

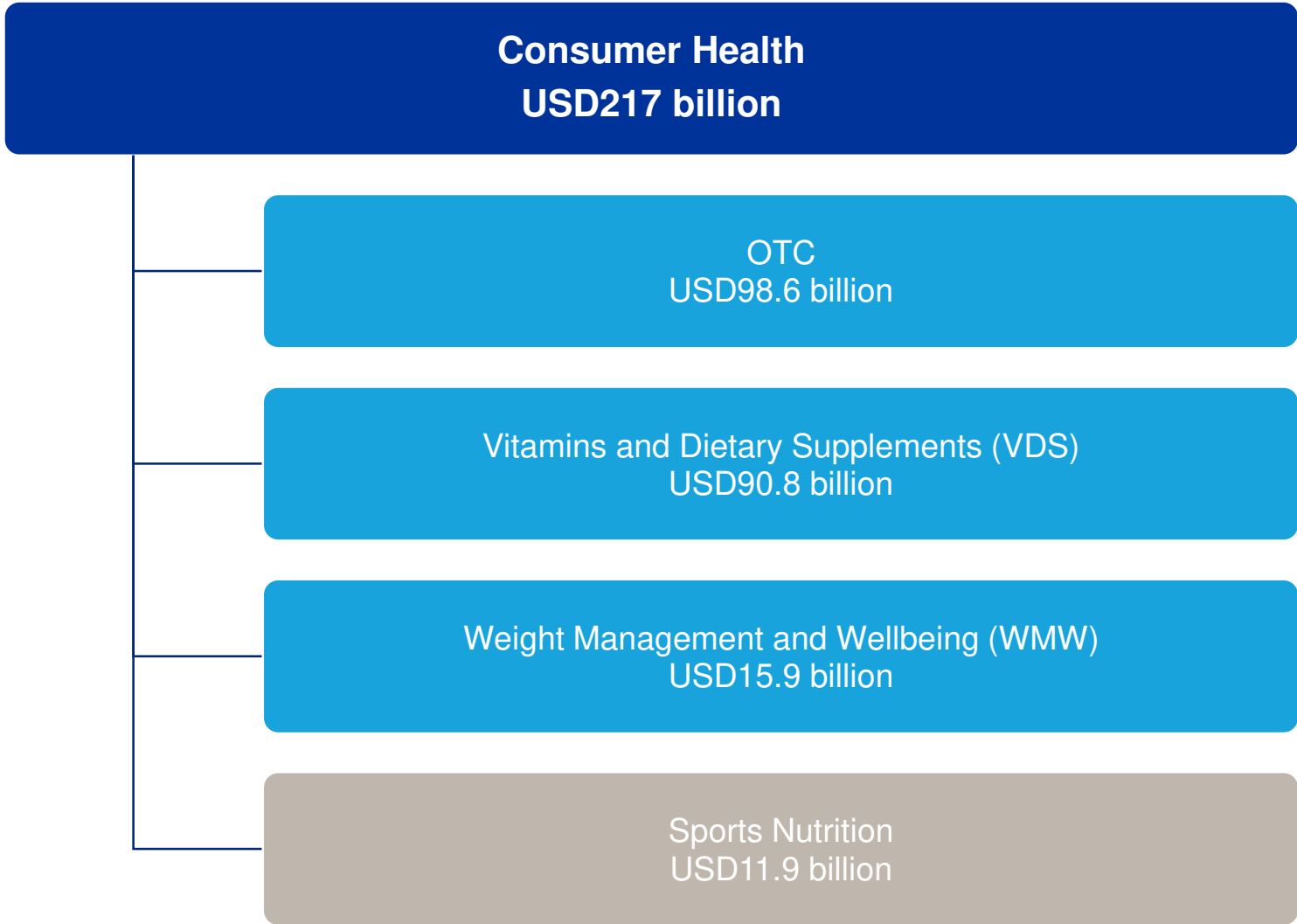


Sports Nutrition: Innovation through Form and Function, backed by Science

Paul Cunningham – Lonza Director Australia & NZ

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Sports Nutrition represents about 5.5% of CH&N globally



Biggest sports nutrition markets:

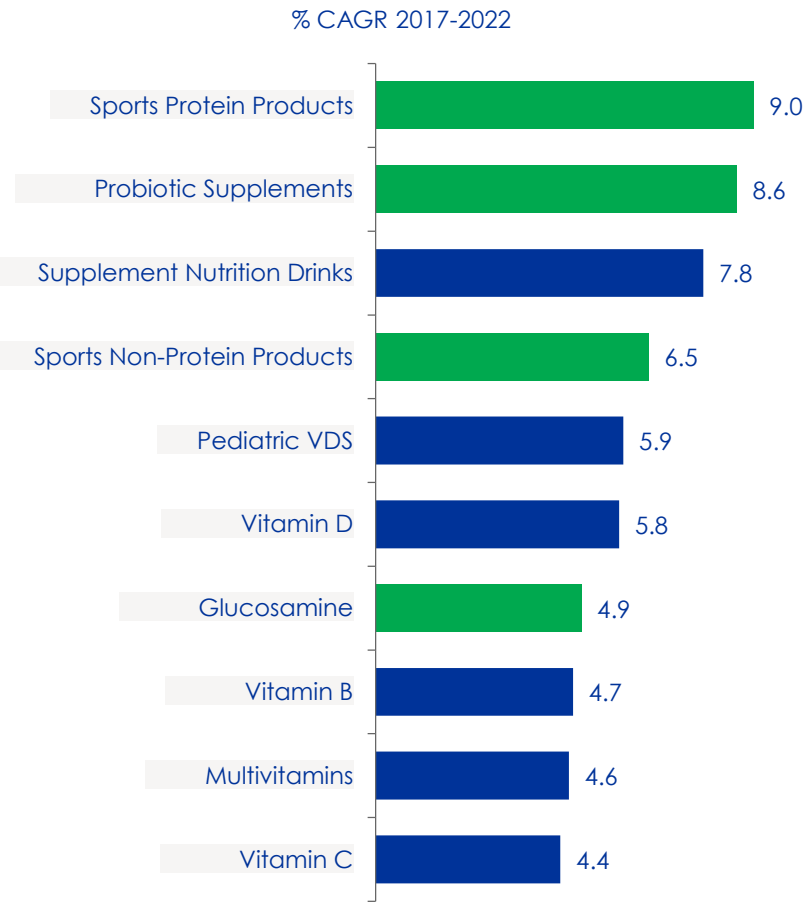
- USA 62% / 7.4bio
- Western Europe
- Australasia
- Asia Pacific
- Latin America
- Eastern Europe
- MEA

Next 5 years
CAGR of 7.9%
Mainstreaming!

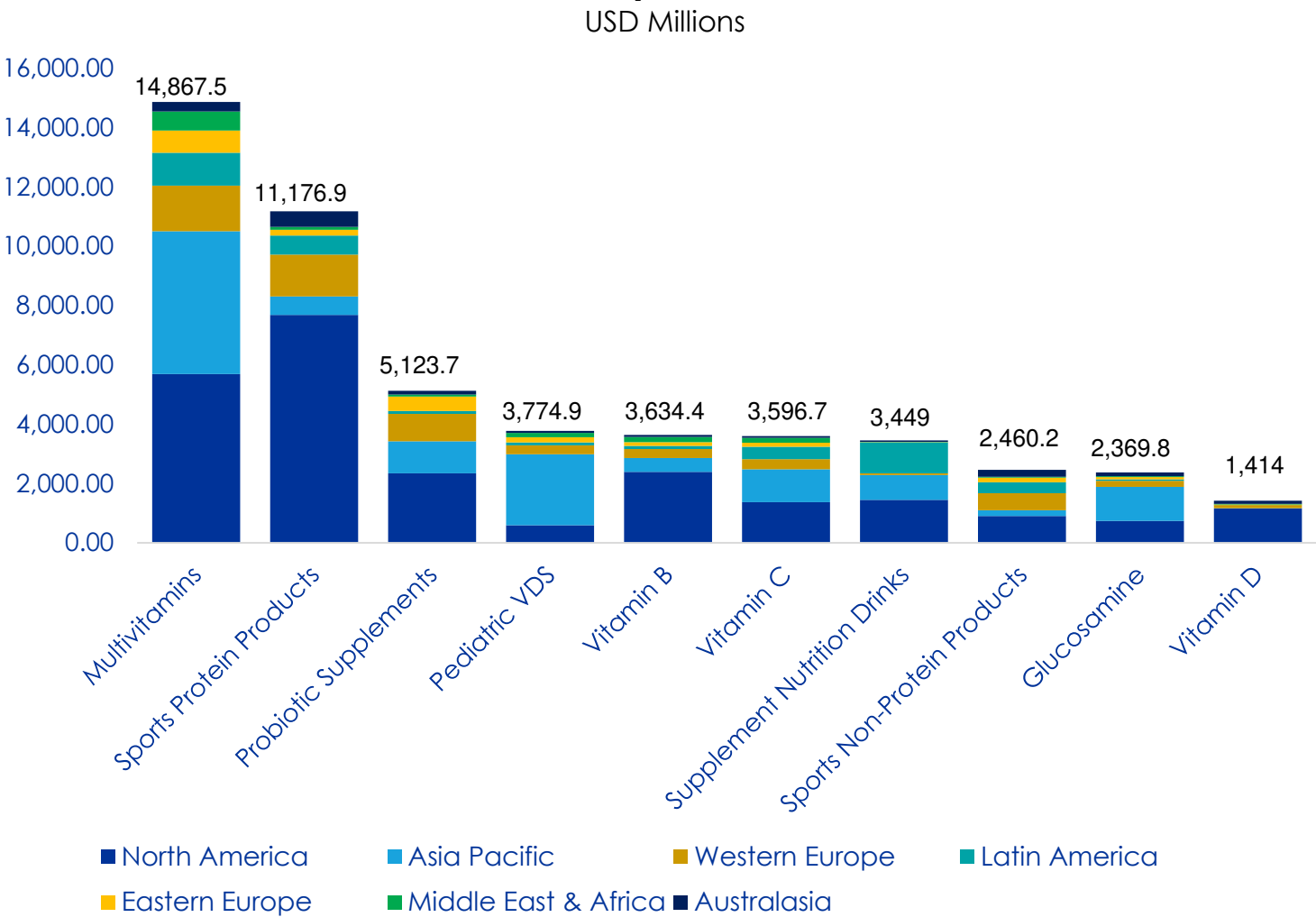
Fastest Growing Segments

Sports Nutrition, Probiotics, Glucosamine and Multivitamins are among fastest growing

Fastest Growing Segments & Products



Regional Share
Ranked by Market Size



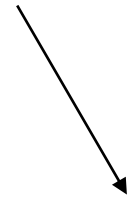
What is Performance Nutrition



Peripheral segments not at the heart of sports nutrition, but close to it



Sarcopenia (muscle loss with age)



Body & skin Look & Feel

The Expanding Consumer Base

New user groups

90ies



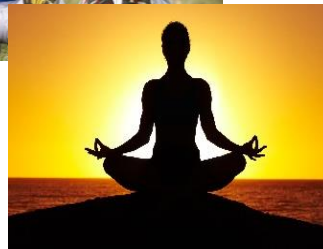
Elite-Athletes

Loyal
Informed
Dedicated
Early adopters
Ambassadors
Embrace innovation
Looking for cutting-edge technologies and latest ingredients
Buys frequently
Performance, results-driven

Pro-Actives

Millennials (21-34y) are the mainstream buyers
GenY and Baby boomers (50-64y) are flocking to the category
Look for products peripheral to training
'We are what we eat'
Clean, green, environmentally focused
Performance, body image, health, weight, longevity

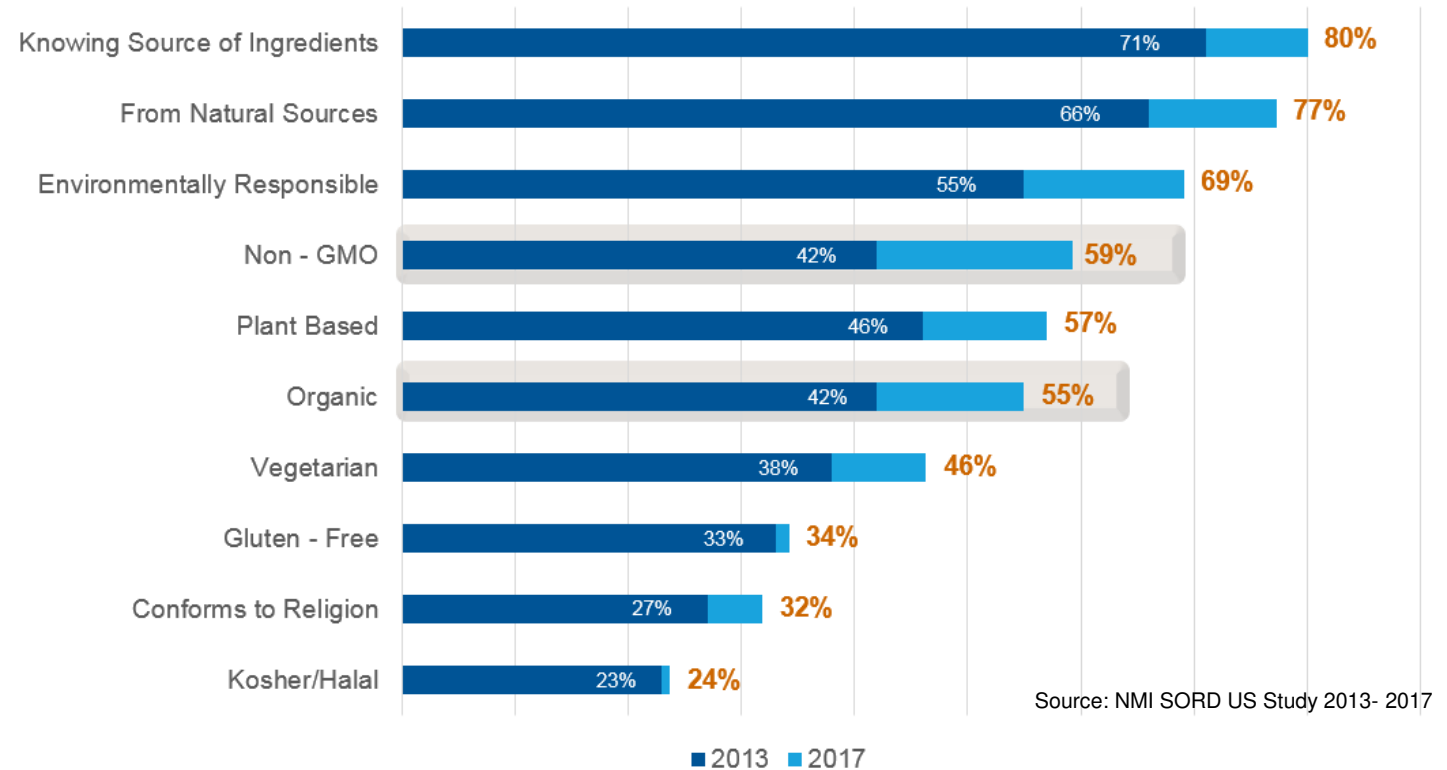
now



Know your customer – build your tribe!



% DS users indicating the following are important factors when considering their supplement purchase

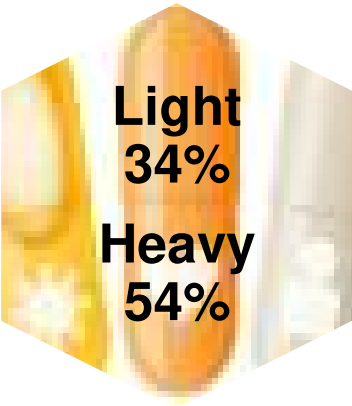
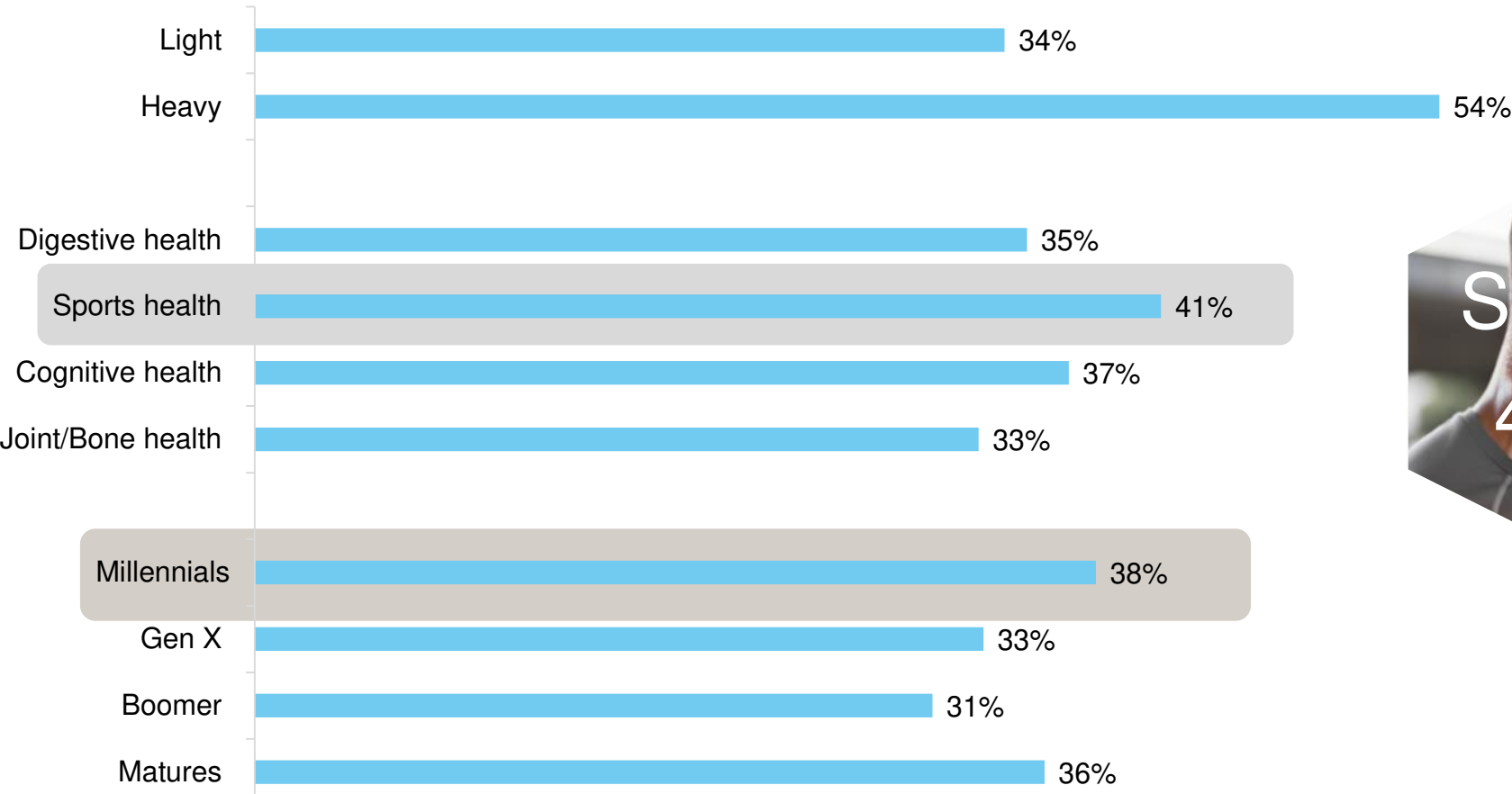


- Consumer demand for product quality, traceability of ingredients, and elimination of additives has set the stage for the advent of the clean label movement.

The Clean Label Movement: Sustainable and Eco-friendly

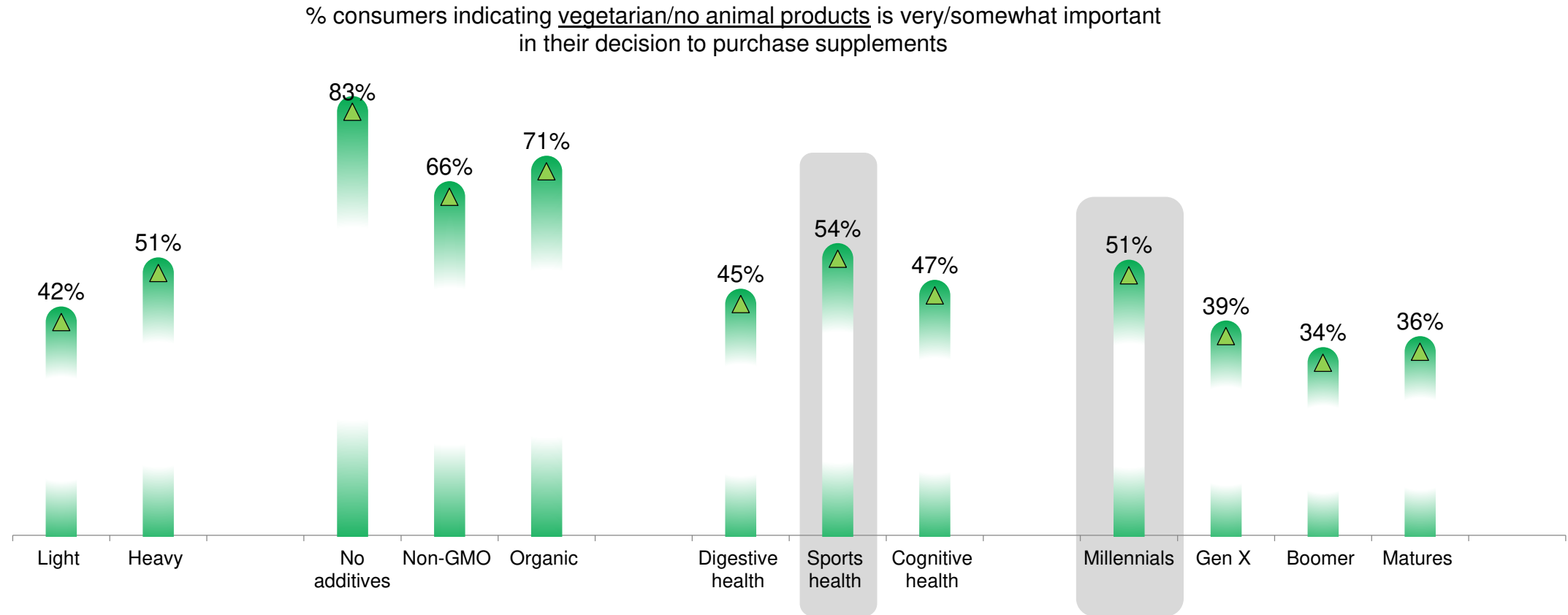
% consumers indicating...

“I am more likely to buy a supplement if it uses sustainable or e-friendly ingredients”



Source: NMI SORD UK Study 2018

The Clean Label Movement: the Link with Vegetarian



Source: NMI SORD UK Study 2018

- Consumers looking for free-from supplements prefer vegetarian products.
- 1 out of 2 Heavy users, Millennials and Sports Nutrition Food supplement users prefer vegetarian products.

Capsugel's natural, free-from, vegetarian dosage forms meet the clean label expectations of consumers



VCAPS® PLUS CAPSULES

PREMIUM PERFORMANCE
IN VEGETARIAN CAPSULES



VCAPS® PLUS SPIRULINA

NATURAL BLUE VEGETARIAN CAPSULE FOR
CLEAN LABEL FOOD SUPPLEMENTS



VCAPS® CAPSULES

THE STURDY STANDARD
VEGETARIAN CAPSULE



DRCAPS™ CAPSULES

DESIGNED TO RELEASE
WHEN YOU NEED IT



PLANTCAPS® CAPSULES

THE MORE NATURAL
ALTERNATIVE



New products



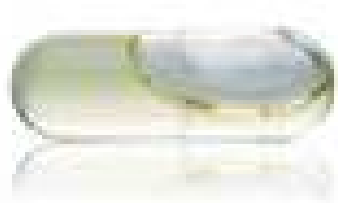
Carnipure® Finished Products

Consumer Health & Nutrition | 23 August 2018

Carnipure® free flowing Licaps® Capsules

World's first and only liquid L-Carnitine capsule product, based on Lonza's Carnipure®

- ✓ Carnipure® 300 & 500mg
- ✓ Made from free L-Carnitine
- ✓ Vegetarian
- ✓ Liquid and pure
- ✓ Stable 24months, room conditions
- ✓ Can be combined with Vit D3 for EFSA claims (ie supports normal muscle function)



- ✓ Contains 300mg **L-Carnitine** (Carnipure®)
 - ✓ 82.5mg **Choline**: Choline is important, in that it makes methionine available for carnitine's biosynthesis
- Contains ultra-high dosed
 - ✓ 500ug **Vit B12**.

Allows EFSA claims on fat metabolism, homocystein levels, and fatigue

Vegan protein plus Carnipure®

- A purely herbal or ovo-lacto-vegetable diet provides only low levels of L-carnitine
- Vegan plant proteins are trending but vegan protein do not have any natural content of L-carnitine
- Vegans therefore benefit from a targeted intake of carnitine
- Opportunity for plant based protein plus carnitine

*No products of animal origin are used in the production process.
Carnipure® is suitable for Vegetarians and Vegans*



L-carnitine can help to avoid muscle breakdown, the combination with vegan proteins makes perfect sense.

Visit www.carnipure.com for more than **17 studies** about the impact on muscle recovery in different types of users including middle aged men/women, athletes, vegetarians and for **6 studies** and pilot clinical trials that support the weight management application.



Formulation possibilities with patented DUOCAP® capsules

DUOCAP® capsule-in-capsule combination concepts with Carnipure® L-Carnitine

DUOCAP™ - a patented capsule-in-capsule delivery system that is ideally suited for combination or dual release products.

liquid Carnitine plus probiotics



Latest science on probiotics goes beyond gut health and have shown to be capable to keep your waist trim (weight management) and to help athletes to reduce the number of URTIs. Carnipure shows exercise recovery and weight management benefits and is combined here with probiotics for an active and healthy lifestyle.

Carnitine plus caffeine



Carnitine turns fat into fuel and we combined liquid carnitine with caffeine in the inner capsule for focus and further metabolic activation (and vitamin B-complex for example). This concept is an energizer for the businessman/woman and sports enthusiast alike.



UC-II® undenaturated collagen type 2 Finished Dosage Forms

Consumer Health & Nutrition | Paul Cunningham | 23 August 2018

- **40mg UC-II®** plus Vitamin C & Vit D, Manganese and Copper
- Allowing **EFSA health claims** on bones, muscles, connective tissue and cartilage formation



EFSA Health Claims are in line with UC-II® benefits:

- Vitamin C contributes to normal collagen formation for the normal function of bones and cartilage (and gums)
- Vitamin D contributes to the maintenance of normal bones and muscle function
- Copper and manganese contributes to the maintenance of normal bones and the normal formation of connective tissue



UC-II® brand: Dosage Form: Bone & Joint Health

Super-Convenience: one tiny “pill” – once daily

- Vegetarian capsule Vcaps plus®



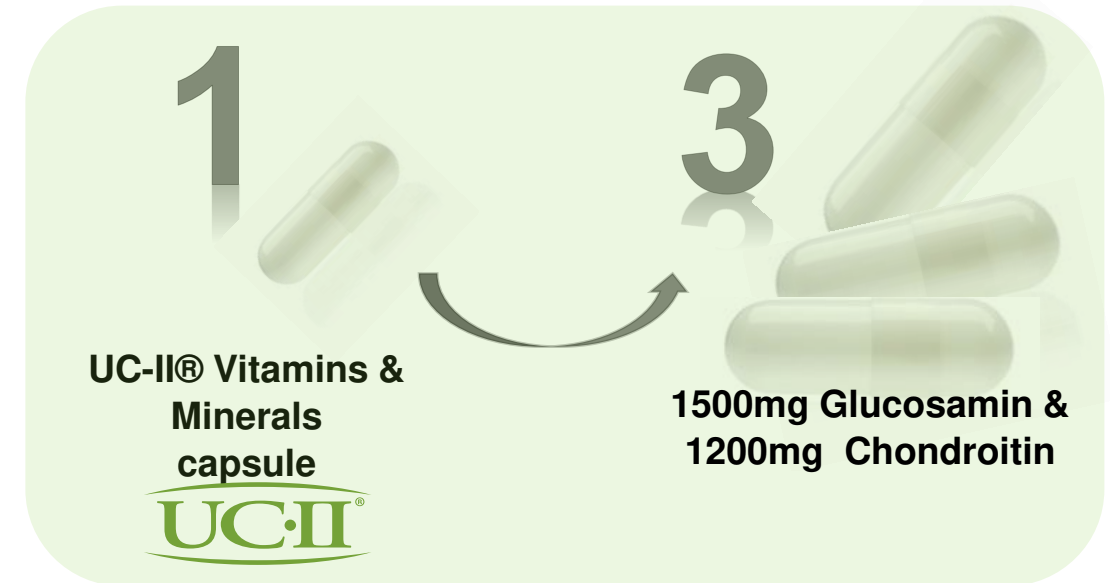
- Small size 3

- Easy to swallow



Convenience

- Branding possible



31% of Sports supplement users have stopped taking Glucosamine because they feel it was not effective

Source: NMI SORD Research 2017 Q.23_26

- Low dose – lower than GC
- Effective in healthy consumers
- Ability to combine ingredients in single dose

Other possible combinations: botanical extracts with anti-inflammatory benefits like omega 3 concentrates / Krill Oil, Curcumin, Boswellia



**UC-II undenaturated
type II collagen +
curcumin extract**



**UC-II undenaturated
type II collagen +
liquid Curcumin**



**UC-II undenaturated
type II collagen +
Krill oil**



**UC-II undenaturated
type II collagen +
fish oil**





Key Take Aways



- **Consumers want efficacious and safe products**
- **Made from natural compounds with clean labels**
- **The supplement experience is at the heart of consumer satisfaction and loyalty**
- **Convenience is important (easy to swallow, low pill burden, taste & odour, fast release or targeted release)**



For a sample,
questions, suggestions, new projects, line extensions

Challenge us

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