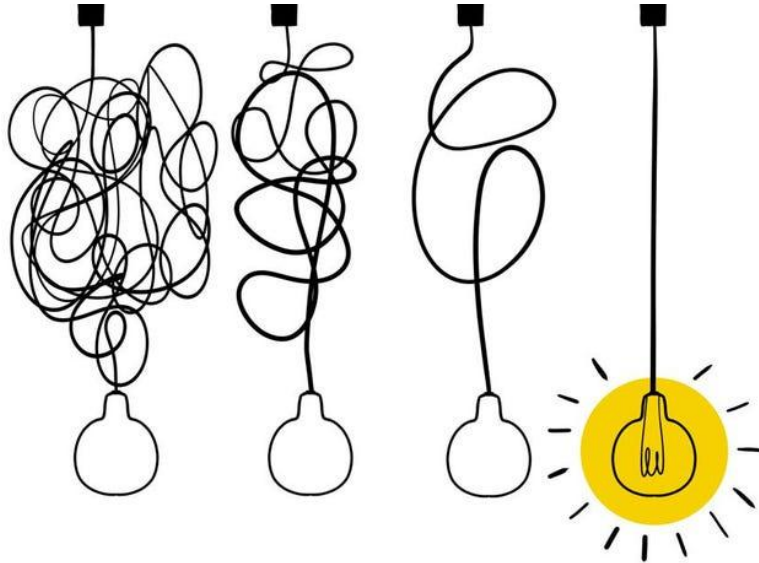


The impact of technology on [nutrition] innovation

Biogredia Health & Nutrition Summit
Gstaad | Jan 2023



What is today all about?



We are living through a digital & technology revolution - “a digital age”.

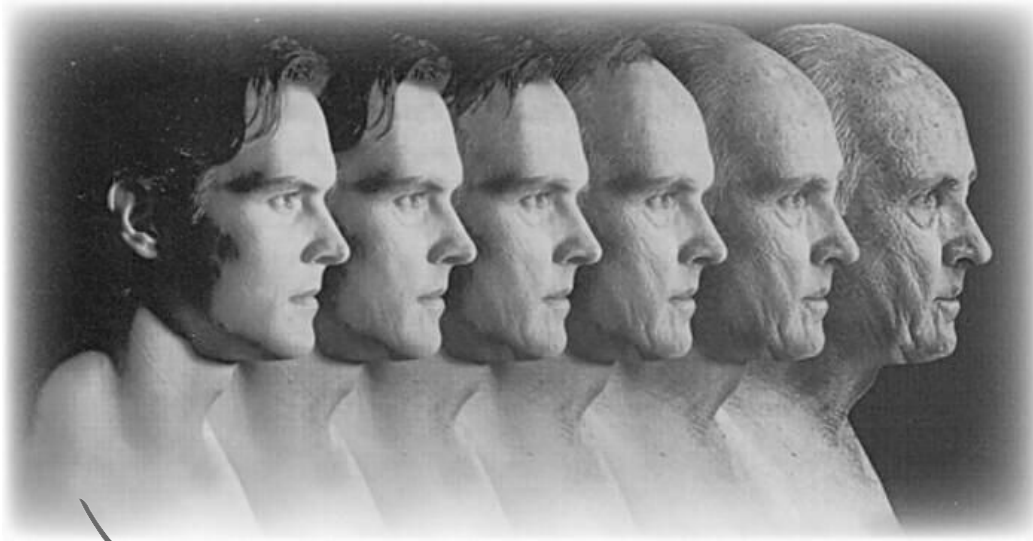
So how is this impacting the design and execution of enhanced nutrition in 2023?

This will be framed in the context of the primary trends shaping the market.

01. The rules

#1. A generational shift in consumers

How are brands adapting and remaining relevant to consumers as they get older?



A changing consumer landscape. Legacy brands will always face the challenge to evolve

The original consumer is getting older and switching from performance to health

The younger 'digitally native' consumer demands more from these brands

Are the same brands who were relevant to 18-25 years old in 2010 or 2015 relevant to the current generation in 2023?

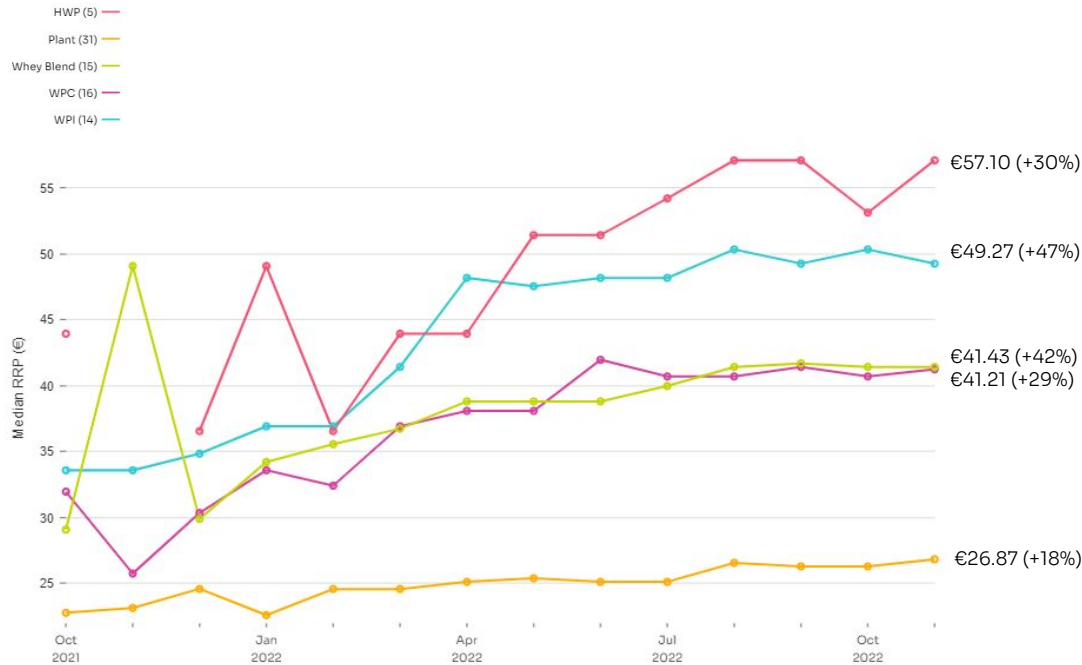
#2. A stable ecosystem

Online Navigation [shop by...]			
INGREDIENT Vitamin C Collagen Curcumin ...	CONCERN (NEED) Immunity Joint Skin ...	CATEGORY Sports Nutrition Inner Beauty Weight Mgt. ...	
DIET Vegan/Plant Natural Gluten free ...	GENDER/AGE Male Female Age (50+) ...	FORMAT Capsule Powder Gummies ...	GOAL Gain muscle Lose weight Stay healthy ...

Next generation is about *redefining* and *reimagining* concepts in ways that are fit for purpose for today's consumers.

And crucially how does this align to the permission of a category and/or brand. It is not possible for everyone to do everything.

#3. The impact of inflation



It costs more to buy a product than ever before.

Products need to be more relevant than ever to a consumer for them to try or buy them.

Figure 3. Median retail price for whey and plant based protein powder | Europe, fixed around 1kg ± 250g

02. Macro trends

Shaping the future

Brand & Product



Category, Population & Need

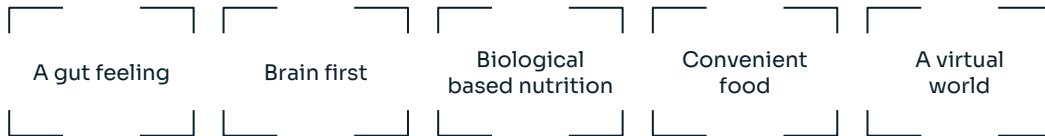


Figure 4. Ten trends shaping the future of enhanced nutrition

03. 'So what' (does this mean)

PROactive nutrition

Consumer transformation



A growing number of consumers are looking at ways to always be progressing.

Re-evaluation. Life is about well being, emotional fulfilment and social change.

Changing values



...from optimisation to balance

...whilst maximising today, and living for tomorrow

Everyday is a pixel



“If you want to know what you will look like in the future, look at what you do today.

If you want to know why you look like you do today, look at what you did in the past”.

Everyday is important. Everyday is a pixel

Health & Nutrition trackers are part of our everyday technology

Online communities are shifting knowledge and behaviour

Mimetic fermentation



We could take the topic of precision fermentation in general, and it is important to the active nutrition.

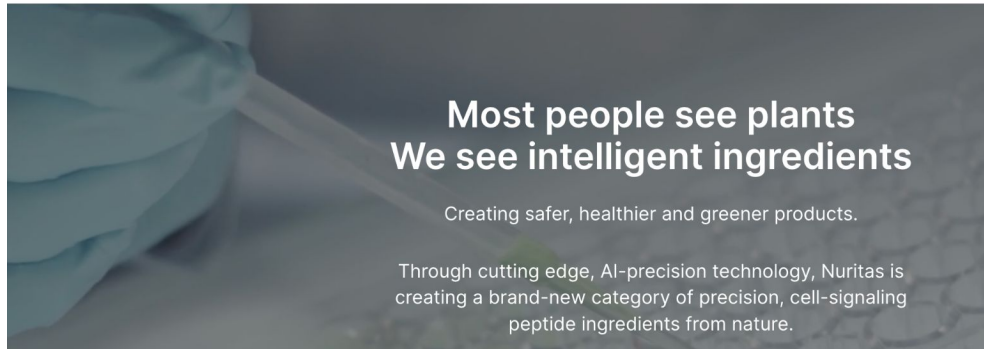
However, the abiding principle needs to be about biological mimetics. That is about being a biological like for like.

VeCollal® is a biomimetic of human collagen type 1

Traditionally, type 1 collagen supplements are made from bovine, porcine or marine sources due to their similar amino acid profile to human collagen. However, it is becoming well acknowledged that animal-based products are both ethically and sustainably challenging.

...and it continue to gather pace

NURITAS | See nature differently



Healthgevity and Nuritas launch next gen anti-aging supplement

By Danielle Masterson [✉](#)

16-Jan-2023 - Last updated on 16-Jan-2023 at 18:12 GMT



RELATED TAGS: Nuritas, peptides, sarcopenia, muscle recovery, anti-aging

With muscle health being a key piece to the healthy aging puzzle, LONGEVITY is tapping into muscle recovery.

Sustainability is a key component

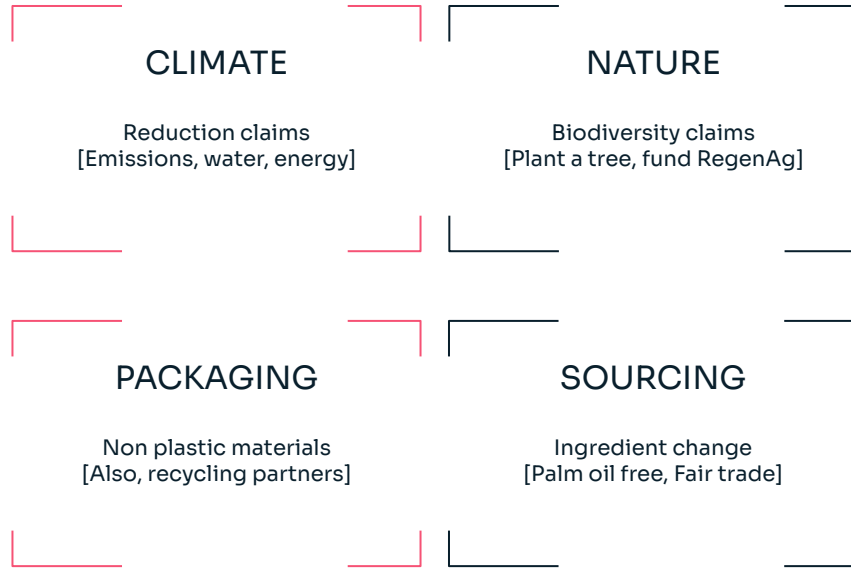


Figure 8. Four key areas to being more sustainable

Four ways to be more sustainable

CLIMATE

Reduction claims
[Emissions, water, energy]

NATURE

Biodiversity claims
[Plant a tree, fund RegenAg]

PACKAGING

Non plastic materials
[Also, recycling partners]

SOURCING

Ingredient change
[Palm oil free, Fair trade]



www.woobar.com
Fermentable protein



www.eatallreal.com
Plant a tree partnership



www.nurhu.com
Edible packaging

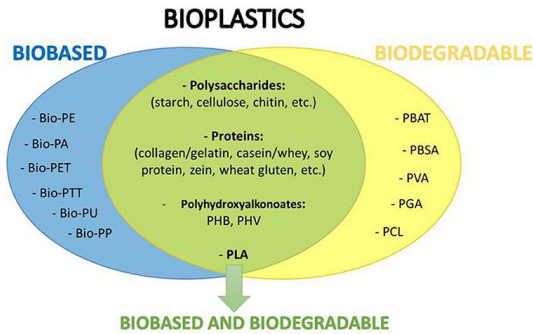


www.realfoodbar.com
Upcycled ingredients

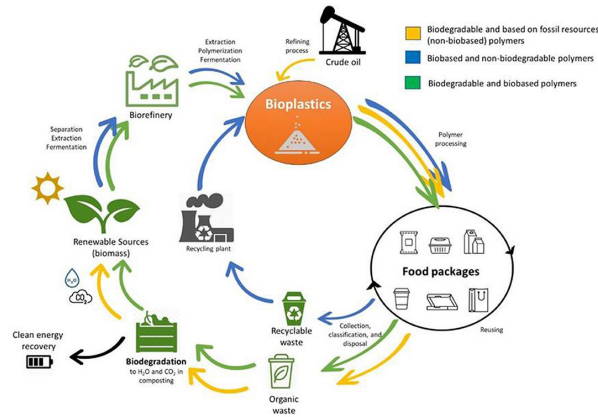
Figure 9. The four pillars of sustainability related to bars

New packaging solutions

Bioplastic classification



Life cycle analysis



Increased publication rate

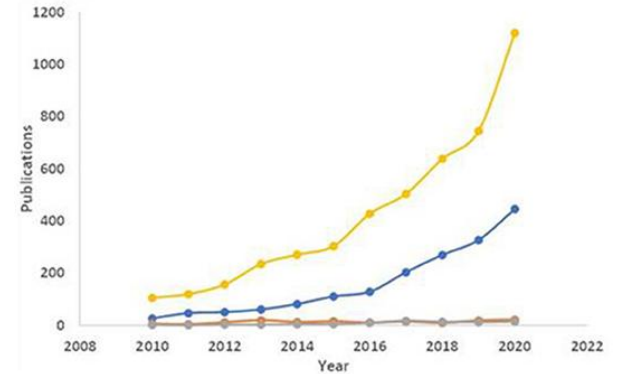


Figure 10. Recent developments in Smart Food packaging focused on biobased and biodegradable polymers

A memorable experience

The combined importance of flavour, taste, hardware, convenience and technology

Join our waterdrop® community!



Figure 11. The importance of status appeal as part of being memorable

One size doesn't fit all

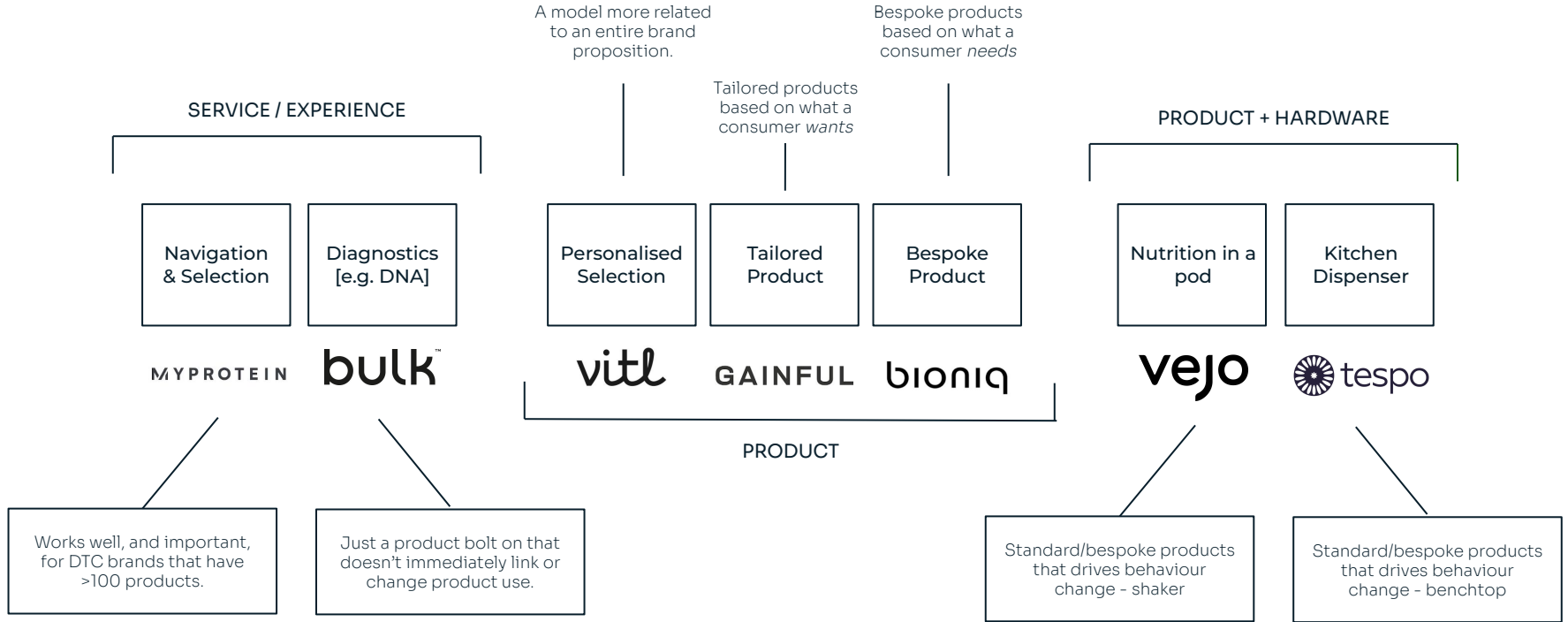
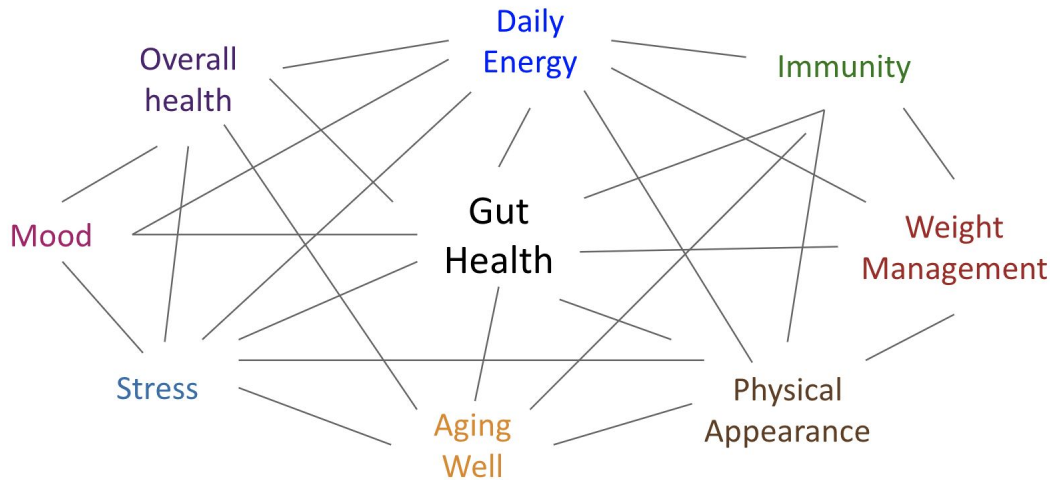


Figure 12. The different approaches to personalised nutrition

A gut feeling



The microbiome is one of the most important target areas to improve human health

This is not just about symptoms of gut discomfort but multiple interrelated benefits

It is our second brain with huge scientific development on the 'gut-brain' axis

It remains primed for huge growth, not least an alignment to technology and personalisation

Gut health will become a prerequisite feature of all products focused on holistic health. And there will be more health brands built around the gut

A gut feeling

**Your Microflora is Unique.
Your Probiotics Should Be Too.**

GET STARTED →



Sun Genomics' personalised probiotics brand Floré has partnered with DSM Venturing in an aim to expand on the science and the commercial availability of precision probiotics around the globe.

Brain first



Energising the brain - the ability to focus, be alert and react quicker

The function of the brain - the ability to think, memorise and process (and prevent decline)

The balance of the brain - the management of mood, anxiety and stress

The regeneration of the brain - the process of recovery and adaptation

Redefining the dynamic

Healthy MIND, healthy body

[Active ageing and the relationship with brain]



FEEL good, look good

[Nutricosmetics and the relationship with brain]

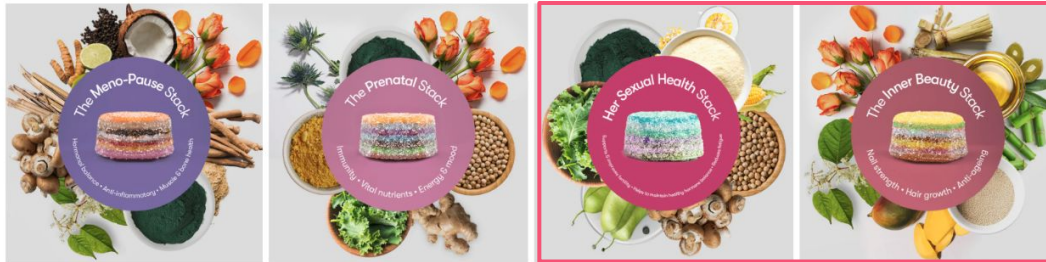
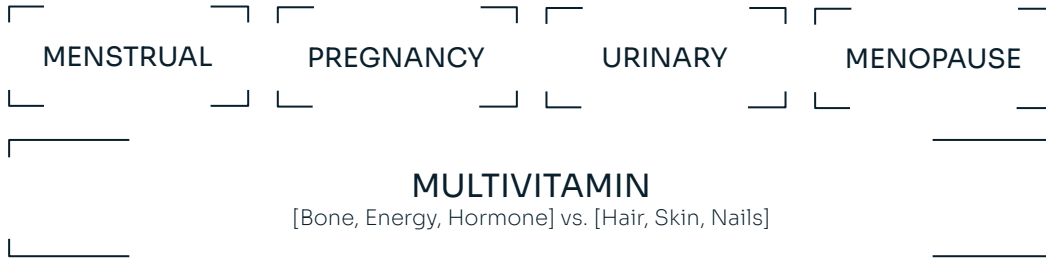


Alignment with time of day



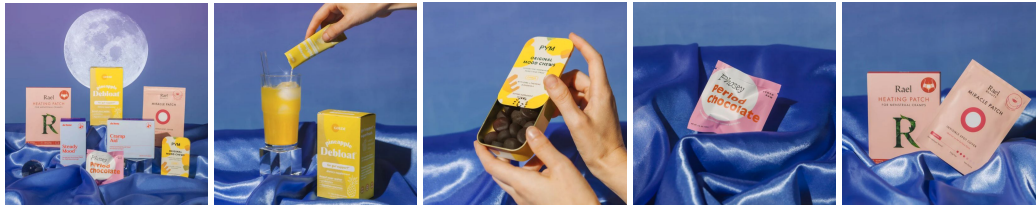
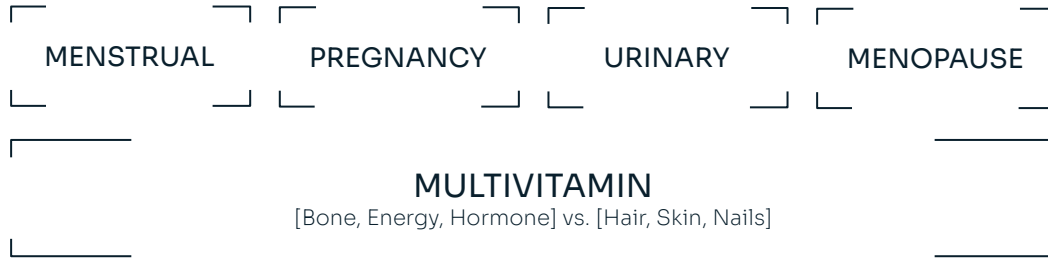
Figure 18. Products aligned to circadian rhythms

Biological based nutrition



Nourished | 3D printed gummies

Breaking the taboo



Delune.co | Ultimate Cycle Wellness Kit

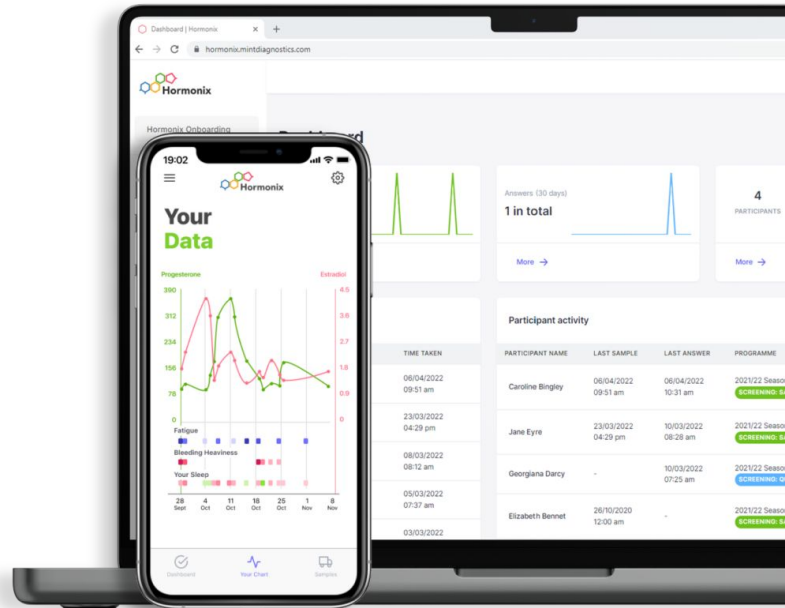
The ideal curation to level up your wellness game and be the healthiest version of you. Hand-picked by our founder, Mimi, these essentials will help you thrive through every challenge your cycle throws at you - cramps, moods, stress, PMS, bloating, cravings, acne, and more



Midol | Speaking out

The same principle exists for Men's Health too

Technology driven application



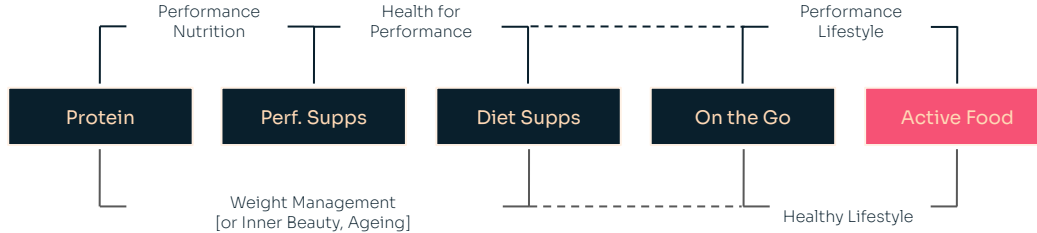
Hormonix



Fitrwoman

Figure 21. Female nutrition and the importance of technology and Apps

Convenient food



Boundaries are being broken.

It is proactive to have a healthy 'ready meal'. It is not a 'cheat'.

It is all about helping people to contextualise price, i.e. price per meal

Next step, breaking the monotony of the same type of food - so expect more types of foods/meals.

Then we'll start seeing brands play with segmentation according to needs, activity, gourmet etc.

Artificial Intelligence Eating App: Get Ready to Shade those Extra Kilos

🕒 April 14, 2022 📺 312 views 🗄️ 0



Figure 22. The five product pillars of active nutrition

A virtual world



In 2021, Newzoo reported that there were 3bn 'gamers*' globally, up 5.3% YoY.

Asia Pacific accounted for 55% of consumers, whilst EMEA and North America accounted for 29% and 7% respectively.

Over half of the UK (52%), Western Europe (54%) and US (58%) classify as gamers.

A virtual (exercise) world



Gaming is obvious, but isn't for everyone

However, gaming is representative of a digitally native consumer and a lifestyle that inherent amongst a shift in consumers

But who owns the virtual exercise world. Will it be a sports nutrition brand or gaming brand?

04. To conclude

We all live in a digital world...

Brand & Product



Category, Population & Need

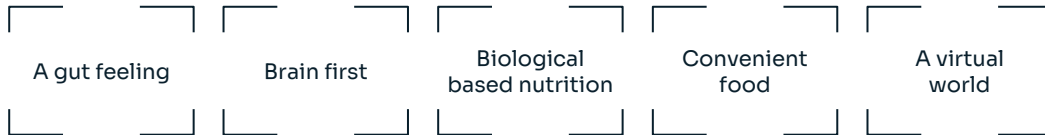


Figure 25. Ten trends shaping the future of enhanced nutrition

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