Safe harbor statement

- This factbook may contain forward-looking statements with respect to DSM’s future (financial) performance and position. Such statements are based on current expectations, estimates and projections of DSM and information currently available to the company. DSM cautions readers that such statements involve certain risks and uncertainties that are difficult to predict and therefore it should be understood that many factors can cause actual performance and position to differ materially from these statements. DSM has no obligation to update the statements contained in this factbook, unless required by law.

- A more comprehensive discussion of the risk factors affecting DSM’s business can be found in the company’s latest Annual Report, which can be found on the company's corporate website, www.dsm.com
Product Portfolio Nutritional ingredients

Differentiation in a broad range of formulations and solutions (including premix)

- Global leader in nutrition, with broadest portfolio of nutritional ingredients

- DSM serves the global industries for animal feed, food and beverages, infant nutrition, dietary supplements, medical nutrition and personal care

- DSM is uniquely positioned in all steps of the feed and food value chains: the production of nutritional ingredients, their incorporation into sophisticated forms, and the provision of tailored premixes and forward solutions
**Product Portfolio Nutritional ingredients**

**Vitamins** – Essential ingredients required for growth and well-being ranging from fat-soluble vitamins (A, D, E, K) to water-soluble vitamins (C, all B vitamins, folic acid and pantothenic acid)

**Carotenoids** – Essential ingredients that are important in nutrition. In addition to vibrant colors, carotenoids will give your products health benefits. Providing sufficient carotenoids increases animal performance across species. Carotenoids also ensure consistent pigmentation of eggs and fish such as salmon. Key carotenoids are beta carotene, lutein, canthaxanthin, astaxanthin and zeaxanthin

**Polyunsaturated fatty acids** (‘PUFAs’) are critical for (the development of) proper brain function, cardiovascular and eye health, immune and inflammatory responses and the production of hormone-like molecules. Omega-3 and omega-6 are used in food, dietary supplements and infant nutrition and are manufactured from algae, fungi as well as fish oil

**Enzymes** improve feed conversion leading reduced costs of feed while at the same time improved ecological footprint of animal protein production. In food & beverage, enzymes and cultures enhance taste, texture or act as processing aids functioning as a catalyst for biochemical reactions

**Gut health** goes beyond issues with digestion, but also relates to many aspects of overall health. The role of the gut health products, including prebiotics and probiotics, is of great importance both in human and in animal feed (where it can act as replacement for antibiotics growth promoters)
**Product Portfolio Nutritional ingredients**

- **Minerals**: Minerals are needed in very small amounts in food and feed. Both human and animal need certain minerals for instance to build strong bones and teeth and turn the food into energy. As with vitamins, a healthy balanced diet should provide all the minerals needed to work properly.

- **Savory–Yeast extracts**: Savory/yeast extracts – Extracts and process flavors to enhance taste while reducing salt in snacks, ready-meals, sauces, soups and meat.

- **Nutraceutical ingredients**: Nutraceutical ingredients – Deliver the optimal balance of microflora in the gastrointestinal tract of animals optimizing nutrient absorption, while in human nutrition, nutraceutical ingredients enable consumers to perform at their peak, as well as helping cope with future health concerns such as cardiovascular disease and weight management.

- **Personal Care ingredients**: Personal Care and aroma intermediates – Ingredients for aromatic scents, detergents and perfumes. UV-filters – Range of high performing UV-A and UV-B filters for skin and hair applications and Skin Bio-actives – Range of vitamins, synthetic peptides and natural extracts for skin care markets.

- **Textures**: Hydrocolloids - gellan gum, xanthan gum and pectin solutions that boost mouthfeel, stabilization and suspension performance in food and beverages, personal care, home care and other specialty industrial applications.
Differentiation in a broad range of formulations and solutions (including premix)

- A broad range of technologies to transform the nutritional ingredients into a different state of presentation, e.g. a fat-soluble vitamin oil into a powder form.
- Allows for maximum differentiation in terms of stability, shelf-life, heat resistance, bio-availability, physical properties

Examples of forms

- Sprayed dried
- Beadlet
- Multi-layer micro encapsulate
- Flavor flake

- Through customized blending of active ingredients and/or forms, DSM offers its clients regional and segment-specific finished products solutions
- A broad network of around 60 premix plants allows DSM to offer tailor-made, customer-driven solutions, i.e. global products & local solutions
Global leader in Nutrition, active over full value chain

Broad, global portfolio differentiated formulations and solutions

DSM’s Food- Feed – Pharma & Personal Care value chain

2018* Sales by end-market (%)

2018* Sales split over value chain (%)

2018 Sales* related to ingredient (%)

* The 2018 sales is the sales of the underlying business corrected for DSM’s best estimate of the 2018 temporary vitamin effect due to exceptional supply disruptions in the industry in the first nine months of 2018
**Broader portfolio is providing resilience**
*With limited exposure to single customers or product lines*

- **2018 Sales per customer** (top 10)
  - Largest customer represents less than 3% of 2018 Nutrition sales

- **2018 Profit contribution** per product line (%)
  - DSM's overall gross margin today relies on many products and therefore tends to be more resilient
  - Product range includes ~100 product lines
  - Largest profit contributor < 10% of profit
  - Several products have a strong IP position

- **2018 Sales by region (%)**

*The sales is the total 2018 sales of the underlying business corrected for DSM's best estimate of the 2018 temporary vitamin effect due to exceptional supply disruptions in the industry in the first nine months of 2018. Including this temporary vitamin effect, 2018 sales was €6.1bn.*
Nutrition - 2018 sales (€5.7bn* underlying)

Key financial data

Sales (€ million)                                    % organic growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales (€ million)</th>
<th>% organic growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>5000</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>5300</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>5600</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>5900</td>
<td></td>
</tr>
</tbody>
</table>

* The €5.7bn sales is the total 2018 sales of the underlying business corrected for DSM's best estimate of the 2018 temporary vitamin effect due to exceptional supply disruptions in the industry in the first nine months of 2018. Including this temporary vitamin effect, 2018 sales was €6.1bn.
## Financials

### Sales (€m) and organic sales growth (%)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales (€m)</th>
<th>Organic Sales Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>4,963</td>
<td>6</td>
</tr>
<tr>
<td>2016</td>
<td>5,169</td>
<td>5</td>
</tr>
<tr>
<td>2017</td>
<td>5,579</td>
<td>8</td>
</tr>
<tr>
<td>2018</td>
<td>5,722</td>
<td>7</td>
</tr>
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</table>

### Adj. EBITDA (€m) & Adj. EBITDA margin (%)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Adj. EBITDA (€m)</th>
<th>Adj. EBITDA Margin (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>822</td>
<td>16.6</td>
</tr>
<tr>
<td>2016</td>
<td>931</td>
<td>18.0</td>
</tr>
<tr>
<td>2017</td>
<td>1,053</td>
<td>18.9</td>
</tr>
<tr>
<td>2018</td>
<td>1,117</td>
<td>19.5</td>
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</table>

### ROCE (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>ROCE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>10.3</td>
</tr>
<tr>
<td>2016</td>
<td>12</td>
</tr>
<tr>
<td>2017</td>
<td>14.1</td>
</tr>
<tr>
<td>2018</td>
<td>14.7</td>
</tr>
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</table>

### Capital employed (€m) (at 31 Dec.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital Employed (€m)</th>
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</thead>
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<tr>
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<td>5,309</td>
</tr>
<tr>
<td>2016</td>
<td>5,537</td>
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<tr>
<td>2017</td>
<td>5,420</td>
</tr>
<tr>
<td>2018</td>
<td>5,683</td>
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</tbody>
</table>

### Adj. EBIT (€m) & Adj. EBIT margin (%)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Adj. EBIT (€m)</th>
<th>Adj. EBIT Margin (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>535</td>
<td>10.8</td>
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<tr>
<td>2016</td>
<td>645</td>
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<tr>
<td>2017</td>
<td>770</td>
<td>13.8</td>
</tr>
<tr>
<td>2018</td>
<td>821</td>
<td>14.4</td>
</tr>
</tbody>
</table>

### Capital expenditure (€m) (accounting)

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital Expenditure (€m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>322</td>
</tr>
<tr>
<td>2016</td>
<td>331</td>
</tr>
<tr>
<td>2017</td>
<td>407</td>
</tr>
<tr>
<td>2018</td>
<td>463</td>
</tr>
</tbody>
</table>

* 2018 numbers presented here are the 2018 numbers of the underlying business corrected for DSM’s best estimate of the 2018 temporary vitamin effect due to exceptional supply disruptions in the industry in the first nine months of 2018.
Nutrition’s unique business model
Broad, global portfolio in nutritional ingredients & local solutions (incl. premix)
Five Key macro trends driving DSM’s growth in Animal & Human Nutrition

Population growth, health & wellness, integrated & personalized solutions and sustainability

- **Animal Nutrition & Health**
  - Antibiotic resistance
  - Environmental footprint
  - Overfishing
  - Greenhouse gas emissions

- **Human Nutrition & Health**
  - Food & Beverage
    - Focus on M&S
    - “Less salt, less fat, less sugar” strategy
  - Specialty Nutrition
    - Personalization
    - Vertical integration

- **Macro Economy**
- **Value Chain Shifts**
- **Sustainability**
- **Growth & Productivity**
- **Health & Wellness**

**New Market Opportunities**
Business model in Nutrition
Basis for market outperformance

Market Growth
- 2-3% Poultry
- 1-2% Swine
- 0-1% Ruminants
- 5-6% Aqua
- 4-5% Pet

Sales by Species

Market Growth
- 3-5%

Sales by Segment
- 2% Infant Nutrition
- 1-2% Food & Beverages
- 5-6% Medical - Pharma

Σ around 2-3%

Outgrowing the complete feed equivalent market through premix, innovation and B2F, leveraging its unique business model

Σ around 2-3%

Outgrowing the relevant market through local solutions, forward integration and i-Health expansion
Ambitions for Nutrition underpinning DSM’s 2021 Targets

Human Nutrition & Health

Animal Nutrition & Health

M&S Excellence

Strategic Growth fields

Human Nutrition & Health

Animal Nutrition & Health

Organic Sales growth
Above market growth

Adjusted EBITDA growth
High single-digit %

Adjusted EBITDA margin
>20%

B2B
Ingredients
Applications

B2C

Food & Beverage
Early life & Medical Nutrition
Pharma
Dietary supplements

Organic
Organic/inorganic

Strengthen Gut health Solutions
Geo-broaden Core
Innovate Species
Focus B2F
Nutrition’s global Presence & unparalleled local network