



Nestlé investor  
seminar 2022



# Medical Nutrition

Solutions to address specific  
medical needs

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# Broad portfolio to address diverse patient needs across care settings

Strong brands under-pinned by scientific expertise

## Acute Care / Adult Medical Care



## Pediatric Care



## In-born Errors of Metabolism



## Metabolic Health

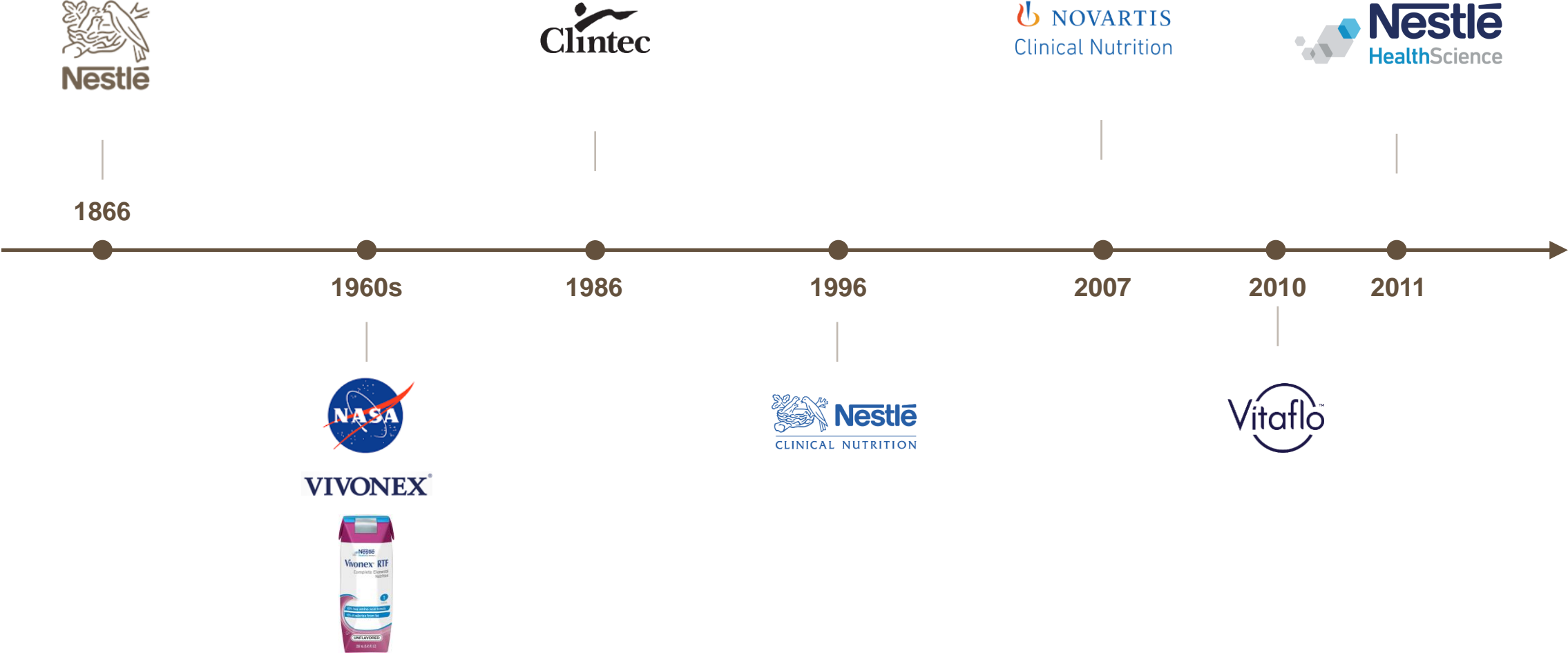


## Gastrointestinal



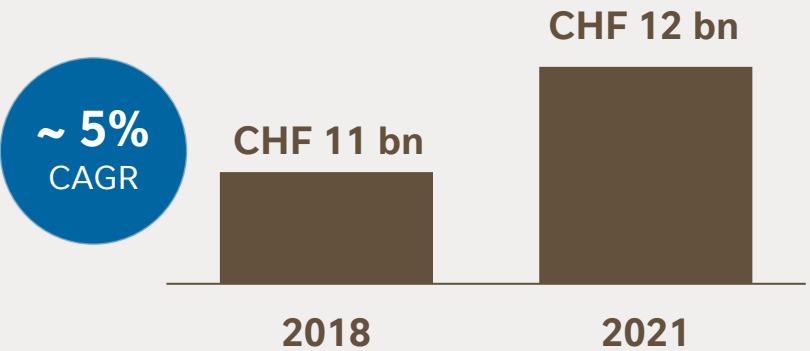


# Building on a long history of Medical Nutrition expertise

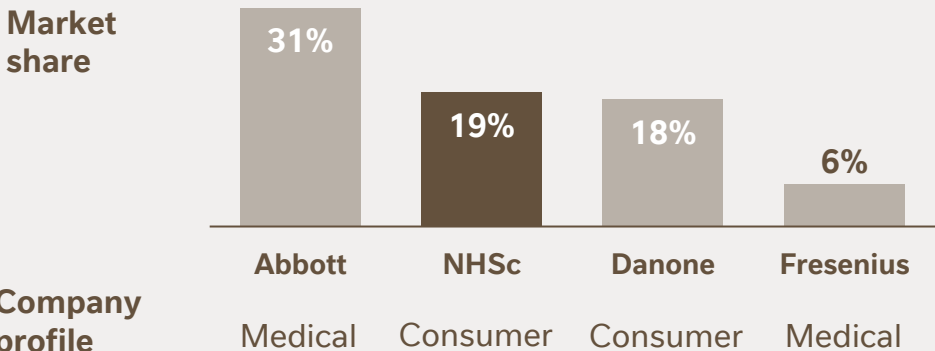


# Medical Nutrition is a large growing category, meeting diverse needs

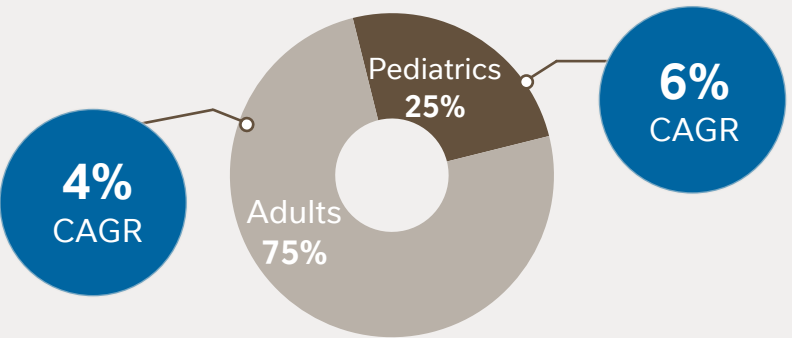
## Category is large, with solid growth



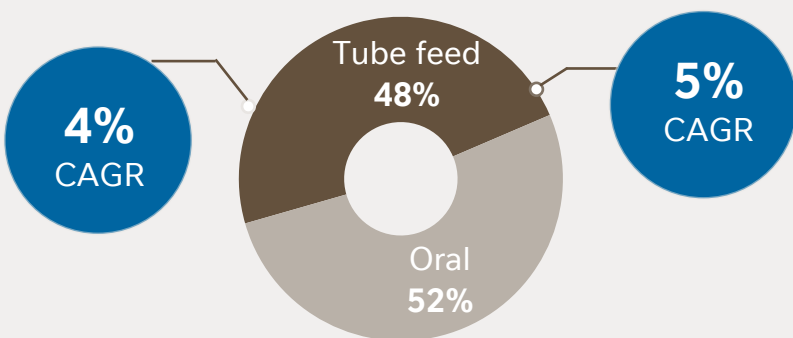
## Competitive landscape



## Serving both adults and pediatrics



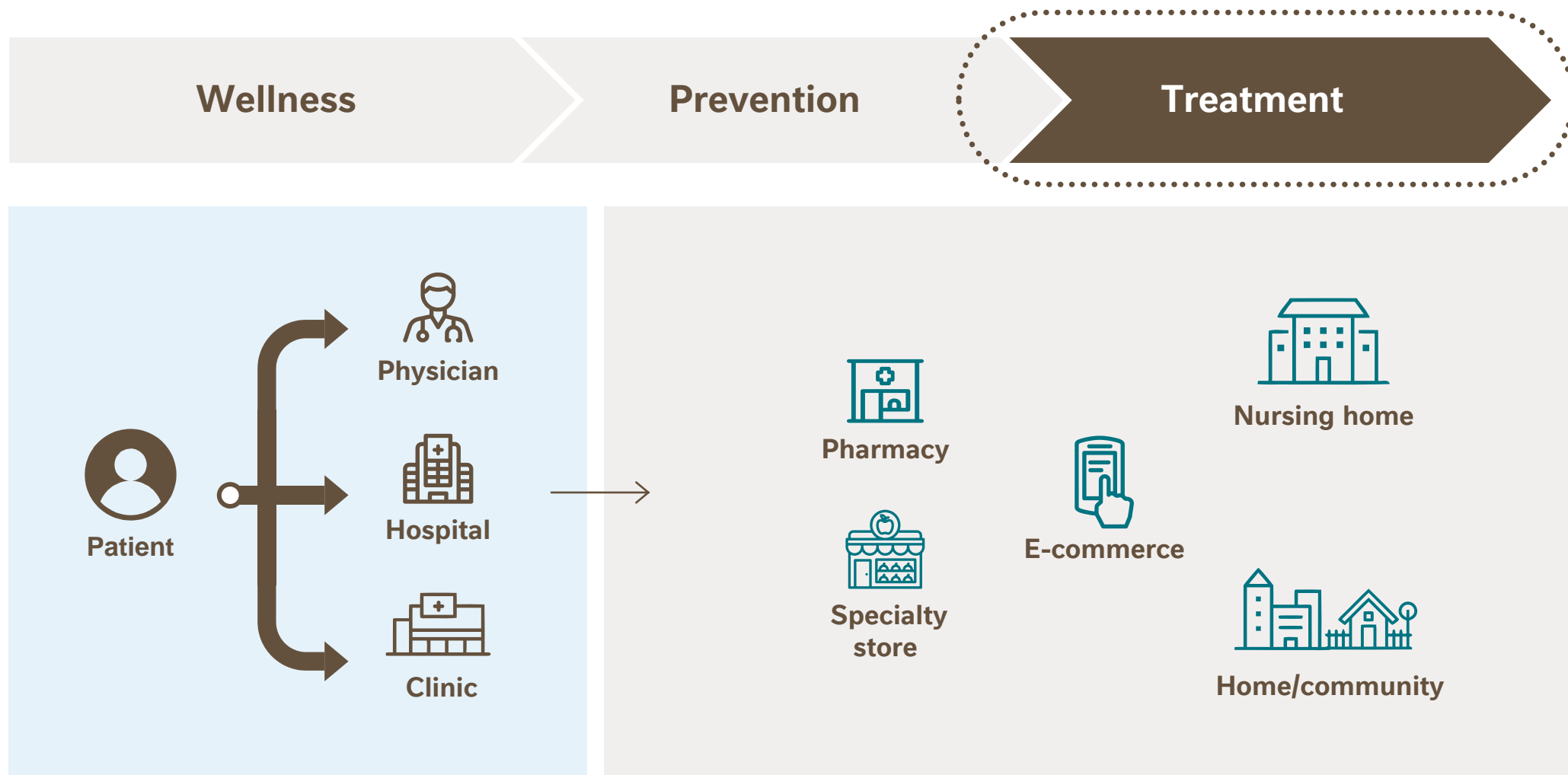
## Split between oral and tube feeding



CAGRs are 2022-26. Source: 2021 financial reports, market data and internal analysis

# Providing treatment in institutions and at home

Usage initiated by Health Care Professional



# Specialized products governed by specific regulatory framework

Leveraging our expertise to manage complex requirements

**Specialized products** for the nutritional management of diseases to be used under medical supervision

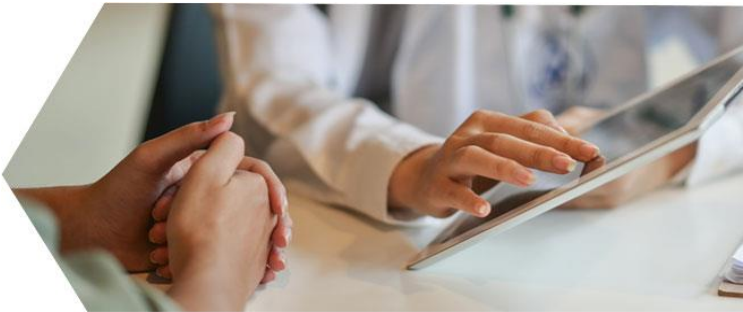
## Examples:

- Malnutrition
- Elective surgeries
- Short bowel syndrome
- Crohn's disease
- Inborn Errors of Metabolism
- Cognitive impairment

## Specific regulations:


- Complex and non-harmonized regulatory route-to-market worldwide
- Specific capabilities and expertise to support approval process
- High standards for scientific substantiation of claims

# Covered by a spectrum of payment models globally















In hospital



At home

Reimbursement / coverage by health authorities or private insurance		
Full	Partial	None
 		 
 	 	 



# Addresses critical healthcare issues and macro trends

Creating significant growth opportunities

## Rising chronic conditions

**6 in 10**

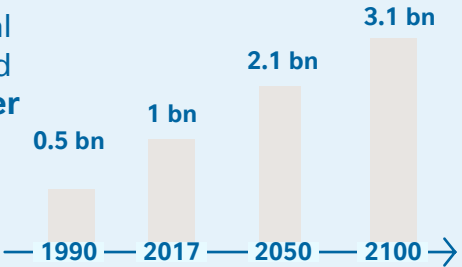
Adults in the U.S.  
have a **chronic disease**

**4 in 10**

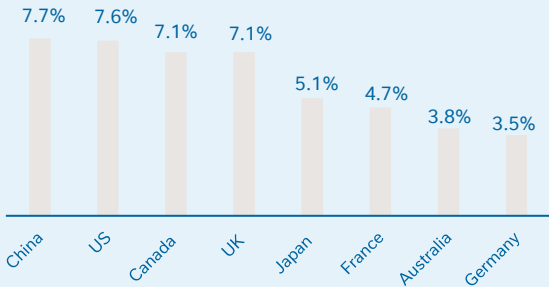
Adults in the U.S.  
have **two or more**

## Aging population

Projected global  
population aged  
**60 years or over**



## Pediatric allergy prevalence



## Increased health ownership

**41%**

patients take some  
degree of action in  
their own health



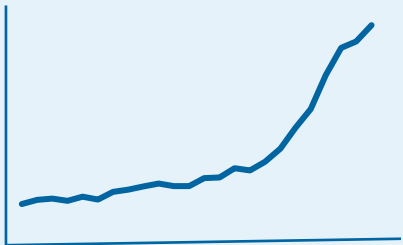
## Pressure on health spending

Healthcare  
expenditure  
relative to GDP

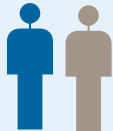
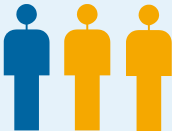




## Demand for evidence & data

Number of  
scientific and  
human studies  
related to  
nutrition

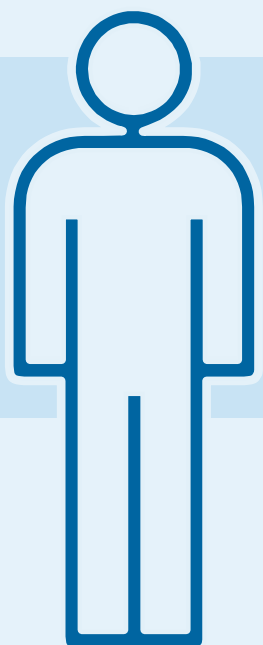


# Malnutrition impacts quality of life and creates economic burdens, costing 3x more than for a well-nourished patient

Rates of malnutrition	Related co-morbidities	Economic impact
<div><p>Patients in hospital</p></div> <div><p>Patients with cancer</p></div> <div><p>Elderly</p></div>	<div>Decreased quality of life</div> <div>Increased complications</div> <div>Increased mortality</div> <div>Longer recovery time</div> <div>Increased hospital stay</div>	<div><p>\$58 bn / year</p></div> <div>Similar impact in other regions</div>

# Medical Nutrition improves quality and cost of care

## Return on investment for every dollar spent on Oral Nutritional Supplements (ONS) - hospital



**\$52**  
return on investment  
for every  
**\$1**  
spent on Oral  
Nutritional  
Supplements

**\$90**

Average cost of ONS  
per inpatient episode\*

**\$5 000**

Estimated  
cost saving per  
inpatient episodes  
with ONS

Source: Philipson et al. Am J Manag Care

\*Including labor and administrative expenses



Infant & children with mild to moderate cow's milk protein allergy

**£10 m annual savings** to NHS in first line treatment



Gastrointestinal cancer patients undergoing surgery

Decreases costs of hospital stay by ~ **CHF 2 000 per patient**



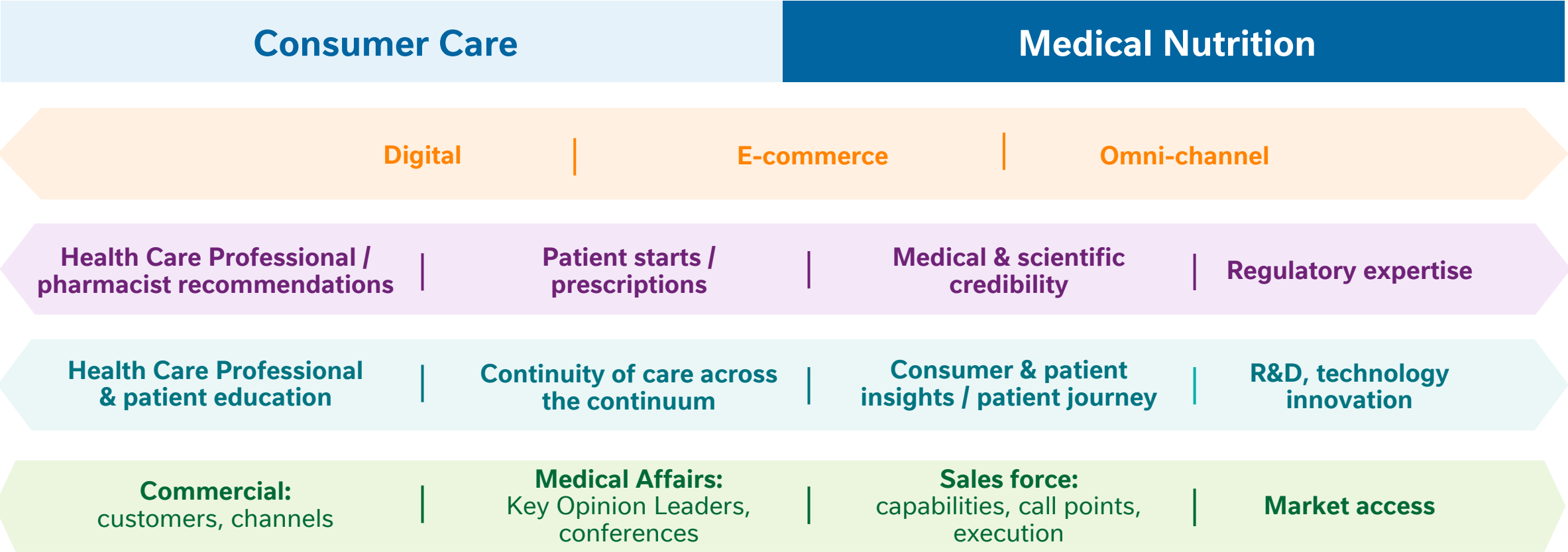
Wound healing patients

Cost savings of ~ **\$1 500 per patient** in the early treatment of pressure ulcers

# Leveraging multi-faceted demand generation and route-to-market



# Shared capabilities across the portfolio










# Leadership in selected segments and geographies, with continued opportunity for market share gains








## Medical nutrition

		Market share	Rank
	Brazil	46%	1
	France	34%	1
	Spain	26%	1
	U.S.	36%	2
	Türkiye	26%	3



## Pediatric allergy

	China	48%	1
	Germany	24%	2
	Mexico	14%	2
	UK	18%	3
	Australia	16%	3

Sources: external data providers and competitive reports; MAT 2022

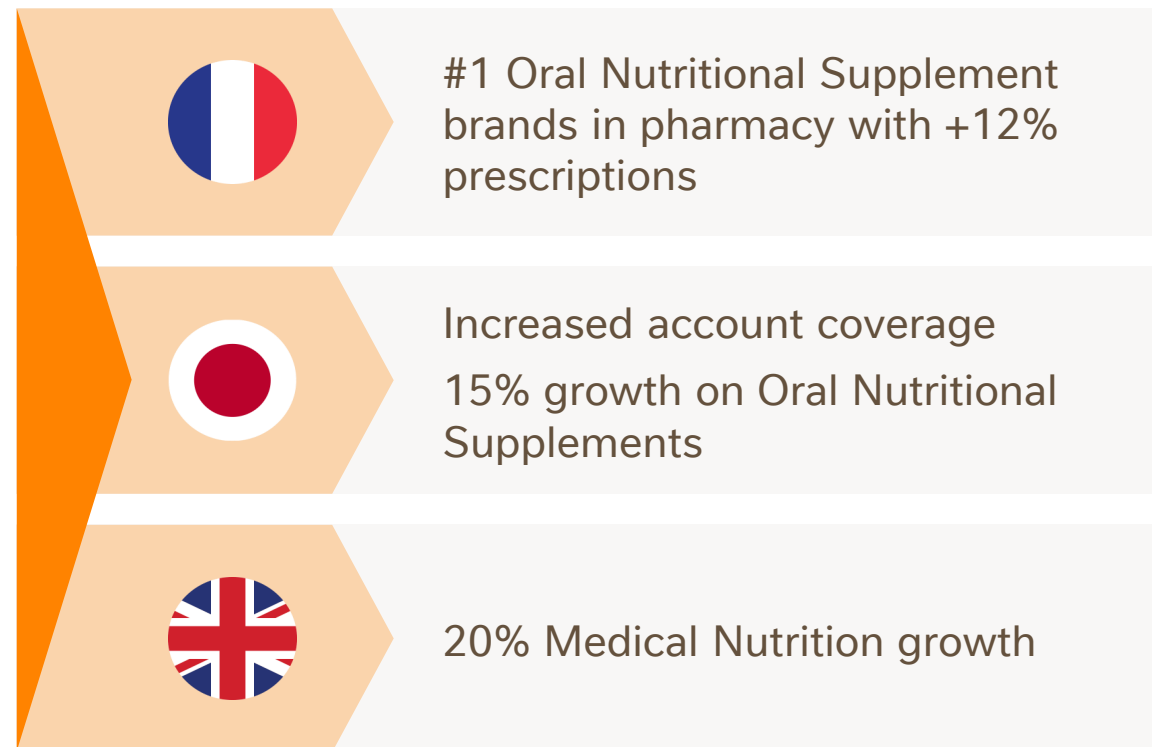
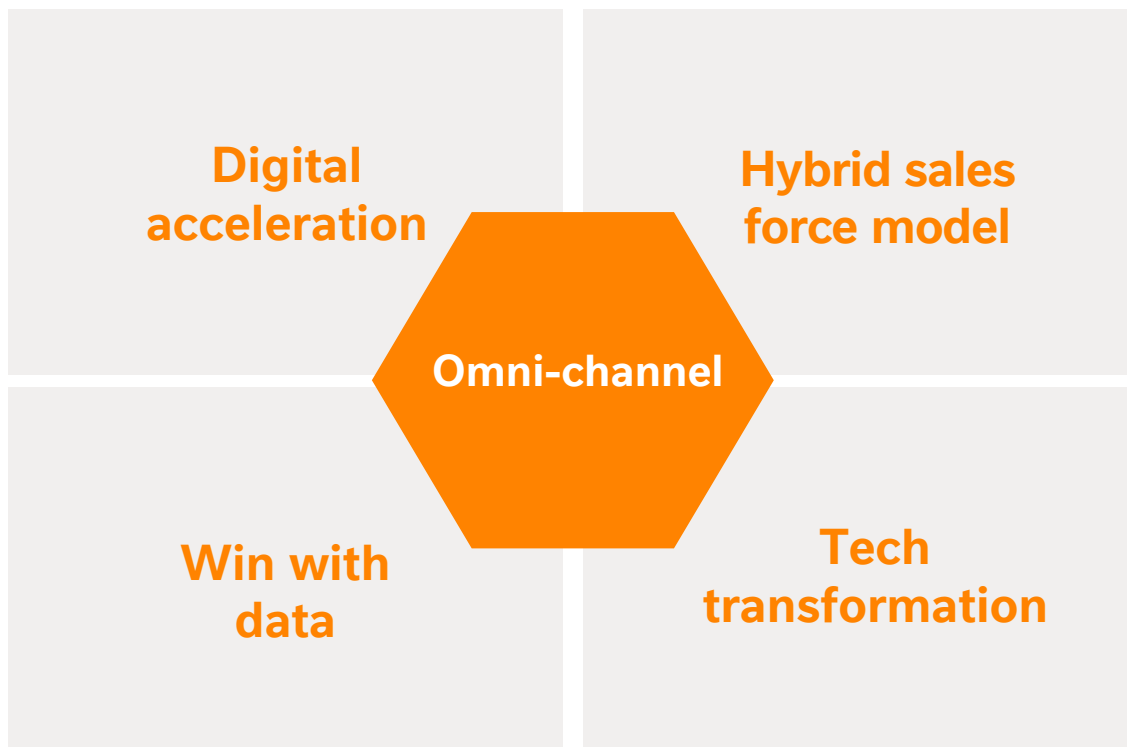
Medical Nutrition excluding Allergy and Inborn Errors of Metabolism



**Boosting growth  
in the core**

# Omni-channel commercial execution drives success

## Key pillars





# Partnerships with external stakeholders shapes innovation and medical practice

Partner with research universities:  
Drug Resistant Epilepsy

Partner with  
Key Opinion Leaders:  
COVID-19 ICU Protocol

Partner with policy makers:  
EU Beating Cancer Plan

**Journal of Neurochemistry** **JNC**  
ORIGINAL ARTICLE

**The ketogenic diet component decanoic acid increases mitochondrial citrate synthase and complex I activity in neuronal cells**

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**Abstract**  
The ketogenic diet (KD) is an effective treatment for drug-resistant epilepsy. However, there are difficulties around compliance and tolerability. Consequently, there is a need for more palatable formulations that maintain the efficacy of the KD. One of the proposed approaches is to use medium-chain triglyceride (MCT) oil. MCTs increase cellular mitochondrial content which results in elevation of the ketone bodies. Here, we have focused on the medium-chain triglyceride form of the diet and the observation that plasma ketone bodies (KB) and decanoic acid (C10) levels are elevated in patients on the medium-chain triglyceride KD. Using a neuronal cell line (SH-SY5Y), we demonstrated that 250 µM C10, but not C8, caused, over a 5-day period, a marked increase in the mitochondrial enzyme, citrate synthase along with complex I activity and cellular activity. Increased mitochondrial number was also indicated by electron microscopy. C10 is a reported peroxisome proliferator-activated receptor-γ agonist, and the use of a peroxisome proliferator-activated receptor-γ antagonist was shown to prevent the C10-mediated increase in mitochondrial content and cellular activity. C10 may mimic the mitochondrial proliferation associated with the KD and raises the possibility that formulations based on this fatty acid could replace a more complex diet.

**Keywords:** decanoic acid, ketogenic diet, mitochondria, PPARγ

**Abbreviations:** KD, ketogenic diet; MCT, medium-chain triglyceride; PPARγ, peroxisome proliferator-activated receptor-γ

The ketogenic diet (KD) in its various forms has been demonstrated to be effective at reducing seizures in individuals with drug-resistant epilepsy (Neal et al., 2008). Despite the effectiveness of the diet, the exact mechanism(s) of action in the context of seizure control are not known. However, a number of mechanisms have been proposed that include alterations in neurotransmitter release, changes in brain excitability, such as GABA, and the metabolic consequences of the diet on cellular energy metabolism (Sisler and Sack, 2008). With regards to the latter, it is of note that mitochondrial dysfunction, at the level of the respiratory chain, has been documented in animal models of epilepsy and in post-mortem brain samples obtained from patients who had epilepsy (Katz et al., 2000; Cook et al., 2002). Furthermore, mitochondrial biogenesis has been reported in the brain of rats fed the KD leading to the

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Tube feeding for patients with acute respiratory failure.  
Feeding protocol.

**Cancer care: why nutrition matters**

Main nutrition in cancer patients leads to poorer health outcomes. It also results in an increased burden to healthcare resources. Nutritional care should be an integral part of cancer care.

**EUROPE'S BEATING CANCER PLAN**  
LET'S STRIVE FOR MORE

**Why do we need an EU Cancer Plan?**

- 1.3 million Europeans die from cancer each year
- 40% of cancer cases are preventable
- 3.5 million cancer cases diagnosed each year
- 4-10 cancer cases are preventable
- Only 3% of health budgets is spent on health prevention and disease prevention
- Overall expected impact of cancer in Europe: 1.6 million cases annually

**Europe's Beating Cancer Plan proposes actions for all stages of the disease**

**PREVENTION**

- A set of every 10 cases of cancer are preventable. The Plan will drive actions to:
- Address gaps in knowledge
- Dissemination of evidence
- Healthier diet and lifestyle
- Reducing exposure to carcinogens in the work place and in the environment
- Form to Risk Strategy to promote healthy diets

**DIAGNOSIS**

- Address gaps in knowledge
- Dissemination of evidence
- Healthier diet and lifestyle
- Reducing exposure to carcinogens in the work place and in the environment
- Form to Risk Strategy to promote healthy diets

**TREATMENT**

- Improve treatment
- Improve quality of life for patients and survivors
- Healthier diet and lifestyle
- Reducing exposure to carcinogens in the work place and in the environment
- Form to Risk Strategy to promote healthy diets

**QUALITY OF LIFE OF PATIENTS AND SURVIVORS**

- Improve quality of life for patients and survivors
- Healthier diet and lifestyle
- Reducing exposure to carcinogens in the work place and in the environment
- Form to Risk Strategy to promote healthy diets



**Boosting growth  
in the core**

# Building a leader in China

## Winning strategy

### Market dynamics

- Aging population
- Prevalence of major diseases
- Regulatory dynamics
- Medical practice shifts

### Invest in local pipeline

- Local R&D
- Local manufacturing
- First liquid Food for Special Medical Purpose plant in China

### Regulatory

- 9 registration licenses
- 1st liquid Food for Special Medical Purpose
- 1st cancer Food for Special Medical Purpose

### In market execution

- Scaled medical sales team
- Health Care Professional education
- Key Opinion Leader collaboration

**#1 in  
pediatric  
allergy**



**#1 in  
pediatric  
growth**



**#1 choice  
for cancer  
patients**





Boosting growth  
in the core

# Market investment and execution drives growth

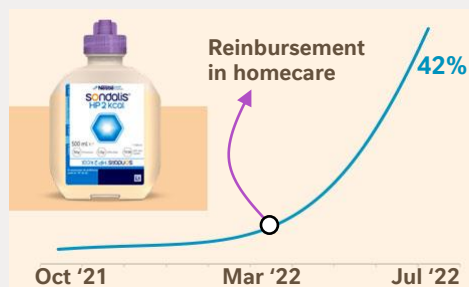


Clinical evidence to drive differentiated market access and growth



## Thicken-Up Clear

- First & only dysphagia product with reimbursement



## Sondalis 2.0

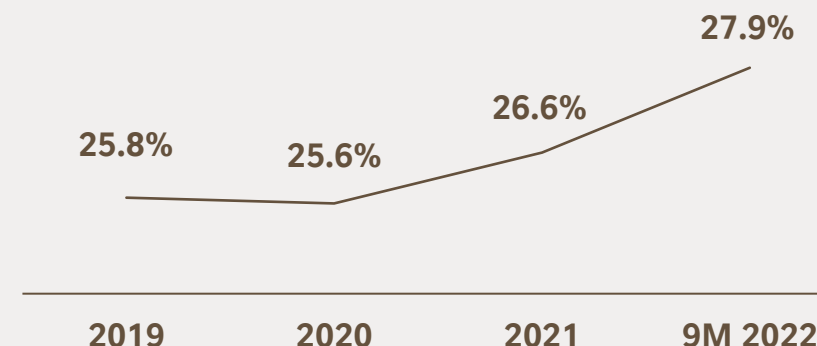
- First hyper-concentrated tube feeding reimbursed in homecare



Locally produced products accelerate growth



## NHSc Türkiye % market share







**Differentiating  
through insights**

# Fuel growth through disease specific innovation to address specific patient needs

## Allergy management



Supports development of the immune system and microbiome of patients with severe cow's milk protein allergies

## High protein, superior tolerance



Specialized high protein with better tolerance and nutrient absorption

## Nutrition concentration



Highest level of protein, improves patient adherence

## Plant-based



Real food to improve tolerance, with microbiome profile, and to meet patient preferences

## Diabetes management



Manage blood glucose levels after meals



**Differentiating  
through insights**

# Innovation beyond products

Holistic industry-leading solutions that drive growth

## SimpLink® feeding technology



## ModuLife® program for Crohn's Disease

Health Care Professional training  
& certification



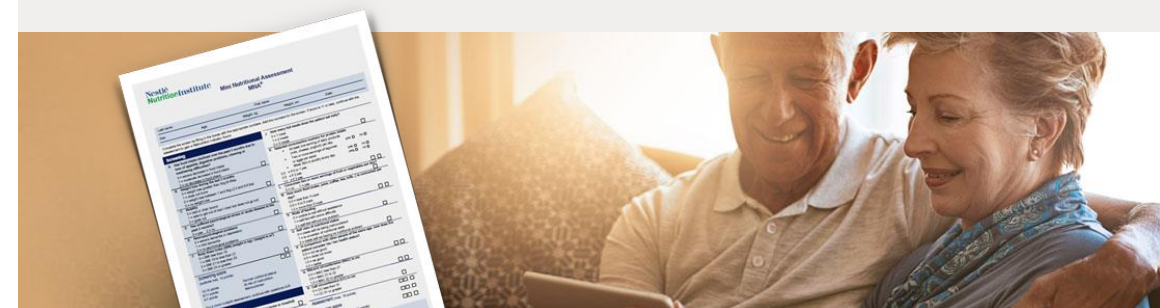
Patient support app



## Cerebral Palsy Health Care Professional & patient platform



## Mini Nutritional Assessment® for elderly





# Key takeaways



# Our leadership journey on nutrition and health

## 3 strategic imperatives

### Boosting growth in the core

Expanding geographically, enhancing category leadership and building customer partnerships

### Differentiating through insights

Understanding consumer/patient needs, leveraging R&D capabilities and innovation ecosystem

### Unlocking growth via portfolio management

Strengthening leadership through M&A and delivering on acquisition and synergy plans

## Driving further value creation to 2025

### Grow organically at a high single-digit rate

- Strong category momentum and share gains
- International expansion
- Science and innovation

### Reach underlying TOP margin of > 18%

- Synergy delivery
- Leverage from strong organic growth
- Efficient use of resources

# Overall: Key takeaways



**1**

**Operate in attractive categories with long-term growth trends**

**2**

**Strong portfolio focused on nutrition and metabolism**

**3**

**Unique scale and leadership**

**4**

**Powerful synergies between Consumer Care and Medical Nutrition**