



**Chr. Hansen Holding A/S**  
**Q3 Report 2016/17**

**Roadshow presentation 11 & 12 July 2017**

**CHR HANSEN**

*Improving food & health*

# Safe harbor statement

This presentation contains forward-looking statements that reflect management's current views with respect to certain future events and potential financial performance.

Forward-looking statements are other than statements of historical facts. The words "believe," "expect," "anticipate," "intend," "estimate," "outlook," "will," "may," "continue," "should" and similar expressions identify forward-looking statements.

Forward-looking statements include statements regarding: objectives, goals, strategies, outlook and growth prospects; future plans, events or performance and potential for future growth; liquidity, capital resources and capital expenditures; economic outlook and industry trends; developments of the Company's markets; the impact of regulatory initiatives; and the strength of competitors. The forward-looking statements in this presentation are based upon various assumptions, many of which are based, in turn, upon further assumptions, including without limitation, management's examination of historical operating trends, data contained in records and other data available from third parties.

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# Financial highlights YTD 2016/17

## Revenue

EUR **780** million  
(up 12% on 2015/16)

## Operating profit (EBIT) margin before special items

**27.9%**  
(27.2% in 2015/16)

## R&D expenditures incurred

EUR **55** million  
(7.0% of revenue, compared to 7.3% in 2015/16)

## Organic growth

**10%**  
(13% in 2015/16)

## Profit for the period

EUR **156** million  
(up 22% on 2015/16)

## Free cash flow before acquisitions and special items

EUR **98** million  
(EUR 58 million in 2015/16)



# Strategic & operational highlights 2016/17

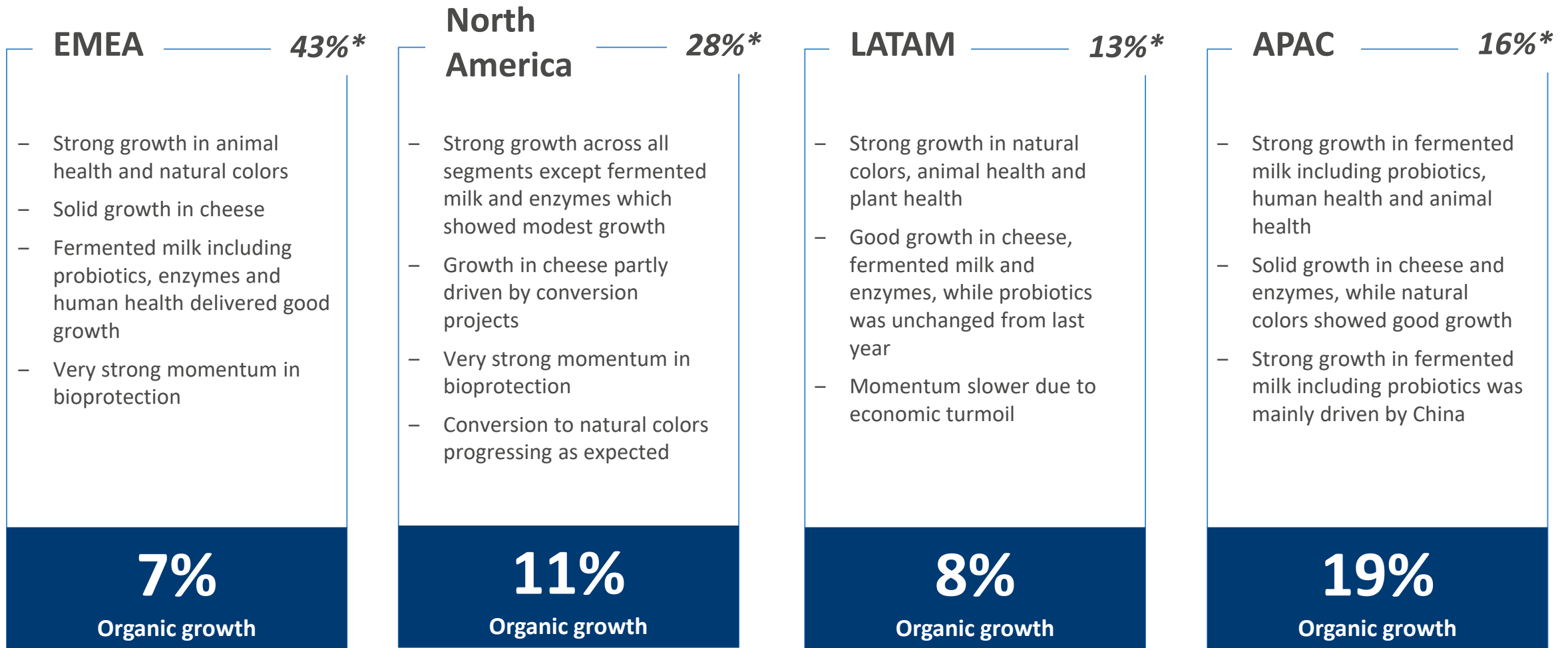
**No.1**

Nature's no. 1 strategy launched in September 2013 with the ambition to pursue growth opportunities in the current core businesses and within new microbial solutions. Strategy reaffirmed at Capital Market Day in April 2016.

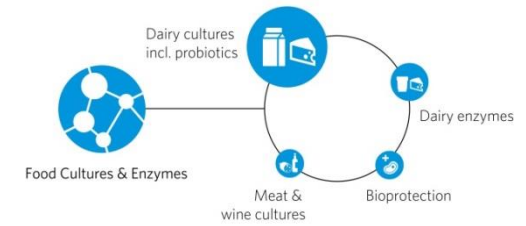
- **Bioprotection:** Strong growth of approx. 30% YTD, with momentum in all segments. Growth of 40% in Q3 driven by both Europe and North America. Next generation under development with expected launch in Q1 of FY18.
- **Plant Health:** Penetration continued with strong growth driven by encouraging field trial results. Pipeline developing as planned.
- **Human Microbiome:** Expanded our strain library with lead candidates targeting gastrointestinal, immune and metabolic health. Both for internal innovation efforts and for partners looking to develop next generation probiotics.
- **Capacity:** Expansion of production capacity for cultures in Copenhagen progressing as planned. First industrial production expected in November.
- **Animal Health:** Strong growth primarily driven by winning customer projects. Market conditions are normalizing in most areas. Integration of NPC ahead of schedule and contributing to margin progression in Q3. Unique product launch in poultry to differentiate offering.
- **Natural Colors:** Profitability improving driven by ongoing optimization initiatives including margin management.



# Regional performance YTD 2016/17



# Food Cultures & Enzymes

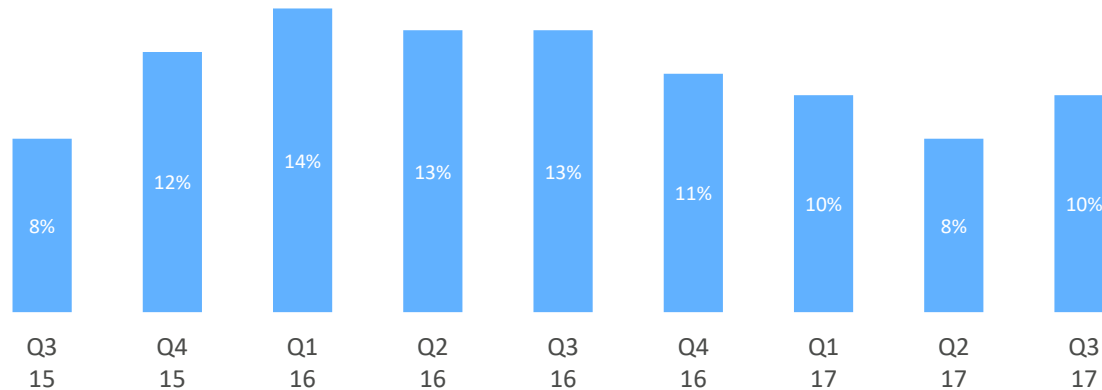


EUR million	Q3 16/17	Q3 15/16	YTD 16/17	YTD 15/16
Revenue	162	144	453	412
Organic growth	10%	13%	9%	13%
EBIT	57	50	152	135
EBIT margin	35.1%	34.8%	33.6%	32.8%
ROIC ex. goodwill			45.0%	41.6%

## Organic growth

- Volume/mix 9%. Strong growth in cheese, fermented milk, meat and wine. Solid growth in probiotics, while enzymes showed good growth
- Growth of approximately 30% in bioprotection driven by the existing segments
- **Q3:** Volume/mix 10%. Strong growth in cheese, fermented milk, meat and wine. Solid growth in probiotics and enzymes. Slight negative impact from EUR-based pricing

## Quarterly organic growth



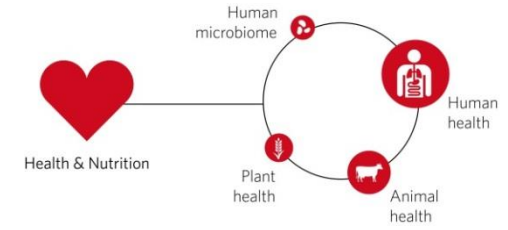
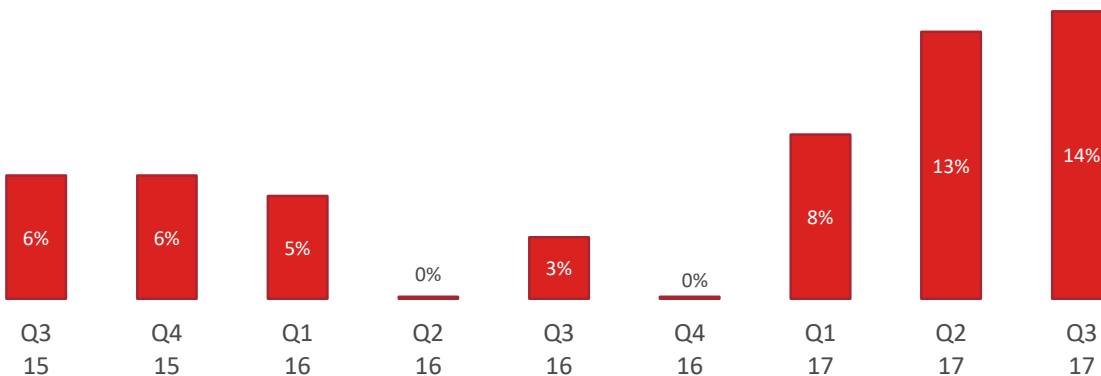
## EBIT margin

- Margin up 0.8%-point on 2015/16
  - Driven by scalability in production
  - Partly offset by initiatives to secure full utilization of existing capacity and higher R&D activity
- **Q3:** Margin up 0.3%-point on 2015/16 driven by scalability in the operating cost base and improved scrap levels. Partly offset by initiatives to secure full utilization of existing capacity and an unfavorable product mix

# Health & Nutrition

EUR million	Q3 16/17	Q3 15/16	YTD 16/17	YTD 15/16
Revenue	59	52	163	134
Organic growth	14%	3%	12%	2%
EBIT	17	14	45	38
EBIT margin	28.3%	27.2%	27.5%	28.3%
ROIC ex. goodwill			26.4%	29.5%

## Quarterly organic growth



## Organic growth

- Volume/mix 12%
- Strong growth in animal health driven by silage and poultry, while dairy cattle declined. Strong growth in plant health and solid growth in human health driven by both dietary supplements and infant formula in APAC
- **Q3:** Strong growth in Animal health and plant health, while human health showed solid growth driven by infant formula
- Market conditions for animal health have normalized in Europe and are improving in North America

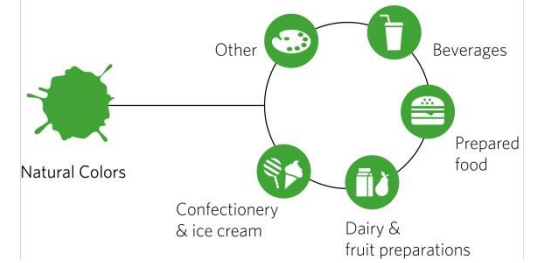
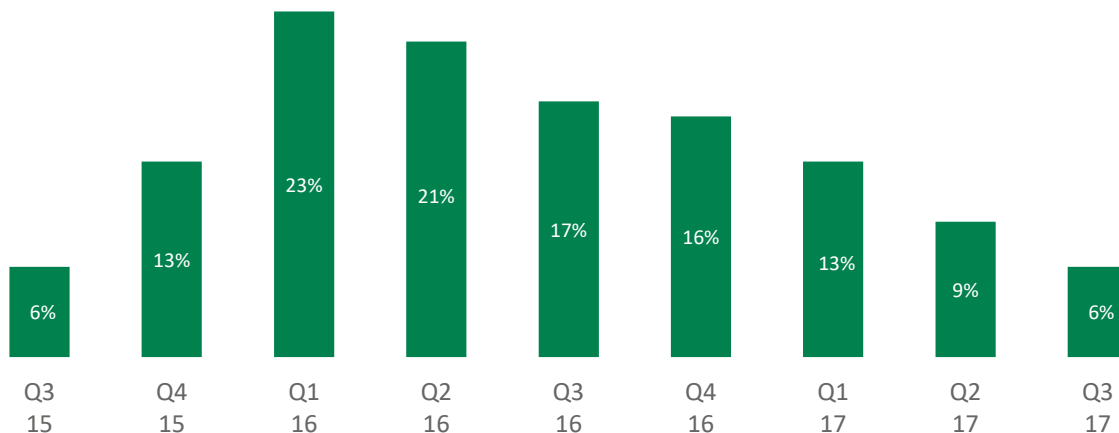
## EBIT margin

- Margin down 0.8%-point on 2015/16
  - Driven by increased activity to support strategic initiatives and higher depreciation & amortization related to acquisitions
  - Partly offset by lower scrap levels in human health production, insourcing of NPC products and discontinuation of NPC traded products
- **Q3:** Margin up 1.1%-points on 2015/16 driven by discontinuation of NPC traded products (will reverse in Q4) and insourcing of NPC products. Partly offset by higher depreciation & amortization related to acquisitions and increased R&D activity

# Natural Colors

EUR million	Q3 16/17	Q3 15/16	YTD 16/17	YTD 15/16
Revenue	58	53	164	148
Organic growth	6%	17%	9%	20%
EBIT	8	7	20	16
EBIT margin	14.1%	12.4%	12.5%	10.8%
ROIC ex. goodwill			27.4%	22.2%

## Quarterly organic growth



## Organic growth

- Volume/mix 5% and price 4%. Price increases reflecting higher raw material prices and general price increases
- Strong growth in natural carotene, annatto and anthocyanin, while carmine volume declined due to profitability initiatives. Growth was anchored across most industries and driven by North America and EMEA
- **Q3:** Volume/mix 5%. Price 1%. Negative price growth in carmine was offset by higher annatto prices

## EBIT margin

- Margin up 1.7%-points on 2015/16
  - Driven by the ongoing optimization initiatives including margin management, operating efficiencies and positive timing from inventories
- **Q3:** Margin up 1.7%-points on 2015/16
  - Driven by margin management and positive mix from coloring foodstuff



# Income statement

EUR million	YTD 16/17	YTD 15/16
Revenue	780	693
<i>Organic growth</i>	10%	13%
<i>EUR growth</i>	12%	11%
<i>Gross margin</i>	53.8%	52.8%
R&D expenses	(52)	(45)
Sales & marketing expenses	(100)	(83)
Administrative expenses	(54)	(50)
Other income/expenses	4	1
EBIT before special items	217	189
<i>EBIT margin b.s.i.</i>	27.9%	27.2%
Special items	(1)	(8)
EBIT	216	181
<i>EBIT Margin</i>	27.7%	26.1%
Net financials	(11)	(11)
Income tax	(49)	(43)
Profit for the period	156	128

## Highlights

### Revenue

Volume/mix 9 %

Price 1 %

**Organic growth 10 %**

Currency 0 %

Acquisitions 2 %

**EUR growth 12 %**

### Gross margin

- Up 1.0%-point to 53.8% driven by improvements in all business areas, specifically H&N and NCD

### EBIT b.s.i.

- Up EUR 28 million and margin improved by 0.7%-point to 27.9%

### Special items

- EUR 1 million related to the acquisition and integration of LGG® and the announced closure of the acquired factory

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# Cash flow and balance sheet

EUR million	YTD 16/17	YTD 15/16
<b>Cash flow</b>		
Operating activities	160	115
Operational investing activities	(69)	(61)
Free operating cash flow	91	54
Acquisition activities	(73)	(169)
Free cash flow	18	(115)
<b>Balance sheet</b>		
Total assets	1,792	1,662
Equity	799	667
Net interest-bearing debt	629	666
<b>Key figures</b>		
<i>Net working capital</i>	19.9%	21.0%
<i>Capital expenditure</i>	9.2%	8.8%
<i>ROIC excluding goodwill</i>	37.4%	36.0%
<i>NIBD/EBITDA</i>	1.8x	2.1x

## Highlights

### Cash flow

- Cash flow from operating activities improved by EUR 45 million
- Cash flow used for operational investing activities increased by EUR 8 million, primarily driven by capacity expansion for culture production
- Acquisition of LGG® at a purchase price of EUR 73 million

### Key figures

- Capital expenditures corresponded to 9.2% of revenue, up from 8.8% in 2015/16. High investment level expected in Q4
- ROIC excluding goodwill up 1.4%-points
- NIBD/EBITDA down to 1.8x

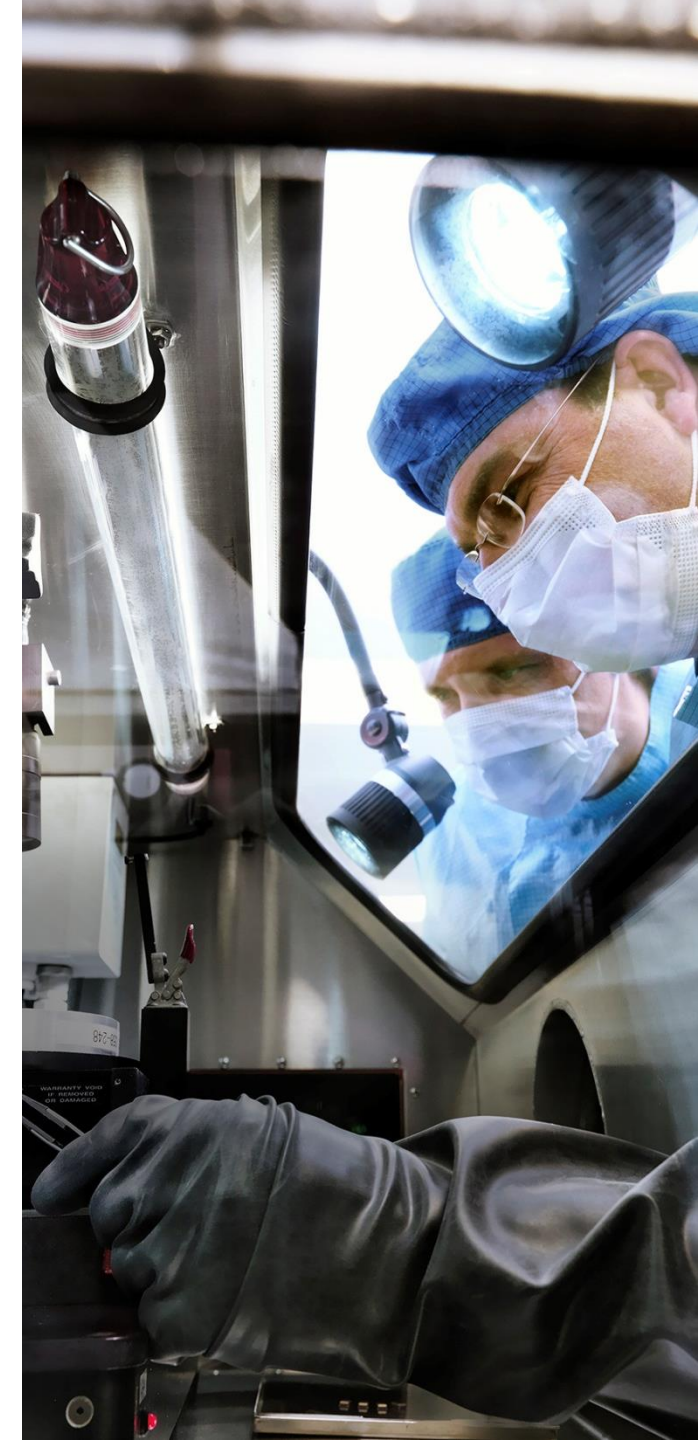
# Outlook for 2016/17

Organic growth target narrowed to the upward end of range

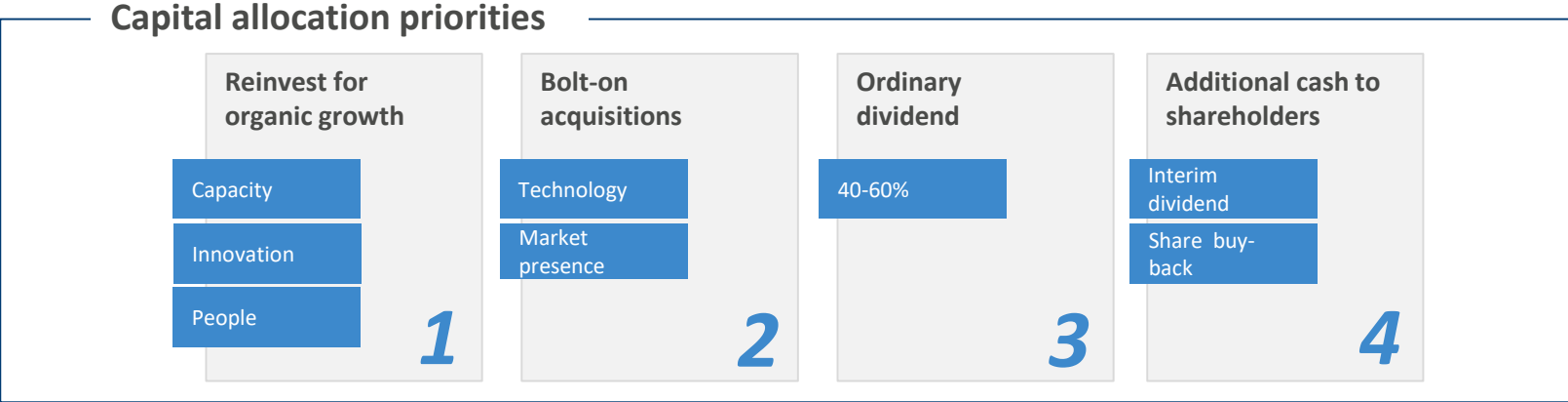
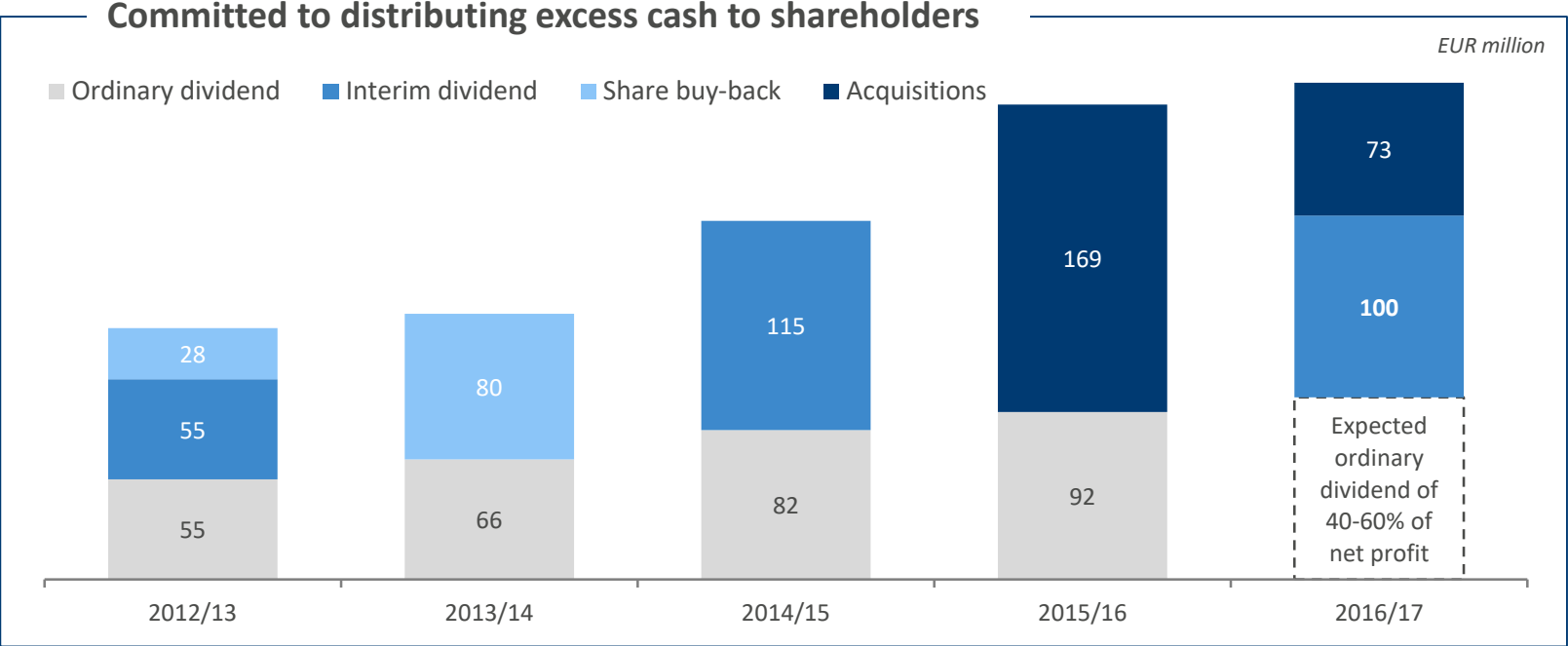
	Realized 2015/16	Outlook 2016/17, April 6	Outlook 2016/17, July 5	Long-term financial ambitions <sup>1</sup>
Organic revenue growth	12%	8-10%	9-10%	8-10%
✓ Food Cultures & Enzymes	12%	<i>In line w/ L.T.</i>	<i>Slightly above L.T.</i>	7-8%
✓ Health & Nutrition	2%	<i>In line w/ L.T.</i>	<i>In line w/ L.T.</i>	+10%
✓ Natural Colors	19%	<i>In line w/ L.T.</i>	<i>In line w/ L.T.</i>	Around 10%
EBIT margin b.s.i.	28.2%	Slightly above 2015/16	Slightly above 2015/16	Increasing <sup>2</sup>
Free cash flow before acquisition, divestments and special items	EUR 175 million	Around the same level as in 2015/16	Around the same level as in 2015/16	Increasing <sup>2</sup>

<sup>1</sup> Baseline 2014/15

<sup>2</sup> Over the period



# Interim dividend of EUR 100 million in 2016/17



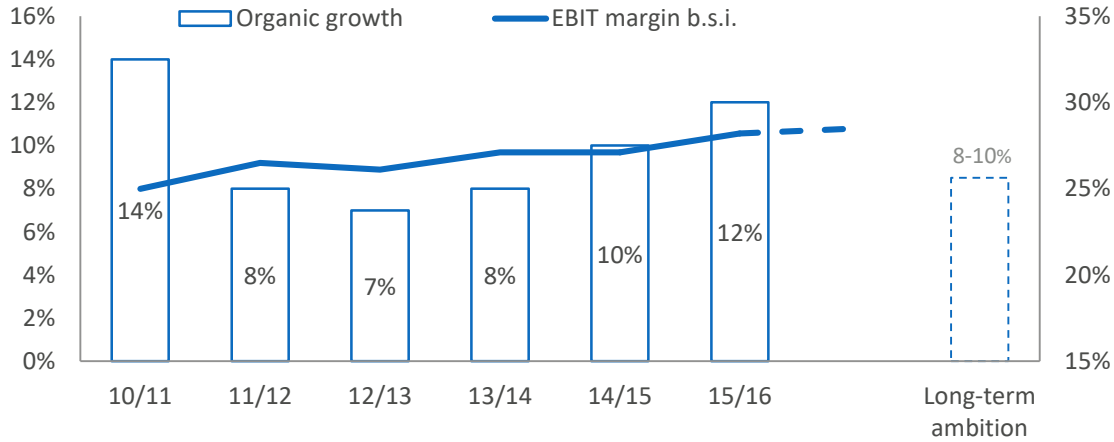




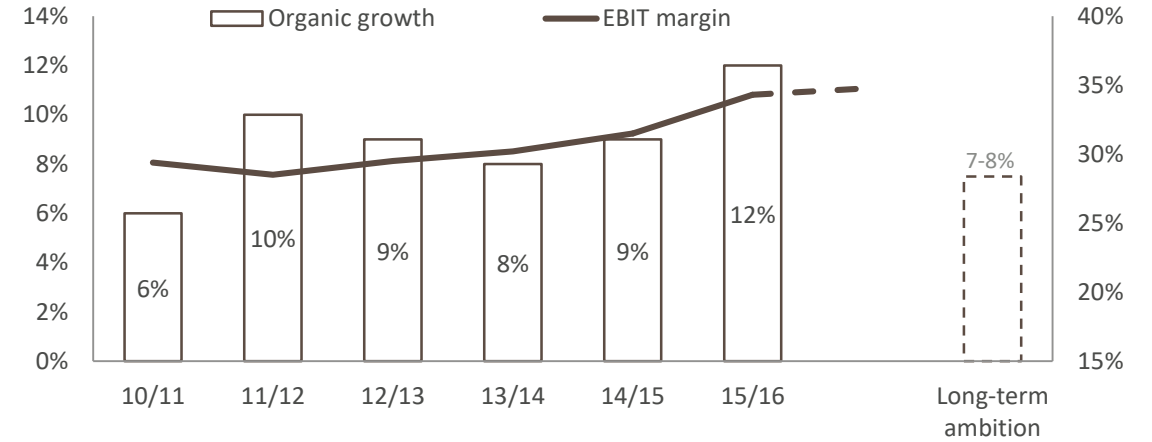
Back up

# Organic growth and EBIT margin history

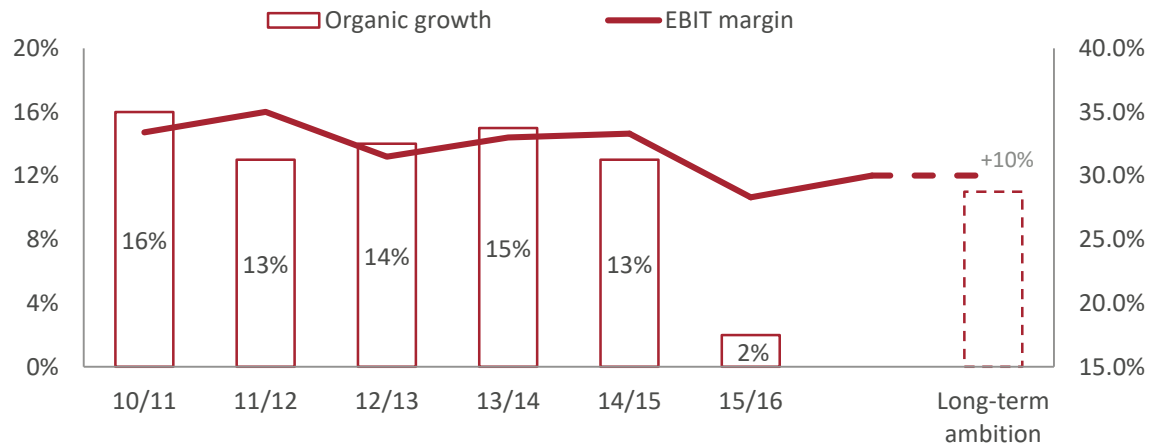
## Group



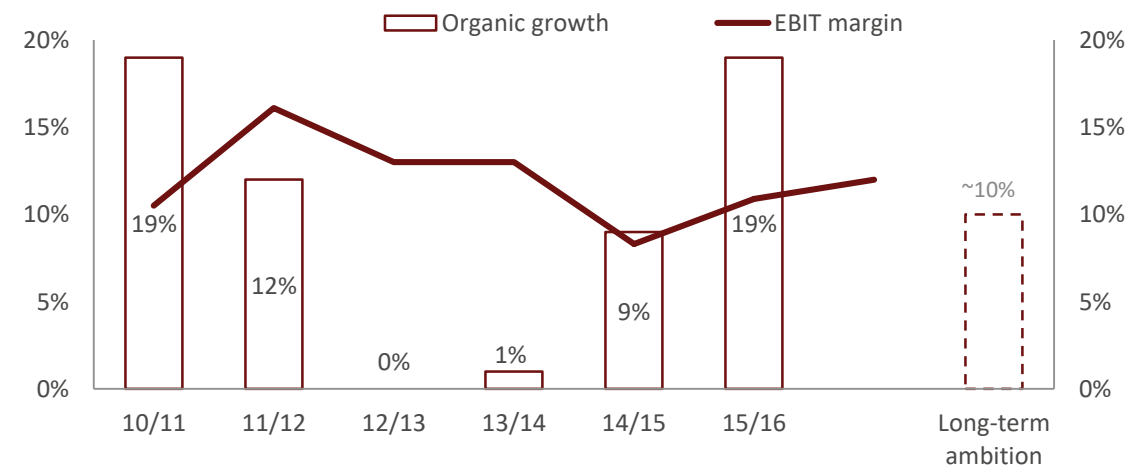
## FC&E



## H&N



## NCD



# Definitions

## **Organic growth**

Adjusted organic revenue growth is calculated based on the reported International Financial Reporting Standards revenue adjusted for sales reductions (such as commissions and sales discounts), further adjusted for acquisitions and divestitures in order to standardize year-on-year comparisons and measured in local currency.

## **Special items**

Special items comprise material amounts that cannot be attributed to recurring operations, such as income and expenses related to divestment, closure or restructuring of subsidiaries and business lines from the time the decision is made. Also classified as special items are, if major, gains and losses on disposal of subsidiaries not qualifying for recognition as discontinued operations in the income statement. Material non-recurring income and expenses that originate from prior years or from projects related to the strategy for the development of the Group and process optimizations are classified as special items.

## **EBIT (Earnings before interest & taxes)**

EBIT is calculated as profit for the period before financial income and expenses and corporate income taxes. EBIT also excludes income and expenses from discontinued operations.

## **Free cash flow**

Free cash flow is a measure of financial performance calculated as operating cash flow less net capital expenditures.

## **Invested capital**

Invested capital is calculated as intangible assets, property, plant and equipment, trade receivables and inventories less trade payables.

## **ROIC (return on invested capital) excluding goodwill**

Operating profit as a percentage of average invested capital excluding goodwill.



# Share details

## Share Data

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Number of shares of DKK 10 (1 September 2016)	131,852,496
Own shares (31 May 2017)	325,461
Classes of shares	1
Voting & ownership restrictions	None

## NASDAQ Copenhagen

ISIN code	DK0060227585
Ticker symbol	CHR
Sector	Health Care

## OTC ADR Level 1 program (BNY Mellon)

DR Symbol	CHYHY
CUSIP	12545M207
DR ISIN	US12545M2070
Ratio	DR:ORD 2:1
Effective Date	Jan 27, 2014
Industry	General Industrials

## Financial Calendar 2016/17

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25 October 2017	Annual Report
28 November 2017	Annual General Meeting

## Contact Chr. Hansen

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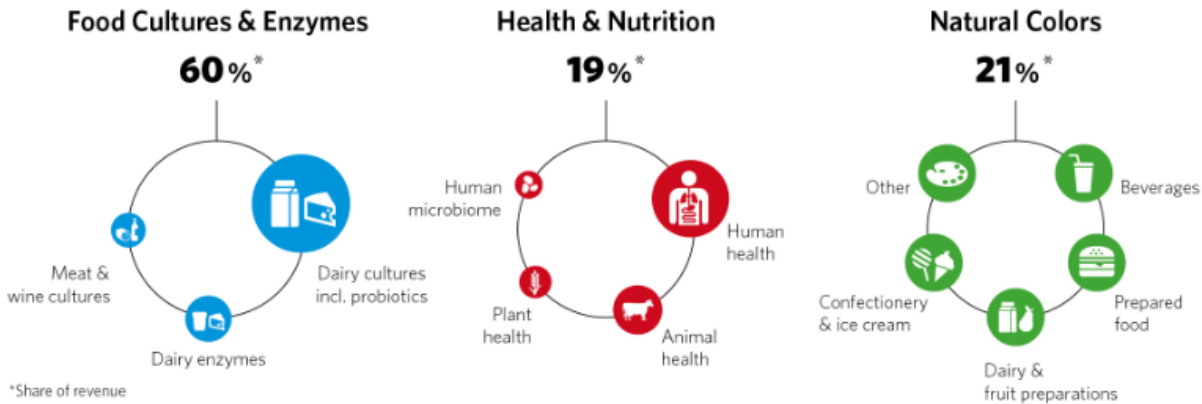
# Company Information

# Chr. Hansen – Key Characteristics

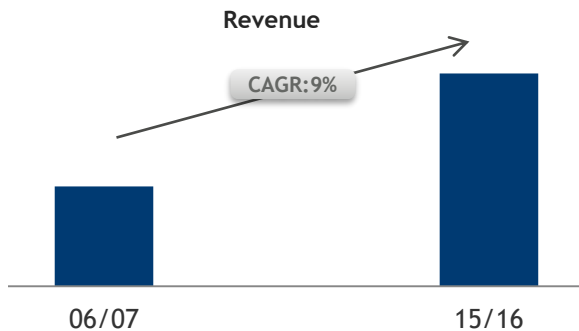
## Founded in 1874

### Focused business areas

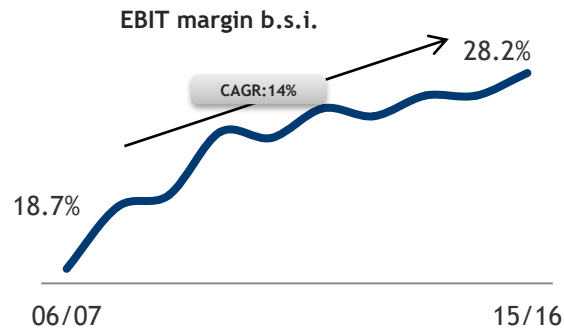
#### THREE BUSINESS AREAS - MULTIPLE PRODUCT CATEGORIES



#### Attractive growth opportunities



#### Strong profitability



### Distinctive capabilities

	Innovation	Production process & capacity	Customer relations
Food cultures	✓	✓	✓
Bioprotection	✓	✓	✓
Dairy enzymes	✓	✓	✓
Human health	✓	✓	✓
Animal health	✓	✓	✓
Human microbiome	✓	✓	✓
Plant health	✓	✓	✓
Natural Colors	✓	✓	✓

# Strategic advantages in Food Cultures & Enzymes

## Core competences creates resilient position in niche industry

### Strong R&D platform

- Largest strain bank in the world
- Capability to identify and map the genomes of a bacteria
- Innovative product and process solutions developed in cooperation with customers

### Unique production setup

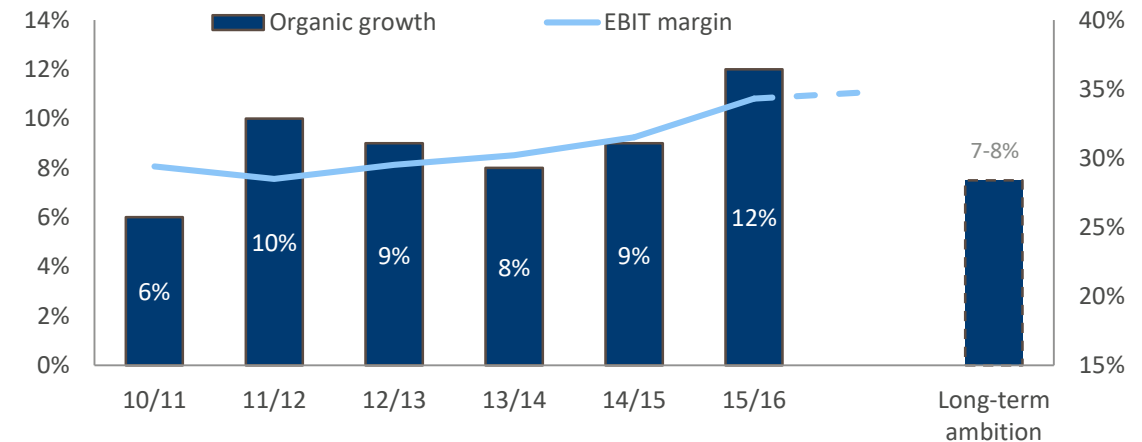
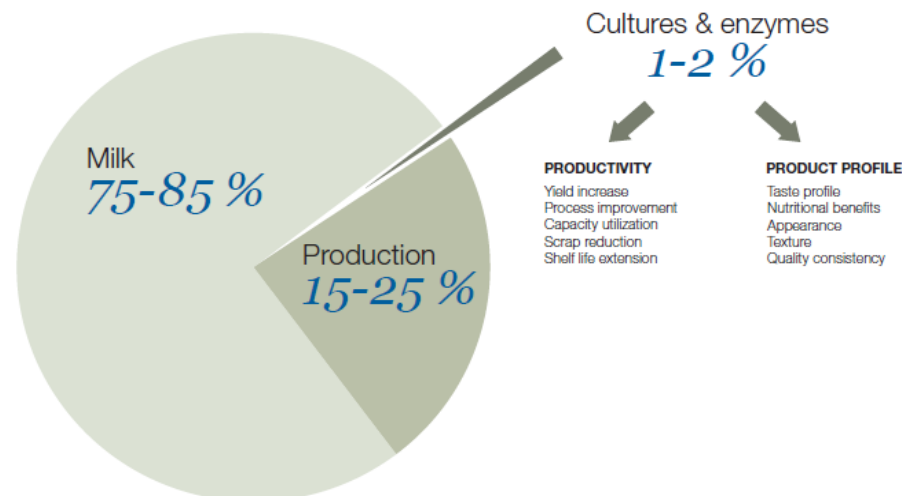
- Largest and most sophisticated bacterial culture production in the world
- Global market share of 45% secures volume which drives scalability
- Technical know-how around up-scaling and large scale fermentation

### Deep customer intimacy

- Done business with all major dairies for many years. All industrialized dairies are mapped
- Local technical and application people in all countries
- Insight in the production processes of the individual dairy plants

## Strategic ingredients

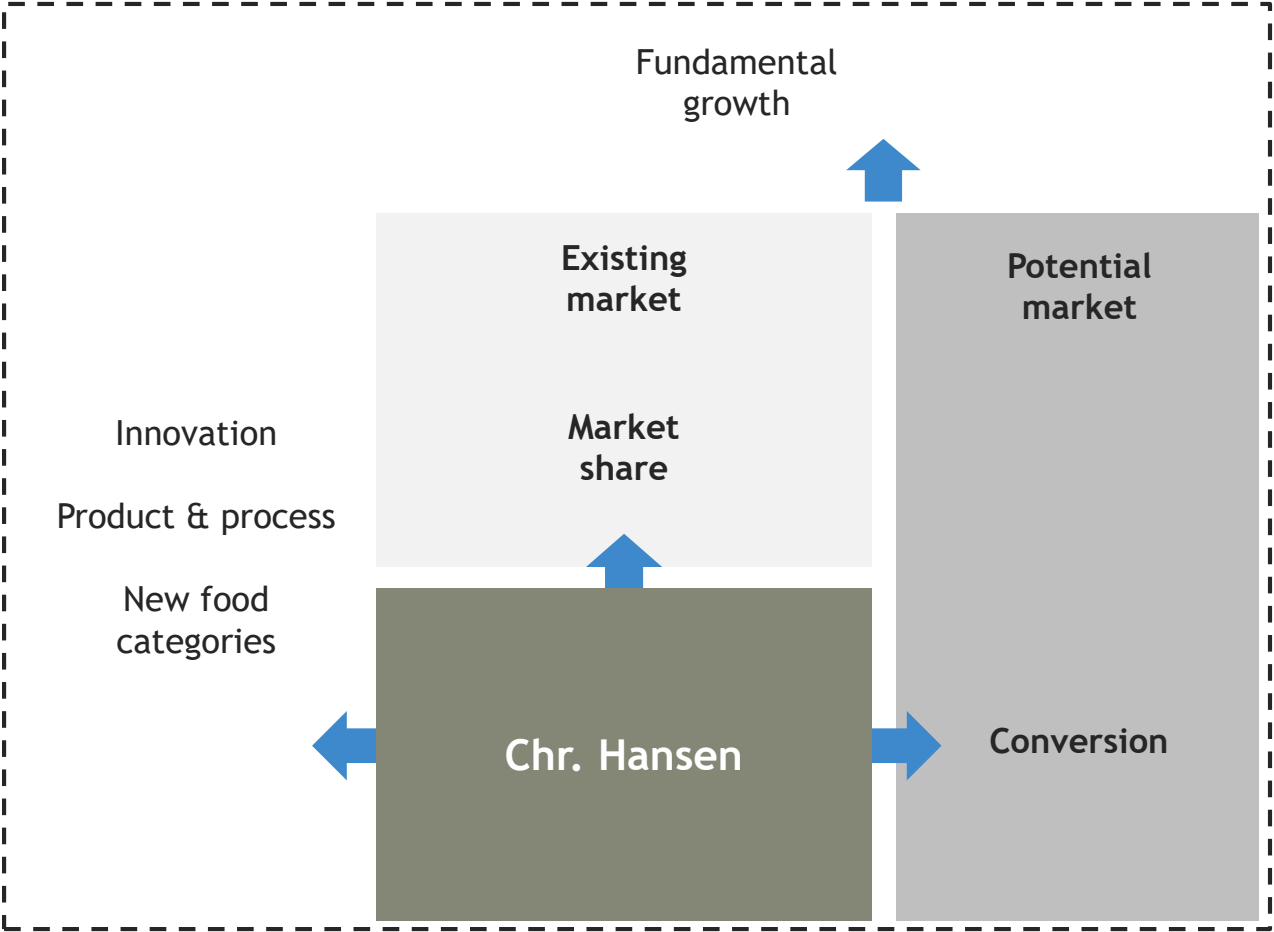
COST OF PRODUCING A CHEESE



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# Growth opportunities in Food Cultures & Enzymes



### Growth components

- Fundamental growth in dairy markets
- Conversion from bulk starters to DVS® solutions
- Innovation incl. bioprotection
- Pricing & market share

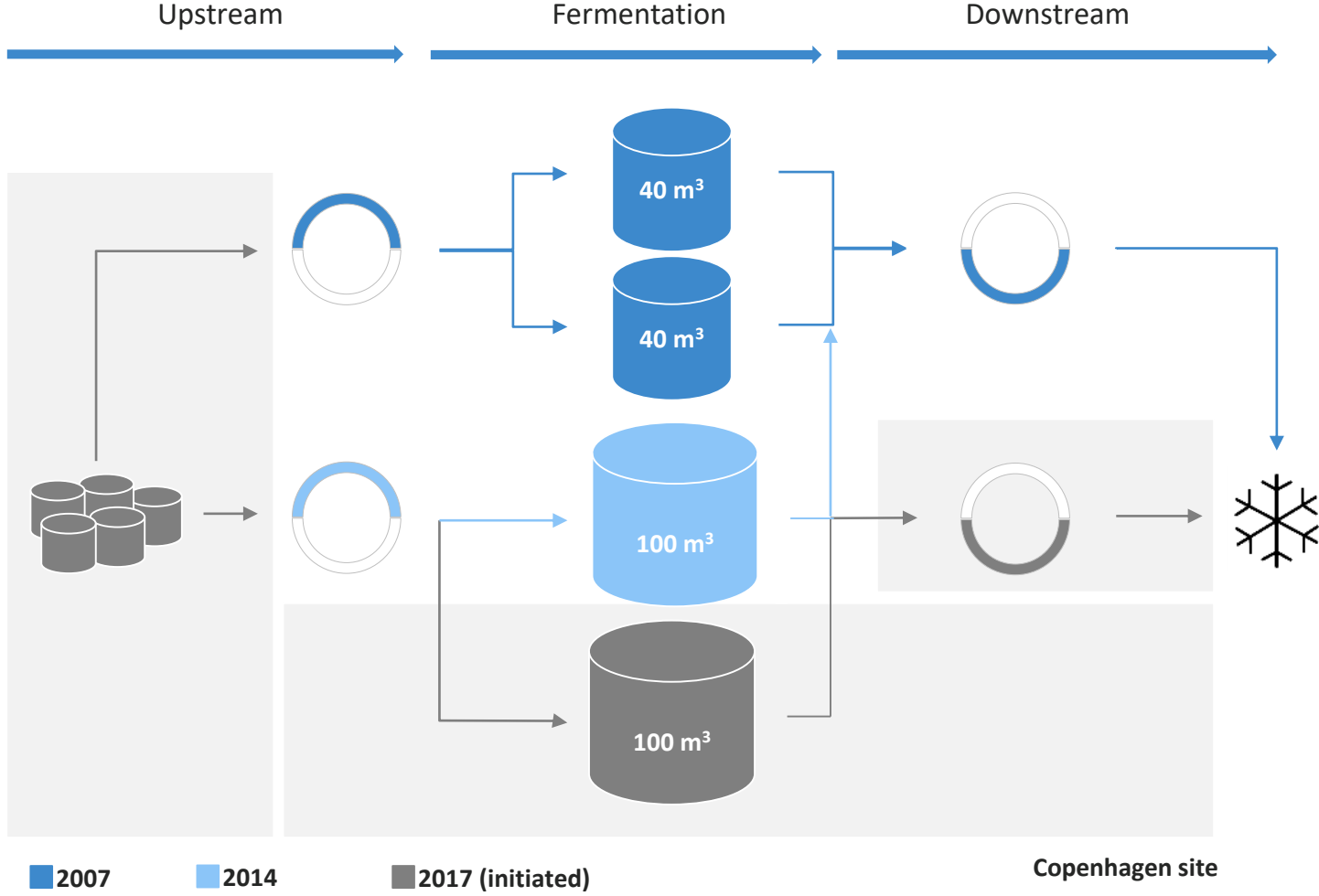
7-8%  
organic growth



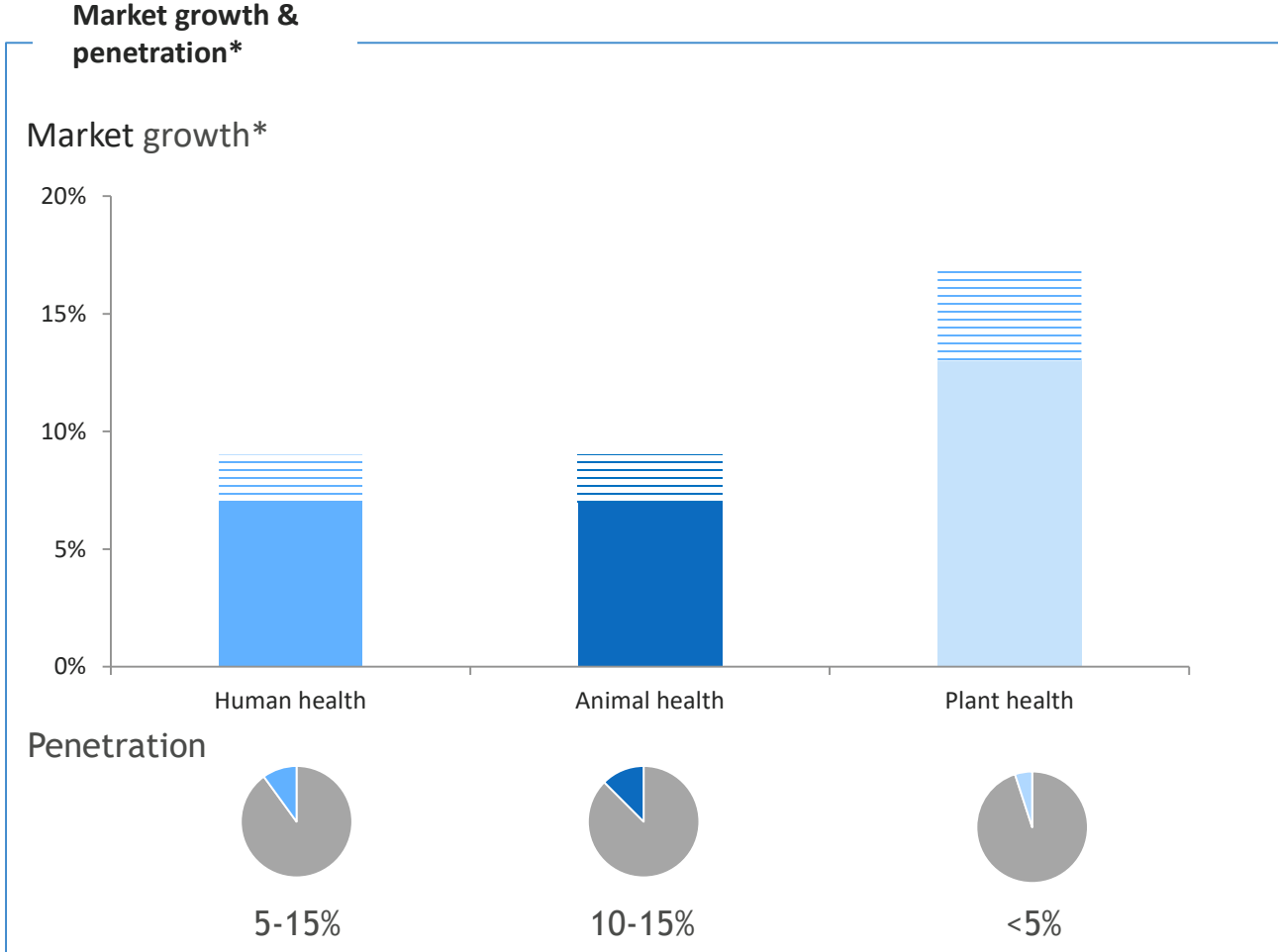


# Industrial culture production footprint in FC&E

- 3 large culture production sites secures supply security and flexibility
- Expansion of Copenhagen plant drives scalability and margin expansion



# Growth opportunities in Health & Nutrition



\* Based on Euromonitor and management estimates

**Growth components**

- Penetration of existing microbial solutions for human, animal and plants
- Addressing new markets and indications areas
- Development of new strains
- Pricing & market share

**>10% organic growth**



# Growth opportunities in Human Health

## The best value proposition...

IT WORKS



- Only strains with documented health benefits on e.g. GI and Immune
- Further benefits via other ingredients
- Dosage forms that ensure efficacy and appeal to consumers

IT LASTS



- 2 years at 25°C for finished products
- 3 years at 30°C for selected products
- Stability data from blends to packed products

IT'S DIFFERENT

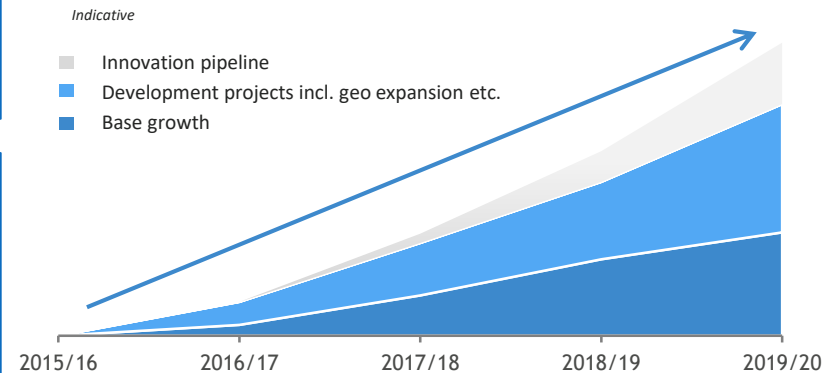


- Comprehensive capabilities for customization
- Unique technology platforms
- Stand-out product concepts

## ...Offers opportunities to “Win with the winners”...

- Supporting 8 of the top global consumer health players
- Co-development of solutions create long-term relationships
- Developing solutions that allow customers to differentiate in the high-end market based on our unique selling points

## ...and secure future organic growth



# Growth opportunities in Animal Health

## Strong value proposition...



- Efficiency of milk production and better rumen health (dairy cows)
- Increased feed conversion (beef)



- Significant reduction in dry matter loss
- Improved aerobic stability and fermentation



- Reduction in piglet mortality
- Increased calorie efficiency (reduced cost with same result)



- Increased feed digestibility and production boost
- Defense against pathogens
- *But increasing competition*

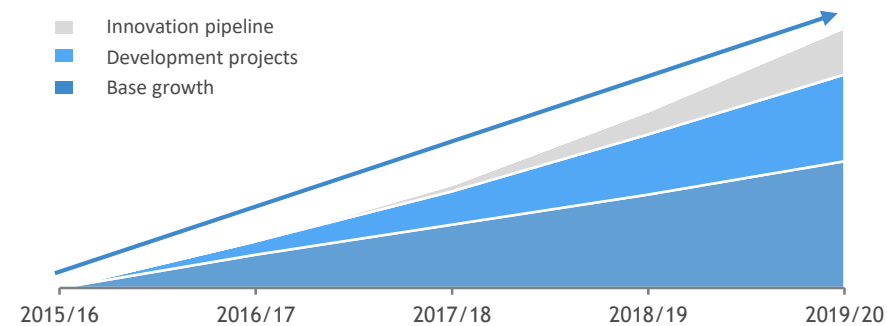
## ...Offers opportunities to deliver customer value...

- Boosting efficiency and profitability for farmers and producers
- Meeting all regulatory requirements for safety, stability, and efficacy
- Address concern around use of antibiotic growth promoters

## ...and secure future organic growth

Indicative

- Innovation pipeline
- Development projects
- Base growth





# Growth opportunities in Plant Health

We bring unique and distinctive capabilities pursuing two paths



## Bacterial production at scale

- Worlds largest producer of live bacteria
- Produce over 400 different bacterial strains



## Bacteria stabilization

- Agrochemicals need long shelf life at poorly controlled temperatures
- Chr. Hansen is world leading in stabilization



## Strain improvement

- >50 years of expertise in non-GMO strain improvement in close collaboration with customers understanding their application



## Alliance with FMC

- Exclusive R&D partner since 2013
- Chr. Hansen provides unique development capabilities
- FMC leads scouting, field trials, registration & commercialization
- Investments and profits are shared

## Relationships with agrochemical companies

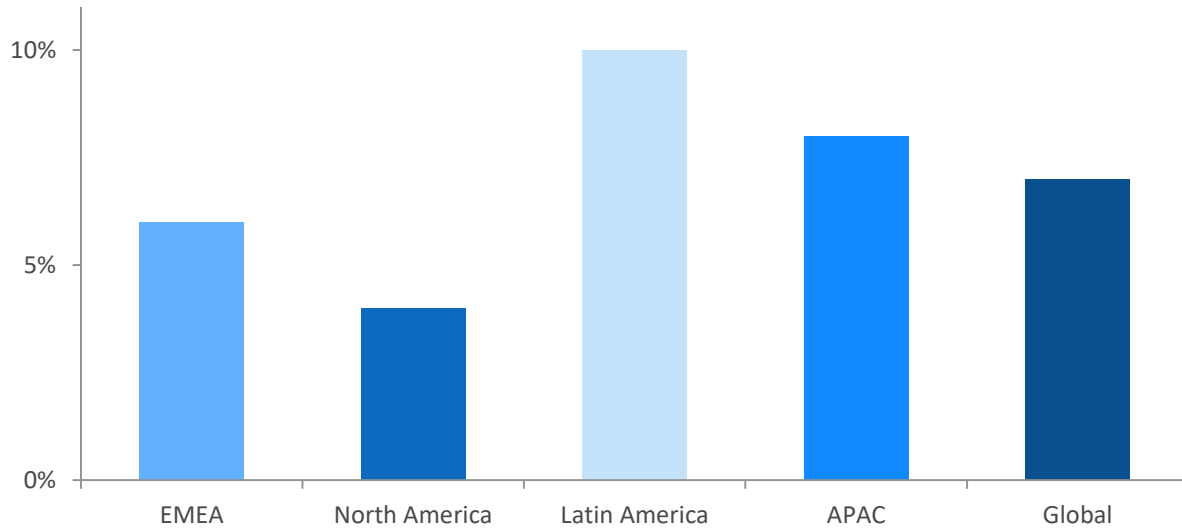
- Custom process development
- Scale-up
- Manufacturing



# Growth opportunities in Natural Colors

## Market growth & penetration\*

### Market growth\*\*



### Conversion



55-60%



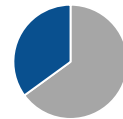
20-25%



25-30%



30-35%



30-40%

## Growth components

- Fundamental growth in food and beverages
- Conversion from artificial to natural ingredients
- Innovation e.g. coloring foodstuff
- Pricing & market share

**Around 10% organic growth**



\* Based on Euromonitor and management estimates

\*\* 2013-2015

# Natures No.1 strategy – 2016 update

## Evolution, not revolution

	1 Fully leveraging the potential of Food Cultures & Enzymes	2 Developing the microbial solutions platform in Health & Nutrition	3 Creating further value in Natural Colors
4 Driving a step change in innovation	<ul style="list-style-type: none"> <li>➤ New platforms for dairy</li> <li>➤ Expand Bioprotection beyond meat and dairy</li> </ul>	<ul style="list-style-type: none"> <li>➤ Expand existing business</li> <li>➤ Develop plant protection</li> <li>➤ Explore &amp; develop human microbiome</li> </ul>	<ul style="list-style-type: none"> <li>➤ Expand FruitMax® range of coloring foodstuff</li> </ul>
5 Reinforcing position in emerging markets	<ul style="list-style-type: none"> <li>➤ Establish direct market presence in key emerging markets</li> </ul>	<ul style="list-style-type: none"> <li>➤ Increase penetration of human and animal health products</li> </ul>	<ul style="list-style-type: none"> <li>➤ Drive US conversion and secure APAC growth</li> </ul>
6 Generating fuel for growth	<ul style="list-style-type: none"> <li>➤ Drive scalability through new capacity in Copenhagen</li> </ul>	<ul style="list-style-type: none"> <li>➤ Reinvest in future growth</li> </ul>	<ul style="list-style-type: none"> <li>➤ Restore profitability</li> </ul>
	<ul style="list-style-type: none"> <li>➤ Continued conversion</li> <li>➤ Commercial excellence</li> </ul>	<ul style="list-style-type: none"> <li>➤ Commercial excellence</li> </ul>	<ul style="list-style-type: none"> <li>➤ Continued conversion</li> <li>➤ Commercial excellence</li> </ul>



# Strategic direction

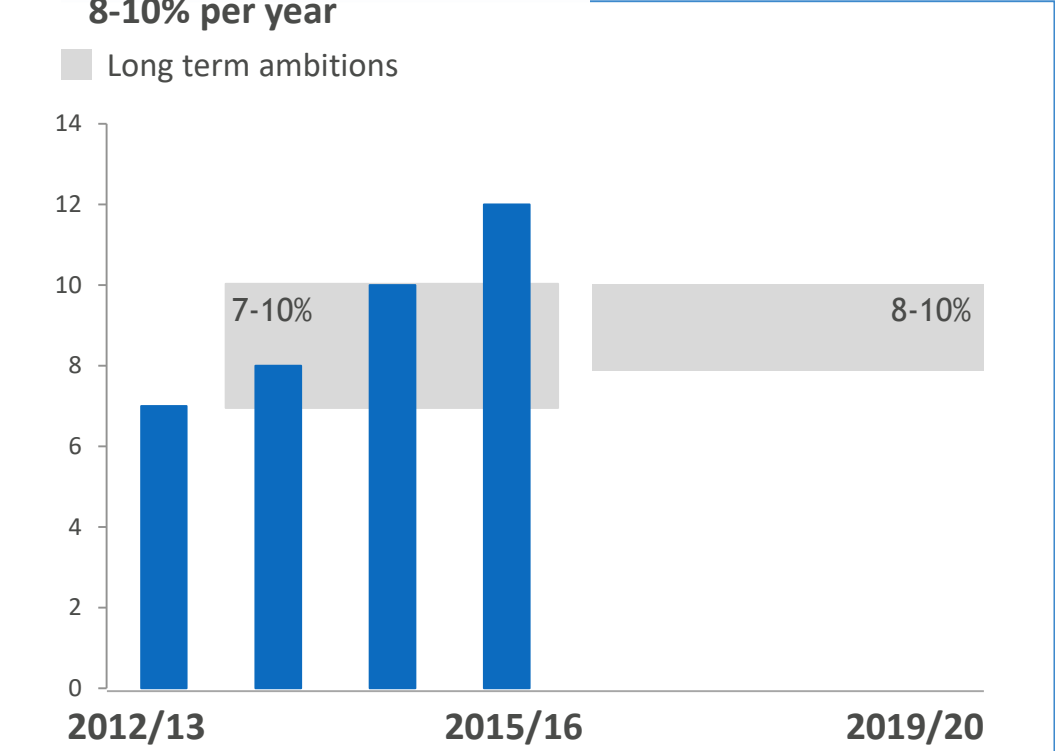
## What we will **still NOT** do

- X** Pursue acquisitions in unrelated areas
- X** Expand into products outside microbials/natural colors
- X** Attempt to become a full fledged pharma player
- X** Lose focus on cost control & operational efficiency

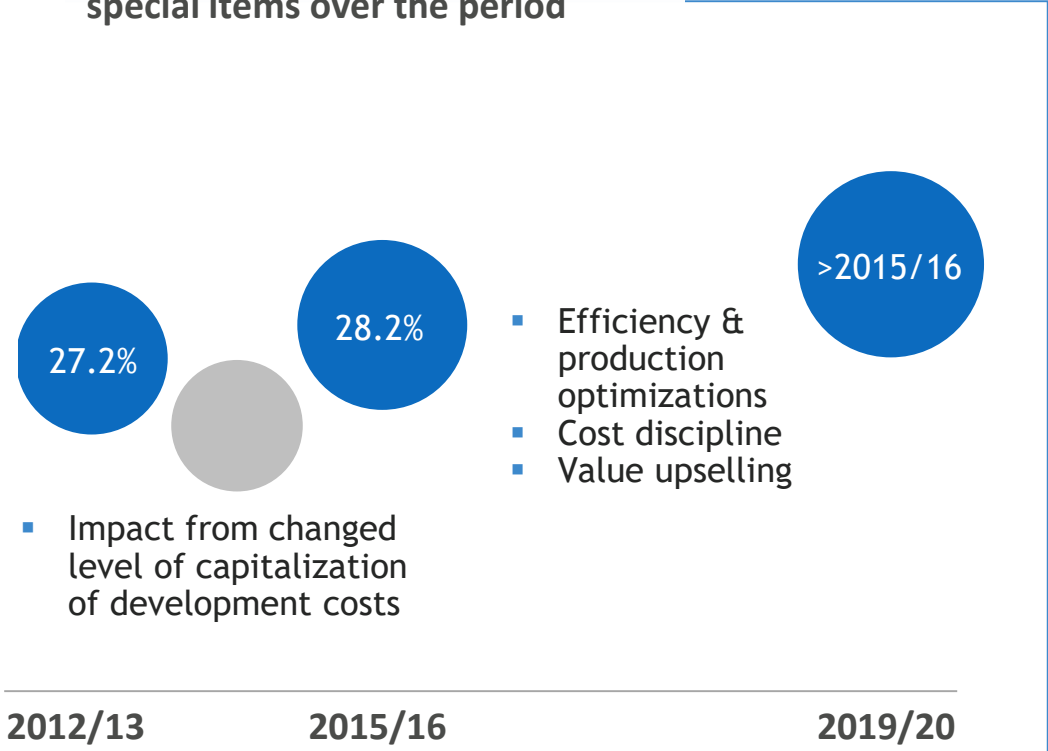


# Securing profitable growth to 2020

## 1 Organic revenue growth of 8-10% per year



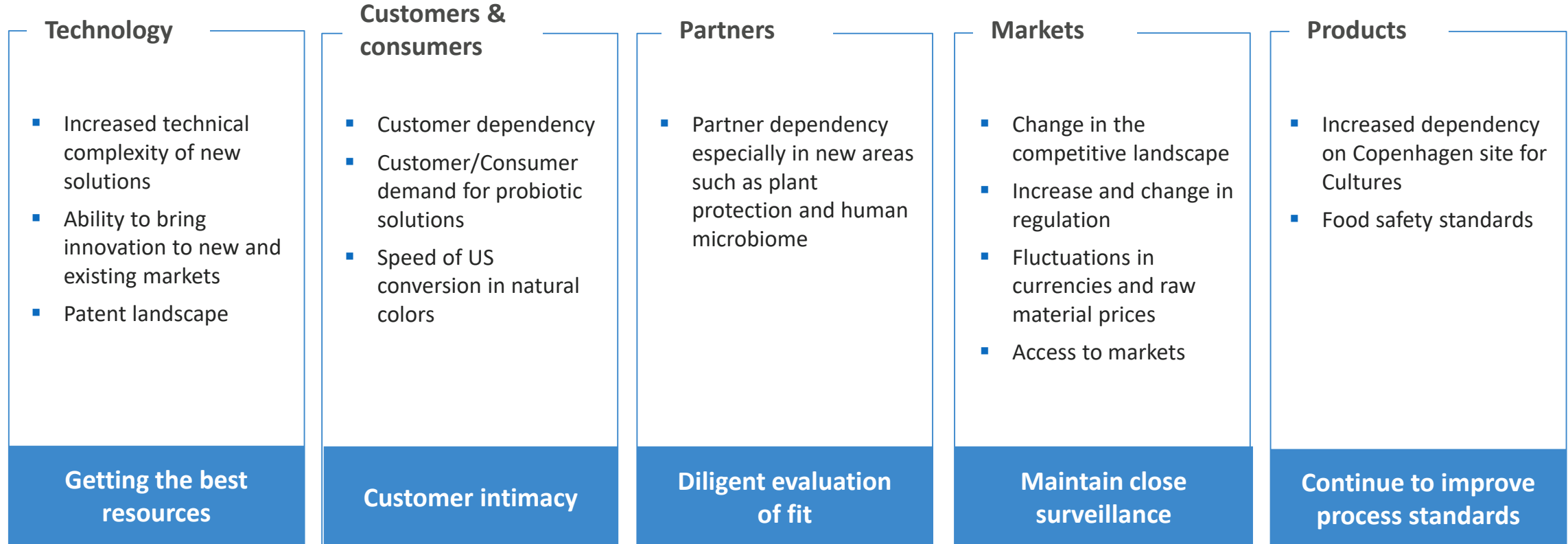
## 2 Increasing EBIT margin before special items over the period



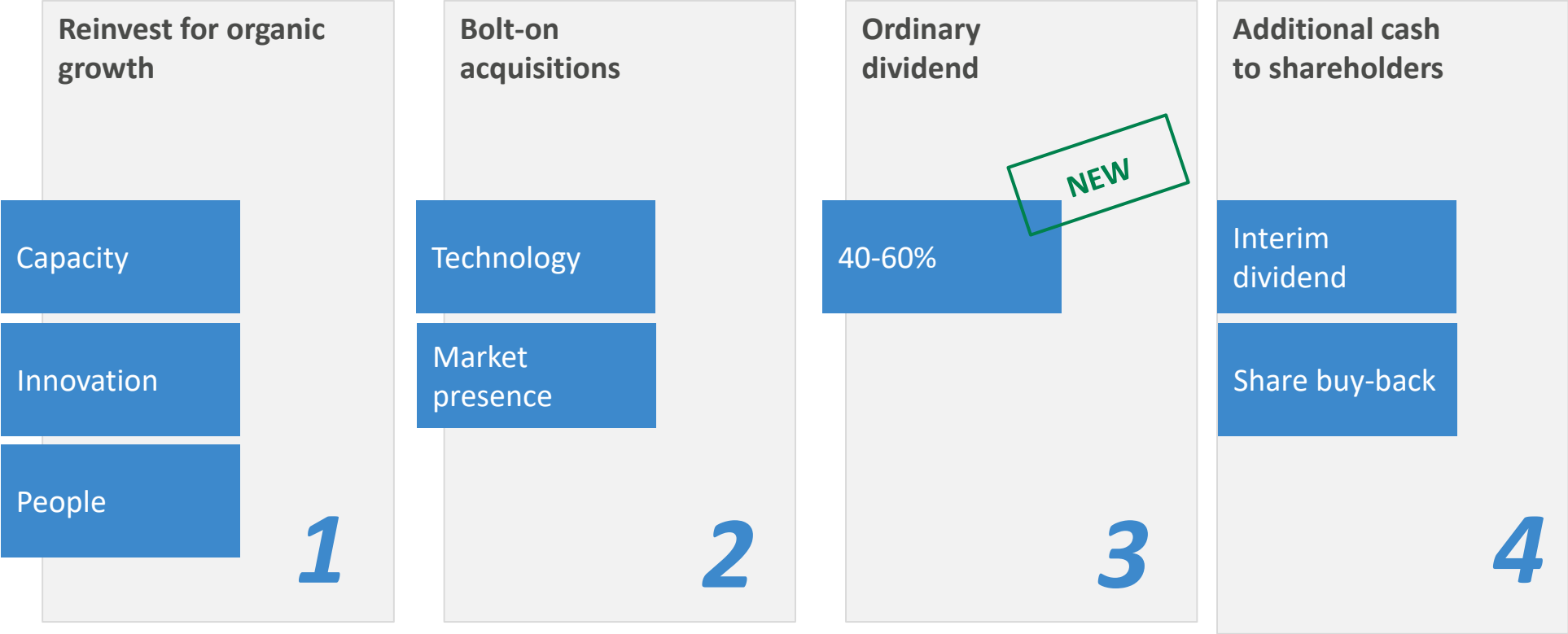
## 3 Increasing free cash flow before acquisitions, divestments and special items over the period



# Key risks to the 2019/20 financial ambition



# Capital allocation priorities



Leverage consistent with a solid investment-grade credit profile

# Chr. Hansen supported by strong megatrends

## The trend



Growing world population and rapid urbanization ✓



Resource scarcity ✓



Increasing health care costs ✓



Demand for cleaner, healthier and more natural products ✓



Technology breakthroughs ✓

## The implication\*

By 2030 almost 2/3 of world population will reside in cities and the middle class will have increased by 2.5 billion people

Global food production will have to increase with 70% by 2050 to support growing world population

Global health spend is estimated at USD 6.5 trillion, with an expected growth rate of 5.3% until 2018

67% of U.S. consumers prefer groceries with fewer and simpler ingredients

Big data and speed of DNA sequencing allow for much faster strain screening and knowledge sharing

## The opportunity

Need for more industrialized produced food & beverages

Need for innovation to improve productivity

Need for cheaper and preventive solutions

Need for better, safer products based on natural ingredients

Open up for faster innovation and new areas such as human microbiome

\*EIU, WHO, The World Bank, IDA, IBRD, Food & Agriculture Organization of the United Nations, ReD, OECD, PwC, E&Y