish to obtain a copy of the Convenient/Active Nutrition study detailed on these pages may contact the author, John J. Baumgartner, at the following email address: John.Baumgartner@mizuhogroup.com

Baumgartner is a career analyst for consumer packaged foods. This study presents a wide array of relevant data in its analysis.

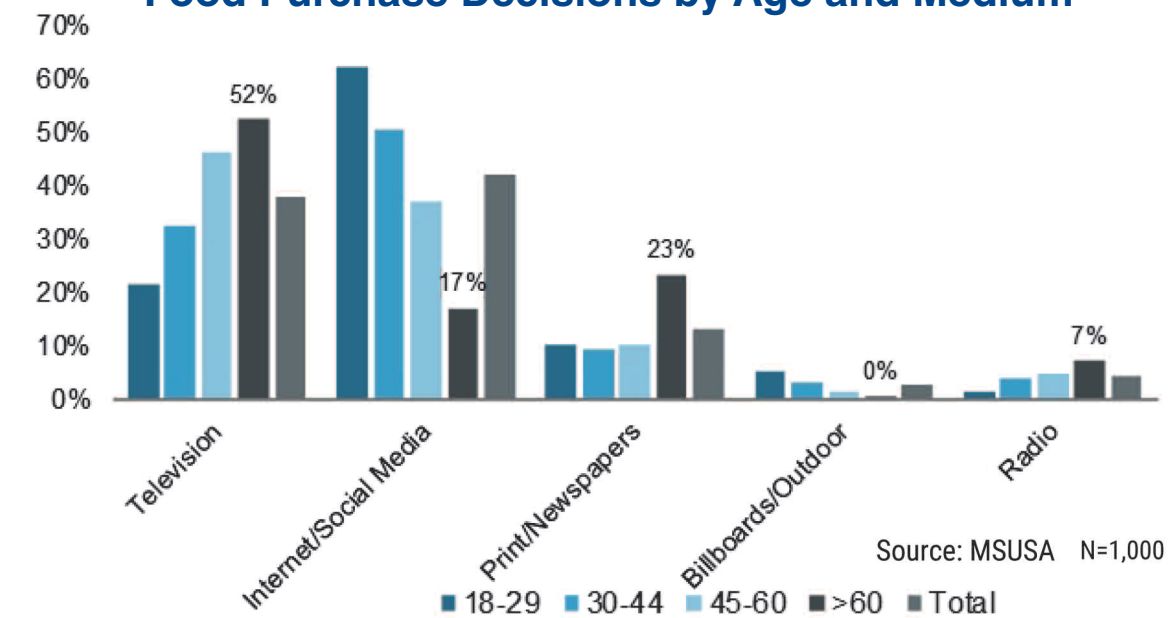
Protein Quality Comparison: PDCAAS Score (0 to 1.0) Protein Digestibility – Corrected Amino Acid Score



Source: Good Food Institute, MSUSA

The first and third top quality proteins are dairy: Casein and Whey Protein. This measure scores "Protein Quality Comparison," on the basis of 0 to 1.0. The technical name for this measure is the Protein Digestibility-Corrected Amino Acid Score. A trend in dietary protein supplements is to combine plant-derived ingredients into formulations that achieve more complete amino acid sequences.

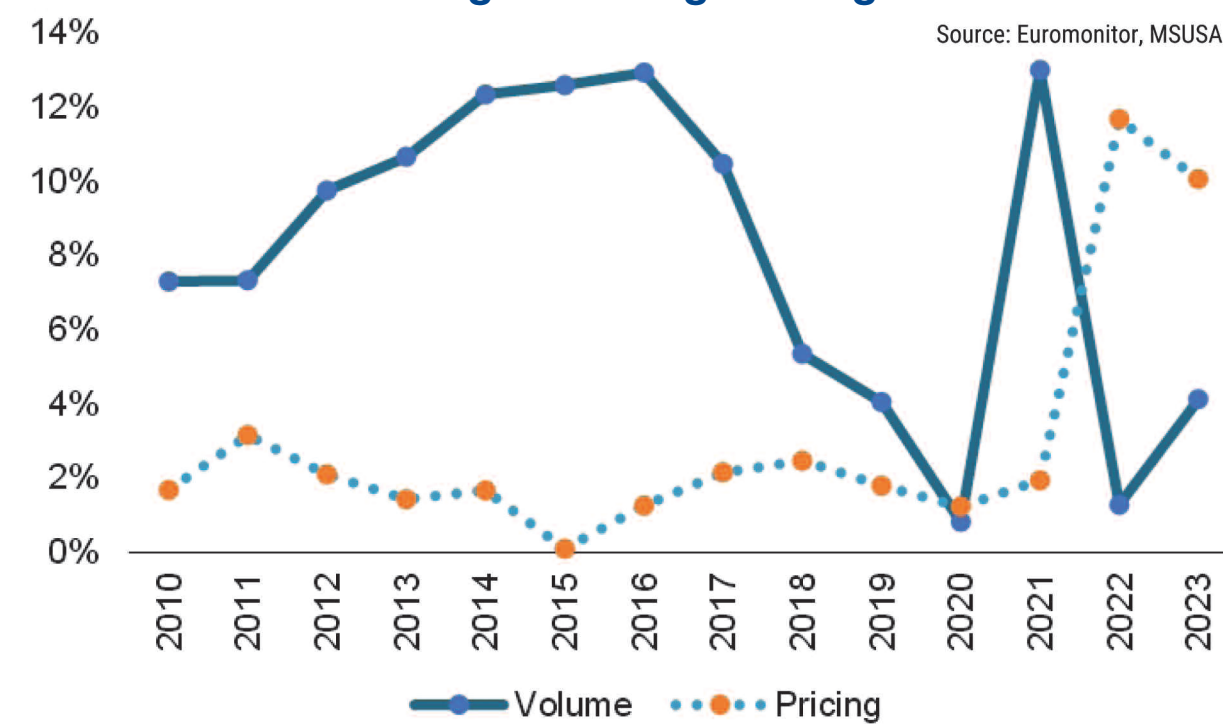
The "Biggest Influence" of Advertisements on Food Purchase Decisions by Age and Medium



Source: MSUSA N=1,000

Here's a breakdown of the "Biggest Influencer" among media options for various age groups in the United States (both men and women). Interestingly, as people age, television is a larger influence on their food purchasing decisions. Conversely, Internet/Social Media play a decreasing role as people age.

U.S., Protein Powder: Annual Volume and Pricing Percentage Change



Source: Euromonitor, MSUSA

Read this graph carefully. The blue line represents annual, year-over-year percentage growth. The dotted line represents the percent of annual pricing changes. Covid-19 events in 2020 sparked a huge increase in annual sales, which tapered off in 2022. In 2023, percent of sale growth rebounded, and prices moderated a bit. The Mizuho report notes "... protein powder is redefining elasticity. In Nielsen channels the pass-through of upstream protein cost inflation in 2022 reached peak retail pricing of 26% yet volume declined by a maximum of -4%. Such resilient demand suggests that the category migrated into more of a staple, rather than a discretionary purchase."