

Accepted Manuscript

Trends in Meat Science and Technology: The future looks bright, but the journey will be long

L. Kristensen, S. Støier, J. Würtz, L. Hinrichsen

PII: S0309-1740(14)00191-0
DOI: doi: [10.1016/j.meatsci.2014.06.023](https://doi.org/10.1016/j.meatsci.2014.06.023)
Reference: MESC 6467

To appear in: *Meat Science*

Received date: 5 May 2014
Revised date: 18 June 2014
Accepted date: 19 June 2014

Please cite this article as: Kristensen, L., Støier, S., Würtz, J. & Hinrichsen, L., Trends in Meat Science and Technology: The future looks bright, but the journey will be long, *Meat Science* (2014), doi: [10.1016/j.meatsci.2014.06.023](https://doi.org/10.1016/j.meatsci.2014.06.023)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Trends in Meat Science and Technology: The future looks bright, but the journey will be long

Kristensen, L., Støier, S., Würtz, J & Hinrichsen, L.*

*Corresponding author

Summary

With an increasing world population, an increase in affluence and a substantial growth in the demand for high quality protein, the meat sector faces a fantastic but challenging century. New scientific knowledge, technology and creative minds are the main ingredients required to reach out for this great opportunity. Efficiency all the way from breeding and farming to processing and dispatch is crucial for success. Technology has brought us far, and there is still a huge potential to increase efficiency by implementing best practices on a global scale. New challenges include: Hyper flexible automation, more accurate and faster measurement systems with the possibility of meeting specialized consumer demands already at the production line. Systems to ensure optimal animal welfare will be even more important, and sustainability is no longer a consumer trend but a license to operate. The scientific meat society must provide knowledge and technology so that we together can reach out for a seemingly bright future.

Introduction

The increasing population of the world needs nutritious protein. Affluence will increase, and although eating habits and preferences are very different between regions, as an industry we simply need to provide more protein in order to maintain adequate food supply. High quality protein must not necessarily originate from livestock. Plant alternatives as well as insects and lab-grown meat are being discussed as alternative sources of nutritious protein (Huis et al., 2013; Post, 2012). The demand for meat will increase on a medium long term scale, and the biggest challenge the meat industry is facing is how to produce meat in a more sustainable way. That goes all the way from the farms, processing and logistics to the waste occurring at the consumer. Much attention must be drawn to the feed conversion rates and breeding programs as the main part of the environmental load comes from the farms (Nguyen et al., 2011). However, there is still a lot to do from an industrial point of view to reduce the environmental load during processing and consumption.

The increasing demand for high quality protein and the need to be more sustainable will change the value chains as we know them today. Muscle based meat will not necessarily be the main product anymore as the value of side streams (e.g. traditional by-products) increases, in particular as valuable food and food ingredients. This development will change the meat industry in the years to come, and it will be a strong driver in the development of new technology.

Download English Version:

<https://daneshyari.com/en/article/5791333>

Download Persian Version:

<https://daneshyari.com/article/5791333>

[Daneshyari.com](https://daneshyari.com)