

NutriLeads BV

catalyzing nutrition & health innovations

Dutch Life Sciences
November 24th, 2016

Erik Dam, CBO



Dutch Life Sciences

Unmet need for food ingredients with clinically proven health benefits

- Consumers want healthy foods – and will pay more for them (Forbes 2015)
- Global nutraceuticals market \$250Bn in 2018 - despite lack of differentiating ingredients to deliver health benefits*
- Consumers will not compromise on taste & convenience

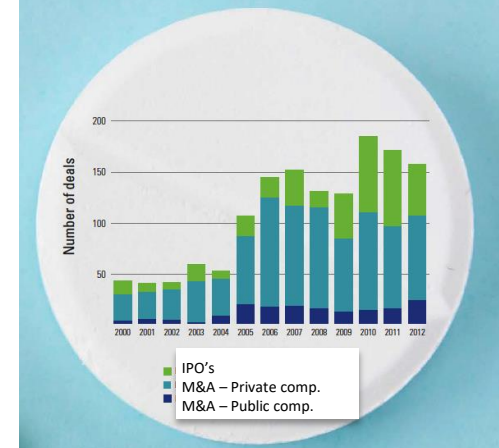


- Huge opportunity for ingredients with:
 1. clinically proven health effect
 2. no (neg.) impact on taste & convenience

* Less than 10% of 3000 health claim dossiers accepted by EFSA



Nutraceuticals M&A on the rise¹



Nutraceuticals, the future of intelligent food, where food and pharma collide, KPMG 2015



NutriLeads develops food ingredients with clinically proven health benefits and superior properties for food & drink applications



2006-12: Initial research @ Unilever; IMPP-1* supports immune function

2012: NutriLeads founded; IP & Know how of IMPP-1 acquired

2015: Successful Seed round with syndicate of 4 investors

2016: Co-development agreement signed with DSM Nutritional Products

2016: Positive results of IMPP-1 from Proof of Concept trial in humans

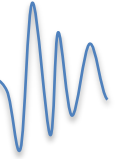
2017(Q1): Closing Series A



* IMPP-1: Immune Modulatory Plant Polysaccharide-1



NutriLeads will lead in food ingredients with clinically proven health benefits



Our vision

- Become the leader in developing food ingredients with clinically demonstrated health effects for specific patient and consumer groups and become the trusted partner for ingredient suppliers and food companies

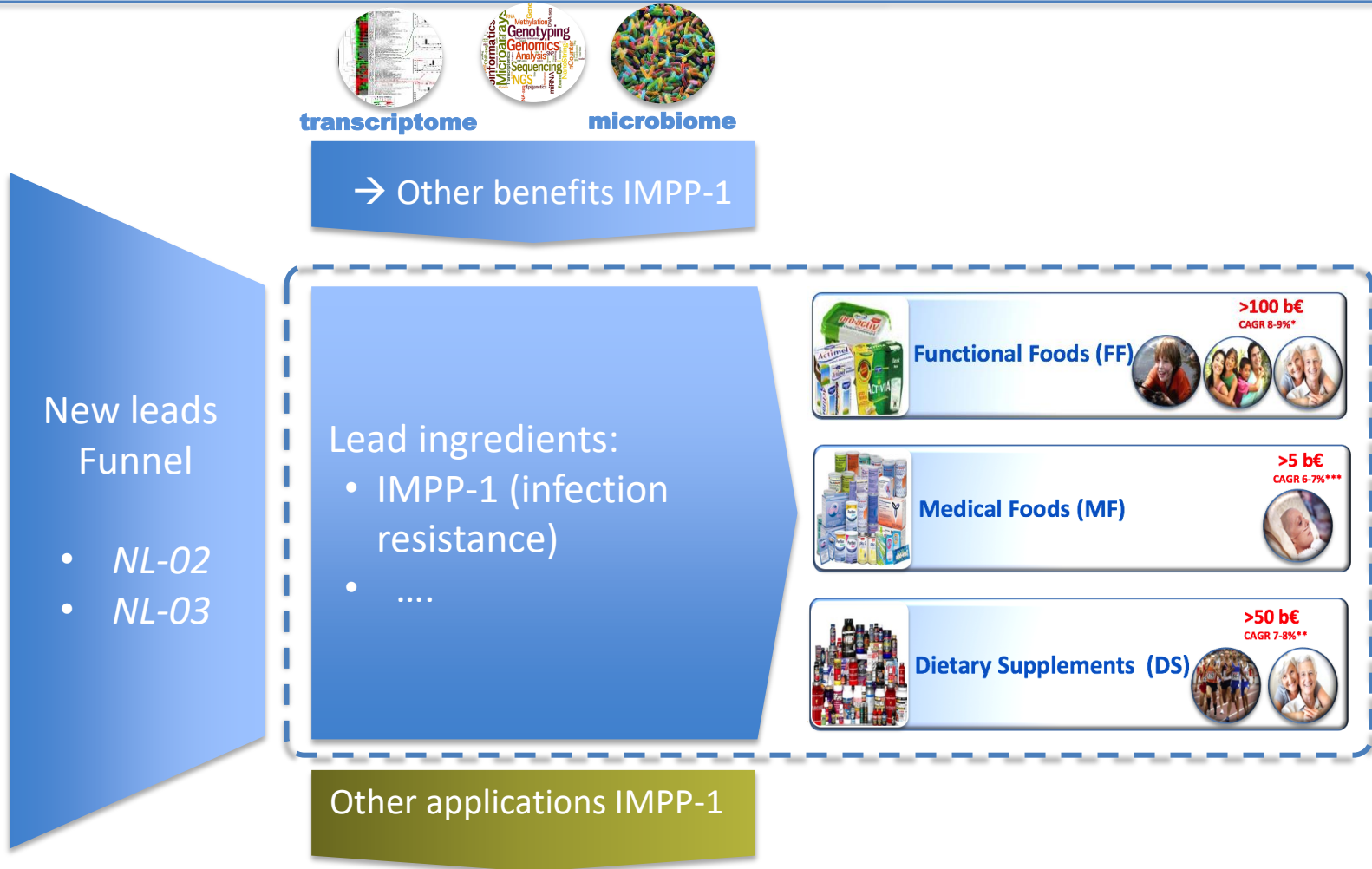
We believe this is an opportunity in foods comparable with the “biotech → pharma” model

Our business model

- Identify promising lead ingredients, develop sustainable production processes, manage regulatory requirements, and initiate scientific and clinical programs to substantiate the health effects
- Partner with relevant parties to effectively bring the benefits of our proprietary ingredients to consumers & patients



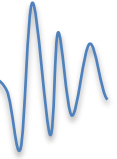
NutriLeads' repeatable model focuses on food applications while leveraging other applications



- Feb 2015, Researchandmarkets industry report;
- ** Oct 2015, FMI industry report;
- *** Industry experts



NutriLeads' lead ingredient IMPP-1 supports immune function



IMPP-1 supports immune function to increase resistance to infections



“The most used supplements by consumers of all ages are those that support immunity and resistance to disease and cold”

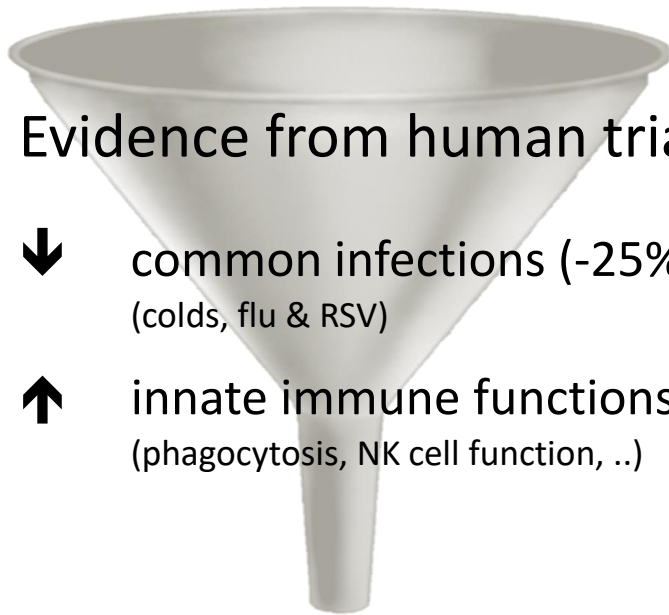
Result consumer survey of 7000 people in Europe, Middle East and Africa by DSM-NP, May 2016



Unilever R&D program led to the identification of IMPP-1

>470 candidates

internet, supplements, Ayurveda, TCM, etc.



Evidence from human trials

- ↓ common infections (-25%)
(colds, flu & RSV)
- ↑ innate immune functions
(phagocytosis, NK cell function, ..)



Extract from Ginseng root

Ginseng works but:

- ✗ regulatory
- ✗ sustainable supply chain
- ✗ COST

IMPP-1 identified as active component also available in particular food crops:

- ✓ regulatory
- ✓ sustainable supply chain
- ✓ COST
- ✓ Properties for application in food & drinks



NutriLeads acquired IP on IMPP-1, and is now rebuilding pyramid of evidence

NutriLeads acquired IP on IMPP-1 in 2012 and continued the (pre-)clinical development:

- In Vitro ✓ and ongoing
- Animal models ✓ and ongoing
- Human trials ✓ and ongoing



IMPP-1 dose-dependently enhances immune function in human PoC trial

NUTRILEADS ANNOUNCES POSITIVE OUTCOME PROOF OF CONCEPT STUDY IN HUMANS

November 24th 2016, Wageningen, The Netherlands. NUTRILEADS B.V., a Dutch Nutrition & Health startup today announces the positive outcome of a proof of concept study in humans demonstrating that its lead ingredient IMPP-1 is safe, well tolerated and supports immune function in humans.

NUTRILEADS develops nutritional ingredients for application in health-promoting food products. The company was founded in 2012 based upon an invention originating from Unilever. In 2015, NutriLeads closed a successful seed financing round with an investor syndicate comprising Thuja Capital, DSM Venturing BV, PPM Oost and Shift Invest and is currently discussing a series A financing.

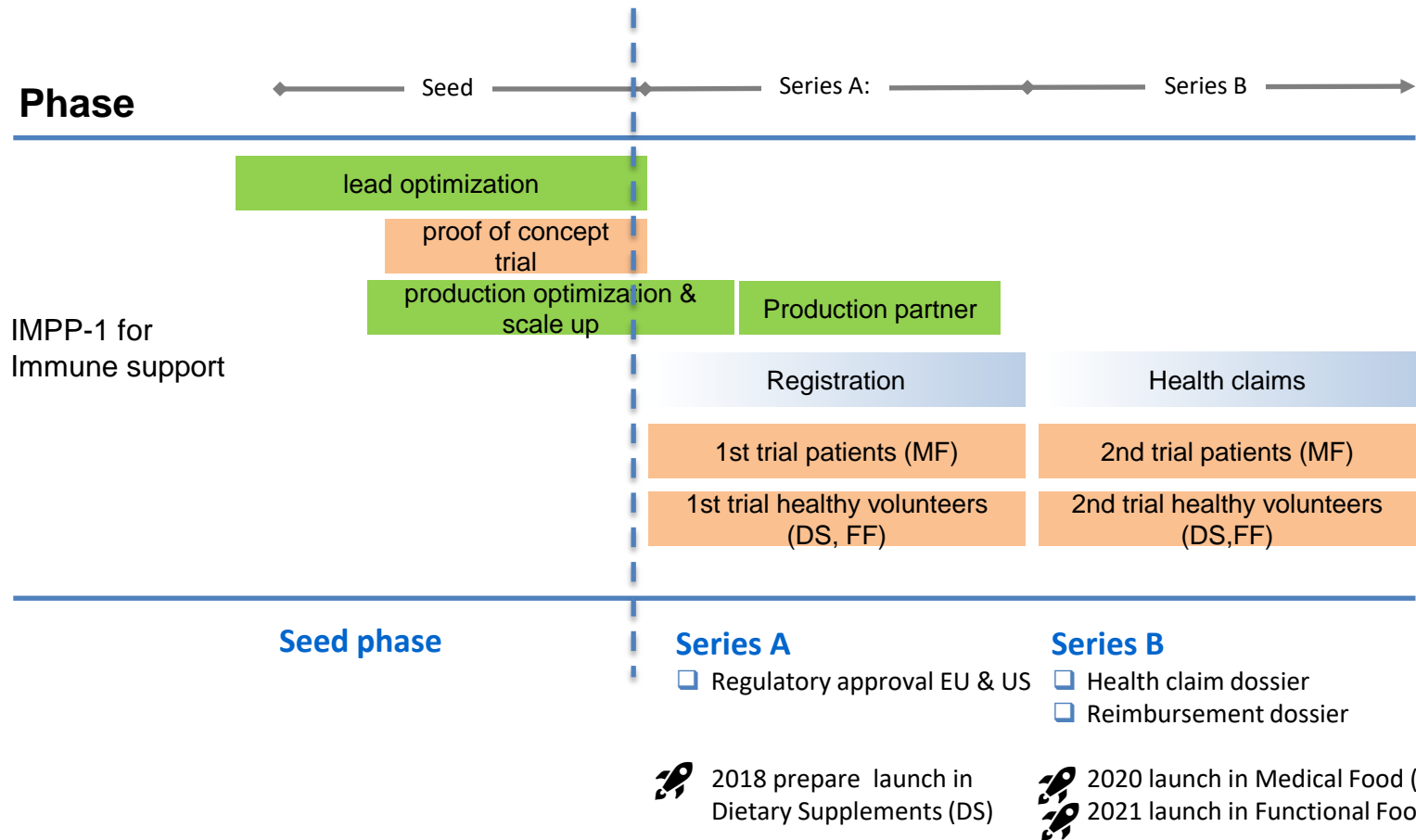
NutriLeads' lead ingredient Immuno Modulatory Plant Polysaccharide-1 (IMPP-1) can be sustainably sourced from food crops. NutriLeads is developing this patented ingredient for different food applications including dietary supplements, medical food and functional food to reach various target populations.

The results of the first proof of concept study with IMPP-1 in healthy volunteers were evaluated by an international group of key opinion leaders from industry and academia. The experts concluded that the results demonstrate excellent tolerability and safety characteristics and significant and dose dependent stimulation of the immune system.

"The positive result in first proof of concept study in healthy volunteers provides the necessary confidence to go full speed ahead with our ambitious development program including several clinical trials to support the use of this proprietary ingredient from sustainable sources as dietary supplement and for application in specialized functional and medical food products" indicates Ruud Albers, PhD, CEO of NutriLeads.



IMPP-1 development focuses on proving health benefit for various food applications



Regulatory framework in EU for a food ingredient with a health claim depends on the applications



Dietary Supplements

- NovelFood
- Clinical evidence nice to have



Medical Nutrition

- NovelFood (incl. use for medical nutrition)
- List of nutritional substances for FSMP
- FSMP (Food for Special Medical Purposes)
- Clinical evidence a must



“Functional Foods”

- NovelFood
- EFSA (European Food Safety Authority) health claim
- Clinical evidence required by “law” and claim needs pre-approval



NutriLeads' international team has in depth development and market knowledge ...



Ruud Albers, PhD
CEO, CSO



Erik Dam, MSc, MBA
CBO, CFO



Marcela Aparicio, PhD
Research Manager
Nutrition & Health



Maria Tzoumaki, PhD
Research Manager
Food Technology

experience

- Director functional foods discovery
- Co-inventor IMPP-1
- Chair ILSI taskforce immune health

- VP medical foods
- General management, business development, marketing
- Souvenaid™

- Postdoc Karolinska Institute/AstraZeneca
- PhD UMC Groningen
- Nutrition & Health

- Postdoc Top Institute Food & Nutrition
- PhD Aristotle University, Greece
- Food technology

prior affiliations

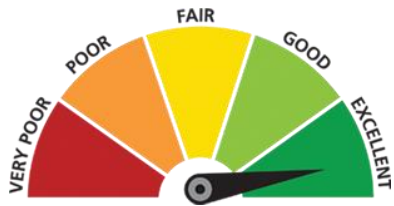


Supported by international scientific advisory and supervisory board with complementary expertise & networks: F&A sector, supply chain, production, commercialization, finance, health care insurance, pharma, DSM, Numico, Nestle

... and is supported by an extensive network of partners leading in their respective fields



NutriLeads coordinates international consortium winning prestigious EUROSTARS grant



#4 of 269 in Europe across all fields
(#1 of 99 in The Netherlands)



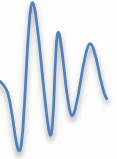
Develop IMPP-1 for application in
Medical Food

Project size: >€2 Million



NutriLeads (consortium leader), NIZO
Food Research plus partners in Germany
and Finland





END

Thank you!