

THE BORD BIA FUNCTIONAL FOOD & BEVERAGE INNOVATION PLAYBOOK - 2019

Five sections to this document.

jump!

1. PURPOSE

2. THE FUNCTIONAL FOOD & BEVERAGE OPPORTUNITY

3. FUNCTIONAL FOOD & BEVERAGE INNOVATION PLATFORMS

4. INNOVATION PLATFORM TESTING SUMMARY

5. WHERE TO FROM HERE?

Purpose

Bord Bia set out to explore evolving consumer needs in functional food & beverage in order to identify high-potential innovation opportunities for Irish manufacturers.

jump! partnership

For this project, we partnered with jump! innovation, an innovation agency with offices in Dublin and London.

jump! help brands **Win Tomorrow** in three ways:

1. **Understand Tomorrow:** research, analysis and insight
2. **Define Tomorrow:** brand vision, positioning and strategy
3. **Invent Tomorrow:** innovation, concepting and prototyping

To find out more about jump!, visit www.jumpinnovates.com

jump!

1. PURPOSE

1.

What does commercial success look like into the future when it comes to functional food and drink?

2.

How do we grow the industry?

3.

How do we commercialise existing knowledge?

Three big study objectives. |

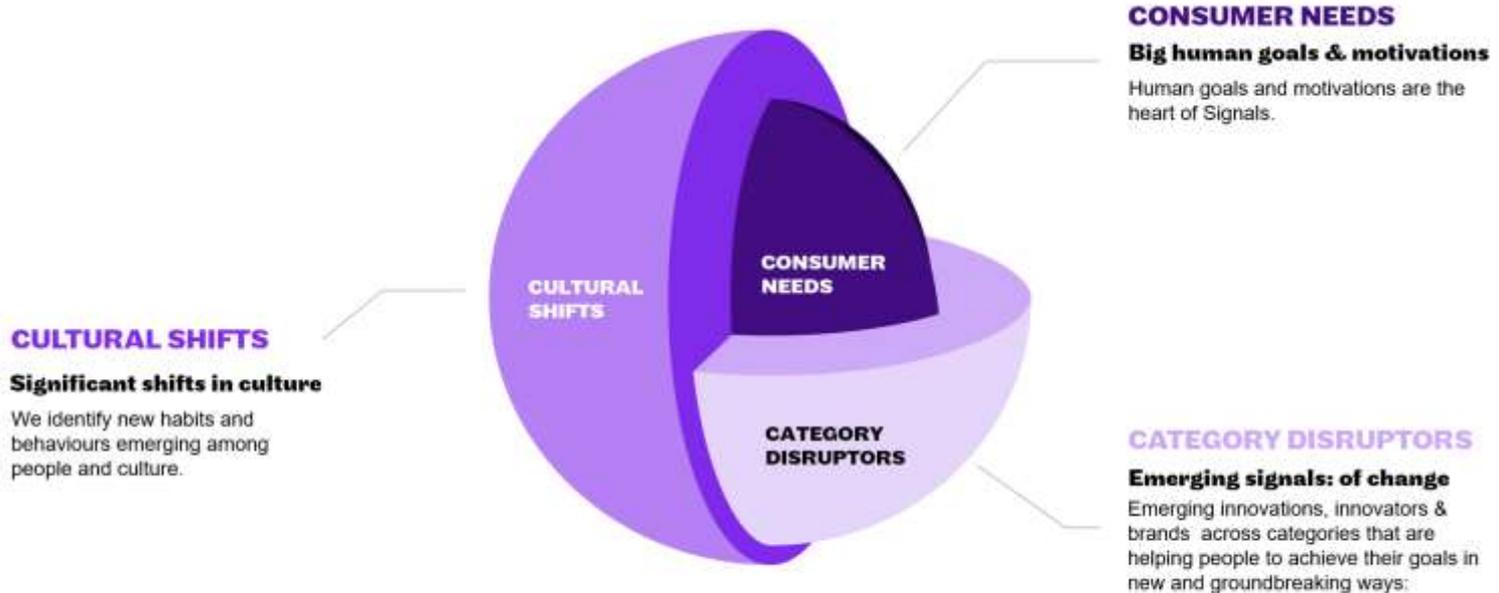
jump!

1. Understand evolving consumer needs in relation to functional food & beverages over the next five years.
2. Identify high potential innovation platforms rooted in these consumer needs.
3. Work with industry to develop sector/category specific opportunities.

An inspiring start-point for purposeful innovation, rooted in rising consumer needs and cultural shifts.

SIGNALS investigates the interplay between culture, brands and consumers to identify early signals of change. It is our approach to understanding evolving consumer needs and identifying future innovation opportunities.

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1. Understand

Investigate and understand the evolution of functional food & beverages through secondary research and global expert interviews.

- A. Secondary research
- B. Interviews with global health, wellness and functional food & drink experts

2. Define

Interact with global consumers through qualitative & quantitative research to explore innovation platforms.

- A. Consumer hot-house sessions x 6
- B. Innovation Platform testing using predictive market approach with Consensus Point (a prediction market research agency)

3. Invent

Deliver high potential functional food & beverage innovation platforms that are rooted in consumer needs and cultural shifts

- A. Bord Bia Functional Food & Beverage Innovation Playbook

A robust qual and quant approach to explore consumer needs and identify innovation opportunities.

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Expert interviews

We conducted six interviews with global health, wellness and functional food & drink experts.



Dr Lina Begdache
US

Research focuses on the link between diet and brain function across age brackets and gender. Believes diet could be a first line defence against mental health and cognitive decline



Dr John Cryan
Ireland

Professor & Chair of Anatomy & Neuroscience at UCC. He co-authored the bestselling book “The Psychobiotic Revolution: Mood, Food, and the New Science of the Gut-Brain Connection”.



Dr Simone Frey
UK

Founder of Future Nutrition and Nutrition Hub, a community of 5,000 nutrition experts providing trends on jobs, start-ups and latest food science.



Dr Simone Peters
Australia

Director of the Mind Gut Clinic in Australia. Uses psychotherapy to improve gastroenteral symptoms. Her research supported the inception of the FODMAP diet.



Dr Drew Ramsey
US

Founder of the Brain Food Clinic. He's a psychiatrist, author, and farmer. He is one of psychiatry's leading proponents of using nutritional interventions.



Dr Makoto Shimizu
Japan

He has published 208 research works on functional food science and factors – and is on several FoSHU committees.

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Thinking House

Secondary research sources.

jump!



We used a hybrid model which incorporated prediction market and online survey techniques.

jump!

What is a prediction market?

Captures the collective wisdom of an audience by asking participants to bet tokens on outcomes.

Questions are designed to measure the likelihood of possible outcomes.

Participants are asked to make a judgement on how a specific group of people will behave, rather than providing individual preferences.

There are two key predictive metrics:

1. The **prediction likelihood index** is the probability of an outcome happening based on participants' collective betting.
2. The **strength meter** summarises the 'intensity' of the positive and negative betting activity.

To help consumers understand innovation platforms and test them more effectively, we created Future Stories.



Future Story Development

For each Innovation Platform, we created a corresponding Future Story

A future story brings an innovation platform to life in a creative way, using simple language and a product example.

This helps consumers to understand, engage with and evaluate the innovation platforms.

These future stories acted as proxies for the innovation platforms in testing.

Example

Think about a future where...

Waking up refreshed is important to people.

In this future, lack of sleep is a rising global issue. Tech in the bedroom and smartphone 'blue-light' is negatively impacting sleep quality.

In this future, many people use over-the-counter drugs to aid sleep. Also, food & drink products are being used to help people wake up feeling like new time and time again.

One popular vanilla-milk is infused with honey, valerian root, melatonin and CBN (a non-psychoactive cannabinol). It is a 'bedtime shot' (50 ml/2 oz) designed to be drunk 30 mins before bed to promote sleepiness and deep sleeping.



jump!

2. THE FUNCTIONAL FOOD & BEVERAGE OPPORTUNITY



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“

LET FOOD BE
YOUR MEDICINE

”

Hippocrates

Functional Food & Beverage Evolution; moving from anecdotal evidence to scientifically proven.

jump!

Ancient Medicines.

Many ancient tribes, and particularly traditional Asian and Indian cultures, used different types of food & drink associated with specific health benefits to heal, strengthen and comfort people

Knowledge was passed down anecdotally from generation to generation .

FOSHU Japan.

In the early 1980s, Japan introduced a formal system to approve foods and drinks with proven health benefits called FOSHU – foods for specified health use.

The purpose of this was to improve the health of an ageing nation and to reduce escalating health care costs.

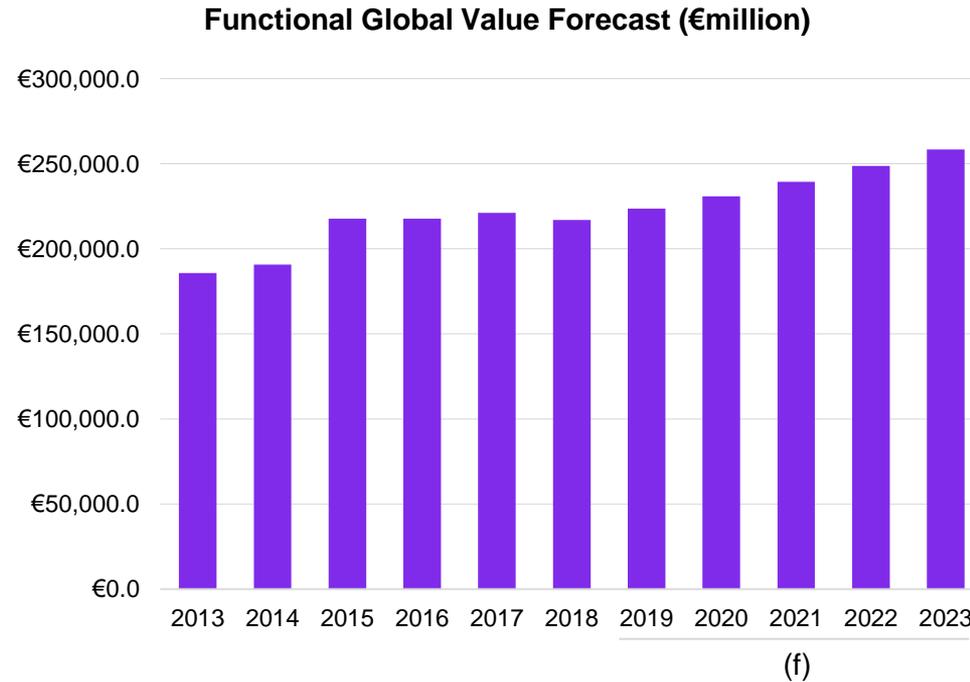
This was the first time nutritional science was used to prove functional food.

Scientific Future.

As functional food and beverage moves forward, science will play a big role in proving food & beverage health benefits.

Ingredient claims will have to be thoroughly researched and food companies will have to adopt a more 'pharma' mindset when looking to prove the specific health benefits of functional products.

The Functional market, as a whole, is forecast to be worth over €250 billion by 2023.



The Functional Market is expected to grow in all regions between 2018 and 2023.



Strong growth forecasted across most regions over five year period.

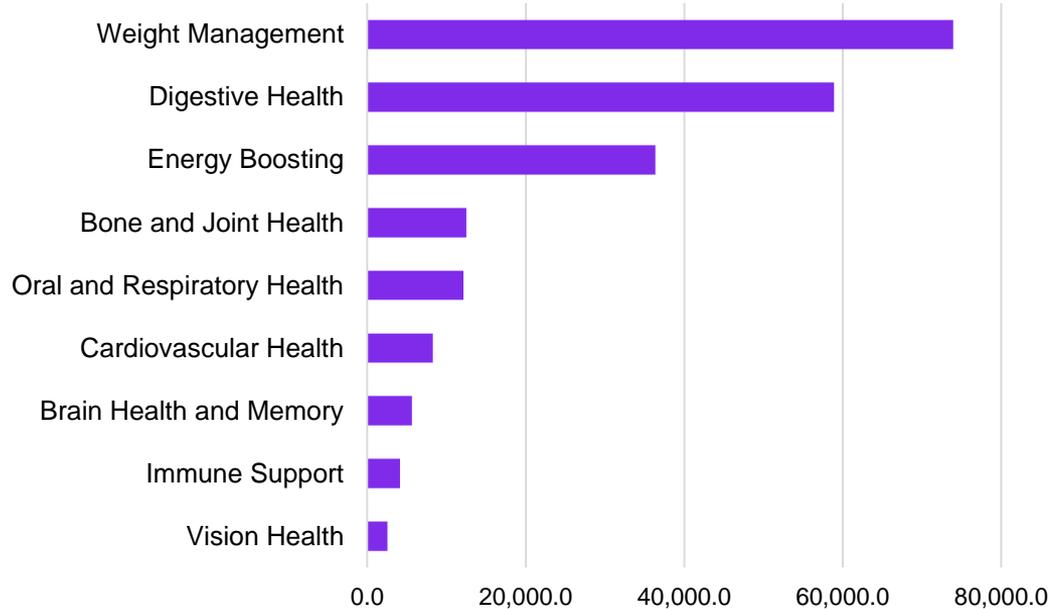
Asia-Pacific and North America are the largest markets.

Less mature markets, such as Eastern Europe, Middle East & Africa and Australasia, all expected to grow significantly.



The market is dominated by three broad functional claims.

Global Value by Functional Claim (€million) 2018



Weight management, digestive health and energy boosting claims make up the majority of the market.

However, as a greater number of health & wellness issues impact modern society, there are opportunities with other functional claims.

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HEALTH IS EVOLVING.

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In the world of health, there are three big movements happening.

jump!

From
Reactive health
to
Preventive health

People moving from reactively dealing with health issues to a more proactive approach.

Preventing illness rather than responding to it.

From
Physical health
to
Holistic health

While physical health has dominated in the past, there is now much greater focus on holistic health.

This involves considering and nourishing all human elements – mind, body and spirit.

From
Artificial Health
to
Natural Health

There is a growing desire for more natural forms of health and wellness; away from synthetic, fake, artificial.

Greater understanding that this is accessed through diet, exercise and general lifestyle.

Health is predominantly viewed through two lenses; science and nature.
There is rising energy towards 'nature' as a form of wellbeing and illness prevention.

jump!

More science



Prescription Medication.

While this form of health is effective and supported by extensive research and trials, there are growing issues.

- Antibiotic resistance
- Harsh side effects
- Safety of excessive use
- Addictiveness
- Can be high cost

It is a **more reactive approach** to health and wellness.

Supplement Pills & Powders

This form of health includes vitamins, minerals, herbals, botanicals and many others; growing in use and value.

However, there are question marks around effectiveness with multiple studies failing to find conclusive evidence.

More nature



Diet, Exercise & Lifestyle.

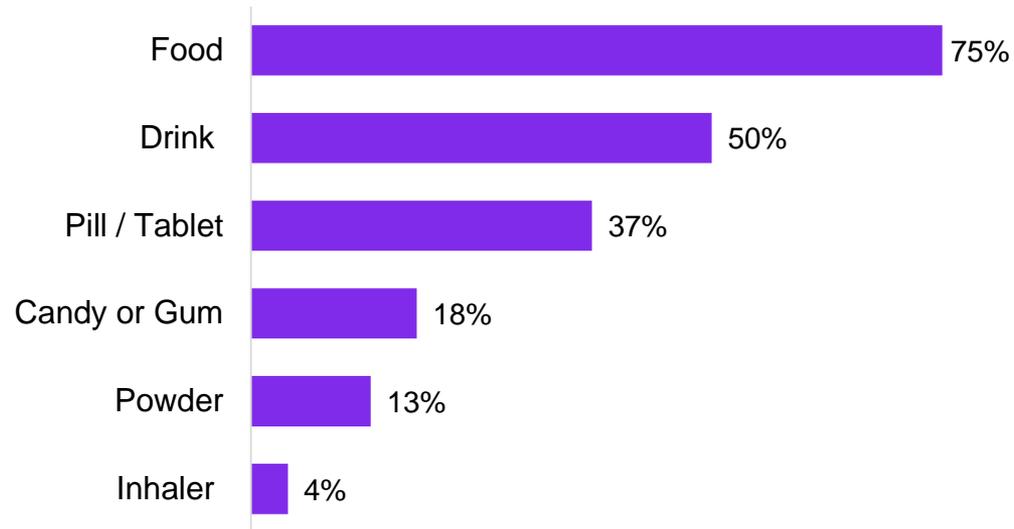
This is a holistic approach to health, which focuses on the person – body, mind, spirit and emotions – and how they interact with the environment.

It is a more **proactive approach** to health and wellness.

As a result, consumers increasingly prefer foods or drinks as delivery systems over pills or tablets. This presents an opportunity for the functional market.

jump!

US: Thinking about health-enhancing ingredients, what would be your preferred consumption format?



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Functional food & beverage blends science and nature.

jump!



Research - clinical trials.
Effective - proven health benefits.
Trust - recommended by professionals.

Familiar – know it
Pleasure – enjoy it
Accessible – readily available
Convenient – existing behaviours.
Feel good – not taking a pill.

Functional food & beverage definition.



Any food or drink with an additional benefit – typically *health promoting, disease preventing or illness managing* – by adding new ingredients and nutrients or more of an existing ingredient and nutrient

jump!



jump!

Health promoting, disease preventing and illness managing are the core benefits of functional food and drink.

With a growing number of health and wellness issues facing modern society, this is an important area moving into the future.

Macro influencers are causing health & wellness issues for modern society. These will continue to grow and point to opportunity areas for functional food & beverage.

jump!



Macro Influencers.

World population growth.

Aging population.

Rising cost of healthcare.

More pressured lifestyle.

Globalisation.

Environmental issues.

Urbanisation.

Comparative culture.

Tech addiction.

Changing jobs landscape.



Health & Wellness Issues.

Sedentary lifestyle.

More pollution.

Gut health disorders.

Mental health problems.

Lack of sleep.

Increased stress.

Increase in brain disease

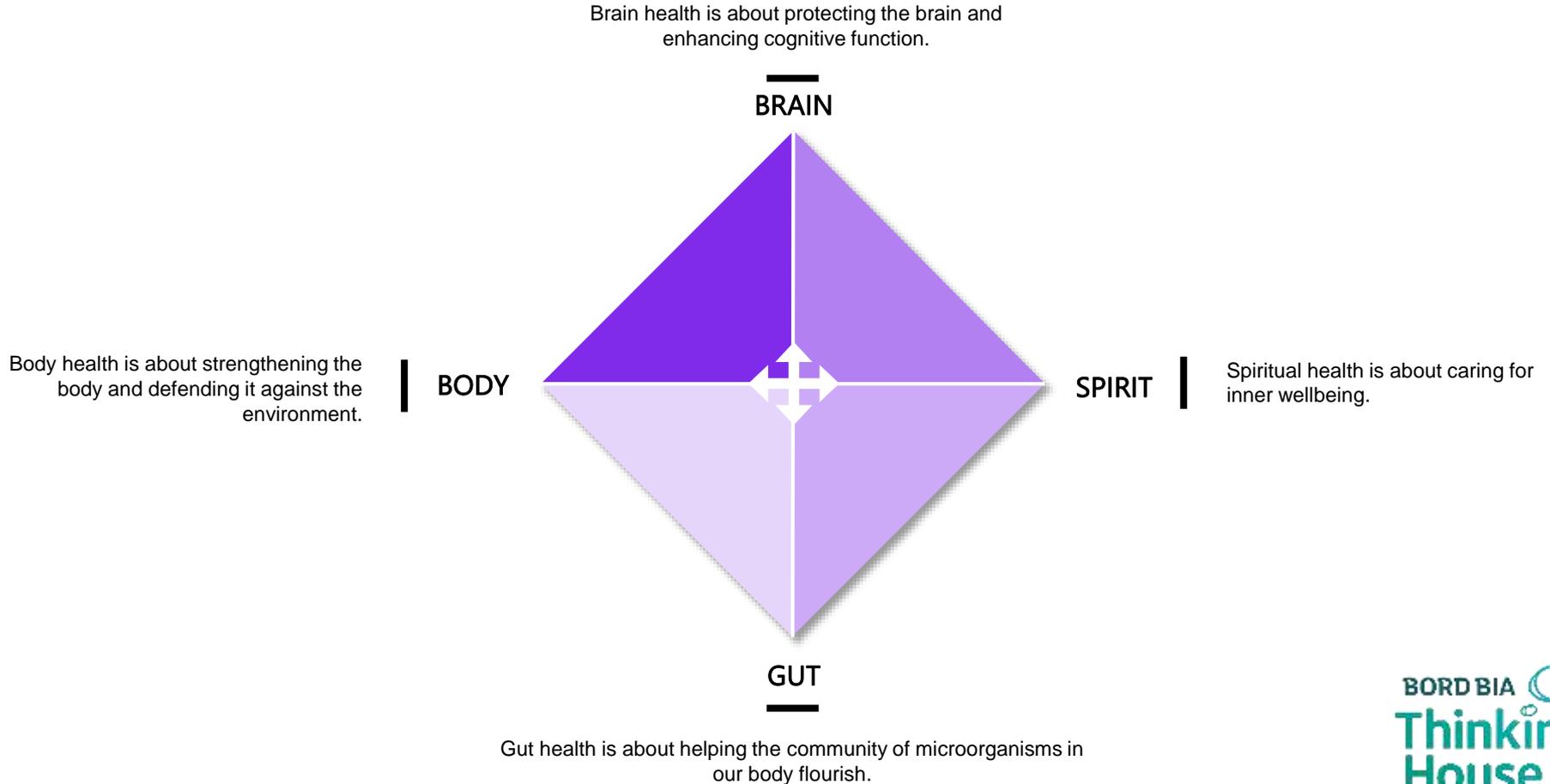
Beauty pressure.

3.

**FUNCTIONAL
FOOD & BEVERAGE
INNOVATION
PLATFORMS**

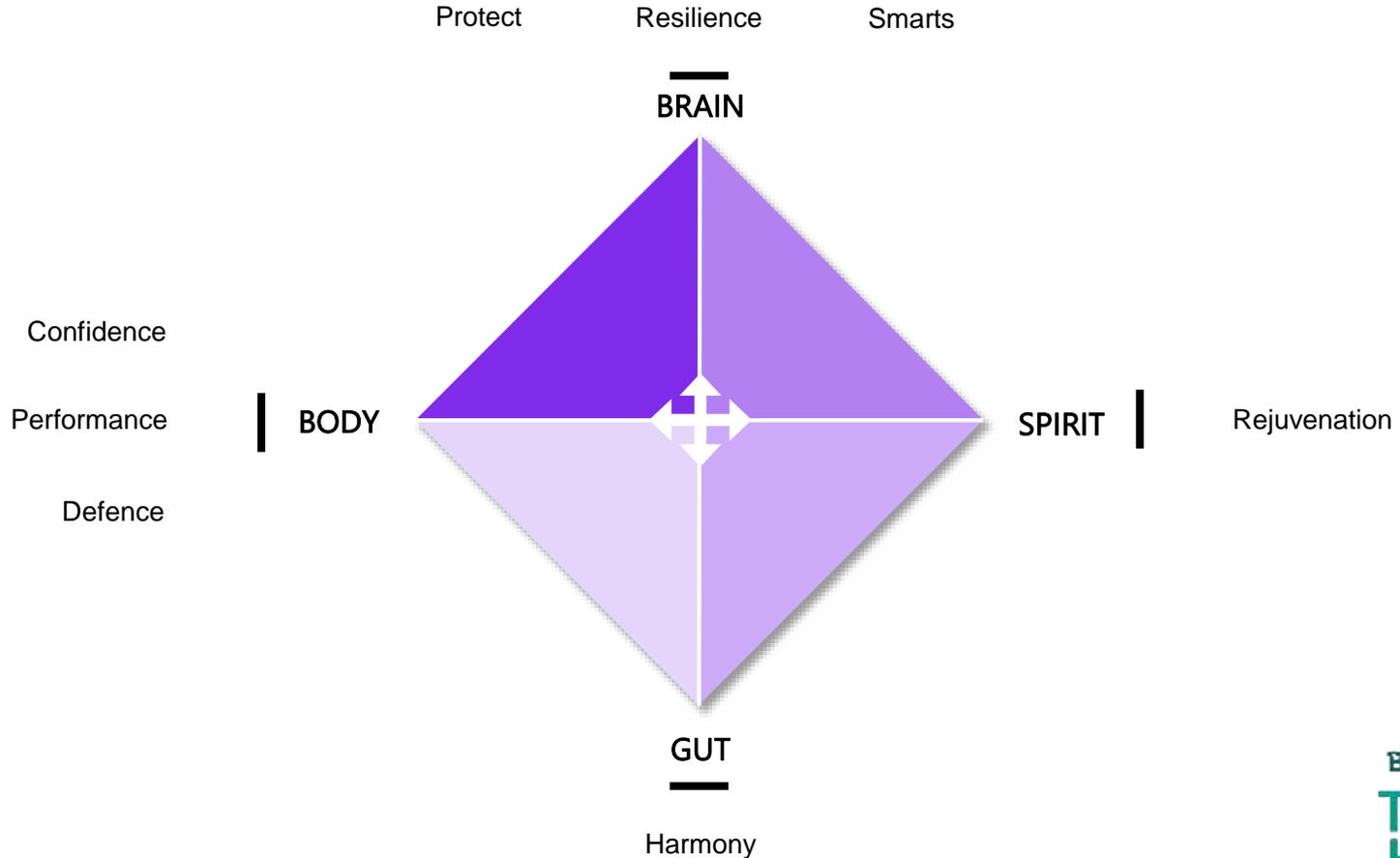
An inspiring start-point for purposeful innovation, rooted in rising consumer needs and cultural shifts.

We identified four key areas of focus for functional food and beverage innovation.



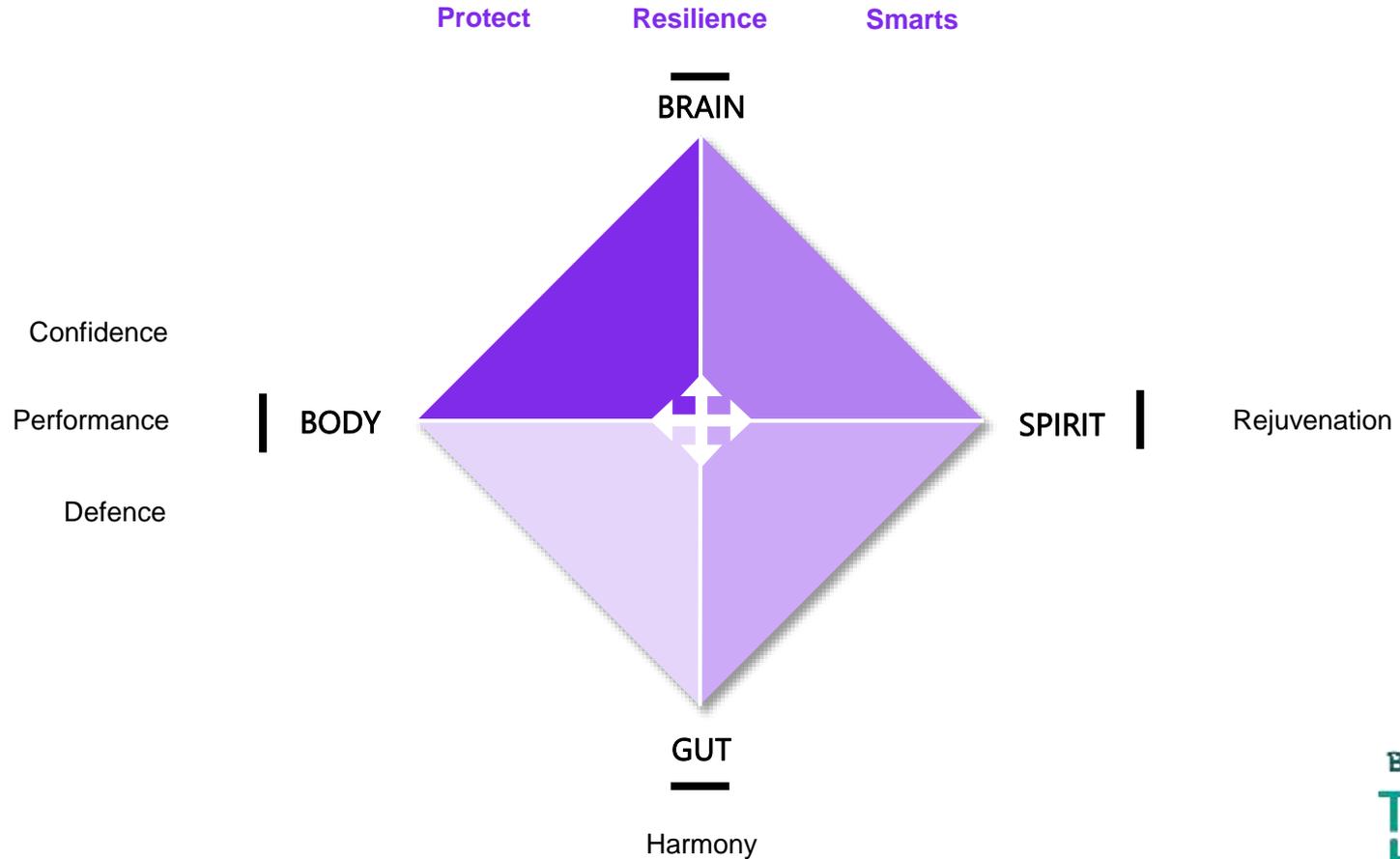
Eight high potential innovation platforms we can tap into, each rooted in an emerging consumer need.

jump!



Three innovation platforms in Brain Health.

jump!



**Brain health
is about
protecting the
brain and
enhancing
cognitive
function.**

1.

Protect

This is about helping protect against cognitive decline.

2.

Resilience

This is about balancing and rebuilding mental health.

3.

Smarts

This is about enhancing cognitive performance.

jump!

PROTECT

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Degenerative
brain diseases
are increasing
globally.

50m

estimated number of
people affected by
Alzheimer's or a related
dementia, which is
expected to roughly triple
by 2050 (Alzheimer's
Society GB)

Degenerative
brain diseases
are increasing
globally.

32

Australians diagnosed
with Parkinson's
everyday (Deloitte,
2015)

People are actively trying to protect their brain.

\$5.6bn

global value of the Alzheimer's Drugs Market by 2024 – an estimated CAGR growth of 8% between 2018-2024 (Zion Market Research, 2018)

Signals.

jump!

People are
actively trying
to protect their
brain.

Hello Brain App

delivers scientifically
designed exercises to 'keep
your brain fit and healthy',
particularly as you get
older.

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Protect – what's happening?

Cultural Context

As average life expectancy increases, degenerative brain diseases such as Alzheimer's and Parkinson's are a rising concern.

Consumer Insight

Protection: people want to safeguard their future.

Age focus

45+

jump!



Alzheimer's is knocking on the door for our age group...My mum is in her early 70's and she has recently taken up bridge because she wanted her brain to be sharp and focused.

45-50 year old Dublin



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Cognitive Anti-inflammatory

Plant antioxidants have anti-inflammatory properties which boost blood circulation to improve memory and prevent cognitive decline, with particular interest in

Cucumin
Pycnogenol extract and
Grape skin or extract
Rutaceae



Brain Development

Folic acid is vital for brain development and function. Deficiency causes memory loss and nerve damage, such as spina bifida in fetuses or long-term damage to your central nervous system.

Niacin is a vitamin B3 which boosts folic acid production to help prevent Alzheimer's.



Enhance Everyday Cognitive Functions

DHA Omega-3 prevents memory decline by boosting neural blood flow to improve our 'executive functions' – how we plan, organise and complete tasks.

Several herbs boost chemicals in the brain which help prevent memory loss, particularly **Ginseng** and **Galantamine**.



Veg of Lund Smoothie

University of Lund food scientists developed Veg of Lund to help people naturally boost their brain health. The smoothies are rich in **omega-3** and **6 fats** found in **potatoes** and **Nordic berries**.



Japanese Mint Gum

Japanese mint gum such as Lotte Xylitol Hani Tsukinikui Mint Gum, uses **Ginkgo Biloba** which has traditionally been used in Chinese medicine to improve memory retention and cognitive health.



Camano Island Coffee

Camano Coffee advocate how **caffeine** and other plant properties contained in coffee are protective factors against cognitive decline. Clinical evidence shows how drinking 3-5 cups of coffee decreased risk of dementia by about 65% at late-life.

Protect – three functional innovation codes; each offering a unique pathway into this platform.

jump!

1.

Prevention

Increased awareness of brain disease has encouraged people to want to take preventative measures such as long-term lifestyle changes.

2.

Defence

Naturally building defence barriers against cognitive decline.

Supporting good brain health with simple changes or supplements to people's meals.

3.

Reduction

Inflammation causes disease and the natural aging process of the brain.

Opportunity with products which focus on naturally reducing or counteracting inflammation in the brain.

Attack Inflammation

Inflammation causes disease and the natural aging process of the brain.

Opportunity with products which focus on naturally counteracting inflammation in the brain.

Optimal Absorption

Provide products in a format they're most optimally absorbed by the body.

For instance, providing a liquid for optimum vitamin B absorption.

Clinically Proven

People want products which demonstrate clinical evidence supporting the brand's claims.

This provides a greater opportunity to connect with customers.

Protect – quantitative performance summary.

Think about a future where...

Protecting brain health is important to people.

In this future, as average life expectancy increases, brain diseases such as Alzheimer's and Parkinson's are a rising concern.

In this future, people as young as 50 are turning to food and drink products to help protect their brain and safeguard their future.

A herbal tea blends blueberry, curcumin (the active ingredient in turmeric) and ginkgo biloba leaves (a herb that aids cognitive function) to reduce inflammation and boost blood supply to the brain.



LIKELIHOOD



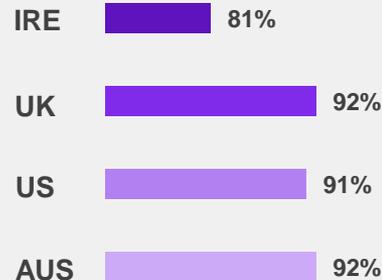
v 83% average

STRENGTH



v 8.4 average

REGION



GENDER



AGE



TIMEFRAME



v 61% average

of people think this will become common within the **next 2 years**

POPULARITY



v 36% average

of people **think more than half of people** will purchase this product

TOP OCCASIONS



Part of breakfast



Mid-morning



Before breakfast

TOP CATEGORIES



Hot Beverages



Dairy-based beverages



Cold Beverages

OVERALL PLATFORM RANKING

1st

FUTURE LIKELIHOOD

Probable

Think about a future where...

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REASONS TO BELIEVE

We are heading towards an ageing population and so there should be focus on preventing age-related disease; it will be very important.

25-34 Female Australia

I've no doubt this will happen. People are increasingly aware of their own brain health and want to protect themselves. There's been a lot of focus recently brain disease such as dementia.

45-54 Male UK

This lifestyle of supporting and repairing cognitive function is already happening. I myself use natural remedies to reduce inflammation and boost blood flow on a regular basis.

55-60 Female US

COMMENTARY

- Greater awareness of the causes and effects of brain disease across different markets.
- More and more people have seen the effects of brain disease on people they know or in their close family network.
- People increasingly want to take preventative measures to protect their brain health, particularly for those 50+

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RESILIENCE

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Signals.

jump!

Modern stress is
eroding mental
wellness

Up to 80%

of all doctor visits are for stress-related issues according to the Journal of the American Medical Association (JAMA Internal Medicine, 2013)

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Modern stress is eroding mental wellness

284m

Number of people suffering with anxiety disorder globally, with more women affected than men (Our World In Data, 2017)

People want to
strengthen
mental
resilience

Wellness Tourism

travel for the purpose of promoting health & wellbeing through physical, psychological or spiritual activities is worth \$639bn and growing twice as fast as general tourism. China and India are top destinations (Global Wellness Institute, 2018)

People want to
strengthen
mental
resilience

\$156bn

projected value of the global
behavioural and mental health
market by 2028.

Projected to expand by 3.4%
CAGR over 2018-2028
(Future Market Insights, 2018)

Resilience – what's happening?

Cultural Context

The pace and pressure of modern lifestyles have increased stress levels and deteriorated people's mental health. Social media has broadened people's awareness and conversation around mental health.

As a result, people want things which relieve their stress and improve mental wellbeing.

Consumer Insight

Resilience: people want to thrive despite the pressures of modern life.

Age focus

16-45

jump!



I want to experience less stress as I'll feel like I could be a better person emotionally and more productive in life in general.



25-35 year old USA



Calming CBD

Cannabidiol (CBD) is a naturally occurring compound from the cannabis plant – it is non-psychoactive – which is trending across many categories.

It is being used for therapeutic benefits to help with stress levels and general pain-relief.



Ancient Adaptogens

These are natural herbs that help the body to adapt to stress.

Many have been used in traditional ancient medicinal for centuries.

Particularly interest around **Aryurvedic** (ancient Indian healing) herbs such as **Ashwagandha** and **Holy Basil** as effective stress relievers.



Serotonin Boost

Modern research has identified several key proteins which help the brain produce serotonin.

Patients with anxiety, bipolar disorder, and depression are encouraged to increase their intake of **SAME**, **5-HTP**, **DHA Omega 3** and **EPA Omega 3**.



Calm, Good Day Chocolate

Blends fair-trade chocolate with **chamomile flower**, **amino acids** and other botanicals linked to releasing tension causing anxiety. Chocolate naturally contains fibre and **tryptophan** which boosts serotonin.



The Morning Motivator

This powdered product is used a coffee-alternative or in breakfast, and blends **Maca** with **cacao**. These antioxidants help relieve anxiety and lower blood pressure.



Metta Beverage

Incorporates adaptogens with **ginseng** – a traditional Chinese herb used to boost mental clarity. It enhances the brain's absorption and levels of dopamine and serotonin to naturally stabilise mood.

Resilience – two functional innovation codes; each offering a unique pathway into this platform.

jump!

1. Mental Strength

Helping people to develop mental strength through stress management.

This relieves symptoms of stress, anxiety and depression.

2. Rapid Stability

People need immediate resolutions which stabilise their mental health in a particularly pressured environments.

Comfort CBD

Maximise the growing trend of CBD products by blending this ingredient into more 'comfort' food and drink (e.g. ice-cream, chocolate, sweets).

Opportunity exists in general through matching product formats which enhance its benefits e.g. hot tea matches the calming properties of chamomile and other herbs.

Natural Origins

People increasingly seek natural ingredients to relieve their symptoms of stress, over synthetically produced adaptogens or treatments.

Maximise this space by using products which are naturally connected to our brain's chemical production. For instance, DHA Omega 3 and EPA Omega 3.

Old is new

Growing use of ancient herbs and substances to heal modern stress.

Advocate the power of these natural ingredients by incorporating the heritage of Chinese herbal medicines or the Yogi tradition Ayurvedic herbs derive from, in your product messaging.

Resilience – performance summary.

Think about a future where...

Promoting mental wellness is important to people.

In this future, modern lifestyles have greatly increased stress levels. As a result, mental health is now a health priority.

In this future, in order to address this, many people have dramatically reduced alcohol intake. They are also turning to food & drink products to relieve some of the stress that may keep them from living life to the full.

One chocolate product infuses CBD (the relaxing, non-psychoactive strain of cannabis) with Meca root (a herb which helps the body fight stress) and ginseng (which naturally boosts serotonin levels) to reduce stress.



LIKELIHOOD



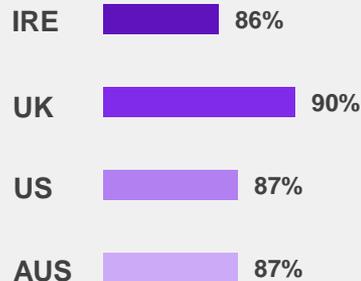
v 83% average

STRENGTH



v 8.4 average

REGION



GENDER



AGE



TIMEFRAME



v 61% average

of people think this will become common within the **next 2 years**

POPULARITY



v 36% average

of people **think more than half of people** will purchase this product

TOP OCCASIONS



TOP CATEGORIES



OVERALL PLATFORM RANKING

2nd

FUTURE LIKELIHOOD

Probable

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REASONS TO BELIEVE

I can see people moving on to more products like this in the future as they encourage to talk about their feelings.

25-34 Male UK

Because younger people do not like drinking as much as older generations. They are also open to more healthy ways to destress, like this.

35-44 Female Ireland

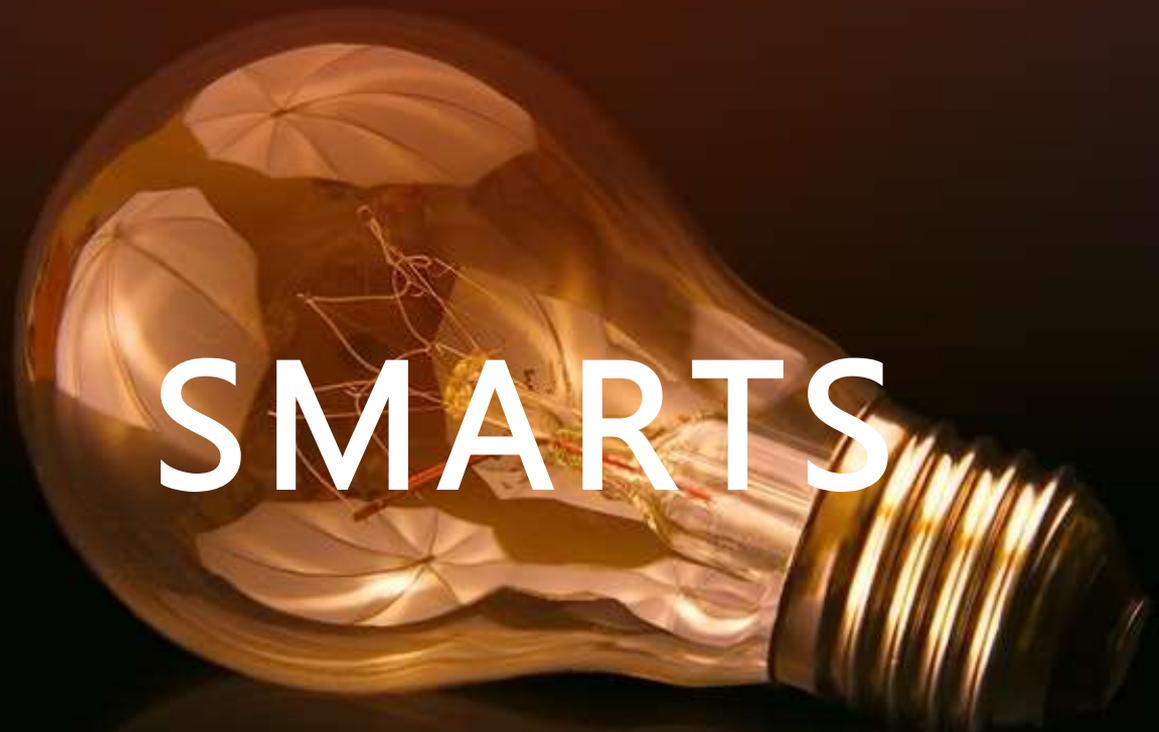
I believe cannabis is going to be the future. When it can be utilized for it's medically beneficial products it will be more readily accepted to assist in the overall wellbeing of day-to-day lives.

18-24 Female Australia

COMMENTARY

- Growing openness to new treatments such as CBD – especially due to greater understanding of the medical benefits CBD provides for people's mental health.
- Although approaches to stress management might differ - awareness of the mental health problem spans across age groups and is clearly affecting people across our different regions.
- People are talking more about their mental health, and this is leading to more people wanting to address this issue as individuals, and at a society level.

jump!



SMARTS

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There is greater
societal pressure
to achieve.

41%

of UK 16-25 year olds
feel under pressure to
achieve unrealistic goals
(Youth Index, 2017)

There is greater societal pressure to achieve.

3 in 5

executives globally rated 'the overwhelmed employee' as an urgent trend in a Deloitte study (Deloitte, 2014)

People are looking for ways to enhance their smarts.

14%

of people admitted to using PCEs (pharmacological cognitive enhancement drugs such as Adderall) to increase memory or concentration (Global Drug Survey, 2017)

People are
looking for ways
to enhance their
smarts.

16%

of students took a
'study' drug without a
prescription while
studying at Oxford
(Cherwell, 2016)

Smarts – what's happening?

Cultural Context

As our global culture becomes more competitive culture, there is huge pressure on people to perform to their 'peak' intellectual abilities.

Consumer Insight

Smarts: people want to optimise their intellectual potential.

Age focus

18-35

jump!



Our society has placed extreme importance on achieving intelligence in our advancing world. I believe that competitiveness will only increase as will the need for and desire to gain 'superior' intellect.

25-35 year old Australian



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Natural Nootropics

Nootropics is a broad term for any substance – either natural or synthetic – that improves brain function.

High interest around natural cognitive enhancers such as:

L-theanine (often used with caffeine), **Acetyl-L-Carnitine** and **choline** – all natural substances.



Mental Mushrooms

Lots of excitement around the potential of mushrooms to boost cognition.

Lion's Mane is the most studied and has strong evidence to support it as a brain enhancer.

Studies have shown that it significantly increases nerve growth factor which helps to improve learning and alertness.



Adaptogenic Enhancer

Of all the adaptogens, **Bacopa Monnieri** is considered the most powerful cognition and memory booster.

The active components improve the signalling of electrical impulses between the brain, helping to memorise things more easily.



WOW Focus

Europe's first nootropic drink is designed to improve cognitive function and lift brain fog using a combination of **nootropics**, **taurine** and **natural caffeine**.



Brainiac Kids

A yoghurt designed to support developing brains using a patented 'brainpack' formula – a blend of **omega-3 DHA**, **ALA**, **choline** and three strains of **probiotics**.



Mushroom Cups

Coffee with superfood mushrooms that aim to awaken your inner genius – they use a mix of **Chanterelles**, **Chaga** and **Cordyceps**.

Smarts – four functional innovation codes; each offering a unique pathway into this platform.

jump!

1. Alertness

Helping people to feel alert and ready, eliminating 'grogginess' and preventing tiredness.

2. Focus

In a time-pressured society – people want to find ways which help them concentrate for longer and without disruption.

3. Sharpness

Helping people feel sharp, quick-thinking and always 'on the ball'.

4. Retention

We increasingly need to retain more and more information. How 'good' we are at this has become a determining factor of success.

Natural Brain Boosters

Focus on natural cognition boosting ingredients, rather than synthetic. They are a better fit with food and drink.

Study / Deadline Occasion

Huge opportunity to target those in school or college, particularly around exam time, with something that is naturally boosting to avoid dramatic crashes.

Or employees that regularly must meet strict deadlines.

Smarts – quant performance summary.

Think about a future where...

Boosting smarts is important to people.

In the future, in the developed world, employment is near full capacity and competition for jobs is fierce. As a result, there is huge pressure on students and employees to optimize their intellectual potential.

In this future, prescription 'smart-drugs' are popular, but people are now turning to food & drink products for greater focus, sharper thinking, and superior memory.

A drink that eliminates 'brain fog' (difficulty thinking and concentrating) using natural nootropics (ingredients that enhance brain function) is flying off the shelves.



LIKELIHOOD



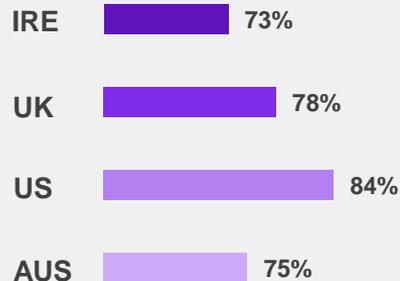
v 83% average

STRENGTH



v 8.4 average

REGION



GENDER



AGE



TIMEFRAME



v 61% average

of people think this will become common within the **next 2 years**

POPULARITY



v 36% average

of people **think more than half of people** will purchase this product

TOP OCCASIONS



Part of breakfast



Mid-morning



Before breakfast

TOP CATEGORIES



Sports nutrition



Cold beverages



Breakfast cereals

OVERALL PLATFORM RANKING

7th

FUTURE LIKELIHOOD

Plausible

Think about a future where...

Boosting smarts is important to people.

In the future, in the developed world, employment is near full capacity and competition for jobs is fierce. As a result, there is huge pressure on students and employees to optimize their intellectual potential.

In the future, prescription 'smart-drugs' are popular, but people are now turning to food & drink products for greater focus, sharper thinking, and superior memory.

A drink that eliminates 'brain fog' (difficulty thinking and concentrating) using natural nootropics (ingredients that enhance brain function) is flying off the shelves.



REASONS TO BELIEVE

There is already a lot of pressure on people with technology. . People will need and use everything on offer, including smart-drugs and food, and anything that could boost their brain.
25-34 Female UK

This is already happening. There are already drugs out there that boost students focus and help them sleep to bring out their best results.
35-44 Male Australia

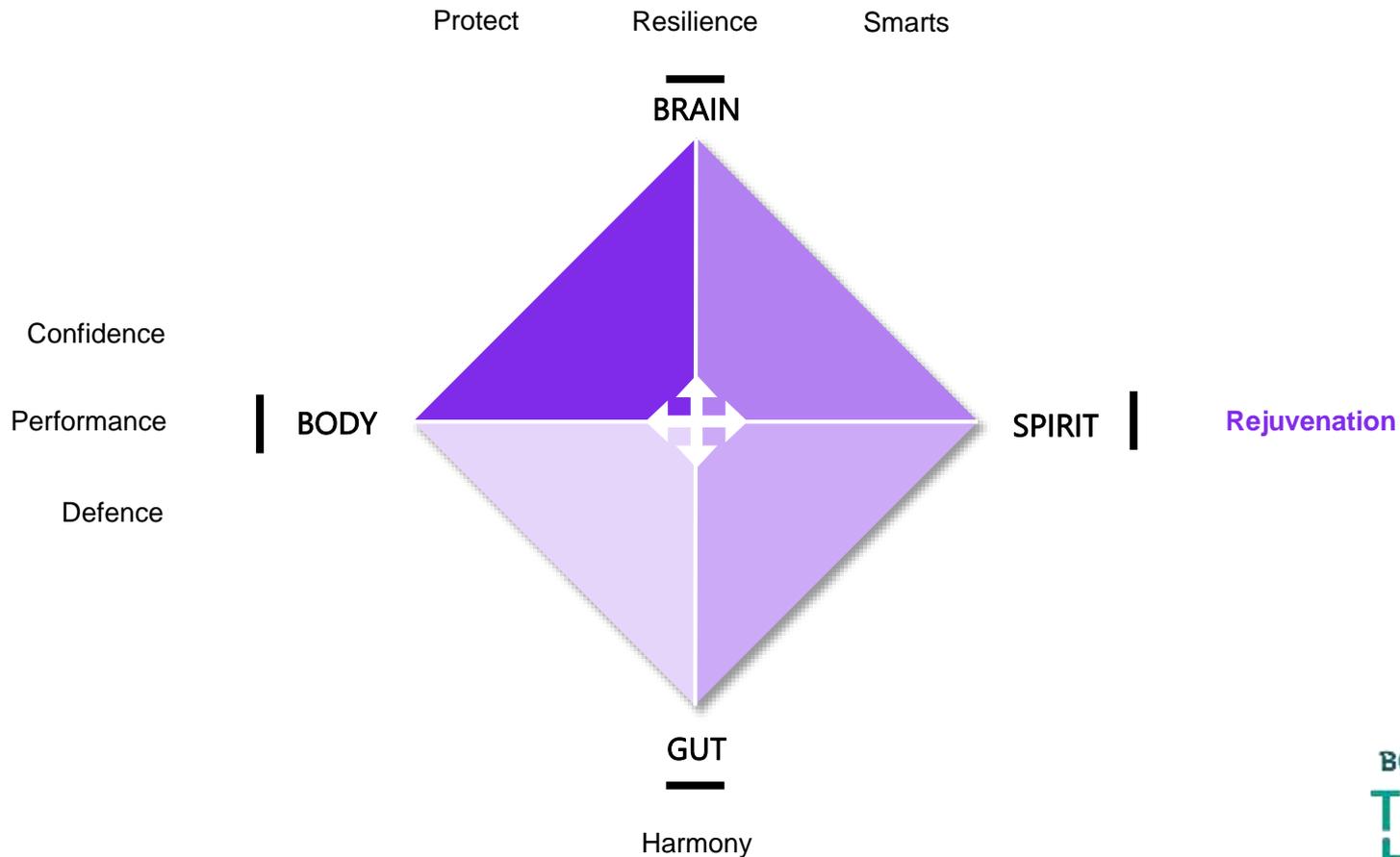
Competition is fierce among millennials and they are very aware of the food/drinks they consume and the benefits of certain drinks.
55-60 Female US

COMMENTARY

- People, especially millennials, feel under intense pressure to succeed or be at the top of their game. This is so evident that older generations comment on this.
- A need to succeed is driving people to use study drugs as well as search for new alternatives such as functional food and beverages.
- Already people are using foods and beverages to improve their brain performance. Ingredients noted in the verbatims wildly referenced caffeine as well as a few mentions of ginseng.

One innovation platform in Spirit Health.

jump!



**Spirit health
is about
caring for
inner
wellbeing.**

1.

Rejuvenation

This is about
helping people
get better sleep.

jump!

REJUVENATION

Orange Sculpture



BORD BIA 
Thinking
House

Lack of sleep is a rising global epidemic.



77%

people in the UK wake up not feeling refreshed (Sealy Sleep Census, 2016)

Lack of sleep is a rising global epidemic.



20%

of adults in China take sleeping tablets (Sealy Sleep Census, 2016)

People are
seeking
rejuvenation.

\$30-40bn

the estimated value of the
'sleep-health' industry -bedding,
sound, light, temperature, sleeping
aids. (McKinsey, 2017)

People are
seeking
rejuvenation.

50+ million

downloads worldwide of relax app
Calm with over 100 million listens
of 'sleep stories' – essentially adult
bedtime stories
(Calm, 2019)

Rejuvenation – what's happening?

Cultural Context

Growing 'always-on' lifestyle and the infiltration of tech in the bedroom, particularly device 'blue-light', is resulting in less hours and poorer quality sleep.

Consumer Insight

Rejuvenation: people want to feel like new; time and time again

Age Focus

16+

jump!



I am usually just wide awake at night and I feel I don't get enough sleep. I might get like 4 or 5 hours of decent sleep and then I'd be wide awake at 6 AM again. It can be a struggle.

20-35 year old Dublin





Bedtime Indulgence

A lot of traditional ‘late-night treats’ (chocolate, ice-cream, cookies) infused with ingredients that promote sleepiness.

Many products being infused with **melatonin**, **CBD**, **magnesium** and **L-theanine** and **glycine**.

Nature’s Sedatives

Using classic, natural forms of sedation to evoke a deeper sleep state.

Honey, **valerian**, **lavender** and **magnolia bark** are well known and being used as part of many sleep-aid products.

CBN Slumber

CBN is the lesser known cannabinoid, but evidence suggests it is a powerful sleeping aid which can help to prolong sleep.

CBN products are still at the oil and supplements stage with research ongoing.

Rejuvenation – brands that are tapping into this rising need.

jump!



Chewpod Sleep On Demand

Fast-acting sleep aid gum designed for those with sleep issues or with jet leg. Blend **melatonin and 5-HTP** with a patented Fastactiv delivery.



Sleep Well

Vanilla or chocolate milk drink made with jersey milk, **natural honey** and **valerian root** designed to be consumed 30 minutes before bedtime for better sleep.



Dream Bars

Organic bars that encourage vivid dreaming made with nervine herbs (**chamomile, lavender, lemon balm**) and rich in **potassium, magnesium, tryptophan, choline** and **theobromine**.

1.
**Sleep
Faster**

Getting to sleep quicker and with less effort.

Eliminating ‘tossing and turning’, particularly those with insomnia or anxiety.

2.
**Sleep
Deeper**

There are four sleep stages.

Deeper sleep is about moving through these stages uninterrupted, resulting in higher quality sleep.

3.
**Sleep
Longer**

Remaining asleep for longer – this is an important area as people aren’t getting adequate amounts of sleep.

Research has shown that blue light impacts melatonin development and thus people are sleeping for shorter periods.

4.
**Sleep
Vividly**

Growing interest around the area of ‘lucid dreaming’ and how it can improve happiness, creativity and mood generally.

Target the pre-sleep occasion.

Sleep products are specifically targeting the 30-60 minutes before bed.

Champion CBN.

Opportunity to bring attention to this lesser known cannabinoid through food and beverage innovation.

Sleep balance

Modern life and tech is disrupting sleeping patterns.

Opportunity for products to help maintain the circadian rhythm (falling asleep and waking up at similar times everyday) and improve sleep cycles.

Rejuvenation – quant performance summary.

Think about a future where...

Waking up refreshed is important to people.

In this future, lack of sleep is a rising global issue. Tech in the bedroom and smartphones 'blue-light' is negatively impacting sleep quality.

In this future, many people use over-the-counter drugs to aid sleep. Also, food & drink products are being used to help people wake up feeling like new time and time again.

One popular vanilla-milk is infused with honey, valerian root, melatonin and CB1 (a non-psychoactive cannabinoid). It is a 'bedtime shot' (50 ml/2 oz) designed to be drunk 30 mins before bed to promote sleepiness and deep sleeping.



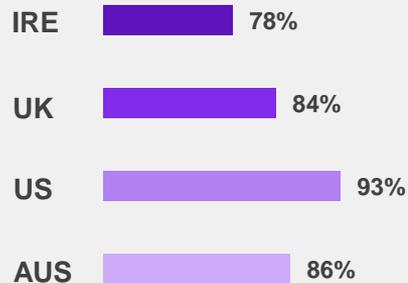
LIKELIHOOD



STRENGTH



REGION



GENDER



AGE



TIMEFRAME



of people think this will become common within the **next 2 years**

POPULARITY



of people **think more than half of people** will purchase this product

TOP OCCASIONS



TOP CATEGORIES



OVERALL PLATFORM RANKING

5th

FUTURE LIKELIHOOD

Probable

REASONS TO BELIEVE

Today a lot of people already have trouble sleeping and aren't waking up refreshed and so if an easy solution presents itself it will be widely popular

25-34 Male AUS

Technology is vastly impacting our sleeping patterns and habits. We often feel sluggish through the day. This product appeal to those that don't have enough time to get a proper 8 hours of sleep.

18-24 Male US

Insomnia and general tiredness is becoming more prevalent. I have heard of melatonin and CBN in supplements so I think it would work.

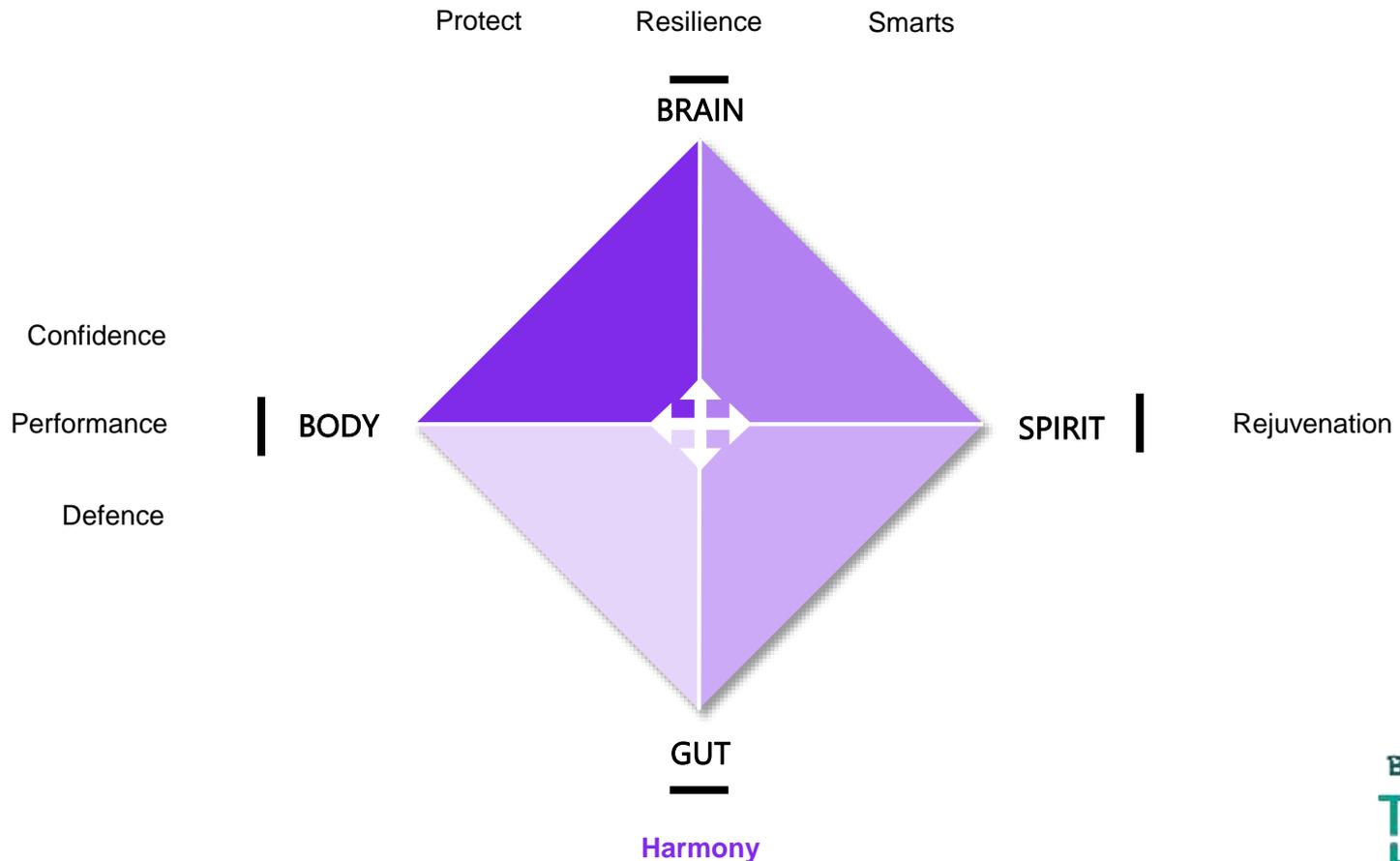
45-54 Female UK

COMMENTARY

- It is clear from the research that sleep is growing as a hot topic. There is greater awareness and understanding of the importance of sleep.
- More hectic lifestyles coupled with a growing use of technology is resulting in less sleep and poorer sleep quality
- There is a strong appetite towards ingredients and products that aid sleep; as well as an openness to the 'pre-bedtime' occasion
- Because of the rapid growth of CBD, there is little resistance to CBN

One innovation platform in Gut Health.

jump!



**Gut health is
about helping the
community of
microorganisms
in our body
flourish.**

1.

Harmony

This is about
enhancing the
connection
between gut and
brain.

jump!

HARMONY

BORD BIA 
Thinking
House

Emerging research suggests a strong connection between the gut and the brain.

90%

of the body's serotonin is estimated to be produced in the digestive tract (HHS, 2015)

Emerging research suggests a strong connection between the gut and the brain.

40%

A Truncal Vagotomy (procedure which removes part of the Vagus nerve, which connects the brain and gut) lowers the risk of Parkinson's by 40% (American Journal of Neurology, 2017)

People are
looking for
ways to nourish
their gut and
brain.

The Second Brain

is becoming a more prominent term in the gut health conversation to describe the way the gut and the brain 'talk to' each other (Scientific America, 2015)

People are looking for ways to nourish their gut and brain.



24%

of British people prefer to manage their mental health with holistic remedies and 35% of those aged 18-34 (Eos Scientific, 2019)

Harmony– what's happening?

Cultural Context

There continues to be a lot of momentum behind 'Gut health' generally within wellness culture.

People now understand that physical health and mental health are intrinsically linked.

More scientific research is focussing on the connection between gut and brain health.

Consumer Insight

Harmony: people want to feel perfectly in sync.

Age focus

25+

jump!



The whole second brain thing is very yogic as well. There is a real yoga connection there and the idea of your energies and everything linked.

35-50 year old Dublin





Psychobiotics

Term used to refer to live bacteria that have a mental health benefit.

Butyrate encourages cellular repair in the brain, potentially leading to better mental health.

Natural Yogurt, Kumis, Kefir are thought to be established Psychobiotics due to their bacterial strains.

Ancient Remedies

Fermented foods help kill pathogens linked to gut disease, nourish microbiota which support cell production in the brain.

Quinine, vinegar, kombucha, fu-tsai, tempeh and **miso** all traditional fermented foods which strengthen the gut.

Prebiotics

Galactooligosaccharide (GOS) is a prebiotic which supports gut bacteria associated with serotonin. There is evidence that GOS reduces anxiety in a similar way to medication.

Prebiotics generally support our stress related responses to life with **garlic, black peppercorns** and **Jerusalem artichokes** are natural sources.



Uplift

Offer cook books and menu options which enhance gut health. Their Vanilla Supplement contains **prebiotics & probiotics** which boost serotonin production. It can be taken as a supplement, with cereals or in baked goods.



Hi! Happy Inside

Kellogg's US launched new cereals containing **fibre, prebiotics and probiotics**. Enriching your gut in these ingredients will support production of the amino acids and microbiome which support brain and mental health.



V8 Vegetable Juice

Parkinson's patients are encouraged to drink over a litre of V8 juice a day. It's packed with **antioxidants** and **fibre** which help alleviate common symptoms of Parkinson's; low blood pressure, dehydration and constipation.

1.
**System
Sync**

The brain and body work in unison.

People are looking for health solutions that improve both, at the same time.

2.
**Mood
Boost**

Asserting more control over the way we feel – our mood, our general levels of stress or happiness is an empowering sentiment for most people.

Being able to eat certain foods that help do this is more appealing than taking medication.

3.
**Digestive
Peace**

Gut issues such as IBS are increasing worldwide.

Reducing gut inflammation helps to relieve gut discomfort which, in turn, helps to reduce mental stress.

It is a harmonious loop between brain and gut health.

4.
**New
'Biotics**

Psychobiotics, bacteria that positively impacts mood, and postbiotics, the outputs of beneficial gut bacteria, are emerging and exciting fields of 'biotics.

Education & Application

Highlight the importance of the gut-brain connection.

This takes the general benefits of gut health to the next level, but the opportunity is relatively new.

Brands that can get to here first, have a chance to really stand out.

Lifestyle Integration

Experts are quick to remind people that there is 'no magic pill' for gut health.

There is a varied opportunity for brands as consumers will want to incorporate a range of different gut/brain health promoting products into their diet.

Investigate 'Psychobiotics'

This is a new and interesting area of 'biotics that taps into the gut-brain connection.

Currently brands are hardly tapping into the mood-boosting power of certain strains of bacteria.

Postbiotics Next

Isolating the outputs of beneficial gut bacteria and using them as an ingredient is an emerging field.

Harmony – performance summary.

Think about a future where...

A healthy gut makes a healthy brain.

In this future, scientific research has confirmed a strong link between gut health and brain health. As nearly 90% of our serotonin is produced in the gut, it is often referred to as our 'Second Brain'.

In this future, some mental health matters are being managed with nutrition and many gut problems are addressed via psychotherapy. People are using specific foods and drinks for a two-sided benefit: improving their gut health and boosting their mood.

A snack bar containing dried antioxidant fruits, puffed buckwheat, and a psychobiotic (strains of good bacteria with proven mental health benefits) yogurt coating is a popular on-the-go choice.



LIKELIHOOD



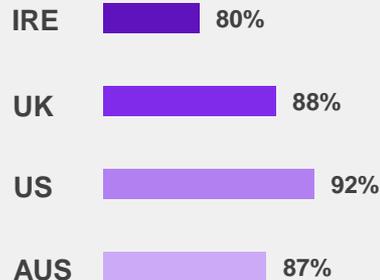
v 83% average

STRENGTH



v 8.4 average

REGION



GENDER



AGE



TIMEFRAME



v 61% average

of people think this will become common within the **next 2 years**

POPULARITY



v 36% average

of people **think more than half of people** will purchase this product

TOP OCCASIONS



Part of breakfast



Mid-morning



Before breakfast

TOP CATEGORIES



Breakfast Cereal



Dairy-based foods



Dairy-based beverages

OVERALL PLATFORM RANKING

3rd

FUTURE LIKELIHOOD

Probable

Think about a future where...

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A snack bar containing dried antioxidant fruits, puffed buckwheat, and a psychobiotic (strains of good bacteria with proven mental health benefits) yogurt coating is a popular on-the-go choice.



REASONS TO BELIEVE

We are more aware of how the Human body works and the benefits of antioxidants & importance of a "Healthy gut" as part of general good health. The convenience of a snack bar format would make this product very desirable.

45-54 Male Ireland

People are becoming more aware of mental health problems, therefore people will be more open to new ideas regarding mental health and how to aid it, such as this.

25-34 Female UK

We're already seeing more research into probiotics and gut health along with the rise of products like kombucha and probiotic drink flavours in supermarket shelves

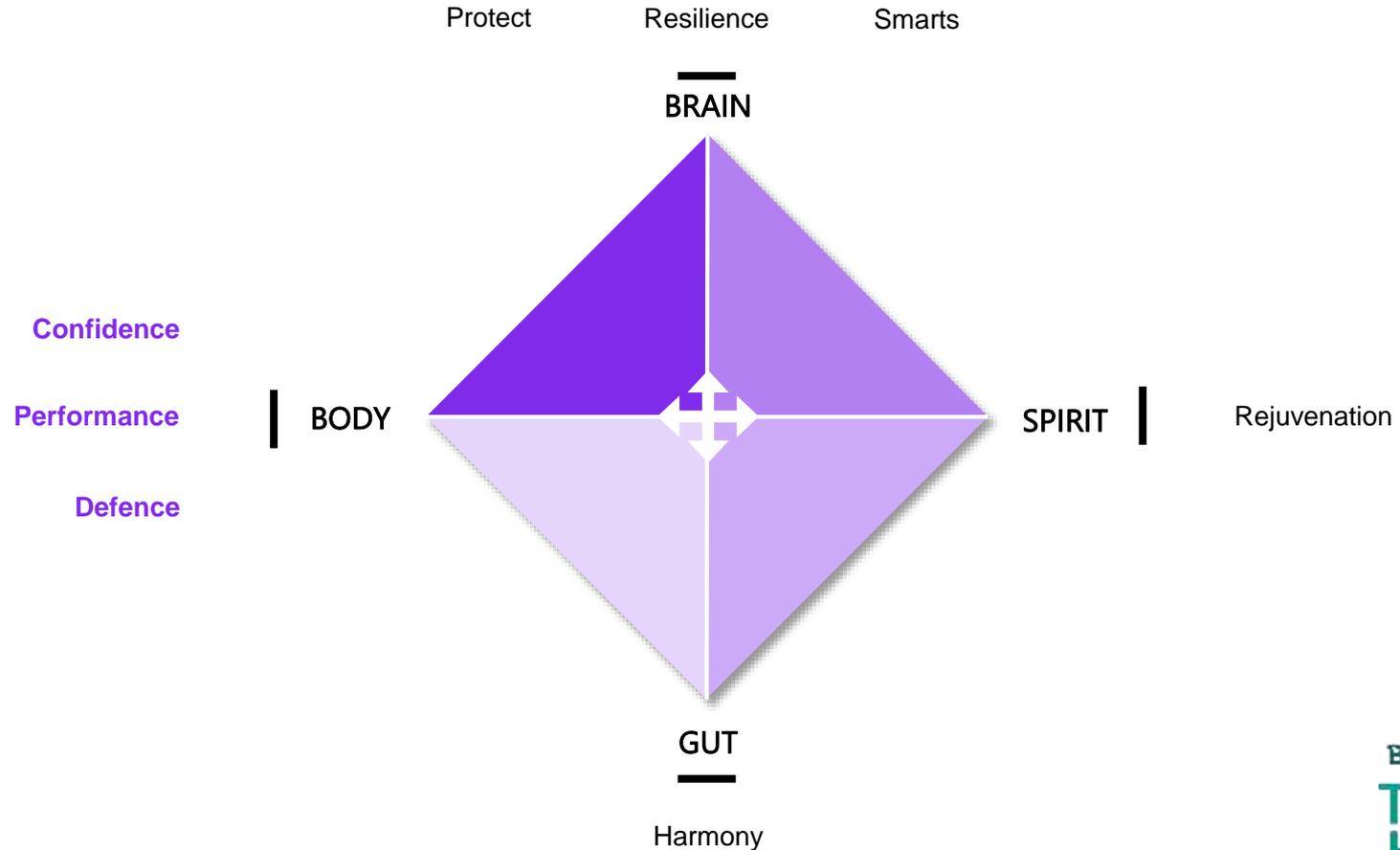
25-34 Male Australia

COMMENTARY

- Gut health remains a hot topic in the general conversation about health and wellness. It is an area of passion for many.
- Consumers are becoming increasingly more familiar with gut health from product messaging and offerings like kombucha and probiotics.
- This is making consumers open to new applications for gut health.
- Additionally, addressing mental health has come through as a high priority across the research. People are receptive to natural ways to manage this.

Three innovation platforms in Body Health.

jump!



**Body health
is about
strengthening
the body and
defending it
against the
environment.**

**1.
Confidence**

This is about
enhancing beauty.

**2.
Performance**

This is about
bone and joint
maintenance.

**3.
Detoxify**

This is about
defending
against the
negative
effects of
urbanisation.

jump!

CONFIDENCE

BORD BIA 
Thinking
House

In an increasingly comparative culture, beauty is highly prized.

62%

Of UK consumers feel inadequate when they compare themselves to others online
(Globaldata, 2017)

In an increasingly comparative culture, beauty is highly prized.

33%

of global consumers say that social media has made them more self-conscious about their appearance (Globaldata, 2017)

People want
to radiate
confidence.

\$460bn

of global sales in beauty and
personal care in 2017
(Euromonitor, 2017)

People want
to radiate
confidence.

57%

of Irish people say they would consider having 'enhancement' (botox, fillers, plastic surgery etc.) treatment in the future (Thérapie Clinic Survey, 2018)

Confidence – what's happening?

Cultural Context

As social media has exploded, so too has comparative culture.

Faced with unattainable beauty standards, people are left feeling inadequate and so, are constantly searching for ways to enhance their appearance.

Consumer Insight

Confidence: people want to always present the best version of themselves

Age focus

18-45

jump!

“

It is there already, there are filters on everything. It has been there since the beginning of time it will always be there, it is just more prevalent now with the social media stuff.

”

35-50 year old, Dublin



Revitalise Collagen

One of the critical building blocks of the tone and production of skin in the body, **collagen** starts naturally declining in women's mid 20s - giving products which restore this huge potential.

Age-old Secrets

Ancient ingredients from Chinese and Indian medicine are experiencing refreshed popularity for their anti-bacterial, anti-hypersensitive, anti-inflammatory properties.

New evidence is emerging about the use of **Centella Asiatica** as a treatment for stretch marks, while **Schisandra** herbs have been used for the treatment of crows feet.

Light & Bright

Growing trend towards lighter skin, particularly in some parts of Asia. Mintel reported a 100% increase in the number of products containing the ingredient **glutathione**, a skin lightening ingredient, between 2017-2018.

Vitamin B12 is also emerging as a hot ingredient for its ability to deliver 'rosy skin'.



Wild Friends Collagen Almond Butter

Made with **collagen** peptides to provide a “nutrient boost” to the much-loved snack. Marketed as the ‘ultimate win win’ – delicious and good for hair, skin and nails



Fat Burning Soup with Miso, Vegetables and Seaweed

Fat burning claim comes from **wakame seaweed** which contains high levels of **fucoxanthin**, which coupled with **guarana** is said to burn and remove stocked fat.



Qu Puteh

An ingestible powdered drink made from **L-Glutathione**, **collagen**, **apple stem cell**, grape, rose and **argan**. **Glutathione** has been proven to whiten the skin when ingested.

Confidence – four functional innovation codes; each offering a unique pathway into this platform.

jump!

1.
**Skin
Elasticity**

Giving the appearance of smooth, supple and youthful skin - no matter what your age.

2.
**Body Fat
Burning**

Helping to reduce bloat, burn stubborn fat and feel instantly slimmer.

3.
**Skin
Brightening**

Illuminating the skin to appear bright and radiant

4.
**Skin
Lightening**

Changing to appearance of skin tone, to become paler.

Appetite for Algae

As environmental impact becomes increasingly important to consumers, algal ingredients like **fucoxanthin** present an opportunity.

Complexion Change

Varying beauty ideals see people looking to modify their skin colour i.e. lighter in Asia, darker in the West. Ingredients such as **glutathione** and **DHA** traditionally used in topical products represent an opportunity for manufacturers.

Confidence – performance summary.

Think about a future where...

Enhancing beauty is important to people.

In this future, social media has grown and beauty standards have never seemed so unattainable. As a result, people feel under immense pressure to always present the best version of themselves.

In this future, billions are spent on sophisticated personal care products and many homes now have augmented reality mirrors to help people closely monitor their dermatological health.

A new 'beauty boost' almond butter spread has become popular. It combines organic almonds, collagen, coconut flakes, and crushed activated pearl to improve the skin's elasticity and increase radiance.



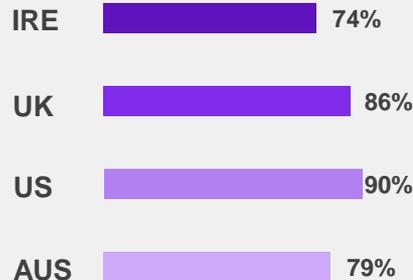
LIKELIHOOD



STRENGTH



REGION



GENDER



AGE



TIMEFRAME



of people think this will become common within the **next 2 years**

POPULARITY



of people **think more than half of people** will purchase this product

TOP OCCASIONS



TOP CATEGORIES



OVERALL PLATFORM RANKING

6th

FUTURE LIKLIHOOD

Plausible

REASONS TO BELIEVE

Think about a future where...

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“Younger people are far more critical of themselves than previous generations ever were”

25-34 Female IRL

“As a society we are constantly striving to be more aesthetically appealing and more desirable. Using an external, at-home, collagen product instead of expensive and invasive injections would likely be the next step in beauty maintenance and standards.”

18-24 Female AUS

“It contains organic almonds which will appeal to people, collagen has been proven to benefit skin for a long time and the pearls sound totally intriguing and very relevant to radiance.”

45-54 Female IRL

COMMENTARY

- There is a clear consensus from the research that social media culture has played a significant role in shaping the comparative culture we live in today and people are far more critical of themselves as a result.
- Among both men and women there is a clear desire to counteract the signs of ageing
- There is a feeling that a lot of beauty products currently on the market are ‘fads’ or ‘gimmicks’

jump!

PERFORMANCE

BORD BIA 
Thinking
House

Signals.

jump!

The world's
population is
ageing.

1 in 2

Americans over the age of
50 are expected to have
or be at risk of developing
osteoporosis in 2020
(NCBI, 2004)

BORD BIA 
Thinking
House

Signals.

jump!

The world's
population is
ageing.

Back pain

was the number one
cause of years lived with a
disability in Ireland in
2017 (Health Data, 2017)

People are
searching for ways
to maintain
performance over
time.

16%

of consumers are
looking to increase their
intake of vitamins and
minerals to improve
joint and bone health
(NCBI, 2017)

People are
searching for ways
to maintain
performance over
time.

33%

are exercising more in
attempt to improve
their bone and joint
health, globally (FMCG
gurus, 2019)

Performance – what's happening?

Cultural Context

Health and wellness have hit the mainstream, with people of all ages recognising the importance of physical exercise in maintaining a healthy body and mind.

People, both young and old, are investing, both time and money in maintaining and optimising their bodies.

Consumer Insight

Performance: People want to achieve their maximum potential

Age focus

18+

jump!



You need to treat these things earlier, like it's too late to treat it when you're 60 and you have osteoarthritis, so it is something that you have to think of sooner, than. So it's a younger stage, rather than older stage, and it's preventative more so.

20-35 year old, Dublin





Algae Properties

As people search for more naturally functional and sustainable ingredients, algal components are well positioned.

One ingredient, **Astaxanthin** claims to be 'multiple times stronger' than other antioxidants while also delivering tendon support, anti-ageing support, brain health and eye support.

Herbal Healing

Herbal formulas that target the issue of inflammation could be an emerging category as people look to recover from strenuous activity and protect against some of the wear and tear.

Ingredients such as **curcumin**, **bosewellia serrata** and **cuvitus** are among the emerging in this space.

K2 for Kids

As parents encourage their kids to live active lifestyles, they also want to make sure their children are well protected.

Recent research has evidenced the importance of **vitamin K2** in supporting bone health, by improving mass and strength but also producing energy for cell.

Performance – brands that are tapping into this rising need.

jump!



Nutritious Oatmeal for Seniors

Hot cereal containing **Australian oats**, **pumpkin**, bitter **buckwheat**, **spirulina**, fibre and vitamin C for busy, health-conscious seniors



Premia Astaxanthin–infused egg

Compared with a normal egg, the Premia egg has **omega 9**, **DHA** and **astaxanthin** to improve bone and joint health.



TuMe Anti-inflammatory Sports Drinks

Combining the healing powers of **turmeric** with the natural antioxidants of **curcumin** this is the ideal beverage for athletes who are looking for a natural way to repair themselves.

Performance – three functional innovation codes; each offering a unique pathway into this platform.

jump!

1.

Bone & Joint Strengthening

Helping to build strong bones and joints which can withstand the wear and tear of every day life.

2.

Joint Anti-Inflammation

Offering immediate relief and soothing for those suffering from inflamed bones and joints.

3.

Muscle Recovery

Encouraging full recovery for those looking to 'bounce back' from strenuous physical activity.

Supporting Seniors

Less than 1% of NPD in performance nutrition in 2017, catered to seniors. With an increasingly ageing population, there will be a growing innovation opportunity with this segment.

Natural Enhancement

67% would prefer 'completely' natural sports supplements paving the way for herbal ingredients and plant-based proteins.

Performance – performance summary.

Think about a future where...

Maintaining bone & joint performance is important to people.

In this future, in many industrialised nations, populations are aging. Sarcopenia (muscle loss due to aging) and osteoporosis are prominent concerns, as are bone and joint injuries such as back pain and sprains.

In this future, people are determined to achieve their maximum physical potential throughout life, so they are turning to food & drink products for bone, joint and muscle support.

One popular brand of Calcium-rich fruit and nut bites contains dried figs, pumpkin seeds (sources of Vitamin K & Magnesium) and a signature blend of algae (proven to benefit bone, joints and tendons).



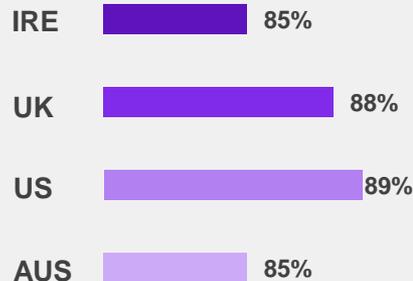
LIKELIHOOD



STRENGTH



REGION



GENDER



AGE



TIMEFRAME



v 61% average

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POPULARITY



v 36% average

of people **think more than half of people** will purchase this product

TOP OCCASIONS



TOP CATEGORIES



OVERALL PLATFORM RANKING

4th

FUTURE LIKLIHOOD

Probable

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REASONS TO BELIEVE

This is such an easy way of combating osteoporosis in particular and one I am sure doctors would recommend.

45-54 Female IRE

Because so many people are turning away from lactose products and not finding alternatives to bump their calcium intake, issue such as osteoporosis will become even more prevalent. People will want an easy way to improve their bone and joint health without drinking milk

18-24 Female AUS

No doubt that this would be a good that would fly off the shelves. All natural products and magnesium is excellent for joint aches and pains

45-54 Female IRE

COMMENTARY

- There is an understanding that the population is ageing and people are working until they are older and therefore we must be cognisant of bone and joint health.
- Calcium and magnesium are both cited as being key ingredients in maintaining bone and joint health.



jump!

DETOXIFY

Signals.

jump!

As more people
live in cities, we
suffer from the
negative impacts
of urbanisation

91%

of the world population in
2016 lived in areas where
the WHO air quality
guideline levels were not
met (WHO, 2018)

BORD BIA 
Thinking
House

Signals.

jump!

As more people
live in cities, we
suffer from the
negative impacts
of urbanisation

1 in 5

In the UK are deficient in
Vitamin D and at risk of
illness associated with
bones, muscles and
cardiovascular problems
(British Nutrition
Foundation)

BORD BIA 
Thinking
House

Santander

People are looking
to defend against
these rising issues.

\$15bn

estimated worth of the
global air purifier market
by 2023 as a result of
depleting air quality
(Techsci Research, 2018)

People are looking
to defend against
these rising issues.

Nature

As of 2018, doctors in Scotland have been authorized to prescribe nature to their patients as a treatment to reduce blood pressure, anxiety, and increase happiness (NHS Shetland)

Cultural Context

As the number of people living in urban areas continues to rise rapidly, there is an increased awareness of the negative impacts of city living.

People are making a conscious effort to ensure that their body; from their skin to their lungs are protected - looking to skincare, air purifiers and blue-light glasses to defend against these negative effects.

Consumer Insight

Detoxify: People want to maintain their health, without compromising on their lifestyle.

Age focus

18-55



Well, people are investing in air purifiers, people have allergies and like asthma and stuff, people have now got monitors in their houses and they can tell you when there's certain levels that are high in your local environment, so that definitely already is a thing.

20-35 year old, Dublin





Spotlight on Eye Health

The digital era has put eye-health in the spotlight as people are spending an increasing amount of time per day on screens.

Functional beverages enriched with **lutein** and **zeaxanthin** and targeted at eye health have begun to gain traction in Asia.

Proving Anti-Pollution Claims

As concerns around pollution grow people will become increasingly concerned with identifying and evidencing claims for anti pollution ingredients.

Early research has suggested that **boysenberries** and **broccoli sprouts** will become two such ingredients.

Let the Light In

Increasingly high-pressured demanding office-based jobs means people today are spending less time outdoors. The effect of this is a deficiency in **vitamin D**.

Products which can restore this Vitamin D, in a convenient way for the time pressed worker present huge



vitaminwater: shine

Water enriched with **vitamin D** which enhances the absorption of calcium and phosphorus and aids in the maintenance of health bones and teeth.



BerriQi Liquid Supplement for Healthy Lung Function

Made with **boysenberry extract** and claims to help repair damaged lung tissue and to reduce inflammation and mucus production



MacuView

A buttermilk drink from the Netherlands containing egg yolks enriched with **lutein** and **zeaxanthin** may help improve eye health.

Detoxify – three functional innovation codes; each offering a unique pathway into this platform.

jump!

**1.
Vitamin D
Boost**

Giving people the restorative effects of sunshine; supporting lung function and cardiovascular health - without having to step outside.

**2.
Lung Protect
& Repair**

Offering restoration and protection of the lungs will ensure easy breathing for those living in urban areas.

**3.
Eye
Shield**

Relieving and protecting the eyes from the strain felt as a result of increased time in front of blue-light-emitting screens.

Pollution Protection

As air pollution continues to increase, there is an opportunity for products which can protect against the ill effects of pollution.

Screen Time Safety

As technology continues to permeate our lives, our screen time will inevitably increase representing an opportunity for products which protect against eye strain

Detoxify – performance summary.

Think about a future where...

Defending against urbanisation is important to people.

In the future, more and more people are enjoying city-living. However urbanisation issues such as pollution, digital eye-strain and sunlight deficiency are becoming a bigger challenge.

In this future, air purifiers and blue-light glasses are growing in popularity as well as food & drink products that protect people as they look to thrive in city-life.

One drink on the market is a naturally filtered water infused with boysenberry extract (a natural antioxidant) to reduce lung inflammation caused by air pollution. People drink this in the morning to protect them during their commute.



LIKELIHOOD



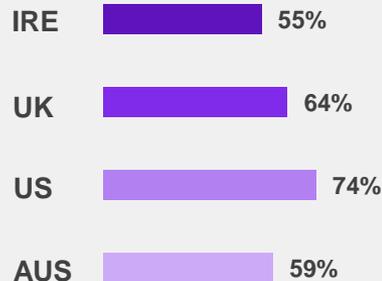
v 83% average

STRENGTH



v 8.4 average

REGION



GENDER



AGE



TIMEFRAME

50%

v 61% average

of people think this will become common within the **next 2 years**

POPULARITY

28%

v 36% average

of people **think more than half of people** will purchase this product

TOP OCCASIONS

41%

As part of breakfast

32%

Before breakfast

29%

After working out/exercising

TOP CATEGORIES

37%

Cold beverages

29%

Specialised sports nutrition products

24%

Hot beverages

OVERALL PLATFORM RANKING

8th

FUTURE LIKLIHOOD

Plausible

REASONS TO BELIEVE

Think about a future where...

Defending against urbanisation is important to people.

In the future, more and more people are enjoying city-living. However urbanisation issues such as pollution, digital eye-strain and sunlight deficiency are becoming a bigger challenge.

In this future, air purifiers and blue-light glasses are growing in popularity as well as food & drink products that protect people as they look to thrive in city-life.

One drink on the market is a naturally filtered water infused with boysenberry extract (a natural antioxidant) to reduce lung inflammation caused by air pollution. People drink this in the morning to protect them during their commute.



People will have to invent something like this product to improve how they would live in this polluted environment.

55-60 Female AUS

Yes, this sounds very likely. City living is very appealing however pollution is an issue, coupled with eye strain from devices!"

35-44 Female IRE

Even if in 30 years time, we've all moved onto electric, no emission vehicles, there could still be forest fires, freak desert storms that blow over from the Sahara, volcanic eruptions etc., so why not help your lungs with a drink infused with boysenberry (one of my fave berries, btw)

45-54 Female UK

COMMENTARY

- There is growing awareness around climate change and the negative impact of higher levels of urbanisation
- Pollution, eye-strain and sunlight deficiency are all issues that people living in urban areas can relate to
- While this platform didn't resonate as strongly as the others, there was still high appeal for solutions to modern city living

4. INNOVATION PLATFORM TESTING SUMMARY

We used a hybrid model which incorporated prediction market and online survey techniques.

jump!

What is a prediction market?

Captures the collective wisdom of an audience by asking participants to bet tokens on outcomes.

Questions are designed to measure the likelihood of possible outcomes.

Participants are asked to make a judgement on how a specific group of people will behave, rather than providing individual preferences.

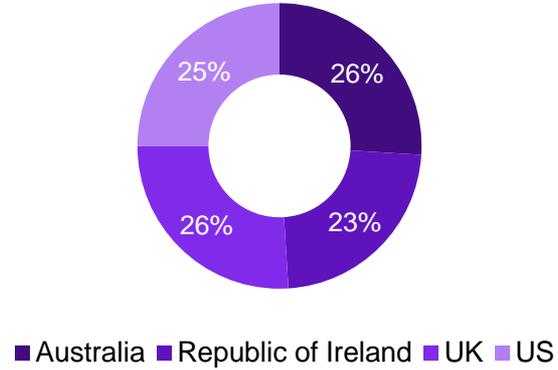
There are two key predictive metrics:

1. The **prediction likelihood index** is the probability of an outcome happening based on participants' collective betting.
2. The **strength meter** summarises the 'intensity' of the positive and negative betting activity.

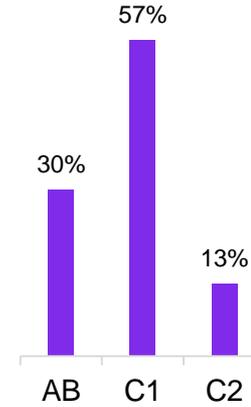
Age

18-24	14%
25-34	27%
35-44	27%
45-54	22%
55-60	10%

Country



Social Class



1. High Probability

5 of the 8 Platforms surpass the Probable threshold of 85%+; with the other 3 falling into Plausible 61%+

2. Brain Health Relevance

The top 3 Platforms all had elements relating to brain health / mental wellbeing:

- Protect 89%
- Resilience 88%
- Harmony 87%

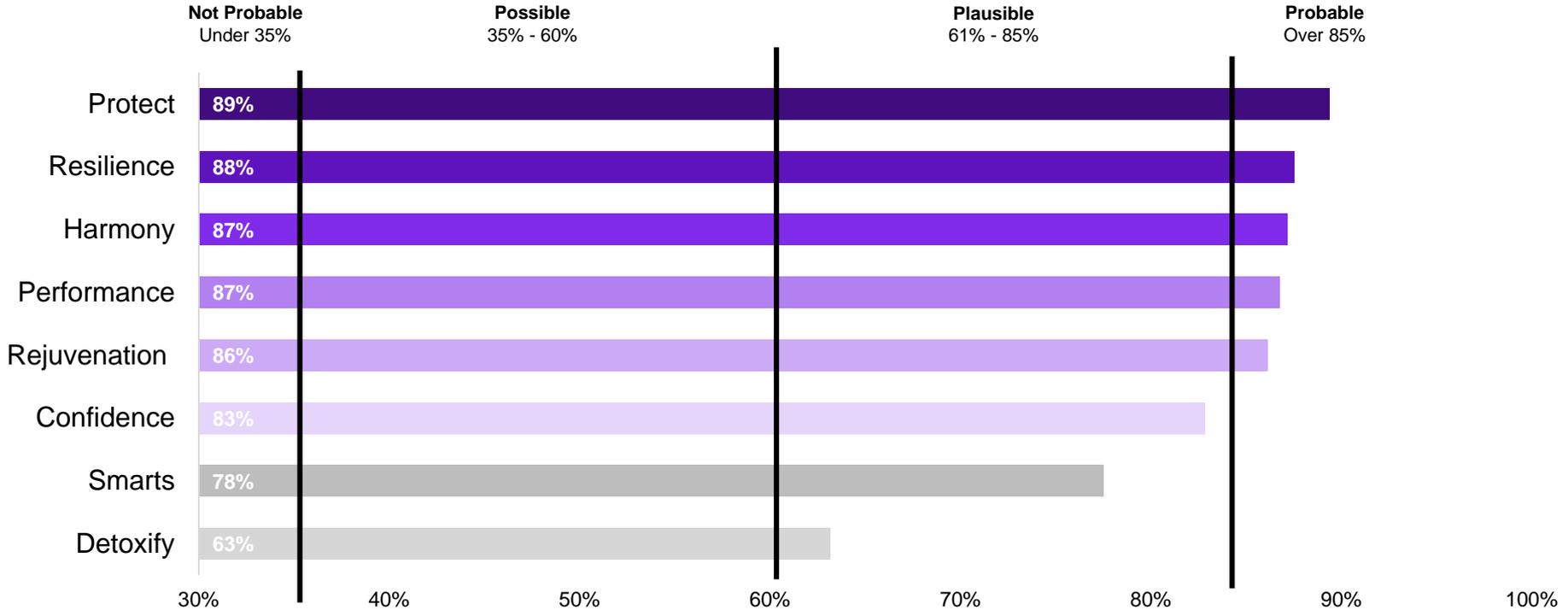
3. Morning Focus

7 of the 8 Platforms are expected to see products released that will be consumed in the morning (mainly as part of breakfast).

4. High Adoption

For 7 of the 8 Platforms, people expect over 50% of the target group to adopt the products mentioned.

Platform prediction likelihood summary.



Top five platforms by prediction likelihood.

jump!



89%



88%



87%



87%



86%

Top fives platform by top categories.

jump!



1. Hot beverages
2. Dairy based beverages
3. Cold beverages



1. Sweet snacks
2. Specialised sports nutrition
3. Savoury snacks



1. Breakfast cereal
2. Dairy-based foods
3. Dairy-based beverages



1. Breakfast cereal
2. Specialised sports nutrition
3. Dairy-based foods



1. Hot beverages
2. Dairy based beverages
3. Cold beverages

Top fives platforms by top occasions.

jump!



1. Part of breakfast
2. Mid-morning
3. Before breakfast



1. Part of breakfast
2. After working out / exercise
3. Before working out / exercise



1. Part of breakfast
2. Mid-morning
3. Before breakfast



1. Part of breakfast
2. After working out / exercise
3. Before working out / exercise



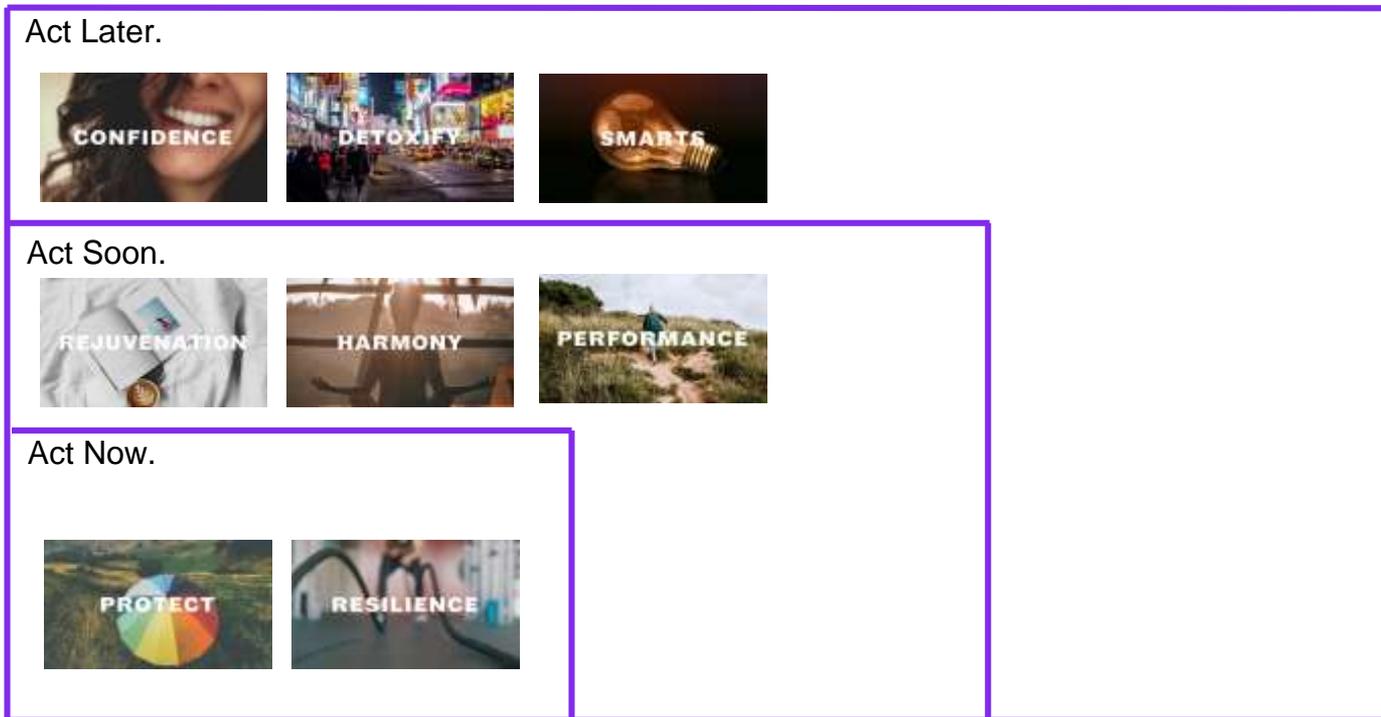
1. Before bedtime
2. Late evening snack
3. After working out / exercise

5.

WHERE TO FROM HERE?

Understanding the platforms – they present both ‘close-in’ and ‘further-out’ opportunities.

jump!



Act Later.



Act Soon.



Act Now.



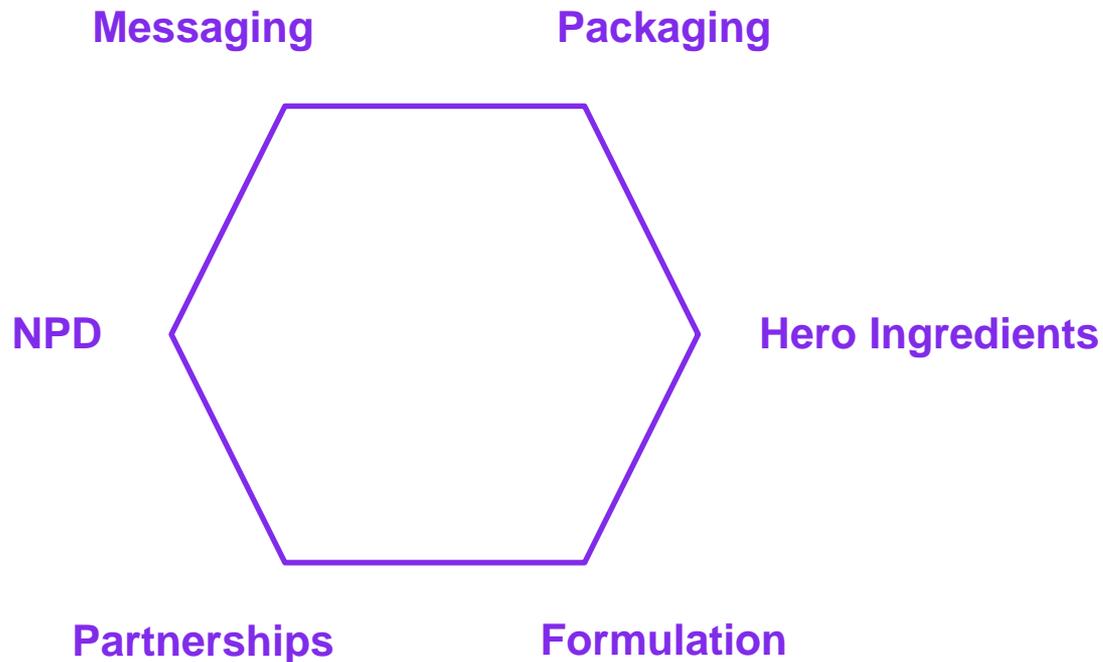
Within 1 year.

1-3 years.

3-5 years.

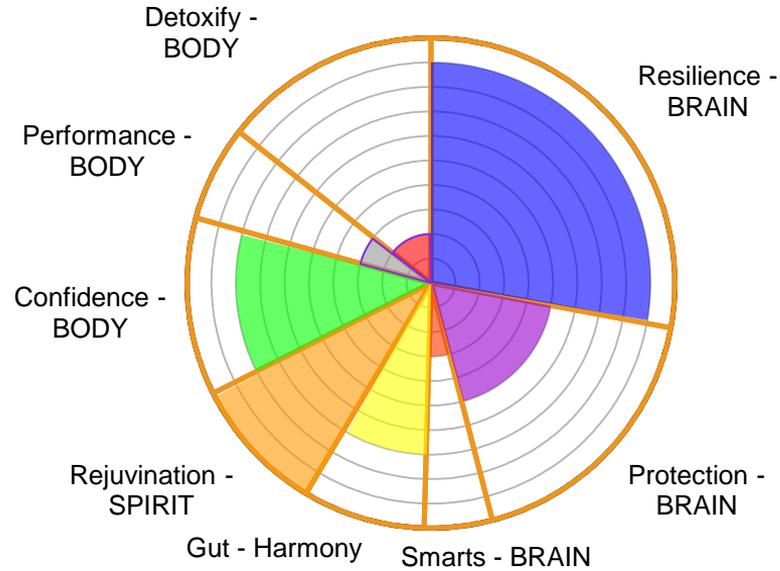
Platform direction – they can inform and inspire across a number of different areas

jump!



Screening for your business – is it of relevance to my business and what is the likelihood of it happening?

jump!



How to make the most of this study?

Work with us!

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Thinking
House



APPENDIX

1. CASE STUDIES
2. ONE-PAGE PLATFORM SUMMARIES
3. GLOSSARY

CASE STUDIES

Radicle Snacks

United States

Cognitive boosting and memory enhancing nootropic bars.

Natural snack bars made with antioxidants, polyphenols and natural nootropics to boost cognitive functioning, protect memory and detox the system.

Target Area: **Brain**

Innovation Platform: **Protect**

Target Group: 25+

Active Ingredients: Curcumin, Piperine, luteolin, Rhodiola Rosea, Ashwagandha, Hovenia Dulcis



Functional Claims from Radicle Snacks:

Curcumin reduces cognitive impairment and increased neurotransmitters associated with **memory formation.**

“Bringing together the **best of science** with the purest of nature.”

Messaging

Radicle emphasizes that their bars are made naturally with whole ingredients and ‘seasoned’ with nootropics.

They heavily highlight scientific evidence and their lack of processed ingredients.

They claim their bars are specifically adapted to certain activities.

Visual Identity

Packaging is clean and not busy to strengthen the emphasis on natural, unprocessed ingredients.

Each bar is named for its benefit – detoxbar, focusbar, memorybar.

Communications

Clear informative language explains the benefits of the individual ingredients of each bar.

Emphasis is placed on the brand being family owned and that the bars are produced in small batches.

Language

- *Plant-based*
- *Whole foods*
- *Nootropics*
- *Craft*
- *Season*
- *Nutrition*
- *Research*

RECESS UNITED STATES

Recess is a sparkling water infused with hemp extract and adaptogens for balance and clarity.

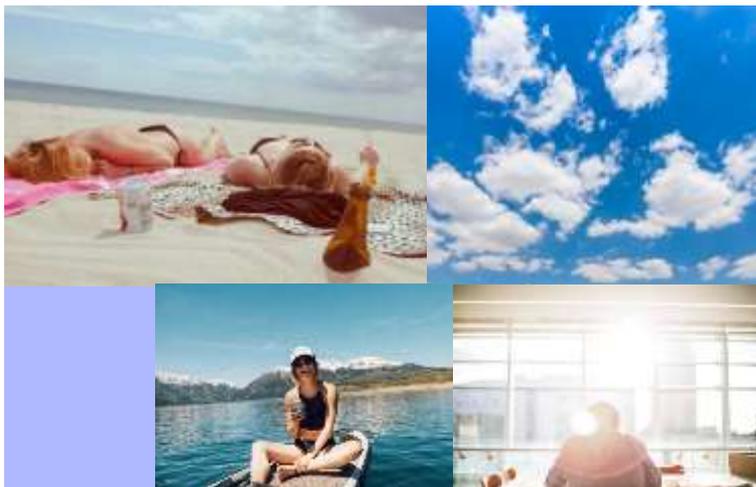
Hemp extract and adaptogens help our body adapt to stress, heighten energy, and boost endurance.

Target Area: **Brain**

Innovation Platform: **Resilience**

Target Group: Millennials

Active Ingredients: Hemp Extract, American Ginseng, L-theanine, Schisandra



Functional Claims from RECESS:

Hemp replenishes the cannabinoid system, making it a go-to for dealing with a variety of **imbalances**.

“We all have too many tabs open in our browsers and in our brains. That’s why we made Recess: each can is **a moment to reset** and rebalance”

Messaging

Recess highlight that their products help cut through the noise of everyday life with its calming ingredients.

Calm
Cool
Collected
Easy drinking
Mental performance
Stress relief
Balance

Visual Identity

Understated, minimalist, fresh

Colourful yet simple design on a clean pack.

Sedate palette backs up the relaxing ethos of the brand.

Their flavours are in hip yet unexpected i.e. Blueberry Chai

Communications

Ensure customers are aware of the healing properties of the drink by describing the ingredients in detail and their benefits.

Recess have an easy-going nature. Their social presence offers nuggets of information around relaxation with a hint of wittiness behind them.

Language

- *Calm*
- *Cool*
- *Collected*
- *Easy drinking*
- *Mental performance*
- *Stress relief*
- *Balance*

Nightfood

United States

Ice Cream formulated by sleep experts

Everybody knows what you eat before bed matters. Nightfood's macro-nutrient and ingredient profiles are optimised by sleep science experts to ensure you'll get a proper night sleep after enjoying this night-time indulgence.

Target Area: **Spirit**

Innovation Platform: **Rejuvenation**

Target Group: 25+

Active Ingredient: Minerals and amino acids that research suggests can support sleep quality.



Functional Claims from Nightfood:

80% of at-home ice cream consumption happens in the hours before bed.

'Nightfood delivers seriously delicious night-time ice cream that's **both sleep expert and cravemonster** approved!'

Messaging

Nightfood makes it clear that their product is backed by scientific research while still being crave-worthy and fun.

Visual Identity

Nightfood comes in a traditional 1 pint (473 ml) cartons so sharing is optional.

Pastel and subdued colours

Quirky 'cravemonster' illustrations on every pack.

Communications

Playful
Fun
Light-hearted

They have an active social media presence and are quick to site the food development awards they have won and the media 'buzz' they have gathered.

Language

- *Revolutionary*
- *Sleep experts*
- *Crave monsters*
- *Satisfying*
- *Permission*
- *Nutrition*
- *Nighttime*
- *Sleep-friending*
- *Research*



Gutsii Australia

Functional Prebiotic Dark Chocolates.

Chocolate/shake form - funky and convenient snack foods that save you time, taste great and heal your gut.

Target Area: **Gut**

Innovation Platform: **Harmony**

Target Group: Female millennials

Active Ingredients: Probiotics, Prebiotics, Antioxidants, vegan protein

Functional Claims from Gutsii:

Founded by a conscious food pioneer and certified health coach, Gutsii has been born with a mission to bring the world of **convenience and tasty functional foods together.**

“Contributes to sustainable weight loss, improves digestion and nourishes good gut bacteria.”

Messaging

They're keen to point out the time consuming nature of functional foods and tastelessness - they claim to have been making their products in the form of healthy, funky (tasty) and convenient.

Visual Identity

Colourful, instagrammable packaging for OTG.

Unconventional flavours names based on famous musicians and songs e.g. Pink Salt Floyd Rocks

Colours build a striking and easy-going visual identity around the brand..

Communications

Playful, colourful, friendly

Frank and BS free comms.

Instagram posts articulating benefits of functional ingredients e.g. probiotics.

Language

- *Sexy*
- *Guilt-free*
- *Vegan*
- *Good*
- *Low carb*
- *Keto friendly*

SAKARA
UNITED STATES

Nutritionally-designed beauty chocolates using plant based collagen.

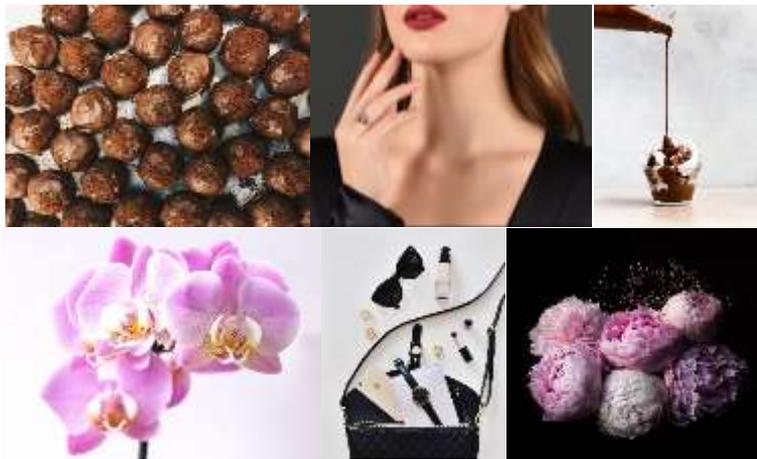
Beauty Chocolates bring new ceramides to the skin cells via the bloodstream, helping the complexion retain moisture, smoothing wrinkles and protecting collagen.

Target Area: **Body**

Innovation Platform: **Confidence**

Target Group: 18+

Active Ingredient: Ceramosides™ Phytoceramide



Functional Claims from Sakara:

Clinically proven to improve skin moisture, texture, and elasticity in **2 weeks** with plant-based collagen boost

“Our philosophy is a combination of cutting edge nutrition science and ancient healing wisdom.”

Messaging

Sakara highlight that their products are backed by science and guided by spirit.

Visual Identity

Youthful, understated luxury

Fresh and floral design on a clean pack.

Sakara looks like a high-end lifestyle brand.

Communications

Sakara ensure customers of the scientific research behind their products by citing their decorated “science and advisory council”.

Sakara are very active on Instagram they have a referral service for the ‘Sakara Life’ and are reviewed in many women’s fashion and lifestyle magazines.

Language

- *Nutrient density*
- *dark cacao*
- *Only 1g of sugar*
- *Moisture*
- *Smoothing*
- *Plant-based*
- *Collagen*
- *Elasticity*
- *Glow*



BerriQi
New Zealand

Liquid supplement formulated with anti-inflammatory boysenberry extracts.
BerriQi improves lung health by repairing damaged lung tissue and reducing inflammation and mucus production. It was been developed as a liquid supplement and is currently being added into functional drinks in Australia and Asia.

Target Area: **Body**

Innovation Platform: **Defence**

Target Group: 18+

Active Ingredient: New Zealand Boysenberry

Functional Claims from BerriQi:

The improvements observed with Boysenberry consumption were consistently shown in three separate in vivo models – acute prophylactic, chronic therapeutic and chronic repair/recovery.

"BerriQi is **scientifically proven** to aid lung health and restoration .. it's made from New Zealand boysenberry the new **superfood**"

Messaging

Depicted as a natural supplement which combats the damage done to the respiratory system by urban pollution.

Cites boysenberry extracts as main active ingredient which is anti inflammatory and can aid against cancer and lung disease,

Visual Identity

The most prominent colour used is a bright purple which matches the boysenberries used to formulate the product.

Photography used is of a young woman jumping in the air wearing white to symbolise overall wellbeing and "clean" living.

Communications

Scientific language, visual aids and explanations are used to explain the benefits of the product.

Language is caring and empathetic - "city life is tough on lungs" - to depict the product as a solution to respiratory issues.

Language

- *Health*
- *Restoration*
- *Scientifically proven*
- *Antioxidant*
- *Anti-inflammatory*
- *Repair*
- *Breathe easier*

ONE-PAGE PLATFORM SUMMARIES

Protect – platform summary.



Consumer need:
Protection

Insight:
People want to safeguard their future and prolong their independent living.

Functional innovation codes:
Prevention | Defence

Age focus:
45+



Veg of Lund Smoothie

University of Lund food scientists developed Veg of Lund to help people naturally boost their brain health. The smoothies are rich in **omega-3 and 6 fats** found in **potatoes** and **Nordic berries**.



Japanese Mint Gum

Japanese mint gum such as Lotte Xylitol Hani Tsukinikui Mint Gum, uses **Ginkgo Biloba** which has traditionally been used in Chinese medicine to improve memory retention and cognitive health.



Camano Island Coffee

Camano Coffee advocate how **caffeine** and other plant properties contained in coffee are protective factors against cognitive decline. Clinical evidence shows how drinking 3-5 cups of coffee decreased risk of dementia by about 65% at late-life.

Growing areas of interest

Cognitive Anti-Inflammatories

Plant antioxidants have anti-inflammatory properties which boost blood circulation to improve memory and prevent cognitive decline.

Cucumin
Tumeric
Pycnogenol extract
Wild Blueberry
Grape skin or extract
Rutaceae

Brain Development

Folic acid is vital for brain development and function. Deficiency causes memory loss and nerve damage, such as spina bifida in foetuses or long-term damage to your central nervous system.

Niacin is a vitamin B3 which boosts folic acid production to help prevent Alzheimer's and brain fog.

Everyday Functions

DHA Omega-3 prevents memory decline by boosting neural blood flow to improve our 'executive functions' – how we plan, organise and complete tasks.

Several herbs boost chemicals in the brain which help prevent memory loss.

Ginseng
Ginkgo Bilbao
Galantamine

Starter Opportunities

Fight Inflammation: Focus on naturally counteracting the brain's aging process.

Clinically Proven: People want clinical evidence supporting product claims.

Optimal Absorption: Provide products in a format they're most optimally absorbed by the body e.g. a liquid for optimum vitamin B absorption.

Resilience – platform summary.



Consumer need:

Resilience

Insight:

People want to thrive despite the pressures of modern life.

Functional innovation codes:

Mental Strength | Stability

Age focus:

18-35



Calm, Good Day Chocolate

Blends fair-trade **chocolate** with **chamomile flower**, **amino acids** and other botanicals linked to releasing tension causing anxiety. Chocolate naturally contains **fibre** and **tryptophan** which boosts serotonin.



The Morning Motivator

This powdered product is used a coffee-alternative or in breakfast, and blends **Maca** with **cacao**. These antioxidants help relieve anxiety and lower blood pressure.



Metta Beverage

Incorporates adaptogens with **ginseng** – a traditional Chinese herb used to boost mental clarity. It enhances the brain's absorption and levels of dopamine and serotonin to naturally stabilise mood.

Growing areas of interest

Ancient Adaptogens

These are natural herbs that help the body to adapt to stress.

Many have been used in traditional ancient medicinal for centuries.

Particularly interest around **Ayurvedic** (ancient Indian healing) herbs such as **Ashwagandha** and **Holy Basil** as effective stress relievers.

Spiritual Wellness

There is a growing trend towards spiritual wellness; an important part of this is using food and drink to cleanse the spirit.

Fermented foods such as **kimchi** or **rejuvelac**.and medicinal mushrooms such as **chaga** or **reishi** are popular in spiritual healing as well as teas.

Serotonin Boost

Modern research has identified several key proteins which help the brain produce serotonin.

Patients with anxiety, bipolar disorder, and depression are encouraged to increase their intake of these.

SAME
5-HTP
DHA Omega 3
EPA Omega 3

Starter Opportunities

Natural Origins:
Use products which are naturally connected to our brain's chemical production.

Holistic approach:
Chose a product format which enhances your product benefits e.g. Hot tea matching the calming properties of chamomile.

Smarts – platform summary.



Consumer need:
Smarts

Insight:
People want to optimise their intellectual potential.

Functional innovation codes:
Alertness | Focus | Sharpness | Retention

Age focus:
18-35



WOW Focus

Europe's first nootropic drink is designed to improve cognitive function and lift brain fog using a combination of **nootropics**, **taurine** and natural **caffeine**.



Brainiac Kids

A yoghurt designed to support developing brains using a patented 'brainpack' formula – a blend of **omega-3 DHA, ALA**, **choline** and three strains of **probiotics**.



Mushroom Cups

Coffee with superfood mushrooms that aim to awaken your inner genius – they use a mix of **Chanterelles, Chaga** and **Cordyceps**.

Growing areas of interest

Natural Nootropics

Nootropics is a broad term for any substance – either natural or synthetic – that improves brain function.

High interest around natural cognitive enhancers such as:

L-theanine (often used with caffeine)
Acetyl-L-Carnitine and **choline** – all natural substances.

Mental Mushrooms

Lots of excitement around the potential of mushrooms to boost cognition.

Lion's Mane is the most studied and has strong evidence to support it as a brain enhancer.

Studies have shown that it significantly increases nerve growth factor which helps to improve learning and alertness.

Adaptogenic Enhancer

Of all the adaptogens, **Bacopa Monnieri** is considered the most powerful cognition and memory booster.

The active components improve the signalling of electrical impulses between the brain, helping to memorise things more easily.

Starter Opportunities

Natural Boosters
Focus on natural cognition boosting ingredients, rather than synthetic. They are a better fit with food.

Study Occasion
Huge opportunity to target those in school or college, particularly around exam time, with something that is naturally boosting to avoid dramatic crashes.

Rejuvenation – platform summary.



Consumer need:
Rejuvenation

Insight:
People want to feel like new; time and time again

Functional goals :
Sleep Faster | Deeper | Longer

Age focus:
18+



Chewpod Sleep On Demand

Fast-acting sleep aid gum designed for those with sleep issues or with jet leg. Blend **melatonin and L-5-HTP** with a patented Fastactiv delivery.



Sleep Well

Vanilla or chocolate milk drink made with jersey milk, **natural honey** and **valerian root** designed to be consumed 30 minutes before bedtime for better sleep.



Dream Bars

Organic bars that encourage vivid dreaming made with nervine herbs (**chamomile, lavender, lemon balm**) and rich in **potassium, magnesium, tryptophan, choline** and **theobromine**.

Growing areas of interest

Bedtime Indulgence

A lot of traditional 'late-night treats' (chocolate, ice-cream, cookies) infused with ingredients that promote sleepiness.

Many products being infused with **melatonin, CBD, magnesium** and **L-theanine, glycin,**

Nature's Sedatives

Using traditional, natural forms of sedation to evoke deeper sleep.

Honey, valerian, lavender and **magnolia bark** well known and used often.

CBN Sleep aid

CBN is the lesser known cannabinoid, but evidence suggests it is a powerful sleeping aid which can help to prolong sleep.

CBN products are still at the oil and supplements stage.

Starter Opportunities

Pre-sleep occasion
Specifically target 30-60 minutes before bed

Champion CBN
Opportunity to bring attention to this through food and beverage.

Circadian Rhythm
Products that help to maintain circadian rhythm, which modern life can disrupt.

Harmony – platform summary.



Consumer need:

Harmony

Insight:

People want an all inclusive solution.

Functional innovation codes:

Clarity | System Sync | Fortitude

Age focus:

25+



UPLIFT

Offer cook books and menu packages which enhance your gut health. Their Vanilla Supplement contains **prebiotics & probiotics** which boost serotonin production. It can be taken as a supplement, cereals or in baked goods.



Hi! Happy Inside

Kellogg's US launched new cereals containing **fibre, prebiotics and probiotics**. Enriching your gut in these ingredients will support production of the amino acids and microbiome which support brain and mental health.



V8 Vegetable Juice

Parkinson's patients are encouraged to drink over a litre of V8 juice a day. It's packed with **antioxidants and fibre** which help alleviate common symptoms of Parkinson's; low blood pressure, dehydration and constipation.

jump!

Growing areas of interest

Psychobiotics

Butyrate encourages cellular repair in the brain, potentially leading to better mental health and resolving symptoms of dementia and Parkinson's.

Yogurt and other fermented milk are the longest established Psychobiotics.

Kumis
Kefir
Natural Yogurt
Aged cheese
Lassi

Ancient Remedies

Fermented foods help kill pathogens linked to gut disease, nourish microbiota which support cell production in the brain, and reduce pain and dehydration experienced by Parkinson's patients.

Quinine
Vinegar
Pickle juice
Kombucha
Fu-Tsai
Tempeh
Miso

Prebiotics

Galactooligosaccharide (GOS) is a prebiotic which supports gut bacteria associated with serotonin. There is evidence that GOS reduces anxiety in a similar way to medication.

Prebiotics generally support our stress related responses to life.

Garlic
Black peppercorns
Artichokes

Starter Opportunities

Awareness: Highlight the importance of this connection.

Psychobiotics: Currently brands are hardly tapping into the mood-boosting power of certain strains of bacteria.

Postbiotics on the horizon
Isolating the outputs of beneficial gut bacteria and using them as an ingredient is an emerging field.

Confidence – platform summary.



Consumer need:
Confidence

Insight:
People want to always present the best version of themselves

Functional innovation codes:
Elasticity | Fat Burning | Brightening | Lightening

Age Focus:
18-45 Females



Wild Friends Collagen Almond Butter

Made with **collagen** peptides to provide a “nutrient boost” to the much-loved snack. Marketed as the ‘ultimate win win’ – delicious and good for hair, skin and nails.



Fat Burning Soup with Miso, Vegetables and Seaweed

Fat burning claim comes from **wakame seaweed** which contains high levels of **fucoxanthin**, which coupled with **guarana** is said to burn and remove stocked fat.



Qu Puteh

An ingestible powdered drink made from **L-Glutathione, collagen, stem cell from apple, grape, rose and argan**. **Glutathione** has been proven to whiten the skin when ingested.

Growing Areas of Interest

Revitalise Collagen

One of the critical building blocks of the tone and production of skin in the body, **collagen** starts naturally declining in women’s mid 20s - giving products which restore this huge potential.

Age-old Secrets

Ancient ingredients from Chinese and Indian medicine are experiencing refreshed popularity for their anti-bacterial, anti-hypersensitive, anti-inflammatory properties.

New evidence is emerging about the use of **Centella Asiatica** as a treatment for stretch marks, while **Schisandra** herbs have been used for the treatment of crows feet.

Light and Bright

Since a lot of South Koreans find translucent skin aspirational, more brands are considering the use of **glutathione** in their product with Mintel reporting an increase of +100% in the number of products containing the ingredient between 2017-2018.

Vitamin B12 is also emerging as a hot ingredient for its ability to deliver ‘rosy skin’.

Starter Opportunities

Appetite for Algae
As environmental impact becomes increasingly important to consumers, algal ingredients like fucoxanthin present an opportunity.

Complexion Change
Varying beauty ideals see people looking to modify their skin colour i.e. lighter in Asia, darker in the West. Ingredients such as **glutathione** and **DHA** traditionally used in topical products represent an opportunity for manufacturers.

Performance – platform summary.



Consumer need:

Performance

Insight:

People want to achieve their maximum potential

Functional innovation codes:

**Bone and Joint Strengthening |
Anti-Inflammation | Muscle Recovery**

Age Focus:

18+

BORD BIA
**Thinking
House**

jump!



Nutritious Oatmeal for Middle Aged Seniors

Hot cereal containing Australian oats, pumpkin, bitter buckwheat, spirulina, fibre and vitamin C for busy, health-conscious seniors.



Premia Astaxanthin-infused egg

Compared with a normal egg, the Premia egg has **omega 9, DHA and astaxanthin**.



TuMe Anti-inflammatory Sports Drinks

Combining the healing powers of **turmeric** with the natural antioxidants of **curcumin** this is the ideal beverage for athletes who are looking for a natural way to repair themselves.

Growing Areas of Interest

Advantages of Algae

As people search for more naturally functional and sustainable ingredients, algal components are well positioned.

One ingredient, **Astaxanthin** claims to be 'multiple times stronger' than other antioxidants while also delivering tendon support, anti-ageing support, brain health and eye support.

Herbal Healing

Herbal formulas that target the issue of inflammation could be an emerging category as people look to recover from strenuous activity and protect against some of the wear and tear.

Ingredients such as **curcumin, boswellia serrata** and **cuvitus** are among the emerging in this space.

K2 for Kids

As parents encourage their kids to live active lifestyles, they also want to make sure their children are well protected.

Recent research has evidenced the importance of **vitamin K2** in supporting bone health, by improving mass and strength but also producing energy for cell.

Starter Opportunities

Supporting Seniors

Less than 1% of NPD in performance nutrition last year, catered to seniors. With an increasing population this could be a opportunity.

Natural Enhancement

67% would prefer 'completely' natural sports supplements paving the way for herbal ingredients and plant-based proteins.

Detoxify – platform summary.



Consumer need:

Detox

Insight:

People want to feel like they are in a position to thrive in their modern lifestyles.

Functional innovation codes:

Vitamin D Boost | Lung Protect & Repair | Eye Shield

Age Focus:

18-55



vitaminwater: shine

Water enriched with vitamin D which enhances the absorption of calcium and phosphorus and aids in the maintenance of health bones and teeth.



BerriQi Liquid Supplement for Healthy Lung Function

Made with **boysenberry extract** and claims to help repair damaged lung tissue and to reduce inflammation and mucus production



MacuView

A buttermilk drink from the Netherlands containing egg yolks enriched with **lutein** and **zeaxanthin** may help improve eye health.

Growing Areas of Interest

Spotlight on Eye Health

The digital era has put eye-health in the spotlight as people are spending an increasing amount of time per day on screens.

Functional beverages enriched with **lutein and zeaxanthin** and targeted at eye health have begun to gain traction in Asia.

Proving Anti-Pollution Claims

As concerns around pollution grow people will become increasingly concerned with identifying and evidencing claims for anti pollution ingredients.

Early research has suggested that **boysenberries and broccoli sprouts** will become two such ingredients.

Let the Light In

Increasingly high-pressured demanding office-based jobs means people today are spending less time outdoors. The effect of this is a deficiency in vitamin D.

Products which can restore this **Vitamin D**, in a convenient way for the time pressed worker present huge potential.

Starter Opportunities

Pollution Protection
As air pollution continues to increase, there is an opportunity for products which can protect against the ill effects of pollution.

Screen Time Safety
As technology continues to permeate our lives, our screen time will inevitably increase representing an opportunity for products which protect against eye strain

GLOSSARY

Glossary: Brain

jump!

5-HTP | an amino acid that your body naturally produces. Your body uses it to produce serotonin, a chemical messenger that sends signals between your nerve cells.

Acetyl-L-Carnitine (ALC) | used as a nootropic that improves mood, learning, and memory.

Adaptogens | a nontoxic substance and especially a plant extract that is held to increase the body's ability to resist the damaging effects of stress.

ALA | An Omega 3 fatty acid. Some studies have suggested it may help prevent certain kinds of cell damage in the body.

Antioxidants | chemicals that fight a process in your cells called oxidation.

Aryurvedic medicine | is one of the world's oldest holistic ("whole-body") healing systems. It was developed more than 3,000 years ago in India.

Ashwagandha | one of the main Aryurvedic herbs and an "adaptogen" to help the body cope with daily stress, as well as a general tonic.

Bacopa Monnieri | considered the most powerful cognition and memory booster of the Adaptogens.

DHA Omega 3 | an Omega 3. Together, DHA and EPA may help reduce inflammation and your risk of chronic diseases, such as heart disease.

EPA Omega 3 | an Omega 3. To reduce cellular inflammation, you need more EPA than DHA.

Galantamine | is an alkaloid that has been isolated from the bulbs and flowers of several different plants. It's used to treat mild to moderate confusion (dementia) related to Alzheimer's disease.

Ginkgo Biloba | The therapeutic properties of the ginkgo plant are said to include treatment for blood disorders and memory problems, enhancement of cardiovascular function and to improve eye health.

Ginseng | traditionally used for a number of medical conditions. Ginseng is used to boost mood, improve concentration and mental performance.

Holy Basil | used in Ayurvedic medicine as an "adaptogen" to counter life's stresses. Holy basil is commonly used to help with anxiety and stress.

Lion's Mane | is the most studied mushroom and has strong evidence to support it as a brain enhancer.

Maca | plant that grows in central Peru and used as an Adaptogen. It lowers blood pressure which relieves anxiety.

Mushrooms | all types of edible mushrooms contain varying degrees of protein and fibre. They also contain B vitamins as well as a powerful antioxidant called selenium, which helps to support the immune system and prevent damage to cells and tissues. Examples are Chaga, Chanterelles and Cordyceps.

Nootropics | a substance that enhances cognition and memory and facilitates learning.

Omega 3 | fatty acids essential to the body's health. Acts to lower the levels of cholesterol and LDL (low-density lipoproteins) in the blood. (LDL cholesterol is the "bad" cholesterol.) Produced naturally and found in plant sources.

Omega 6 | Along with omega-3 fatty acids, omega-6 fatty acids play a crucial role in brain function, and normal growth and development.

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Thinking
House

Glossary: Brain

jump!

SAMe | compound found naturally in the body. SAMe helps produce and regulate hormones and maintain cell membranes. People generally use SAMe to treat osteoarthritis, liver disease and depression.

Serotonin | acts as a neurotransmitter, a type of chemical that helps relay signals from one area of the brain to another.

Taurine | a type of amino acid found in many foods and often added to energy drinks. Taurine has been shown to have several health benefits, such as a lower risk of disease and improved sports performance

Glossary: Spirit

jump!

5-HTP | an amino acid that your body naturally produces. Your body uses it to produce serotonin, a chemical messenger that sends signals between your nerve cells.

Cannabidiol (CBD) | A naturally occurring compound from the cannabis plant – it is non psychoactive and is being used for therapeutic benefits in many different formats.

Cannabinol (CBN) | A minor cannabinoid from the cannabis plant that has been linked to helping with sleep

Chamomile | A herb that comes from the daisy-like flowers of the Asteraceae plant family. It is a calming natural remedy that is often used to reduce anxiety and promote sleep.

Choline | A macronutrient that is important to many different body functions. It is particularly linked to improving energy levels and sleep cycles.

Device blue light | Light which is emitted from phones, tablets and laptops. Exposure suppresses the production of the sleep hormone melatonin more than other types of light which can have a negative effect on sleep quality.

Lavender | Herb recognised as a relaxant and general mild sleep aid. antioxidant which plays an important role in preventing

Glycine | Amino acid and neurotransmitter that is important for many functions. Research has shown higher levels help speed up sleep, increase sleep efficiency and promote deeper sleep.

L-theanine | Amino acid found in tea leaves. It has been shown to improve the quality of sleep – not by acting as a sedative, but by lowering stress and promoting relaxation.

Magnesium | Essential mineral that has a widespread role in the body. It increases GABA which encourages relaxation and sleep. Research has shown insomnia is often a symptom of magnesium deficiency.

Magnolia Bark | A flowering tree native to China, it works as anxiolytic to reduce stress and can act as a sedative which improves sleep.

Melatonin | Hormone released by the pineal gland that regulates wake-sleep cycles. It signals to the body when it is time to sleep and levels stay elevated throughout sleep.

Potassium | Natural mineral that has shown to be linked with better quality sleep.

Tryptophan | Amino acid that turns into a B vitamin called niacin. Niacin plays a key role in creating and regulating serotonin and melatonin levels which balances wake-sleep cycles.

Valerian Root | Herb native to Asia and Europe which is used to promote relaxation and encourage better sleep.

Glossary: Gut

jump!

AIP Diet | a relatively new a diet that is designed to heal the gut by reducing inflammation created by autoimmune conditions. It mainly includes eating meat and vegetables.

Antioxidant | substances that can prevent or slow damage to cells caused by free radicals, unstable molecules that the body produces as a reaction to environmental and other pressures.

Bioavailability | describes the ability of a to have an active effect on the body once entering circulation. i.e the ability for probiotics to reach the gut intact.

Fermentation | In food it broadly refers to any process in which the activity of microorganisms brings about a desirable change to a foodstuff or beverage

FODMAP DIET | a diet low in fermentable carbs known as FODMAPS which is clinically recommended for the management of irritable bowel syndrome (IBS).

Fructooligosaccharides (FOS) | a soluble fibre and a prebiotic which is naturally sourced from foods like bananas, asparagus, and artichoke.

Galactooligosaccharides (GOS) | are prebiotics derived from lactose, a natural ingredient in cow's milk.

Inulin | a type of soluble fibre found in many plants like garlic and chicory root. It is often also used as a supplement for prebiotic and digestive health purposes.

Lactic Acid Bacteria | an order of bacteria often found in milk products and fermented foods. They produce lactic acid as a product of carbohydrate fermentation.

Microbiome | the collection of microorganisms living in or on the human body.

Mycobiome | mycobiota, or fungal microbiome, is the fungal community in and on an organism i.e. the human body.

Polyphenols | a chemical linked to antioxidant benefits which can be found naturally in sources like red wine and green tea. The historically important chemical class of tannins.

Post-biotic | re non-viable bacterial products or metabolic by-products from probiotic microorganisms that have biologic activity in the host.

Probiotic | Probiotics are live microorganisms intended to provide health benefits when consumed, generally by improving or restoring the gut flora.

Prebiotic | Prebiotics are compounds in food that induce the growth or activity of beneficial microorganisms.

(Prebiotic) Fibre | is a non-digestible part of foods that goes through the small intestine undigested and is fermented when it reaches the large colon.

Psychobiotic | is a term used in preliminary research to refer to live bacteria that, when ingested in appropriate amounts, might confer a mental health benefit by affecting microbiota of the host organism.

Serotonin | Serotonin is a chemical that has a wide variety of functions in the human body. It is sometimes called the happy chemical, because it contributes to wellbeing and happiness.

Synbiotics | refer to food ingredients or dietary supplements combining probiotics and prebiotics in a form of synergism

Vagus Nerve | the longest cranial nerve. It runs all the way from the brain stem to part of the colon.

Glossary: Body

jump!

Astaxanthin | Occurs An antioxidant found in algae, which claims to be 'multiple times stronger' than other antioxidants while also delivering tendon support, anti-ageing support, brain health and eye support.

Boswellia Serrata | A naturally occurring anti-inflammatory.

Boysenberry | An edible fruit said to help repair damaged lung tissue and to reduce inflammation and mucus production.

Centella Asiatica | A plant which has been successful in treating stretch marks when applied to the skin topically and more recently in food products

Collagen | The main structural protein found in skin and other connective tissues.

Curcumin | Curcumin is the key active ingredient in turmeric with powerful anti-inflammatory effects.

Cuvitus | A cucumber extract powder ingredient manufactured by XSTO Solutions to aid muscle and joint health.

Fucoxanthin | A natural substance sourced from brown seaweed such as wakame and hijiki said to offer a variety of health benefits including fat burning.

Glutathione | An antioxidant which plays an important role in preventing oxidative damage to the skin and has also been associated with skin lightening ability.

Lutein | Believed to block blue light from reaching the underlying structures in the retina, thereby reducing the risk of light-induced oxidative damage that could lead to macular degeneration.

Schisandra | Used as an "adaptogen" for increasing resistance to disease and stress, increasing energy, and increasing physical performance and endurance.

Vitamin B12 | A vitamin important for the normal formation of red blood cells and the health of the nerve tissues. A deficiency can lead to anaemia and permanent nerve and brain damage.

Zeaxanthin | Similar to Lutein, zeaxanthin is an antioxidant best known for supporting the clearance of free radicals in your eyes.

REFERENCES

References:

Facts for the media. Retrieved from <https://www.alzheimers.org.uk/about-us/news-and-media/facts-media>

Deloitte Access Economics. (2015). *Living with Parkinson's Disease*. Deloitte Access Economics. Retrieved from <https://shakeitup.org.au/wp-content/uploads/2011/07/Living-with-Parkinsons-27082015-FINAL.pdf>

Global Alzheimer's Drugs Market Expected to Reach USD 5.66 billion By 2024: Zion Market Research. (2019). Retrieved from <https://www.globenewswire.com/news-release/2018/07/26/1542579/0/en/Global-Alzheimer-s-Drugs-Market-Expected-to-Reach-USD-5-66-billion-By-2024-Zion-Market-Research.html>

Nerurkar A, Bitton A, Davis RB, Phillips RS, Yeh G. When Physicians Counsel About Stress: Results of a National Study. *JAMA Intern Med*. 2013;173(1):76–77. doi:10.1001/2013.jamainternmed.480

Ritchie, H., & Roser, M. (2019). Mental Health. Retrieved from <https://ourworldindata.org/mental-health>

(2018). Retrieved from https://globalwellnessinstitute.org/wp-content/uploads/2018/11/GWI_GlobalWellnessTourismEconomyReport.pdf

High Rate of Disability Across the World to Create a Greater Potential Need for Behavioural Health Services. (2019). Retrieved from <https://www.futuremarketinsights.com/press-release/behavioral-health-market>

Prince's Trust. (2017). *The Princes's Trust Macquaire*. Retrieved from <http://www.princes-trust.org.uk>

References:

Deloitte. (2014). *The overwhelmed employee Simplify the work environment*. Deloitte. Retrieved from <https://www2.deloitte.com/insights/us/en/focus/human-capital-trends/2014/hc-trends-2014-overwhelmed-employee.html>

GDS 2017 results released! | Global Drug Survey. (2019). Retrieved from <https://www.globaldrugsurvey.com/past-findings/gds2017-launch/results-released/>

Revealed: Oxford's addiction to study drugs | Cherwell. (2019). Retrieved from <https://cherwell.org/2016/05/13/revealed-oxfords-addiction-to-study-drugs/>

Sealy; Loughborough University. (2016). *The Sealy Sleep Census*. Sealy. Retrieved from <http://www.sleep-census.com/media/PDF/Sealy%20Sleep%20Census%20final%20report.pdf>

Investing in the growing sleep-health economy. (2017). Retrieved from <https://www.mckinsey.com/~media/mckinsey/industries/private%20equity%20and%20principal%20investors/our%20insights/investing%20in%20the%20growing%20sleep%20health%20economy/investing-in-the-growing-sleep-health-economy.ashx>

press — Calm Blog. Retrieved from <https://www.calm.com/blog/press>

(2016). Retrieved from <https://authors.library.caltech.edu/56514/5/nihms669675.pdf>

References:

Vagotomy and Parkinson disease A Swedish register–based matched-cohort study. (2017). Retrieved from <http://Vagotomy and Parkinson disease A Swedish register–based matched-cohort study>

Justin Sonnenburg, E. (2015). Gut Feelings–the "Second Brain" in Our Gastrointestinal Systems [Excerpt]. Retrieved from <https://www.scientificamerican.com/article/gut-feelings-the-second-brain-in-our-gastrointestinal-systems-excerpt/>

50% of millennials would pick CBD oil over prescriptions for mental health. (2019). Retrieved from <https://www.openaccessgovernment.org/cbd-oil-over-prescriptions-for-mental-health/63618/>

TrendSights Analysis: Image Consciousness; Exploring consumers' attitude... (2016). Retrieved from <https://www.globaldata.com/store/report/cs0053ts--trendights-analysis-image-consciousness-exploring-consumers-attitudes-towards-image-and-beauty/>

Beauty Survey 2017: Key Insights and System Update. (2017). Retrieved from <https://go.euromonitor.com/WP-171024-BeautyandPersonalCareSurvey.html>

McGettigan, G. (2019). Confidence boosters or chasing perfection? The rise of cosmetic surgery in young Ireland | IMAGE.ie. Retrieved from <https://www.image.ie/beauty/beauty-real-cosmetic-surgery-ireland-124247>

References:

(US), O. (2004). The Frequency of Bone Disease. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK45515/>

Ireland. (2017). Retrieved from <http://www.healthdata.org/ireland>

Nutrition and osteoporosis prevention for the orthopaedic surgeon A wholefoods approach. (2017). Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5508855/>

FMCG Gurus: Global joint and Bone Health, 2019

Ambient (outdoor) air quality and health. (2018). Retrieved from [https://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health](https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health)

Diet, n., Ba, N., Nutrition Science Webinars Nutrients, s., Nutrients, F., Healthy, s., & events, C. Government advice on vitamin D - British Nutrition Foundation. Retrieved from <https://www.nutrition.org.uk/healthyliving/helpingyoueatwell/vitamind.html>

Global Air Purifier Market 2023 Size, Shares & Forecast | TechSci Research. (2018). Retrieved from <https://www.techsciresearch.com/report/global-air-purifier-market/3073.html>

Carrell, S. (2019). Scottish GPs to begin prescribing rambling and birdwatching. Retrieved from <https://www.theguardian.com/uk-news/2018/oct/05/scottish-gps-nhs-begin-prescribing-rambling-birdwatching>

Thank you...