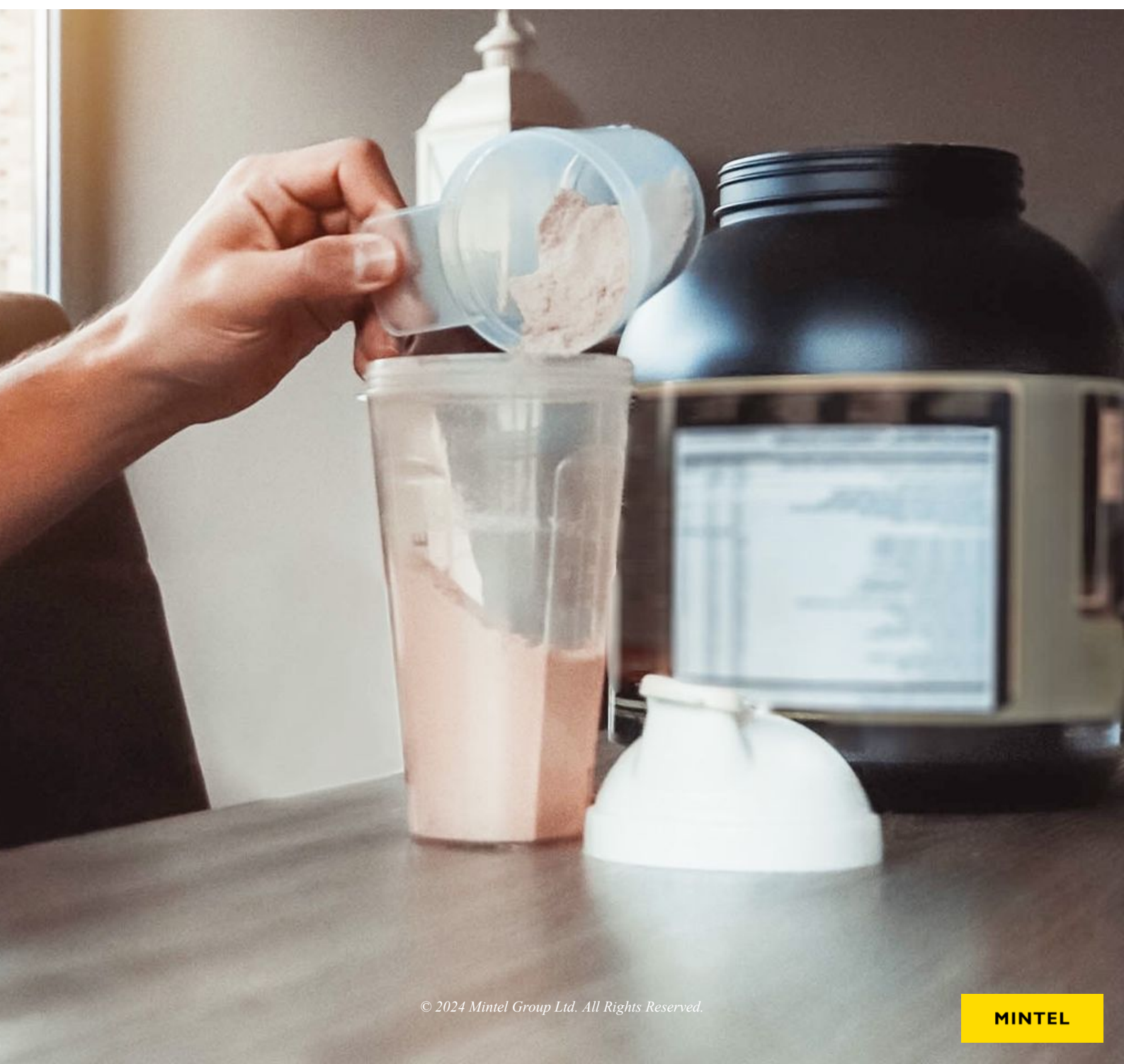


PATENT INSIGHTS: NEW DIRECTIONS IN SPORTS NUTRITION

Patent activity in sports nutrition continues to grow. Inventions reveal exciting botanical compounds and fresh uses for staple sports supplement ingredients.



Rick Miller, Food & Drink
Associate Director for
Specialised Nutrition



Report Content

- At a glance
- Mintel's perspective

WHAT CONSUMERS WANT AND WHY

- Plant-based sports nutrition is growing in demand
- Muscle growth remains very important to consumers who use sports nutrition products

PRODUCT INNOVATION TRENDS

- Slimming, brain health and nervous system claims are all under-utilized claims globally for sports nutrition
 - Graph 1: % food and drink performance nutrition launches, select functional claims, 2015-19
- Dairy proteins dominate; pea and rice proteins grow as soy falls
 - Graph 2: % food and drink performance nutrition launches, select ingredients, 2015-19
- Leading South African sports nutrition brand re-focuses on plant-based

THE PATENT LANDSCAPE

- Overall growth of sports nutrition patents filed in last 10 years
 - Graph 3: sports nutrition, number of patent families published each year (excluding China-only filings*), 2010-20
- China, Korea and the US are joint leaders with the most sports nutrition patents granted in the last 10 years (including China-only filings)
- Muscle growth dominates sports nutrition patent activity
- Muscle growth dominates sports nutrition patent activity
- Kao Corp. leads in innovation related to sports nutrition
 - Graph 4: top five organizations with currently active* patent families for sports nutrition inventions (excluding China-only filings), Jan 2020

Look forward to enhanced muscle endurance

- US consumers are most likely to purchase sports drinks and want more functional benefits than just carbohydrates
 - Graph 5: types of sports and nutrition drinks purchased in past three months, December 2018
 - Graph 6: desired health benefits in sports drinks, December 2018
- Gatorade responds to functionality needs and is taking on Bang Energy and Reign
- Unique ingredients that enhance muscle contractility, prevent blood glucose drops and reduce lactate accumulation
- Exciting plant extracts increase exercise endurance through cellular efficiency and gene expression

Patent insights: new directions in sports nutrition

Look forward to new uses for amino acid L-arginine

- L-arginine is an effective sports nutrition ingredient with a number of health and performance uses
- Oral microbiome: the key to getting the best from L-arginine?
- Essential amino acids are popular in sports drinks, but individual amino acids, such as L-arginine are growing
 - Graph 7: % of performance nutrition drink launches containing select ingredients, 2015-19
- L-arginine appears in several key sports performance patents
- Keto performance beverages are becoming more popular for serious athletes

Look forward to advanced botanicals and probiotics

- Consumers preferentially choose natural ingredients in sports and other supplements
- Botanical ingredients are growing in sports nutrition launches globally but could develop much more
 - Graph 8: % of performance nutrition food and drink launches with select functional ingredients, 2015-19
- Botanical ingredients in sports nutrition could use gut health as a reason to believe
- Patents outline the emergence of performance probiotics in sports nutrition
- Sea vegetation and minerals offer new performance potential
- Unique botanical ingredients to watch that enhance sports performance
- Utonic's sports drink moves away from energy-boosting effects and targets relaxation through botanicals

THE IMPLICATION

- Patents are pushing muscle endurance boundaries and exploring new stress and recovery territory, pointing to the emergence of "athletic wellness"

APPENDIX

- Research Methodology
- Key exercise endurance ingredient patent examples
- Key L-arginine ingredient patent examples
- Key botanical and probiotic patent examples
- Shape your future with Mintel bespoke patent analysis

Disclaimer

This is marketing intelligence published by Mintel.
The consumer research exclusively commissioned by Mintel was conducted by a licensed market survey agent ([see Research Methodology for more information](#)).

Terms and Conditions of use

Any use and/or copying of this document is subject to Mintel's standard terms and conditions, which are available at <http://www.mintel.com/terms>

If you have any questions regarding usage of this document please contact your account manager or call your local helpdesk.

Published by Mintel Group Ltd

www.mintel.com
email: store@mintel.com

Help desk

UK	+44 (0)20 7778 7155
US	+1 (312) 932 0600
Australia	+61 (0)2 8284 8100
China	+86 (21) 6386 6609
India	+91 22 4090 7217
Japan	+81 (3) 6228 6595
Singapore	+65 (0)6 818 9850