

A short introduction to the world of Human Nutrition & Health

DSM Nutritional Products

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Place: Maize F Strategy Workshop, TZ

Date: 10/06/2016

Our challenge: help keep the world's growing population healthy

Population today: 7.2 bn
2019: 7.6 bn



138 m births in 2015 with
average life expectancy of
71.3 years



Pensioners on the rise
today: 990 m
2019: >1.6 bn



The double burden of malnutrition



Obesity has more than doubled since 1980.
In 2014, 1.9 billion overweight (BMI 24+), 600 million obese (BMI 30+).



Global diabetes prevalence:
Today 8.4%, 2019 8.8%



+ a high number of undiagnosed people

Malnutrition negatively impacts individuals and society



Source: www.thousanddays.org



I want a
brighter world.

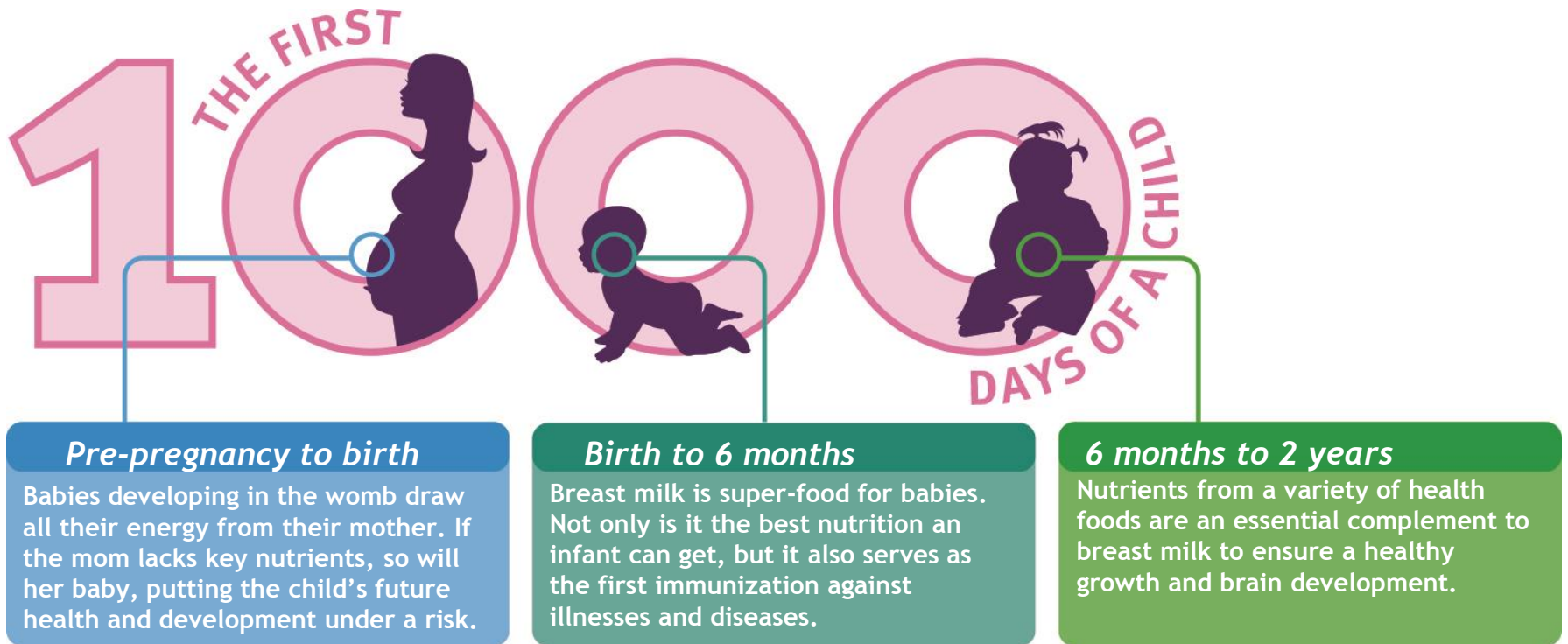
Adequate nutrient intake is essential at every stage of life

Consumers become more and more aware of the importance of adequate amounts of micronutrients on health and well-being.



A healthy life starts before birth

The right nutrition before pregnancy and in the 1,000 days between a woman's pregnancy and her child's second birthday builds the foundation for a child's ability to grow, learn and thrive.



Source: www.thousanddays.org

Children who get the right nutrition in their first 1,000 days...



... are 10x more likely to overcome the life-threatening childhood diseases.



... are more likely to have healthier families of their own.



... complete 4.6 more grades at school.



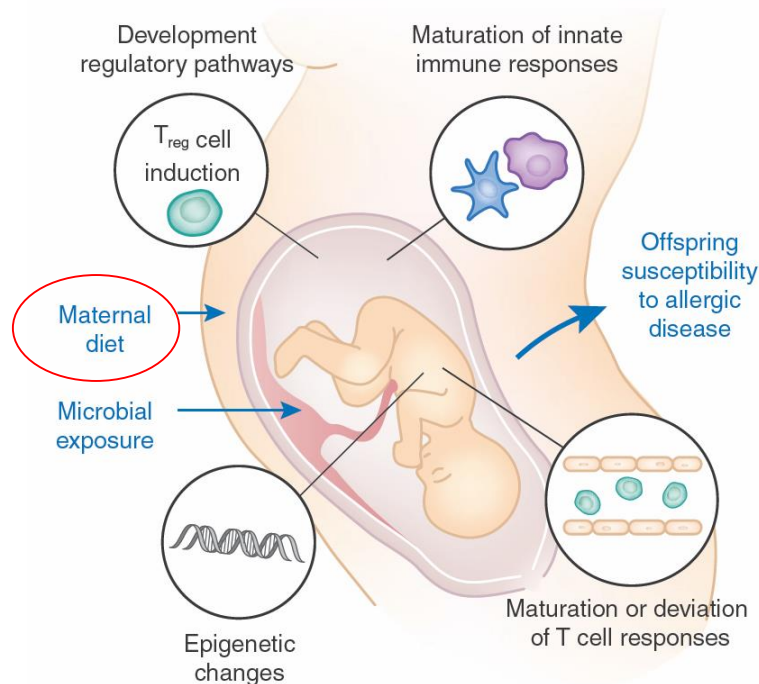
... earn 21% more in wages as adults.



Source: www.thousanddays.org

The first 1,000 days echo to the rest of life

1'000 days principle: “early programming of infants”



- **Maternal nutrition may have a long-term influence on the risk of chronic diseases in later life.**

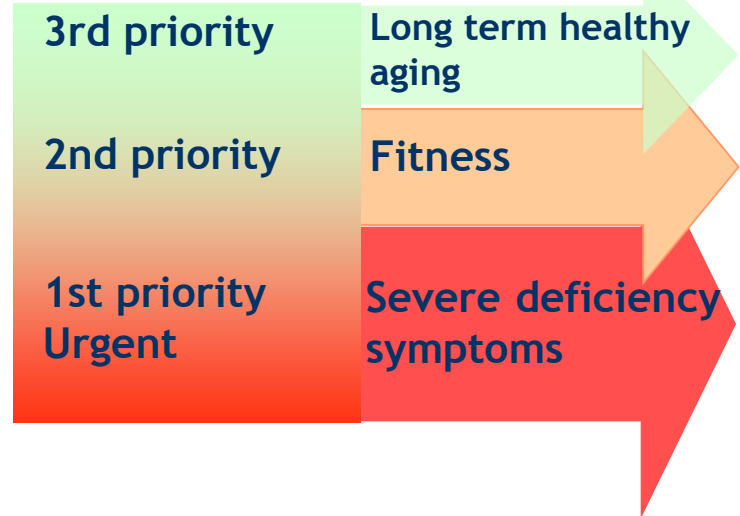
Source: www.thousanddays.org

Triage theory by Bruce Ames

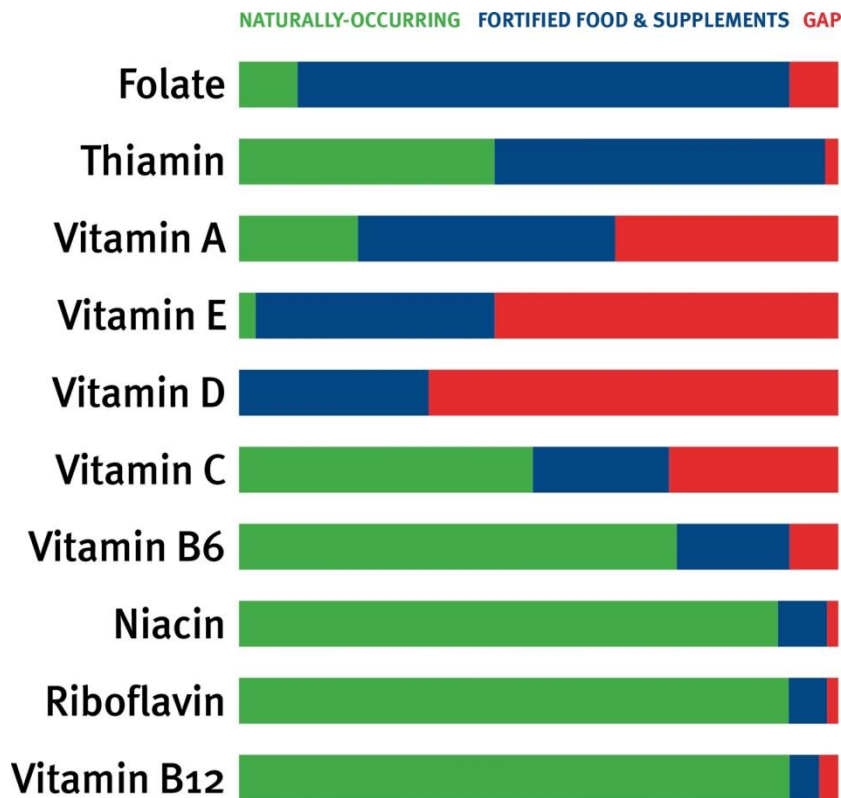
- **Even modest micronutrient inadequacies have long-term effects on health!**
- **Continuous intake of sufficient levels of essential micronutrients**



Micronutrient intake



Even with balanced diets, nutritional gaps exist. What can we do to close them?



3 simple steps to improve nutrient intake



1 EDUCATE in healthy nutrition



2 ENRICH diet with fortified foods



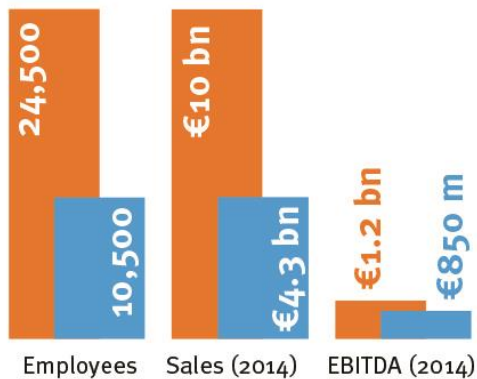
3 ENHANCE supplementation

Source: Burden of disease: Lancet global burden of disease study 2010. Global Status report on NCD: Global status report of NCD 2010 by the WHO: How added nutrients and supplements can help fill the gaps: The Journal of Nutrition; 24 August 2011; doi:10.3945/jn.111.142257, page 1853, figure 3". Developed by DSM Nutrition Science & Advocacy.

Our company at a glance

DSM is a global, science-based company active in health, nutrition and materials.

By connecting its unique competences in Life Sciences and Materials Sciences, DSM creates value along three equally important dimensions: People, Planet and Profit.



DSM (Group company)

DSM Nutritional Products

DSM Nutritional Products:

Human Nutrition & Health

Animal Nutrition & Health

Personal Care



Leading global supplier of **vitamins, carotenoids, omega-3 & 6 nutritional lipids, nutraceutical ingredients** and customized state-of-art premixes (**Fortitech®**).



29 production sites, including 14 premix plants located worldwide.

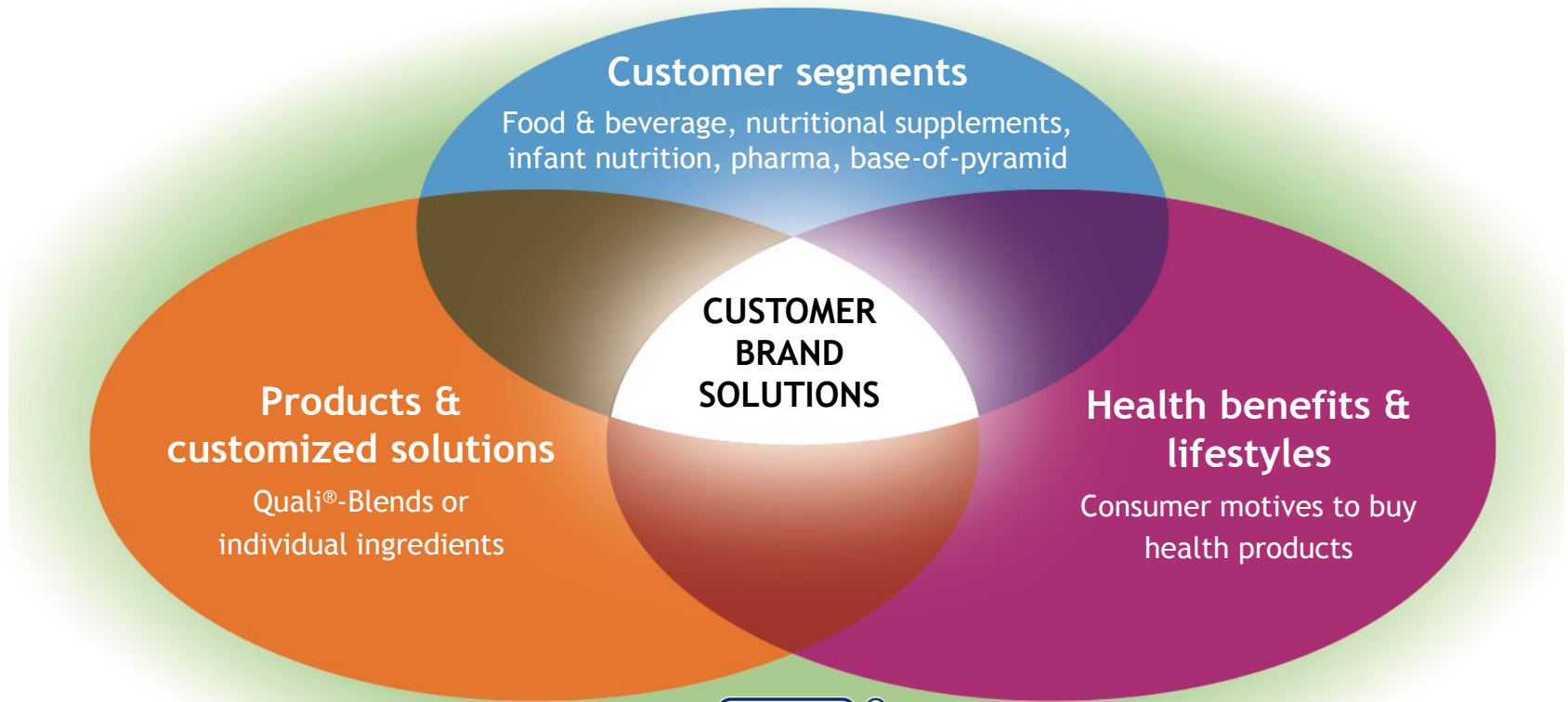


200 R&D and scientific experts and five Nutrition Innovation Centers.



Global network of sales offices and regulatory experts.

We can help you get to market faster with appealing nutritional solutions that work



...with the customer brand as the core focus



...and backed by our Quality for Life™ promise

Quality
Reliability
Traceability
and...**Sustainability!**



Peace of mind!



How can we *Health* you?

Our Health Benefit Solutions address the main consumer health concerns



Fighting malnutrition: DSM's commitments and partners

Nutrition Improvement Program

Develops effective nutrition solutions to improve public health for 4 billion people at the base of the pyramid.



Humanitarian think tank to eliminate malnutrition by advancing research, sharing best practices, and mobilizing support.

NGOs



International organizations



Private sector partners globally



Turning bright science into brighter living

Nutrition Science and Advocacy



The Nutrition Science and Advocacy is core to our business. We are engaged in a **comprehensive strategy** that **addresses the requirements of nutritional solutions.**

Consumer education



Each year DSM reaches approximately 1 billion consumers globally with our positive nutrition science, information and messages.

*We can help you get to market faster
with appealing solutions that work*



BRIGHT SCIENCE. BRIGHTER LIVING.™

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R&D and Innovation

Market-specific competences based on technology-driven set-up

