

Challenges and opportunities for the meat sector

A very thought-provoking and interesting presentation by David Hughes, Emeritus Professor of Food Marketing, Imperial College London was recently given at the Biomin World Nutrition Forum in Vancouver, Canada.

Here we highlight some of the key points from this presentation, which was entitled 'Driving the protein economy: Unprecedented challenges and opportunities'.

The global human population will increase by two billion over the next 30 years with most of the growth coming from emerging countries. This, coupled with higher incomes, will put pressure on the world's protein suppliers, with poultry, pork and eggs growing the fastest. Farmed fish and seafoods will more than compensate for their decline in caught wild products.

In the short term, prices will be volatile but, hopefully, will be more stable in the longer term. While in many countries meat consumption is increasing, there are countries in the developed world where consumption, especially of beef and pork, is static or even in decline.

Recent research from the UK highlights that this is mainly due to health concerns (58% of respondents), to save money in difficult times (21%), animal welfare concerns (20%), food safety (19%) and worries about the environmental impact of livestock farming (11%).

The 'processed meat and red meat is bad

for your health' lobby is controversial but fortunately is currently getting lost in the cacophony of media noise about what is good or bad for you!

Green credentials

Prof Hughes sees well financed start-up companies, mainly based in California, that are launching analogue meat and egg products as a real medium-to-long-term threat. These non-meat proteins will compete on their taste, price and green credentials.

Historically, price, taste and convenience have been the consumers' principal drivers but they are now looking more and more at product attributes, such as place and method of production, provenance and background story, care of the local economy, animal and worker welfare, environmental impact and overall sustainability.

Recent surveys suggest that there is a real willingness to pay more for products with strong environmental credentials.

The 'green bar' is rising all the time and the challenge for the food industry is to meet or, better still, to exceed consumer expectations and thereby gain their long-term loyalty.

This is not just a Western phenomenon and Asian consumers are now increasingly giving their custom to environmentally

friendly (especially with regards to packaging waste that is recyclable) and concern about social values and the health of their customers.

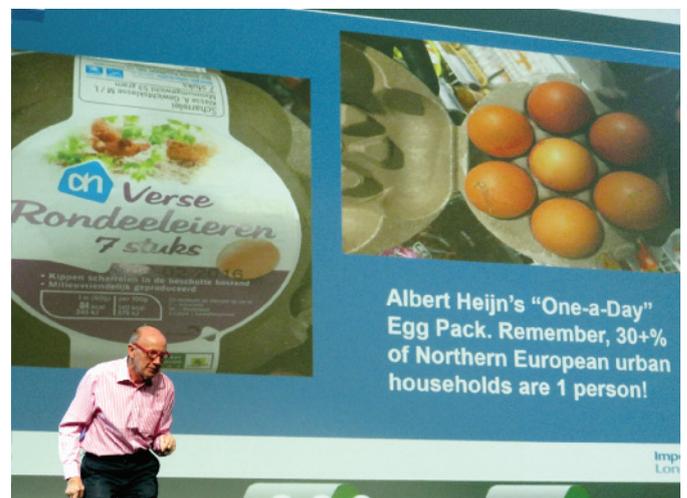
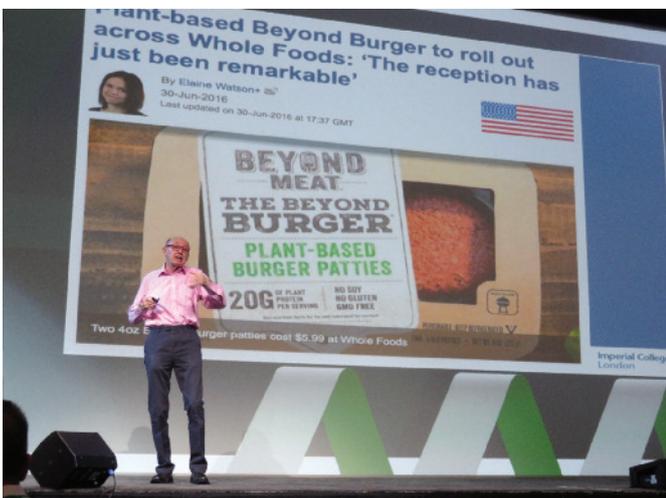
The big challenge in the modern day production of animal products for human consumption is to define exactly which attributes consumers' value and are willing to pay for.

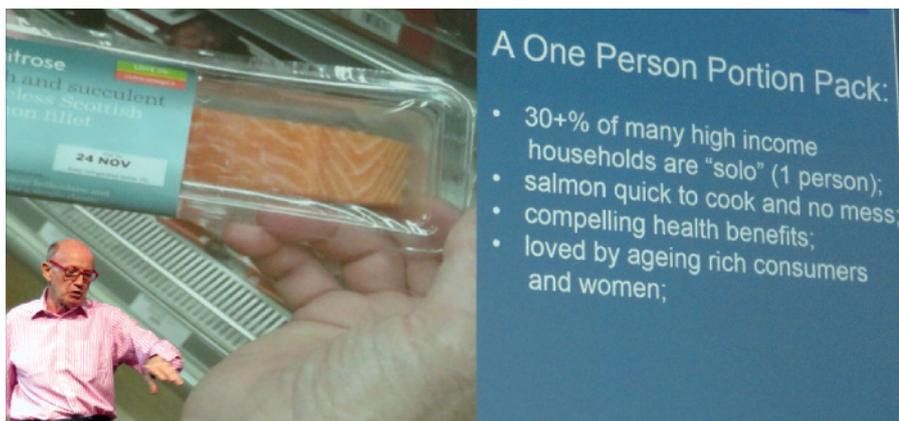
In this context, products which can claim some or all of the following should be able to command premium prices:

- Free range.
- Slow grown.
- Happy/contented.
- Grass fed.
- Vegetarian-fed.
- Aberdeen Angus.
- Rare breed.
- Produced by Farmer Jones.
- Organic.
- Omega-3-rich.
- Local.

Words like chicken, beef, pork and fish are commodity nouns which earn commodity prices and still give a decent return to the lowest cost producers. However, attractive margins are in the adjectives, such as 'Farmer Jones' Scottish, grass fed, Aberdeen Angus beef'.

Consumers want their purchases to be 'free from' and prefer to see these specified, rather than to just be told that their purchase is additive free. Examples here include:





- Antibiotic-free.
- Hormone-free.
- Additive-free.
- Campylobacter-free.
- Salmonella-free.
- GMO-free.
- Gluten-free.

Nowadays, the expectation is that these will be provided as a matter of course and with no additional premium price.

The use of antibiotics

Another issue of the day is the use of antibiotics to improve growth efficiency. Major groups like McDonalds and Yum (owners of KFC) are continually responding to pressure from their shareholders and special interest groups to remove the routine usage of antibiotics. The global interest was highlighted in May 2016 when the Economist magazine identified the livestock sector as a particular culprit in the overuse of antibiotics in an article entitled 'When The Drugs Don't Work'.

In China and some other emerging countries food safety is a major issue and there is a pervasive concern about food chain integrity.

Looking at this positively, consumer concerns and consumer demand for food with compelling stories creates substantial commercial opportunities for companies who understand the consumer, have high integrity processes and closely managed supply chains with trusted partners.

On the downside many of the product attributes being sought by the consumer can not be easily detected and this provides opportunities for food fraud.

Companies must be able to deliver the promises they give! In recent times successful products have been:

- Really tasty and 'more-ish'.
- Convenient.
- Given strong health and well-being hooks.
- Wrapped up with strong social values.
- Made up from a few simple, natural ingredients.
- Linked with a super ingredient, for example, omega-3.
- Indulgent, but affordable.

- In a format that can be eaten as a snack.
- The traditional three meals a day eating pattern is breaking down, some might say it has already broken down! Snacking or the pattern of eating frequent, smaller meals is emerging. Consumers are therefore looking for solutions and avoiding problems.

Chunks of meat are now often perceived as problematic. Historically, the answer to the question "what shall we have for dinner tonight" was pork or chicken; nowadays it is much more likely to be a Chinese, Italian or Indian meal!

This change brings opportunities to add value to meat and, to date, the poultry industry has responded quickly to this challenge.

The pork industry has long had such an orientation with products like ham, bacon, salami and sausages. The global salmon market has opportunities to follow with the universal attraction to sushi.

Beef and lamb need to urgently focus in a similar fashion.

One of the enigmas of the global meat protein industry is that the fish and seafood sector rarely considers that it competes with the land based meat sector and vice versa – yet, to the consumer, meat, fish, eggs and plant derived proteins are substitutes for each other.

Globally, fish and seafood are in the prime position with poultry and pork sharing second place. If we take dominant China out of the equation then fish and seafood share prime position with poultry.

In much of Asia and Africa, fish is the major source of protein for consumers and the big global battle is that affordable meat protein lies between 'industrially produced' fish and poultry meat.

Farmed fish such as tilapia and pangasius are highly efficient converters of feed when it comes to producing meat, with chicken next. The challenge for pork, and especially beef and lamb producers, is to distance their products from the intense competition between the 'white meats'.

In addition, all meat producers will have to keep a close eye on the emerging meat analogues that seem to be getting a toehold, particularly in the developed markets. Their much improved taste and 'mouth feel' which is similar to meat, plus

their perceived environmental credentials may herald a bright future and make them serious competition to real meats.

Our global meat industry has a great future, which is strewn with challenges (as shown in the box below). ■

Challenges for the future

- Prices for the principal inputs of intensive livestock production (>50% of total costs) are inherently unstable.

- Meat demand is predictable – buoyant in emerging markets and subdued or even static in developed countries.

- Vocal special interest groups stress the need to reduce growth on health grounds. This has resonance with some consumers and is disproportionately covered by the media.

- 'New wave' meat analogues, based on plant proteins and with strong financial backers are starting to have market traction and could become substantial competitors.

- Around the world middle income consumers want more from their meat, although they may buy less.

- The more tangible attributes there are that command a premium price, the greater the likelihood of food fraud.

- Chicken, pork, beef, lamb and fish are commodity nouns with extraordinarily thin margins, so profits lie with the adjectives supporting these nouns for the consumer-centred meat business.

- All consumers want safer meat with high integrity supply chains and their great preference is to have meat free from antibiotics, hormones and additives, irrespective of the scientific rationale for their use.

- Building trust with consumers starts with understanding their values relating to meat and then aligning industry values to these.

- In urban, middle-class societies with small households, selecting meat species for the main family meal is old-fashioned. Finding a quick and easy solution is more pertinent. The first decision is, will it be an Indian, Chinese, Italian or Mexican meal. Whether it is pork, chicken or seafood based is very much a secondary issue.

- The future looks bright! The biggest challenge is to move quickly from being production orientated/supply driven to a consumer facing/friendly meal and snack provider.