

Nutrition

Microfluidics

Internet of Things

Artificial Intelligence

Our Track Record

Entrepreneurs specialized in µFluidics, Health Care and Digital Technologies with more than 10 innovative start-ups created since 2010

Our Values

- INNOVATION
- TRANSPARENCY
- EFFICIENCY

- RESPONSIBILITY
- KINDNESS

Our Mission

To design personalized solutions for living better and longer.

Our Goal

To produce 1 billion years of healthy life expectancy before 2050



A leadership team with significant professional achievements



Adrien Plecis, PhD
CEO & CSO
Operations

- Entrepreneurship and leadership: Cofunded > 5 microfluidic technology based company generating > 5M€ Annual TU. Managed & recruited > 60 collaborators.
- Scientific expertise: 7 years as CSO, 8 patents generated and over 15 scientific collaborative projects
- Risk assessment / complex program management (Biodefense department manager for French Ministry of Defense >2M€ annual investment and > 15M€ of contract supervision)



CTO

R&D / Production

- Engineering and production:
 Developed and brought to market > 15
 technological systems in 6 years as R&D manager.
- Mass production and "Swiss made" profile: 3 years in Swiss companies from innovative start-ups to cash payment system optimization.



Ludovic Rondini, PhD, MBA

CMO

Product Manager

- Brand manager and formulation expert: >25 years of experience as dietary supplement developer and > 100 product launches in FR and BE.
- Market introduction and sales management: CEO and cofounder of a Belgium dietary supplement company and a technical consulting company.



A recruitment strategy based on young talents guided by senior consultants



Danny Liu, PhD
Nutrition R&D Manager
Scientific Collaborations



Lucas Roche, PhD
Robotics & Electronics
Dispenser Development



Elodi Viellet, Ms
Formulation & Biochemistry
Supplement Development



Paul Fetet, MS
Software & Production
Software Development



Maxime Horvais, PhD

Design and UX

Marketing



Mathieu Velve-Casquillas
ERP & CRM
Consultant



Etienne Castanie IoT & Industrialisation Consultant



Jérôme Iglesias E-health / Digital MKT



Tewfik Zementzali
IT & Growth Hacking
Consultant



An experienced and involved scientific and strategic board (France)



Régis MartinEntrepreuneurship
Cofounder



Jean Deregnaucourt Industry & Strategy Strategic Advisor



Michel Canton
Diagnostic & international
Strategic Advisor



Prof. LecerfNutrition and Medical
Strategic Advisor



Christophe Jurczak
VC, AI & Blockchain
Strategic Advisor



Prof. MoussaAnalytical Chemistry
Scientific Advisor



Catherine Aguilar Nutritionist / Sports Scientific Advisor



Dr. Isabelle MeurgeyGP/Anti-Ageing

Scientific Advisor



Isabelle de Vaugelas
Pharmacist /KOL/Japan
Scientific Advisor



Dr. Alexandra DaluGP/ Nutritionnist

Scientific Advisor





A growing consciousness of vitamin deficiencies



Percentage of the French population with a deficiency in ...

Vitamin D: 84.3 %

Retinol: 63.3%

Magnesium: 60.7%

β-carotene : 56.9%

Vitamin C: 51.1% lodine: 48%

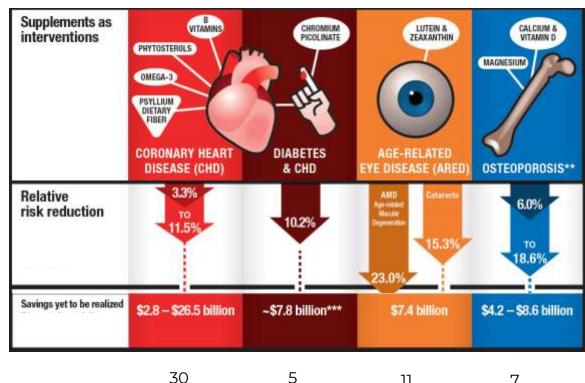
Copper: 46%

Vitamin E, B9, Calcium, Zinc > 30%

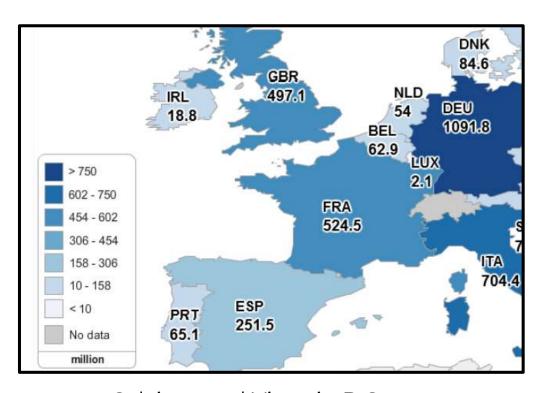




A growing interest in dietary supplements for Smart Prevention



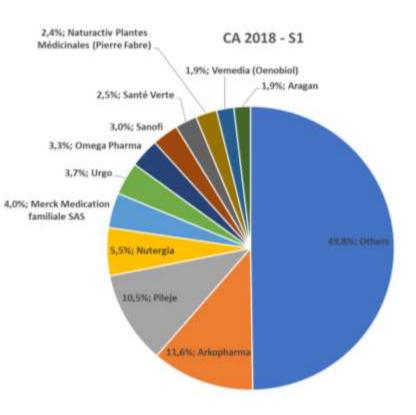




Calcium and Vitamin D Summary, Potential Health Care Cost Savings (in M€)



A growing market fragmentation to fit personalized needs

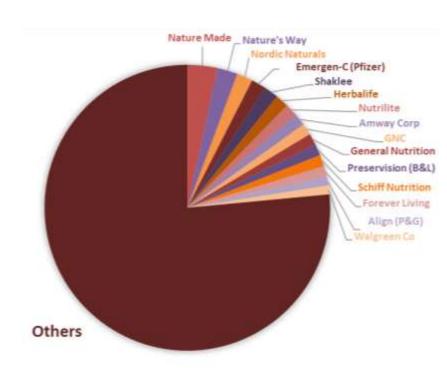


FR Market shares of 11 major dietary supplementation brands ©vitagenic - Données IQVIA 2018 >50 000 products

>100 new products / week

>30% of the French dietary supplement market share is based on products launched in the last 3 years

An innovation driven market

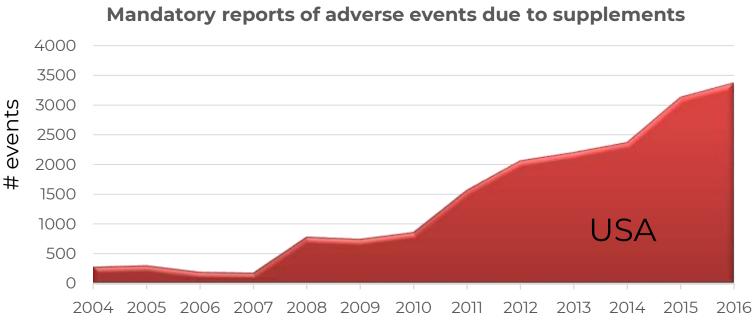


US Market shares of 15 major dietary supplementation brands Euromonitor International 2017



A growing concern over dietary supplement quality and abuse





A 2015 investigation of 4 major US retailers (390 tests involving 78 samples were performed) showed that just 21% of the test results verified DNA from the plants listed on the labels. Only 4% of the Walmart products tested showed DNA from the plants listed on the labels.

A growing expectation toward a simpler experience to enhance overall compliance





Typical personalized supplementation program

5 to 12 pills /day (with 3 to 6 different micro-nutrients)

37.4 % of people have difficulties in swallowing tablets and capsules*

58.8 % of them have already modified their drugs in a way that may alter safety and efficacy*

75 % of US adults are nonadherent in one or more ways**

^{*}Difficulties swallowing solid oral dosage forms in a general practice population: Prevalence, causes, and relationship to dosage forms, European Journal of Clinical Pharmacology, April 2013, Volume 69, Issue 4, pp 937–948

^{**} Take as Directed: A Prescription Not Followed," Research conducted by The Polling Company. National Community Pharmacists Association December 16, 2006



A growing need for smarter and safer vitamins



- **Stronger expertise**
- **02** Increased personalization
- **Higher quality supplements**
- **O4** Improved compliance



A nutritional all inclusive program starting at 79€/month

1. Stronger expertise



Quarterly review with a nutrition expert

HCP validated by Linkednutri for their micro-nutrition expertise.

Biological tests negotiated with state of the art labs.

Supplement program definition & general coaching (nutrition, sports, others...)

2. Personalization



A personal dietary supplement dispenser

Microfluidic technology able to generate instant personalized formulas from 6 separate liquid cartridges.

Up to 27 billion different formulas available at home as a 5ml shot in the food or drink of your choice. No more pills!

3. Higher quality



Liquid top quality supplements

No more pills, no fillers, or artificial flavors, fewer preservatives

The purest and best absorbed form of micro-nutrients

Automatic renewal of cartridges: you get only what you need

4. Compliance



A digital experience to boost your program

Online appointments with your HCP

Dashboards with your supplement intakes and all your health parameters

Additional coaching modules on the mobile App



A versatile printing technology that adapts your dose depending on your needs



- Up to 5 predefined, directly accessible supplementation modes adapted to the user's specific lifestyle & needs:
 - **Athletes:** before, during and after competitions
 - Women: menstrual cycles, hormone imbalance...
 - Professionals / student : stress, exams, partying...
 - **Senior:** pain, chronic disease, ...
- The dispenser's tactile screen allows you to easily select your daily supplement regiment from predefined modes.
- Instantaneous dispensing of your personalized supplement shot in the drink / food of your choice and automatic recording of your vitamin intakes.



3 programs to progressively fit your needs

	Standard	Advanced	Premium
Online appointments & dashboards	✓	✓	✓
AI based nutritional profiling	✓	✓	✓
Supplement individual modes	1	3	5
Personal home dispenser	<u> </u>	✓	✓
Unlimited micronutrients		✓	✓
Annual HCP sessions included**	_		4 to 8
Biological tests discount	5%	10%	20%
Additional connected device***			✓
Price (€/month)	FREE	79€ TTC/month*	149€ TTC/month*

^{*} Monthly subscription does not include an additional, one time fee of 50€ for the first month

** The number of annual sessions depends on the HCP

** Choose up to 2 connected devices from a list of self-care device partners: withings, FitBIT, ...(Premium offer to be launched in 2022)





Micro nutritionists : an expertise still rare and difficult to find



HCP with a specific specialization in micro-nutritional expertise

~2000 <1% of all HCP in France



Nutritionists



Anti-Ageing MD



Sport MD



Speciality MD*

Specialization impossible to advertise



A holistic practice requiring constant adaptation and monitoring

over 250 input parameters



A dynamic process

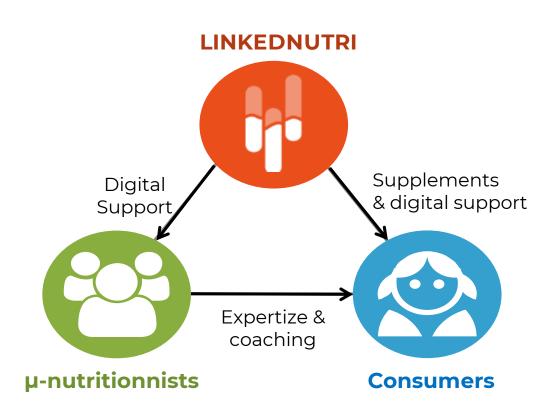
Personal survey (15 to 30 min) Biological tests (0 to 500€) to 6 month HCP expertise and experience (60 to 250€ / visit) Coaching program (nutrition, health, sport, mental) Dietary supplement program



Personalized coaching for every profile during any period of life

Reasons to choose a specific coach

- Weight management
- Addiction (stop smoking / drinking)
- Pregnancy and Fertility
- Change in nutrition patterns (going vegan)
- Prepare for a competition
- Reduce daily pain
- Protect health capital
- Sleep better
- Reduce stress
- Increase energy level
- Improve performances
- •





A new way to connect patients and HCPs



The easiest way to find micro-nutritionists

Explore a directory of specialized micro-nutritionists with different coaching methods and philosophies, sort using price, location, and tele-consultation capabilities.



The first directory based on premium HCPs with certified skills

Linkednutri selects only HCPs with the required credentials and ensures continued monitoring of HCP skills. Users can also consult other users' comments.



The most versatile and adaptable coaching experience

Change your HCP whenever you need to improve a specific aspect of your health, or keep a regular pool of HCPs with combined nutritional and health expertise for a customized coaching experience.



The first home dispenser designed for a personalized supplementation program



A dispenser with medical precision based on a <u>patented</u> & connected technology



Replaces 6 type of pills (up to 18 pills) with 1 shot of ~ 5mL

Catalog of 20 cartridges and 10 dose levels => 27 billion home-based programs



A patented technology with <u>a worldwide</u> <u>exclusivity</u>



Microfluidic cartridge head ⇒ 5µL resolution / 2% precision



Pressure control algorithm

⇒ Cartridge level control down to 100µL



Ultra miniaturized manifold

⇒ Low cost & large scale production

FRENCH PATENT FR1656381 (July 2016)

WW extension (January 2019): US, CN, JP, EU (85% TAM)











The safest technology for supplementation



Medical grade technology

Double control of dose dispensing + automatic recording of supplement dose intake

Security procedure in case of multiple intake attempts – automatic reminder in case of no intake



Contamination-proof

Hermetically sealed liquid cartridges with no possible contamination due to usage / handling

HEPA filter for clean pressurized air, bacteria free



Advanced stability

Medical grade plastic with no chemical leaching

Lower UV and oxygen exposure

Automatic lock on expired cartridges





High assimilation supplement cartridges with low 26 a preservative content

80% of HCP recommendations are based on 20 micro-nutrients or micro-nutrient mixes



Cartridges with pure micro-nutrients (vitamin A, C, D, magnesium, selenium, zinc, iron, etc.)



Health & Beauty

Cartridges with a preselected nutrient mix dedicated to health and beauty (arthrosis, vision, skin and hair, heart, etc.)



Cartridges with a preselected nutrient mix dedicated to life style needs (stress, detox, sleep, concentration, etc.)

Our partners for formulation, cartridge shaping / packaging and organic plant sourcing FranceAgriMer DES PRODUITS DE L'AGRICULTURE ET DE LA MER



From on-the-shelf solutions to a progressive internalization of R&D and production

On-the-shelf premium ingredients / formulas Formulation adaptation External stability check Plant-based solution ~30% of catalog

20 cartridges



Sourcing of premium,
organic & ethical
ingredients
Proprietary Formulation
Internal stability check
Plant-based solution
~50% of catalog

40 cartridges

2018-2019

90k€ investment R&D and subcontracting for formulation, stability tests & registration

Production & shaping cost 80k€ (50 k cartridges)

Total 170k€

2021-2022

200k€ investment R&D and subcontracting for formulation, stability tests & registration

Sourcing & shaping cost 600k€ (800 k cartridges)

Total 1M€

Strengths and Opportunities

Lean production scheme
Liquid and semi-liquid formats
Hermetically sealed cartridges
No risk of counterfeit products

- ⇒ Innovative formulation with fewer or no conservatives
- ⇒ Licensing of premium dietary supplement brands
 - ⇒ Customized cartridges for large B2B costumers (Therapy centers)



Linkednutri liquid supplement highlights



The most secure solution on the market

Advanced monitoring of supplement batch quality by external analysis, < 6 month between production and consumption, automatic renewal of cartridges before micro-nutrient deterioration with no risk of counterfeiting / bad storage.



The best absorbed form of micro-nutrient

Liquid supplements are absorbed up to 50 times more than pill-based equivalents, premium formulation including either plant-based matrices or state of the art formulas (liposomal, chelated,...), no additives or artificial sweeteners, just pure micro-nutrients with no intermediate treatment or unnecessary processing



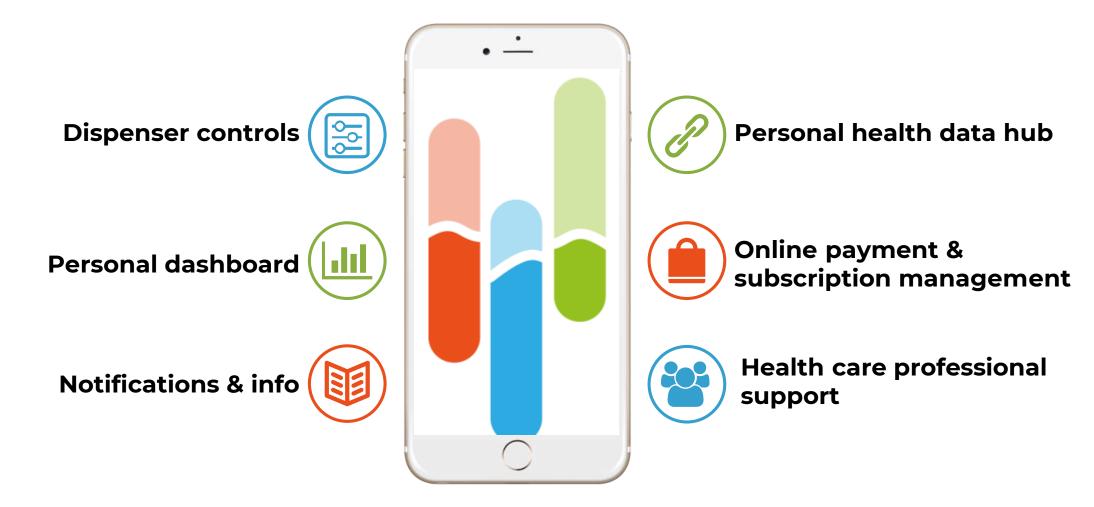
Respecting the body and the planet

No animal products, redundant catalog enables users to choose between advanced technical solutions (chemical-based) and 100% natural programs, plant-derived from organic and ethical agriculture.





A single digital interface for managing your personalized health program



300k€ initial investment for on-line software launch Standard interface Q3 2019 – Advanced interface Q1 2020



A free and efficient digital portal for HCPs to simply manage their patients' health

Save Time



Preliminary and follow-up questionnaires on line prior to consultation: start your consultation with a comprehensive summary of your patient health highlights.

Keep track



Keep all your patient data, prescriptions, biological tests and recommendation history in a single on-line file and share the same data with your patients.

Follow their health status / connected device.

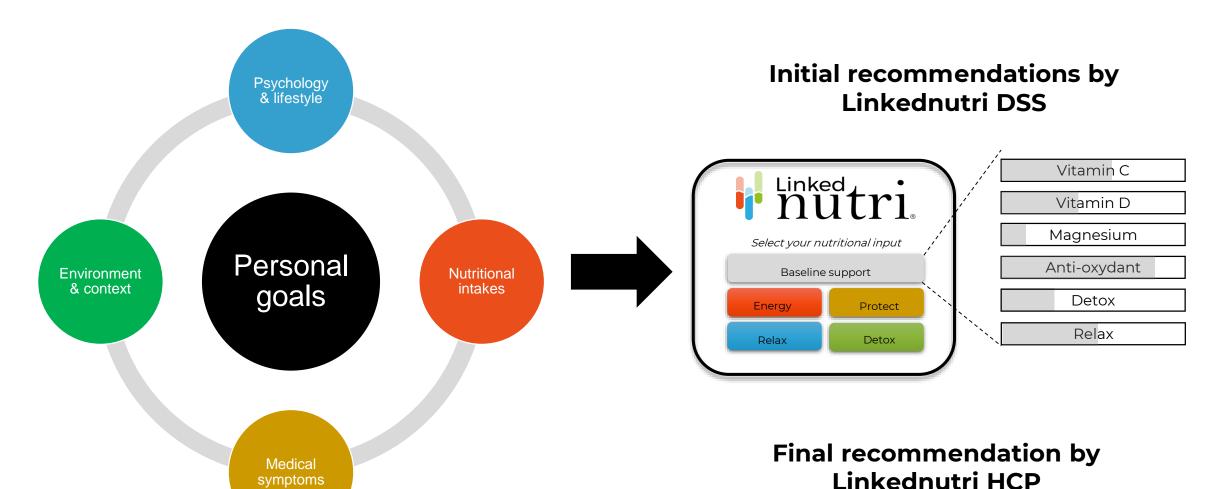
Go deeper



Get access to preformatted graphics, instant and cumulated supplement usage, an integrated Decision Support System (DSS) and receive alerts on persisting symptoms requiring intervention.

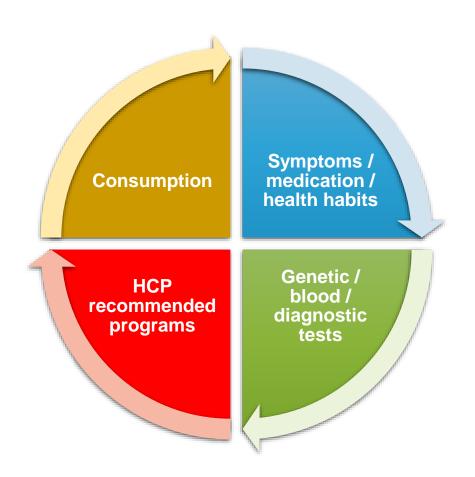


The first Decision Support System (DSS) for dietary supplementation recommendations





Digitalized nutrition with a complete feedback loop fitted for machine learning





Research consortium under construction for the clinical evaluation of an Al-based prediction algorithm and the development of an e-health blockchain technology



Premium market introduction via HCP recommendation, a B2B4C approach



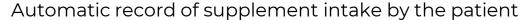
5 steps to entering the most advanced supplementation coaching program

Automatic update of dispenser programs via a Wi-Fi connection









- Invitation from your HCP to create a free account and use the digital interface
- 2 Switch from your pill-based program to the Linkednutri Advanced offer
- Program your personal dispenser with your referring HCP
- A Receive your dispenser and cartridges to start your program
- **5** Optimize your program regularly with any Linkednutri HCP



Our Service Available Market (SAM): a niche market of premium users of dietary supplements



>30 year-old
Selfcare adept
Educated
Higher occupations
> Women
> Sport / fitness

Acceptable monthly budget for supplements = 100€ (>4 suppl /day)

240 000 premium users visiting specialized HCPs in France

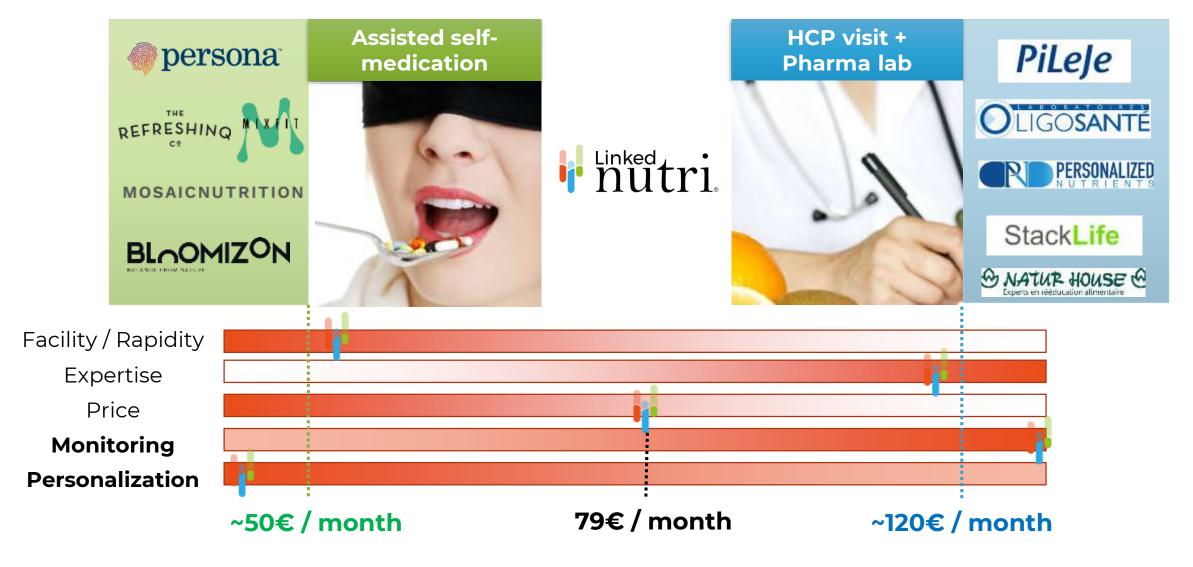
~20% of micro-nutritionist patients (120 of 600 patients)

2000 Micro-nutritionists in France with 10% annual GR

SAM = 300M€ with 10% annual GR (~15% of dietary supplement TAM)



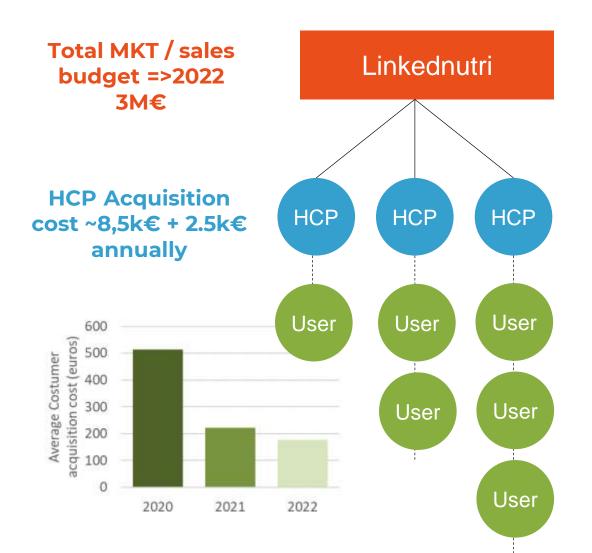
A unique offer combining the strengths of digital monitoring and face-to-face consultations





A B2B4C approach with exponential decrease of user acquisition costs





Main hypothesis

2 new HCPs / sales reps/ week 6 new users/HCPs/month User/HCP churn rate ~46%/ year



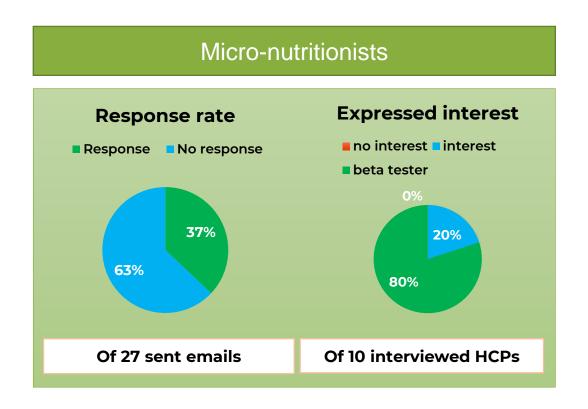
1HCP = up to 100 k€ TU/year

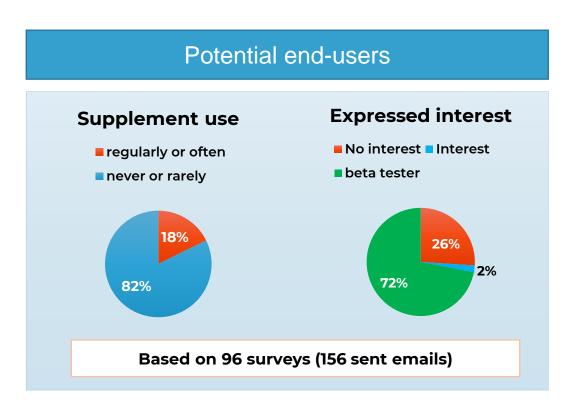
1 Sales rep~120 HCP





>70% of HCPs specialized in micro-nutrition and surveyed users want a beta test



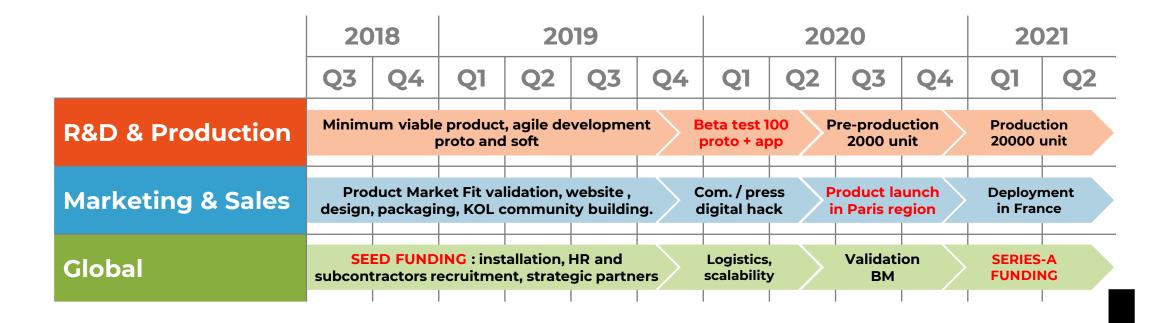


Initial surveys based exclusively on a French panel





Fast track to the market with product introduction in 2020



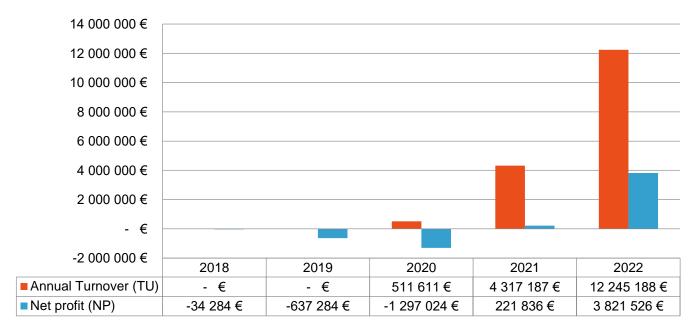
Break even Q2 2021 100 HCP, 4000 users ~1% of premium market Series-A funding for US/ Asia deployment

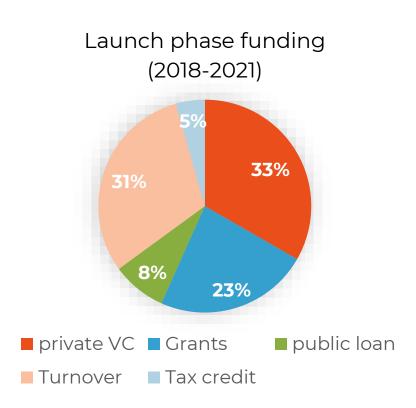




A 6.25M€ launch phase for the validation of the Business Model in France







Gross Margin from 45% to 80% (2020 to 2022) Break even Q3 2021 : 100 HCP & 4000 users Total budget until break even: 6.25M€ Board investment Q4 2018 : 100 k€ VC Q2 2019 + Q2 2020: 1+1 M€ min Total Public Grants = 1.5M€



From a 300M€ to a \$30 billion SAM in 5 years

