Chr. Hansen Q2 2018/19 Roadshow presentation
Chr. Hansen named most sustainable company in the world by Corporate Knights

► Independent ranking conducted by Canadian media and research firm Corporate Knights since 2005
► Review of all publicly listed companies with >USD 1bn revenue worldwide (7,500 in total)
► Screening based on 21 quantitative indicators
► Chr. Hansen was named #1 because of the contribution of its product portfolio to the UN Global Goals and its reporting (‘100% score on clean revenue’)
► Corporate Knights’ Global 100 index has outperformed MSCI All Country World Index since inception (2005-2018)
Food Cultures & Enzymes and Health & Nutrition share a common research platform, and production method. The R&D platform is a process of screening, developing and upscaling of microbes. Production is the optimization of recipes, flows and infrastructure for the fermentation of microbes. Together: The Microbial Platform.

AT A GLANCE
We are market and technology leaders in our core business
We develop natural solutions that help to reduce sugar, ensure food safety, improve health, replace artificial ingredients and much more!

**NOLA® Fit** reduces added sugar in yogurt by 2g per 100g yogurt without losing sweetness.

**SAFEPRO®** cultures help to keep meat safe from *Listeria*.

Replace artificial ingredients with our e-number free labeling coloring foodstuffs range **FRUITMAX®**.

**QUARTZO®** and **PRESENCE®** are probiotic plant health solutions that help sugar cane and other crops fight off attacks from nematodes.

**LGG®** has been studied in +300 clinical studies that indicate that the strain may have beneficial effects on immune and gastrointestinal functions.

With **CHY-Max®** dairies can increase cheese output by 0.5% compared to other coagulants (i.e. 100 tons in case of a production volume of 20,000 tons).
Sustainability is at the core of what we do

**Better farming**
We help feed the growing population by promoting sustainable agriculture

Expand reach of natural plant protection by 25m hectares (2025)

**Good health**
We improve global health through healthier, safer and more products

Launch 6 new products with a documented health effect (2022)

**Less waste**
We help customers reduce food waste and improve yield and productivity

Reduce global yogurt waste by 1.2m tons (2022)

82% of Chr. Hansen’s 2017/18 revenue contributes to the UN Global Goals
- reviewed by PWC
**Our Nature’s no.1 strategy: evolution since 2013 – now Sustainably**

<table>
<thead>
<tr>
<th>STRATEGY</th>
<th>FOCUS AREAS</th>
<th>FOCUS AREAS</th>
<th>FOCUS AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive penetration of new innovation</td>
<td><strong>FOOD CULTURES &amp; ENZYMES</strong></td>
<td><strong>HEALTH &amp; NUTRITION</strong></td>
<td><strong>NATURAL COLORS</strong></td>
</tr>
<tr>
<td>- Continue to prioritize core dairy business</td>
<td>- Drive new products for Human Health (incl. Microbiome) and Animal Health</td>
<td>- Expand FruitMax® range of coloring foodstuffs</td>
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<tr>
<td>- Develop adjuncts and adjacencies</td>
<td>- Invest in Plant Health platform to unlock potential of EUR 100m by 2025</td>
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<tr>
<td>- Drive Bioprotection lighthouse to EUR 200m by 2025</td>
<td>- Human Health: Expansion into emerging markets and growth segments</td>
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<td></td>
</tr>
<tr>
<td>Reinforce position in growth markets</td>
<td>- Further strengthen global market presence</td>
<td>- Drive US conversion and secure APAC growth</td>
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<tr>
<td>- Application support in core adjacencies</td>
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<td>-</td>
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</tr>
<tr>
<td>Generate fuel for growth</td>
<td>- Drive scalability in supply chain</td>
<td>- Reinvest in future growth</td>
<td>- Continue drive to restore profitability</td>
</tr>
<tr>
<td>- Digitalize core processes</td>
<td>- Reinvest in future growth</td>
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</table>

**FOCUS AREAS**

- **HEALTH & NUTRITION**
  - Develop the microbial platform

- **NATURAL COLORS**
  - Create further value

- **FOOD CULTURES & ENZYMES**
  - Leverage the full potential
Our three lighthouses address challenges within food safety, agriculture and public health

- **Bioprotection**: Bacterial solutions for food safety and freshness – target of EUR 200m by 2025
- **Plant Health**: Bacterial cultures for crop protection – target of EUR 100m by 2025
- **Human Microbiome**: Joint venture with Lonza in live biotherapeutic products (LBP) contract manufacturing

Lighthouse
Potential revenue of minimum EUR 100m per year

Designated as lighthouse in 2016
Designated as lighthouse in 2013
Designated as lighthouse in 2013
We retain our long term growth guidance with majority of growth coming from core customers and markets.

**Technologies**

**Existing**
- Fundamental market growth, pricing and market share
  - ~4% growth

**New**
- Upselling and innovation in core business
  - 2-3% growth
- Extension into new food categories and near adjacencies
  - <1% growth

**Customers/markets**

**Existing**
- Further conversion of dairies
  - ~1% growth
Upselling novel solutions and increasing wallet size with existing customers is a key focus for 2018/19

Rejuvenate product offerings and up-sell customers to newer, higher priced solutions.

Develop new adjunct uses of cultures and enzymes.

Selling more solutions to each existing customer on average.

Identify paths to outpace volume growth in mature fermented milk markets.

CHY-MAX® Supreme to increase cheese yield by up to 1% compared to the market leading coagulant.

nu-trish® range for fermented plant bases now available with LGG® and BB-12®

Health by probiotics
Bioprotection by FreshQ®
Sugar reduction by NOLA® Fit
Ripening aids by DVS®
FOOD CULTURES & ENZYMES

Our bioprotection journey

Bioprotection business split by category and region

- Dairy
- Meat
- APAC
- LATAM
- EMEA
- NA

2013
Chr. Hansen enters bioprotection market in dairy with launch of FreshQ® brand

Early 2000
Chr. Hansen launches first bioprotection solutions in meat to control Listeria

Late 1990s
First bioprotection solutions emerge

2017/18
Launch of 2nd generation FreshQ® targeted at regions with hotter climates and less reliable cold chains

Today: Unlocking the full potential of the business
- Regional expansion into LATAM and APAC
- Building application knowledge and client relationships in adjacent areas
- Working with authorities on regulatory framework & labelling solutions

2024/25
EUR200m sales target
We continue to roll out the 2nd generation and drive penetration across core food applications

Bioprotection has made strong progress since 2013, and will continue to create long-term revenue optionality

<table>
<thead>
<tr>
<th>Year</th>
<th>Today</th>
<th>Tomorrow</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/13</td>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
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<tr>
<td>13/14</td>
<td><img src="image3.png" alt="Image" /></td>
<td><img src="image4.png" alt="Image" /></td>
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<tr>
<td>14/15</td>
<td><img src="image5.png" alt="Image" /></td>
<td><img src="image6.png" alt="Image" /></td>
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<tr>
<td>15/16</td>
<td><img src="image7.png" alt="Image" /></td>
<td><img src="image8.png" alt="Image" /></td>
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<tr>
<td>16/17</td>
<td><img src="image9.png" alt="Image" /></td>
<td><img src="image10.png" alt="Image" /></td>
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<tr>
<td>17/18</td>
<td><img src="image11.png" alt="Image" /></td>
<td><img src="image12.png" alt="Image" /></td>
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</tbody>
</table>

**Food waste**
Shelf life extension targeting yeasts/mould

**Food Safety**
Additional protection against gram-positive food pathogens (Listeria, Clostridium)
Human Microbiome gaining traction amongst scientists and wider public

Scientific understanding of microbiome is progressing rapidly

- "Conventional" strains are showing higher therapeutic potential than previously anticipated
- +200 preclinical to phase III drug trials ongoing in several indication areas including gastrointestinal diseases, obesity, diabetes, nervous system diseases, oncology, skin disorders, autism and asthma

Sources: PubMed, Google

Microbiome knowledge trickling down to KOLs, doctors & end consumers

Chr. Hansen’s Human Microbiome journey: ‘the far lighthouse’

13/14 - Launch of lighthouse with Nature’s no. 1
- External scientific advisory board founded

14/15 - R&D consortium with leading universities established

15/16 - First commercial partnership entered
- Inauguration of pharma-grade pilot plant

16/17 - Production of first strict anaerobes
- Strain library expanded by 100 novel lead candidates

17/18 - Prota Therapeutics partnership on peanut allergy
- Internal clinical trial on defense against gut damage caused by household painkiller successful

18/19 - Joint venture with Lonza
- Integration of remaining HM into HH

No. of research publications on microbiome

No. of google search queries on microbiome

Sources: PubMed, Google
Chr. Hansen and Lonza establish joint venture to pioneer LBP market

**Emerging market**
- Early mover in very promising market for live biotherapeutic products (LBP)
- EUR 150-200m market potential for clinical supply by 2025; > EUR 1bn for clinical and commercial supply combined by 2035

**Perfect fit**
- Two leading players with strong execution track record
- Best-in-class complementary capabilities and unrivalled know-how in strict anaerobes

**Strong value proposition**
- First pharma contract manufacturer (CDMO) with full supply chain offering for LBP
- Large scale pharma-grade manufacturing capabilities
- Faster route-to-market

**Attractive risk-return profile**
- Phased investment of EUR 90m to be shared equally between the partners over 3 years
- JV expected to be largely self-funding after production set-up has been established

**Fully in line with strategy**
- No changes to 2018/19 outlook and 2021/22 long-term financial ambition
- Capacity to distribute excess cash to shareholders modestly reduced for the next 3 years

Closing expected for Q1 2019/20 subject to merger control clearance

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1 Chr. Hansen will account for the JV interest using the equity method in its consolidated financial statements
Joint venture to become partner of choice for LBP contract manufacturing

**50/50 joint venture** with headquarters in Basel

- **1** EUR 45m investment
  - Facilities in Hørsholm & Basel for pre-clinical to phase II projects
- **2** EUR 45m investment
  - New site for phase III projects and initial commercial supply
  - Further expansion for commercial supply

**Faster route-to-market**
- Drug substance and product development out of one hand increases speed-to-market and chance of ‘right-first-time’

**Large scale manufacturing capabilities**
- Full supply chain offering from development to commercial CDMO with cGMP-compliant manufacturing set-up to be established

**Strong expertise in LBP pharma and strict anaerobes**
- Drawing on unrivalled capabilities from two global experts; first end-to-end offering for strict anaerobic LBPs

**Partner with high reputation and proven track record**
- Same partner throughout the project lifecycle allows customers to focus on discovery

**Strong value proposition for pharma and biotech: Joint venture to address unmet customer needs**
**Human Health and Microbiome to operate twofold going forward**

**Joint venture with Lonza**

**to pioneer market for bacteria-based pharmaceuticals**

- End-to-end contract manufacturing for live biotherapeutics
- Full supply chain offering from development to commercial CDMO including strict anaerobic capabilities
- Market potential of EUR150-200m for clinical supply by 2025 and of > EUR 1bn for clinical and commercial supply combined by 2035

**Human Health**

**to bring microbiome-based probiotic health solutions to life in dietary supplements and infant nutrition**

- Execute product pipeline and develop new concepts for dietary supplements and infant formula
- Development and commercialization of strain X
- Drive R&D for other application areas such as women’s health and infant microbiome

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**CDMO commercial**

**CDMO phase III**

**CDMO pre-clinical to phase II**

**Pharma**

**End market**

**Dietary supplements & infant nutrition**

**Type of bacteria**

- **Conventional strains**
  - Gut & immune health
  - Infant
  - Women
  - Metabolic & other novel health areas

- **New strains**
  - LGG®
  - BB-12®
  - L. Acidophilus 98®
  - LA-5®
  - Strain X

**Strict anaerobes**

**Market potential of EUR150-200m for clinical supply by 2025 and of > EUR 1bn for clinical and commercial supply combined by 2035**
HEALTH & NUTRITION

Potential to increase penetration of microbial solutions

Attractive market growth driven by megatrends

Mega-trends
- Growing world population and rapid urbanization
- Increasing scientific evidence of health benefits from “good bacteria” (and KOL/consumer awareness)
- Resource scarcity creates productivity squeeze for customers
- Need to reduce antibiotic growth promoter usage in livestock production
- Pressure to curb chemicals usage in crop production

Opportunities to increase penetration
- 5-15% Microbial penetration
- 10-15% Microbial penetration
- <5% Microbial penetration

Source: Euromonitor and management estimates
Animal Health to further strengthen route-to-market globally

**North America**
- Direct route-to-market
- Introducing our newest innovations

- >60% of revenue\(^1\)
- 16% of global meat and dairy production

**EMEA**
- Optimizing our business partner relationships
- Launching new products; Gallipro Fit and Bovamine

- <20% of revenue\(^2\)
- 37% of global meat and dairy production

**LATAM**
- Combining direct sales and business partner network
- Launching new products in cattle and poultry

- <10% of revenue\(^3\)
- 14% of global meat and dairy production

**APAC**
- New business partners
- More dedicated resources on the ground
- Growing portfolio

- <10% of revenue\(^3\)
- 33% of global meat and dairy production

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\(^1\) Fiscal Year 2017

Source: FAOSTAT, tons of meat/dairy produced in 2016 (cattle, poultry, swine)
Plant Health to unlock a potential of EUR 100m revenue by 2025

Market opportunity in crop protection, % growth (CAGR 2018-21)

- Total crop protection: 2.5%
- Biologicals: > 10%
- Microbials: 13-17%

>EUR 50bn total global crop protection sales

<table>
<thead>
<tr>
<th>Penetration in %</th>
<th>≈5%</th>
<th>≈2%</th>
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</thead>
<tbody>
<tr>
<td>Focus crops, m hectares harvested in 2017</td>
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</tr>
</tbody>
</table>

- Sugar cane: 26MH
- Soy: 124MH
- Corn: 197MH

Ambitions of Plant Health

- Today: On market primarily in South America (Brazil)
- 2019/20: Expansion in North America
- 2024/25: Presence in all major geographies
- Ramping up investments in capacity, discovery, and tech support

EUR 100m
Unlocked potential by 2025

Source: Phillips McDougall, Faostat, Markets&Markets
Natural Colors presents an attractive growth opportunity

Key messages

Attractive growth potential from conversion and coloring foodstuffs

Transformation project completed

Limited synergies between Natural Colors and our microbial platform

Current market overview

NORTH AMERICA
Market value EUR ~150m
Conversion volume ~25%

EMEA
Market value EUR ~500m
Conversion volume ~60%

LATAM
Market value EUR ~100m
Conversion, volume ~25%

APAC
Market value EUR ~225m
Conversion volume ~30%

GLOBAL
Market value EUR ~1,000m
Conversion volume ~35%

5-7%
Global market growth

Main trend and projected value

Demand for cleaner, healthier and more natural products

Projected 2030 market value of EUR 2.0 - 2.5bn

Source: Euromonitor and management estimates.
Note: Market value measured as Food & Beverages Natural Colors including Coloring Foods, and excluding Caramel colors (approximately EUR 200m)
FINANCIAL PERFORMANCE

Great track record of financial performance

Revenue in EUR m / organic growth, %

Free cash flow before special items and acquisitions in EUR m / CAGR, %

EBIT before special items and acquisitions in EUR m / margin, %

Return on invested capital in EUR m / ROIC, %

Great track record of financial performance
FINANCIAL PERFORMANCE

Three complementary businesses with strong fundamentals

FOOD CULTURES & ENZYMES

HEALTH & NUTRITION

NATURAL COLORS

FINANCIAL PERFORMANCE

Three complementary businesses with strong fundamentals

1. FOOD CULTURES & ENZYMES
   - Organic revenue growth: 8% (13/14), 9% (14/15), 12% (15/16), 9% (16/17), 12% (17/18)
   - EBIT margin: 30.2%, 31.5%, 34.3%, 34.5%, 34.3%
   - ROIC ex. goodwill: 34.6%, 40.3%, 46.2%, 47.1%, 45.6%
   - 59% of Group sales

2. HEALTH & NUTRITION
   - Organic revenue growth: 15% (13/14), 13% (14/15), 2% (15/16), 14% (16/17), 8% (17/18)
   - EBIT margin: 33.0%, 33.3%, 30.6%, 28.3%, 29.2%
   - ROIC ex. goodwill: 31.0%, 29.0%, 29.8%, 29.2%, 29.0%
   - 21% of Group sales

3. NATURAL COLORS
   - Organic revenue growth: 13% (13/14), 17.4% (14/15), 10.9% (15/16), 12.9% (16/17), 12.0% (17/18)
   - EBIT margin: 26.2%, 17.4%, 8.3%, 9%, 19%
   - ROIC ex. goodwill: 5%, 13.0%, 12.9%, 12.0%, 12.0%
   - 20% of Group sales
**FINANCIAL PERFORMANCE**

We will drive scalability and invest for future growth

**Improved efficiency will drive scalability...**

**Cost of sales in % of revenue**

- 2013/14: 48.3%
- 2014/15: 48.0%
- 2015/16: 46.7%
- 2016/17: 45.6%
- 2017/18: 45.2%

**Administrative expenses in % of revenue**

- 2013/14: 7.1%
- 2014/15: 7.1%
- 2015/16: 6.9%
- 2016/17: 6.7%
- 2017/18: 6.4%

**...whilst we invest for future growth**

**Sales & marketing expenses in % of revenue**

- 2013/14: 12.3%
- 2014/15: 11.8%
- 2015/16: 11.9%
- 2016/17: 12.6%
- 2017/18: 12.7%

**R&D expenditure incl. capitalizations in % of revenue**

- 2013/14: 6.1%
- 2014/15: 6.4%
- 2015/16: 7.1%
- 2016/17: 7.0%
- 2017/18: 7.3%
We will continue to pursue profitable growth through 2021/22

LONG-TERM AMBITION

8-10% organic growth
with 7-8% organic growth in FC&E

30+% EBIT margin b.s.i.

+10% CAGR FCF b.s.i.a.
CAPITAL ALLOCATION

Our capital priorities are unchanged with organic growth still being the top priority

1. Reinvest for organic growth
   - Capacity
   - Innovation
   - People
   - EUR ~425m capex spent 13/14 - 17/18

2. Bolt-on acquisitions
   - Technology
   - Market presence
   - EUR ~250m in acquisitions 13/14 - 17/18

3. Ordinary dividend
   - 40-60%
   - EUR ~410m ordinary dividend 13/14 - 17/18

4. Additional cash to shareholders
   - Extraordinary dividend
   - Share buy-back
   - EUR ~460m additional cash distributed 13/14 - 17/18

Leverage consistent with a solid investment-grade credit profile
INVESTMENTS

Peak capex in 18/19, partially to be financed with sale-and-lease-back

Capex projection in EUR m and % of revenue (illustrative)

Selection of major investment projects

Expected year of completion

Freeze dried & powder packaging
19/20

Natural Colors US footprint & Montpellier R&D upgrade
19/20

Capacity expansion in Health & Nutrition
20/21

R&D facility
21/22

Dairy expansion
Beyond 21/22

~10% of net revenue capex p.a. 2017/18 – 21/22
EXECUTIVE COMPENSATION

Closely aligned to key metrics and with strong incentive component

SHORT TERM

Annual incentive program for CEO and CFO

- Based on group financial targets and discretionary, personal goals
- Bonus is paid as 1/3 of the payout in Restricted Stock Units, and 2/3 in cash; normally accounts for 25-30% of total remuneration package

LONG TERM

Progressive three-year incentive program

- Requires personal investment in Chr. Hansen shares to participate
- Grant value estimated (based on Black-Scholes) at 20-25% of the remuneration package

Group financial targets

- Organic growth target: 20%
- EBIT target: 20%
- Free cash flow target: 20%
- Individual non-financial targets: 40%

Discretionary, personal goals

x0.5
Retention
x1.5
Organic growth target (CAGR)
Accumulated EBIT target
x2
TSR performance relative to peers

Matching shares per 1 invested share

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## OUR SUSTAINABILITY TARGETS

### Ranked ‘most sustainable company in the world’ by Corporate Knights

#### Target dimensions

<table>
<thead>
<tr>
<th>Commercial</th>
<th>Operational</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Better farming</strong></td>
<td><strong>Workplace responsibility</strong></td>
</tr>
<tr>
<td>Expand reach of natural plant solutions</td>
<td>Improve work safety</td>
</tr>
<tr>
<td>Hectares of farmland treated (cumulative)</td>
<td>LTIF (Frequency of Lost Time Incidents per million working hours)</td>
</tr>
<tr>
<td>6.7m hectares</td>
<td>≤1.8</td>
</tr>
<tr>
<td><strong>Good health</strong></td>
<td><strong>Increase diversity of workforce</strong></td>
</tr>
<tr>
<td>Launch new products with a documented health effect</td>
<td>% of diverse corporate teams</td>
</tr>
<tr>
<td>Number of products (cumulative)</td>
<td>78%</td>
</tr>
<tr>
<td>3 products</td>
<td>≤80%</td>
</tr>
<tr>
<td><strong>Less waste</strong></td>
<td><strong>Climate and environment</strong></td>
</tr>
<tr>
<td>Reduce global yogurt waste</td>
<td>Reduce environmental footprint in:</td>
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<tr>
<td>Tons of yogurt saved (cumulative)</td>
<td>Energy</td>
</tr>
<tr>
<td>0.4m tons</td>
<td>Efficiency in % compared to base year 13/14</td>
</tr>
<tr>
<td>1.2m tons</td>
<td>9%</td>
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<tr>
<td><strong>Operational</strong></td>
<td>Water</td>
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<td></td>
<td>6%</td>
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<td>CO₂</td>
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<tr>
<td></td>
<td>22%</td>
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<td></td>
<td>Waste recycled</td>
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<td></td>
<td>42%</td>
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<tr>
<td></td>
<td><strong>Business and product integrity</strong></td>
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<tr>
<td></td>
<td>Ensure fair, transparent and ethical standards of business conduct</td>
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<tr>
<td></td>
<td>Completion of Code of Conduct training</td>
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<tr>
<td></td>
<td>99%</td>
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<tr>
<td></td>
<td><strong>Human rights and responsible sourcing</strong></td>
</tr>
<tr>
<td></td>
<td>Respect human rights and ensure responsible practices in supply chain</td>
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<td></td>
<td>On site sustainability assessment of high risk suppliers</td>
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<tr>
<td></td>
<td>Supplier requirements and internal training</td>
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</tbody>
</table>

*For better farming the target is to be reached by 24/25.*

*Based on sales numbers and application rates of Plant Health solutions and silage inoculants.*

*Based on 7 days extended shelf life and sales numbers for FreshQ®.*

*Efficiency relative to production units.*

*Defined as corporate management teams reporting to VP level and above that include at least one woman and one non-local.*

*Efficiency relative to production units.*
Q2 2018/19 Results
FINANCIAL HIGHLIGHTS Q2/YTD 2018/19

Solid momentum continues, outlook maintained

YTD 2018/19

<table>
<thead>
<tr>
<th>9% organic growth</th>
<th>27.0% EBIT margin b.s.i.</th>
<th>EUR 8m FCF b.s.i.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>YTD 2017/18: 9%</td>
<td>YTD 2017/18: 26.2%</td>
<td>YTD 2017/18: EUR 11m</td>
</tr>
</tbody>
</table>

Q2 2018/19

<table>
<thead>
<tr>
<th>8% organic growth</th>
<th>27.8% EBIT margin b.s.i.</th>
<th>EUR 40m FCF b.s.i.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2 2017/18: 9%</td>
<td>Q2 2017/18: 27.0%</td>
<td>Q2 2017/18: EUR 30m</td>
</tr>
</tbody>
</table>
### Financial Highlights Q2/YTD 2018/19

**Double-digit growth in FC&E and H&N; NCD impacted by raw materials**

<table>
<thead>
<tr>
<th>Organic growth</th>
<th>YTD 18/19</th>
<th>Q2 18/19</th>
<th>Share of Group revenue YTD 2018/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC&amp;E</td>
<td>+10%</td>
<td>+11%</td>
<td>59%</td>
</tr>
<tr>
<td>H&amp;N</td>
<td>+11%</td>
<td>+6%</td>
<td>21%</td>
</tr>
<tr>
<td>NCD</td>
<td>+5%</td>
<td>+5%</td>
<td>20%</td>
</tr>
</tbody>
</table>

**Notes:**
- Organic growth
- Share of Group revenue YTD 2018/19
- NCD impacted by raw materials
**STRATEGIC HIGHLIGHTS Q2/YTD 2018/19**

**Making progress on bringing new innovations to market**

### Natural's no. 1

**FOCUS 2018/19 - FOOD CULTURES & ENZYMES**
- Leverage the full potential

**FOCUS 2018/19 - HEALTH & NUTRITION**
- Develop the microbial platform

**FOCUS 2018/19 - NATURAL COLORS**
- Create further value

#### Drive penetration of new innovation
- Continue to drive penetration of new products e.g. bioprotection
- Cross-sell and develop adjacent areas

#### Reinforce position in growth markets
- Strengthen attention to key accounts
- Invest in and strengthen local footprint
- Push market-specific new product development

#### Generate fuel for growth
- Leverage new expansion
- Upgrade e-commerce solution
- New digital services

#### Additional Highlights
- Launch new products in Human Health (incl. Microbiome)
- Expand Plant Health business to new countries and crops
- Portfolio expansion within coloring foodstuffs
- Continue growth momentum in all segments
- Further expand Animal Health commercial footprint in Asia-Pacific and Latin America
- Driving conversion projects in partnerships with our customers
- Scalability and efficiencies in production
- Investments in new US capacity and continuation of efficiency programs
Solid growth in EMEA & LATAM offset by lower momentum in NA & APAC

**NORTH AMERICA**

**YTD/Q2:**
- FC&E with solid and NCD with strong growth, HH flat and AH declined due to soft farmer economics and timing of orders in silage

**APAC**

**YTD:**
- HH growing strongly and FC&E with good performance; NCD flat

**Q2:**
- FC&E with good growth, HH declined due to timing of orders in dietary supplements and NCD due to declining raw material prices

**LATAM**

**YTD/Q2:**
- FC&E and H&N with strong growth, whilst NCD declined due to raw material price decreases and challenging economic climate
- EUR pricing accounted for approximately half of organic growth in Q2 and YTD

**EMEA**

**YTD:**
- HH and AH with strong growth,
- FC&E and NCD with solid growth

**Q2:**
- FC&E and HH with strong growth, NCD with solid momentum, AH declined due to changes in distribution set-up

*FC&E= Food Cultures & Enzymes, H&N= Health & Nutrition, NCD= Natural Colors (Division), AH= Animal Health, HH= Human Health.*
FOOD CULTURES & ENZYMES Q2/YTD 2018/19

Strong growth in cheese, meat and enzymes; volumes picked up in Q2

10% ORGANIC GROWTH YTD 18/19

YTD
- Strong growth in cheese, enzymes and meat; fermented milk and probiotics with solid growth
- Bioprotection with ~10% organic growth on a demanding comparable; strong growth in EMEA as well as LATAM and APAC, albeit from low base

Q2
- Strong growth in cheese, enzymes and probiotics followed by solid growth in fermented milk and bioprotection (~10%); good growth in meat

31.9% EBIT MARGIN YTD 18/19 (+0.6%-point yoy)

YTD
- Realized scalability benefits in excess of 1%-point from increased capacity at Copenhagen site, partly offset by investments in NN1 and sales & application support

Q2
- Increase of 1.1%-points driven by scalability benefits from Copenhagen site ramp-up and other production efficiencies

Quarterly development of organic revenue growth and EBIT margin, %

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Organic growth</th>
<th>EBIT margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2 16/17</td>
<td>8%</td>
<td>30.5%</td>
</tr>
<tr>
<td>Q3 16/17</td>
<td>10%</td>
<td>35.1%</td>
</tr>
<tr>
<td>Q4 16/17</td>
<td>10%</td>
<td>37.1%</td>
</tr>
<tr>
<td>Q1 17/18</td>
<td>10%</td>
<td>31.7%</td>
</tr>
<tr>
<td>Q2 17/18</td>
<td>12%</td>
<td>31.0%</td>
</tr>
<tr>
<td>Q3 17/18</td>
<td>11%</td>
<td>34.7%</td>
</tr>
<tr>
<td>Q4 17/18</td>
<td>12%</td>
<td>39.4%</td>
</tr>
<tr>
<td>Q1 18/19</td>
<td>10%</td>
<td>31.7%</td>
</tr>
<tr>
<td>Q2 18/19</td>
<td>11%</td>
<td>32.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarter</th>
<th>EUR million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2 17/18</td>
<td>153.7</td>
</tr>
<tr>
<td>Q2 18/19</td>
<td>166.0</td>
</tr>
<tr>
<td>YTD 17/18</td>
<td>308.8</td>
</tr>
<tr>
<td>YTD 18/19</td>
<td>327.1</td>
</tr>
</tbody>
</table>

- Revenue 12% 10%
- Organic growth 12% 10%
- Volume/mix 10% 7%
- EBIT margin 31.0% 31.9%
- ROIC ex. goodwill 39.7% 39.1%
HEALTH & NUTRITION Q2/YTD 2018/19

Strong growth in PH and HH whilst continuing to invest in NN1 priorities

**11% ORGANIC GROWTH YTD 18/19**

- HH: Strong growth in infant formula in all regions; dietary supplements with solid growth in EMEA, other regions flat
- AH: Strong growth in poultry and solid growth in swine offset by weakness in cattle and silage leading to slight growth
- PH: Strong growth in LATAM, albeit from modest base

| Q2 | HH: Strong growth in infant formula; dietary supplements flat due to weakness in NA and APAC |
|----|AH: Modest growth driven by strong momentum in poultry and solid growth in silage; cattle and swine declined |
|----|PH: Continued strong growth in LATAM |

**28.4% EBIT MARGIN YTD 18/19 (+0.2%-point yoy)**

- Positive margin development driven by production efficiencies, favorable product mix and currency was offset by investments in NN1 leading to 0.2%-point increase overall
- Decrease of 1.5%-points due to investments in strategic initiatives and higher production costs, partly offset by FX

<table>
<thead>
<tr>
<th>Quarter</th>
<th>EUR million</th>
<th>Q2 17/18</th>
<th>Q2 18/19</th>
<th>YTD 17/18</th>
<th>YTD 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td></td>
<td>57.2</td>
<td>62.5</td>
<td>105.5</td>
<td>118.1</td>
</tr>
<tr>
<td>Organic growth</td>
<td></td>
<td>7%</td>
<td>6%</td>
<td>8%</td>
<td>11%</td>
</tr>
<tr>
<td>Volume/mix</td>
<td></td>
<td>7%</td>
<td>6%</td>
<td>8%</td>
<td>10%</td>
</tr>
<tr>
<td>EBIT margin</td>
<td></td>
<td>32.5%</td>
<td>31.0%</td>
<td>28.2%</td>
<td>28.4%</td>
</tr>
<tr>
<td>ROIC ex. goodwill</td>
<td></td>
<td></td>
<td></td>
<td>24.6%</td>
<td>25.3%</td>
</tr>
</tbody>
</table>
Conversion successes in NA offset by weaker demand in LATAM & APAC

5% ORGANIC GROWTH YTD 18/19

- Strong growth in coloring foodstuffs supported by new launches in FRUITMAX® range
- Strong growth in NA and solid growth in EMEA partly offset by slower momentum in APAC and LATAM
- Price declines due to raw material deflation in carmine and annatto were largely offset by price increases in other pigments

Q2 | Successful conversion projects with key customers in NA; EMEA with solid growth driven by FRUITMAX®; LATAM and APAC declined due to lower prices for carmine and annatto

10.9% EBIT MARGIN YTD 18/19 (+2.0-points yoy)

- Margin improvement driven by operating efficiencies, a soft baseline and declining raw materials, partly offset by FX

Q2 | Margin increase of 1.5%-points driven by operating efficiencies, soft baseline, declining raw material prices and last year’s management change, partly offset by FX

Quarterly development of organic revenue growth and EBIT margin, %

<table>
<thead>
<tr>
<th>Organic growth</th>
<th>Q2 16/17</th>
<th>Q3 16/17</th>
<th>Q4 16/17</th>
<th>Q1 17/18</th>
<th>Q2 17/18</th>
<th>Q3 17/18</th>
<th>Q4 17/18</th>
<th>Q1 18/19</th>
<th>Q2 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>9%</td>
<td>6%</td>
<td>11%</td>
<td>4%</td>
<td>4%</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
<td>5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EUR million</th>
<th>Q2 17/18</th>
<th>Q2 18/19</th>
<th>YTD 17/18</th>
<th>YTD 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>52.8</td>
<td>55.2</td>
<td>103.9</td>
<td>108.0</td>
</tr>
<tr>
<td>Organic growth</td>
<td>4%</td>
<td>5%</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Volume/mix</td>
<td>2%</td>
<td>6%</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td>EBIT margin</td>
<td>9.5%</td>
<td>11.0%</td>
<td>8.9%</td>
<td>10.9%</td>
</tr>
<tr>
<td>ROIC ex. goodwill</td>
<td></td>
<td></td>
<td>15.9%</td>
<td>19.4%</td>
</tr>
</tbody>
</table>
INCOME STATEMENT Q2/YTD 2018/19

Scalability benefits from Avedøre partly offset by NN1 investments

Comments YTD 2018/19
- Gross margin improvement of 1.8%-points driven by all business areas
- Operating expenses increased by 10.1% to EUR 153m (27.7% of revenue) compared to last year due to increased investments related to NN1 initiatives
- EBIT margin b.s.i. was up 0.8%-point; currencies had an immaterial impact
- Special items of EUR 1m related to Hundsbichler acquisition

Group revenue growth YTD 2018/19

<table>
<thead>
<tr>
<th>Volume/mix</th>
<th>Price</th>
<th>Currency</th>
<th>M&amp;A</th>
<th>YTD 2018/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>+6%</td>
<td>+3%</td>
<td>-2%</td>
<td>0%</td>
<td>+7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YTD 17/18</th>
<th>YTD 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUR million</td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td>518.2</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>(243.6)</td>
</tr>
<tr>
<td>Gross profit</td>
<td>274.6</td>
</tr>
<tr>
<td>Gross margin</td>
<td>53.0%</td>
</tr>
<tr>
<td>R&amp;D expenses</td>
<td>(37.1)</td>
</tr>
<tr>
<td>% of sales</td>
<td>7.2%</td>
</tr>
<tr>
<td>Sales and marketing expenses</td>
<td>(65.9)</td>
</tr>
<tr>
<td>% of sales</td>
<td>12.7%</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>(36.5)</td>
</tr>
<tr>
<td>% of sales</td>
<td>7.0%</td>
</tr>
<tr>
<td>Other operating income/expenses</td>
<td>0.8</td>
</tr>
<tr>
<td>EBIT b.s.i.</td>
<td>135.9</td>
</tr>
<tr>
<td>EBIT b.s.i. margin</td>
<td>26.2%</td>
</tr>
<tr>
<td>Special items</td>
<td>-</td>
</tr>
<tr>
<td>EBIT</td>
<td>135.9</td>
</tr>
<tr>
<td>EBIT margin</td>
<td>26.2%</td>
</tr>
<tr>
<td>Net financial items</td>
<td>(9.2)</td>
</tr>
<tr>
<td>EBT</td>
<td>126.7</td>
</tr>
<tr>
<td>Income taxes</td>
<td>(29.1)</td>
</tr>
<tr>
<td>Tax rate</td>
<td>23.0%</td>
</tr>
<tr>
<td>Profit for the year</td>
<td>97.6</td>
</tr>
</tbody>
</table>

Comments YTD 2018/19

Group revenue growth Q2 17/18

<table>
<thead>
<tr>
<th>YTD 17/18</th>
<th>Q2 17/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>+6%</td>
<td>+6%</td>
</tr>
<tr>
<td>+2%</td>
<td>+2%</td>
</tr>
<tr>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>+8%</td>
<td>+8%</td>
</tr>
</tbody>
</table>

Comments Q2 17/18

Group revenue growth YTD 2018/19

<table>
<thead>
<tr>
<th>YTD 17/18</th>
<th>Q2 17/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>+6%</td>
<td>+6%</td>
</tr>
<tr>
<td>+2%</td>
<td>+2%</td>
</tr>
<tr>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>+8%</td>
<td>+8%</td>
</tr>
</tbody>
</table>
Comments

- Increase in cash flow from operating activities was driven by growth in operating profit and a change in working capital offset by higher taxes paid due to absence of acquisition-related benefits.
- Increase in cash flow used for operational investing activities from 8.7% to 10.8% of revenue compared to last year in line with the company’s expansion program.
- Total capex for the financial year 2018/19 expected to be between EUR 110-130m net of sale-and-lease-back.
- Cash flow used for acquisitions of EUR 9.3m related to the Hundsbichler acquisition, integration well on track.

FCF b.s.i.a. driven by strong operating cash flow and increased capex

<table>
<thead>
<tr>
<th>In EUR m</th>
<th>YTD 17/18</th>
<th>YTD 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash flow</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxes paid</td>
<td>(37.4)</td>
<td>(51.5)</td>
</tr>
<tr>
<td>CF from operating activities</td>
<td>55.9</td>
<td>66.6</td>
</tr>
<tr>
<td>CF from operational investing activities</td>
<td>(45.0)</td>
<td>(60.0)</td>
</tr>
<tr>
<td>Free cash flow b.s.i.a.</td>
<td>11.0</td>
<td>7.6</td>
</tr>
<tr>
<td>Acquisition activities</td>
<td>na</td>
<td>(9.3)</td>
</tr>
<tr>
<td>Free cash flow</td>
<td>10.9</td>
<td>(2.7)</td>
</tr>
</tbody>
</table>

**Balance sheet**

<table>
<thead>
<tr>
<th></th>
<th>YTD 17/18</th>
<th>YTD 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets</td>
<td>1,809.9</td>
<td>1,926.1</td>
</tr>
<tr>
<td>Equity</td>
<td>747.9</td>
<td>772.5</td>
</tr>
<tr>
<td>Net interest-bearing debt</td>
<td>732.7</td>
<td>785.0</td>
</tr>
</tbody>
</table>

**Key ratios**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net working capital</td>
<td>21.3%</td>
<td>22.0%</td>
</tr>
<tr>
<td>Capital expenditure</td>
<td>8.7%</td>
<td>10.8%</td>
</tr>
<tr>
<td>ROIC excluding goodwill</td>
<td>32.1%</td>
<td>32.8%</td>
</tr>
<tr>
<td>NIBD/EBITDA</td>
<td>2.0x</td>
<td>2.0x</td>
</tr>
</tbody>
</table>
## OUTLOOK

### Outlook maintained

<table>
<thead>
<tr>
<th></th>
<th>YTD 2018/19</th>
<th>Outlook 2018/19¹</th>
<th>Outlook 2018/19²</th>
<th>Long-term financial ambition²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organic revenue growth</strong></td>
<td>9%</td>
<td>9-11%</td>
<td>9-11%</td>
<td>8-10%</td>
</tr>
<tr>
<td>Food Cultures &amp; Enzymes</td>
<td>10%</td>
<td>Above long-term ambition</td>
<td>Above long-term ambition</td>
<td>7-8%</td>
</tr>
<tr>
<td>Health &amp; Nutrition</td>
<td>11%</td>
<td>10% or above</td>
<td>10% or above</td>
<td>n.a.</td>
</tr>
<tr>
<td>Natural Colors</td>
<td>5%</td>
<td>6-9%</td>
<td>5-7%</td>
<td>n.a.</td>
</tr>
<tr>
<td><strong>EBIT margin b.s.i.</strong></td>
<td>27.0%</td>
<td>Around 29.5%</td>
<td>Around 29.5%</td>
<td>30+%</td>
</tr>
<tr>
<td><strong>Free cash flow b.s.i.a.</strong></td>
<td>EUR 8m</td>
<td>Around the same level as in 17/18</td>
<td>Around the same level as in 17/18³</td>
<td>+10% CAGR</td>
</tr>
</tbody>
</table>

¹ The outlook is based on constant currencies and stable raw material prices and assumes no acquisitions. The outlook is also based on the current political and economic environment, although there is a risk of increased political and economic uncertainty – e.g. the economic climate in the Middle East and Latin America, the risk of a 'hard' Brexit, and trade tensions between large economies. Any deterioration in these situations might impact the outlook.


³ Assumes lower growth in cash flow from operating activities than growth of EBIT before special items, due to a higher level of taxes to be paid in 2018/19, mainly related to the absence of acquisition-driven tax benefits realized in 2017/18. Cash flow used for operational investment activities will be at a relatively high level, and is expected to be between EUR 110-130 million. This includes multiple investments across the group, and also assumes a successful sale-and-lease-back of the company’s main site in Hørsholm in Q4 2018/19.
Financial calendar

July 3, 2019
Interim Report Q3 2018/19

October 10, 2019
Annual Report 2018/19

November 27, 2019
Annual General Meeting 2019

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