



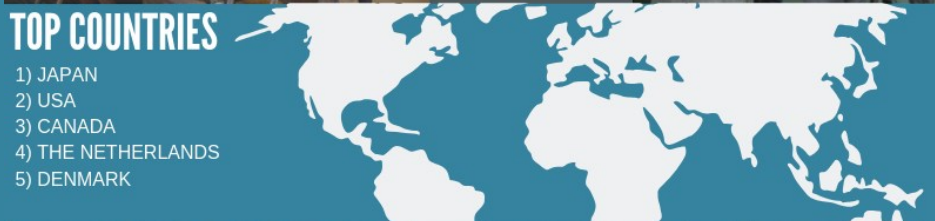
IEC Global Leadership Conference

Highlights from
IEC Copenhagen 2019





IEC COPENHAGEN IN NUMBERS



About IEC Copenhagen 2019

Bringing together CEO's and senior executives from the worlds leading egg businesses, the International Egg Commission once again offered delegates at its Global Leadership Conference a broad range of top-level speakers.

Across the four days, delegates were able to develop new business relationships and heard from a wide range of different perspectives, giving the latest opinions on the future opportunities for the industry.

We hope this post conference report gives you a chance to recap or access what we learned in Copenhagen, inspiring the future development of our industry.

Please visit the IEC website to access the **video presentations** and **photographs** from IEC Copenhagen.

The IEC would like to thank the official sponsors of the 2019 IEC Global Leadership Conference for their generous support.



Updates from Copenhagen

IEC Copenhagen 2019 proved to be another fantastic showcase of our industry and was the perfect location for the announcement of two new expert groups that will support the continued development of our industry.

Outgoing IEC Chairman, Tim Lambert, announced the inception of the IEC Nutrition Expert Group, which will support the work of the International Egg Nutrition Centre (IENC) through pooled resources and access to leading researchers and industry minds. Tim highlighted that this new group will aid the IEC's increasing focus on supporting the global industry's communications, by ensuring that members have access to the latest research.

Tim also introduced the new Environmental Expert Group, which will focus on providing support to the Global Initiative for Sustainable Eggs (GISE). Tim highlighted that sustainability is becoming increasingly important on the consumer agenda, and that our industry had a fantastic story to tell. He said that the new expert group would support in developing the sustainability narrative and bring together leaders of the environmental and sustainability fields.

We would like to take this opportunity to once again thank Tim for his dedication to the IEC throughout his time as an Office Holder and as IEC Chairman. The latest announcements highlight the commitment of both Tim and the IEC to develop a support network for the global egg industry, which is something that we look forward to continuing.



NEW IEC VICE CHAIR

GREG HINTON, USA



NEW IEC VICE CHAIR

JUAN FELIPE MONTOYA,
COLOMBIA



NEW BOARD MEMBER

KENT ANTONIO, AUSTRALIA



NEW BOARD MEMBER

JAMES HAN, CHINA



OUR NEW IEC CHAIRMAN

SURESH CHITTURI, SRINIVASA FARMS , INDIA

We are delighted to welcome Suresh as our new IEC Chairman.

Suresh has served as Vice Chair for the past two years, and is a second generation member of the IEC, representing his family business Srinivasa Farms in India.

Suresh takes up the role as Chairman at a critical time for the global egg industry and aims to deliver an inclusive and beneficial programme for all, driving membership growth to ensure that all areas of the world are represented.

As many of you will know, Suresh is passionate about promoting the nutritional value of the egg and this will form a key part of the IEC's strategy under his leadership.

We would like to wish Suresh every success during his Chairmanship, and look forward to supporting him in helping to deliver a united and truly global organisation.

Retail Focus — The future of shopper marketing

SIMON WAINWRIGHT DIRECTOR OF INSIGHT, IGD

Opening the Retail Focus Session, Simon explained that noticeable demographic shifts are resulting in disruptive behavioural changes. He went on to identify five key features that will characterise shoppers of the future, and the opportunities they bring to the egg industry.

- 1) **Time optimisers** - Consumers have the perception that they are busier than ever, but in fact chose to spend their time in different ways. This means the retail sector needs to work harder to improve efficiencies for consumers.
- 2) **More health conscious** - The way health and wellbeing is viewed is starting to change, with more prominence on products that make you 'look' good, rather than 'feel' good. Eggs are in the perfect position to provide a solution as a healthy, sustainable source of protein.
- 3) **More individual** - 56% of shoppers said they would share data to receive a personalised shopping experience, meaning embracing personalisation in product offerings will become increasingly important.
- 4) **More experimental** - 80% of shoppers say they will try new products, which presents opportunities for product range developments in new and exciting formats.
- 5) **More socially conscious** - Shoppers want to make sustainable and ethical choices, and the egg industry has a great story, promoting eggs as a sustainable source of animal protein.

JOHN O'HARA MD, SUNNY QUEEN FARMS

John explained that innovation is the future lifeblood of any business, and in order to succeed, businesses need to examine how they can innovate and deliver on consumer megatrends.

Discussing the successful marketing campaigns his business has implemented, he explained that eggs fit perfectly with the eight major megatrends affecting consumers globally. As an industry offering a healthy source of protein, egg producers should be looking to compete with all food producers and not just against other egg companies.

John then explored how Sunny Queen Farms had tapped into the opportunities megatrends provide. He explained that 'Snackification' (or convenience foods) had witnessed a huge increase in shelf space and product proliferation in recent years.

He went on to say that eggs as snacks ticked three of the key megatrend boxes - health and wellness, convenience and evolving consumer landscape - therefore presenting a fantastic opportunity for product development.

As a result, Sunny Queen Farms launched on-the-go 'Omelette Bites' offering a convenient eating solution that was healthy and tasty. John explained that although it was early days, the range had already reached Woolworths, Coffee Chains and Airlines in Australia, and was resonating well with consumers.

PROFESSOR DAVID HUGHES IEC GLOBAL FOOD MARKETING ANALYST

Professor Hughes discussed the opportunities for eggs to benefit from the rise of meat replacers. He explained that consumption of protein rose by 40% between 2008 to 2018, and with the global population predicted to reach 10bn by 2050, this demand is only going to increase further, offering opportunities for protein-rich foods.

But, there is a catch!

Consumers are becoming increasingly environmentally conscious, and climate-friendly diets are gaining substantial traction, leading many to reduce their intake of meat products.

Professor Hughes reminded delegates that this offered a fantastic opportunity to position eggs as "the quintessential, climate friendly, nutritional protein product", but it was up to the egg industry to ensure that consumers know our story.

He explained that consumers often don't recognise the level of protein in eggs and this needed to be addressed, noting that retail merchandising is a huge untapped opportunity that could support this.

Professor Hughes encouraged businesses to consider the method of many plant based competitors, who have taken a consumer first approach to provide solutions, and examine how these principles can be replicated to ensure that consumers recognise eggs as a great source of protein.



Congratulations to our 2019 IEC Award Winners!



GOLDEN EGG AWARD FOR MARKETING EXCELLENCE

FENAVI, COLOMBIA



**DENIS WELLSTED INTERNATIONAL
EGG PERSON OF THE YEAR**

**PETER CLARKE, SOUTH VIEW FARMS,
CANADA**



**CLIVE FRAMPTON EGG PROCESSOR
OF THE YEAR**

OVOBEST, GERMANY

Networking Opportunities



Photos from the conference are available to view and download on the IEC website at www.internationalegg.com/all-galleries



Feed Focus

NAN-DIRK MULDER

SENIOR GLOBAL ANIMAL PROTEIN SPECIALIST, RABOBANK

Opening a diverse session, Nan-Dirk explored the strategic impact of African Swine Fever (ASF) in pork on global egg markets.

He explained that Asia is a hugely important feed market consuming four times more protein than any other continent, and that a bigger disruptive factor hasn't been seen by the global feed market in the past 25 years.

Chinese pork production is predicted to drop by 25% this year, with a further 10% reduction in 2020. With two thirds of soya bean protein going into China, and demand from the pork industry reducing, global feed prices will see a knock-on impact.

The result? ASF in Asia could see 2019 become the first year with negative animal protein growth.

He added that the affects have also been seen by consumers, with retail pork prices rising quickly. Substitution protein products, such as alternative meats and eggs, have also seen prices rise as demand increases.

Spent hen prices are increasing and the market is seeing growing numbers of hens being killed for meat, often before the end of the laying cycle. This is likely to have a future impact on egg prices as the national flock depletes.

Nan-Dirk told delegates that there could be an opportunity for global export of spent hens and potentially eggs, as demand continues to grow.



He suggested recovery from the outbreak could take many years, depending on the rate at which the disease continues to spread. Although this will bring increased volatility to the market, he noted there are opportunities for substitute products, such as eggs, to gain market share, but this will be reliant on marketing, availability, trade and price.

PETER VAN HORNE

IEC ECONOMIC ANALYST

Peter identified three challenges that are affecting the protein world:

1. Global food demand is expected to rise 60% by 2050
2. Livestock contributes 14.5% of total global greenhouse gas emissions
3. Current growth in yields are falling short

In order to address these challenges he advised that novel and innovative protein sources, such as insects, will need to play an increasing role.

Research conducted by Wageningen University concluded that consumers are accepting of insect protein within animal feed, but are less accepting of consuming insects directly. This therefore creates an opportunity for the animal protein industry to explore alternative feed sources that have the potential to support growing food demand.

However, before insect protein can become a commercially viable solution, Peter noted



there are a number of barriers to overcome.

Current production methods are expensive, with insect protein costing three times that of soya bean meal on a per kilo basis, which presents a need for production cost decreases. Additionally, legislation in some countries, such as those in the EU, means that processed insect protein is not currently allowed in farm animal feed.

However, Peter advised that poultry has a unique advantage over other animal protein industries, as hens eat insects in their natural environment, making live feeding a potential option.

He explained that the Netherlands have been early adopters of live insect feeding, with a new brand of insect-fed eggs being offered at a premium price. Current sales are performing well, but Peter advised that further research was needed to establish the true commerciality of insect feeding.

DR MARTY MATLOCK

EXECUTIVE DIRECTOR, UA RESILIENCY CENTER, UNIVERSITY OF ARKANSAS

Dr Matlock opened his presentation with an overview of the power of lifecycle assessments in the drive for sustainable food production. He explained that impact is measured in a cradle to grave assessment that considers all processes involved in the production of a product. For example, in egg production manure, spent hens and the



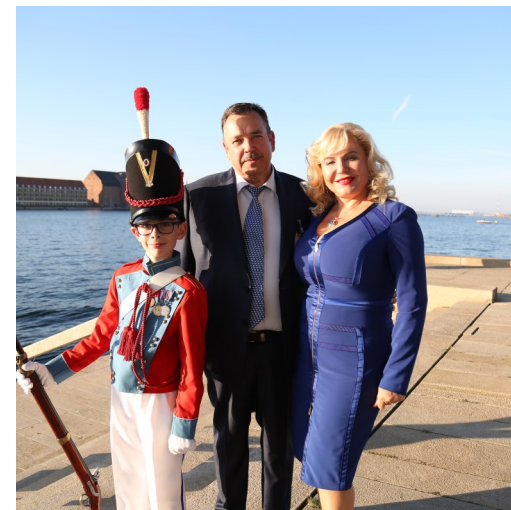
fertiliser used to grow feed would be amongst the inputs evaluated. This enables the identification of potential areas of improvement.

Dr Matlock encouraged delegates to change the way that they view sustainability, as it should not be seen as getting more from less, but instead getting better from less.

In this vein, he went on to say that egg production is on the right track globally, and that as an industry, egg producers have a great sustainable story to tell. The global warming potential of a hen has dramatically reduced as technological innovations have continued to improve feed efficiency and drive sustainable production, which should be promoted.

He added that incremental increases are critical as the population continues to grow, and that careful consideration needs to be given to the potential impact of policy decisions. Intensive systems are often highly efficient and are therefore more sustainable, which will play an increasingly important role in years to come.





Zero Waste

Hosted by Young Egg Leader, Kent Antonio, the zero waste session aimed to inspire delegates to consider and explore zero waste manure management systems.

JAMES CORBETT

MD, RIDGEWAY FOODS

James explained that in such a competitive market, monitoring and controlling costs is equally as important as the birds themselves.

He noted that disposal of chicken manure can be a significant cost for some businesses, but there is also an opportunity to generate a substantial income from the waste.

Following the installation of the worlds first 'laying hen muck burner' in 2016, James explained the fluidised bed combustion system has had significant benefits on his farm. From improved ventilation due to the ability to heat the sheds, to the generation of electricity and the reduction of emissions, James encouraged delegates to consider technology in a bid to lower the cost of production in a sustainable and long-term way.

STEPHEN DVORAK

MD, DVO INC

Stephen explained that technological

advancements including anaerobic digestion (AD) can now play a role in effective poultry waste management.

He said that historically AD has been underutilised in poultry due to the high levels of ammonium within the manure being toxic to the bacteria. However technological developments to strip and scrub ammonium from the manure, mean this is no longer a problem.

KENT ANTONIO

YOUNG EGG LEADER, MCLEAN FARMS

Kent discussed the potential for composting on-farm to form part of a waste management solution. He discussed the advantages of composting manure, which include zero land down-time after spreading, increased bioavailability of nutrients and a consistent nutrient profile within the final product.

Composting has historically been a practice for those with plenty of space to install windrows, but Kent explained that technological advancements mean that new modular options are coming to market.

He concluded that in addition to zero waste manure management providing a great sustainability story, it can also add significant value to a waste product - making brilliant business sense.



International Reviews

Key industry figures from 15 countries provided updates on the opportunities and challenges facing the egg industry within their countries.



International Review presentations are available to watch at www.internationalegg.com/document_category/video-presentations



Sustainability Showcase

BASTIAAN SCHIMMEL

YOUNG EGG LEADER, CENTURION POULTRY INC

Bastiaan explored '100-week birds - a sustainable milestone', giving delegates an insight into the advances made to the genetic potential of hens over the past 50 years.

He explained that tremendous gains in breeding have been made since the 1960's, with average eggs/HH increasing by an estimated 200 during this period, to reach 420 eggs in 2018. This has helped to improve the efficiency of production through increased yields per layer house, and reduced costs from depopulating, while also reducing the environmental impact due to a reduction in the number of replacements required.

Bastiaan noted that some producers are already achieving incredible results, which the industry can learn from, so that more producers reach the genetic potential of 500 eggs.

Management is key to achieving the full potential of each bird, with housing, lighting, health and nutrition being essential in both pullet rearing and layer management. Bastiaan recommended that producers consult both experts and their peers in order to reach their full potential.



PROFESSOR JENS PETER

CHRISTENSEN

UNIVERSITY OF COPENHAGEN

Professor Christensen presented the latest research in keel bone damage, giving delegates an overview of the causes of deformities and fractures.

He explained that deformities are caused by pressure on the keel bone from perches, where as fractures result from a trauma such as bad landings or crashes with 'furniture'.

He went on to identify that there was no relation between deformities and fractures, but the results of fractures included:

- Reduced egg laying
- Reduced egg weight
- Increased food and water intake
- Increased mortality

All of which have an impact on the sustainability of production.

Professor Christensen noted that although there was no difference in prevalence between production types, a study had shown that free range and barn housing had the highest level of birds with three or more fractures.



Perception Versus Technical Reality

STIG MELLERGAARD

DANISH VETERINARY AND FOOD ADMINISTRATION

Stig discussed the importance of collaboration between industry and veterinary authorities, using Denmark as a case study of what can be achieved when successful.

Drawing on the experience that the country has in disease control, he explained a 'one health approach', along with the development of public private partnerships, have been essential in limiting the damage of disease outbreaks, and reopening markets as quickly as possible.

He encouraged producers to consider how they can work more closely with their respective authorities to ensure that both parties are prepared to react to any potential disease crisis.

PROFESSOR PETER SANDØE

COPENHAGEN UNIVERSITY

Market driven animal welfare developments were the focus of Professor Sandøe's presentation. He gave delegates insight into the origins of animal welfare, explaining that although historically regulation was often built around welfare, more recently the EU has moved away from doing so, leading to the rise of market driven initiatives.

He went on to say that there are two forms of market driven welfare, the first is driven by consumer choice and the second is driven by corporate social responsibility whereby



organisations enforce a certain level, often as a result of pressure from NGO groups.

Professor Sandøe advised producers that they need to become more proactive in telling their story to both the food industry and consumers about the true meaning of animal welfare within egg production. He suggested that if producers don't start to act, then barn eggs will likely become the next production system demonised by NGO's, despite a lack of evidence to support the argument.

DR FABIEN DE MEESTER

OWNER, DMF LTD CO

Fabien gave delegates an insightful presentation, offering a journey to re-establishing the truth about cholesterol and eggs. He explained that eggs may be the 'ideal' food, but that this was not guaranteed and that it came with a responsibility.

He explained that cholesterol is a secondary risk factor in health concerns, meaning it only becomes an issue when the primary risk factor - chronic inflammation - is present. He added that inflammation occurs as a result of the essential fatty acids present in the diet, namely the omega 3 to 6 ratio.

He advised producers that the omega 3 to 6 ratio is important to consider within layer diets, and that if they wanted to be seen as the 'perfect' food source, they had a responsibility to reduce the level of omega 6 in eggs.



What does the future look like?

A Young Egg Leaders perspective

YOUNG EGG LEADERS

2018/2019 GROUP

Three members of the Young Egg Leader group opened delegates minds to innovation that will shape the future of the egg industry in a fantastic panel presentation and Q&A session delivered by Kent Antonio, Elisa Finco and Bastiaan Schimmel.

As the world crosses over from the age of information to the augmentation age, there are endless opportunities for businesses to utilise technological developments. From 'smart' shed technology, that collects and analyses data in the 'cloud', to bacteria technology that improve gut health and immunity, technology is rapidly evolving and Bastiaan, Elisa and Kent encouraged delegates to embrace it.

The group discussed the opportunity for innovation to address the labour challenge, with robotics offering the potential to bridge labour shortages, with current technology being developed to collect floor

eggs, as well as litter samples for testing.

The health of the birds was a key area of focus for the presentation, with a number of future developments discussed, from heat sensor cameras that can detect changes in flock temperatures, to hi-tech cameras that identify certain behaviours that are related to disease.

The Young Egg Leaders believe that these developments will have a significant positive impact on the industry, and encouraged delegates to welcome augmentation and become 'one with technology', as investment costs continue to decrease. They noted the results will speak for themselves, through improvements to product quality, bird health and welfare, and production efficiency.

**Presentations are available
to watch at
[www.internationalegg.com/
document category/video-
presentations](http://www.internationalegg.com/document-category/video-presentations)**

Delegates networking tour



Opportunities for the future

JESPER UGGERHØJ

CEO, LØGISMOSE MEYERS

Jesper gave delegates an insight into how premium Danish retailer and food service provider, Løgismose Meyers, has capitalised on megatrends.

He explained that food trends are at the centre of product development at Løgismose Meyers, and in recent years there have been four key trends:

1. Local and Nordic
2. Organic
3. Animal Welfare
4. Craftmanship

Jesper gave examples of how these trends had been materialised in-store, such as the inclusion of a free range organic whole chicken, which is grown amongst the forests in the Pyrenees. He explained this delivers on two key trends - organic and higher animal welfare - and has achieved a 5% market share in Denmark despite costing double that of a standard bird.

He also identified a number of future trends which are being explored currently by the business:

- Plant based and alternative protein products

- Climate neutral food and production
- Vegetarian and vegan becoming the norm
- Daily Convenience but extraordinary for special occasions
- Natural ingredients
- Sustainable packaging

Jesper also recognised that story telling has been a vital part of the success of the business, concluding that the story behind the products is what makes them sell.

ASSOCIATE PROFESSOR MARIANNE HAMMERSHOJ AARHUS UNIVERSITY

Marianne explored new egg products and trends for the egg product industry. She first discussed the role of egg products, explaining that they provide improved convenience, safety, shelf life and potentially improved functional properties for a number of applications compared to shell eggs.

She added that egg consumption is growing, and that consumer perceptions of eggs have vastly improved over the past 10 years as consumers relate to the health benefits of eggs.

Marianne explained that plant-based alternatives will continue to challenge egg

products, but that egg products can remain competitive by providing superior functional properties. She explored a study which suggested that although alternative proteins have functional properties and can be used to produce foams, gels and emulsions, eggs outperform them.

She identified that there were future value added opportunities for the industry. For example the development of technologies to separate egg proteins and phospholipids to produce high nutrition value products for the pharmaceutical and infant formula markets will generate a significant price premium.

MARK DURNO DIRECTOR AGRIFOOD, ROCKSTART

During the final conference presentation, Mark discussed agri-food innovation and the opportunities that investment can open.

He explained that 75% of CO₂ is coming from the agriculture industry, which presents a massive opportunity for the industry to capitalise on, in developing new technology and software.

He added that his investment business looks for start-up investments that improve efficiency and processes within the agrifood

industry, with one such example being food waste reduction.

Mark discussed a number of the business start-up investments, identifying how they are adding value and helping to reduce the level of food waste that is currently produced, for example through better forecasting using on-the-ground data.

He advised delegates that if they wanted to be a front runner in driving change and innovation then they need to engage with start-up businesses, who are delivering targeted and adaptable solutions to the problems that the industry face. He suggested that there is value in looking outside of your business and your industry to identify 'growth hacks' for your own industry.

Presentations are
available to view on the
IEC website





Business Conference

SAVE THE DATE

5th - 7th April 2020

Registration opens in early December

*Early booking discount available until 31st December

