



Prof. Jude Capper

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Strategies to inform decision making in dairy and meat supply chains

Prof. Jude L. Capper

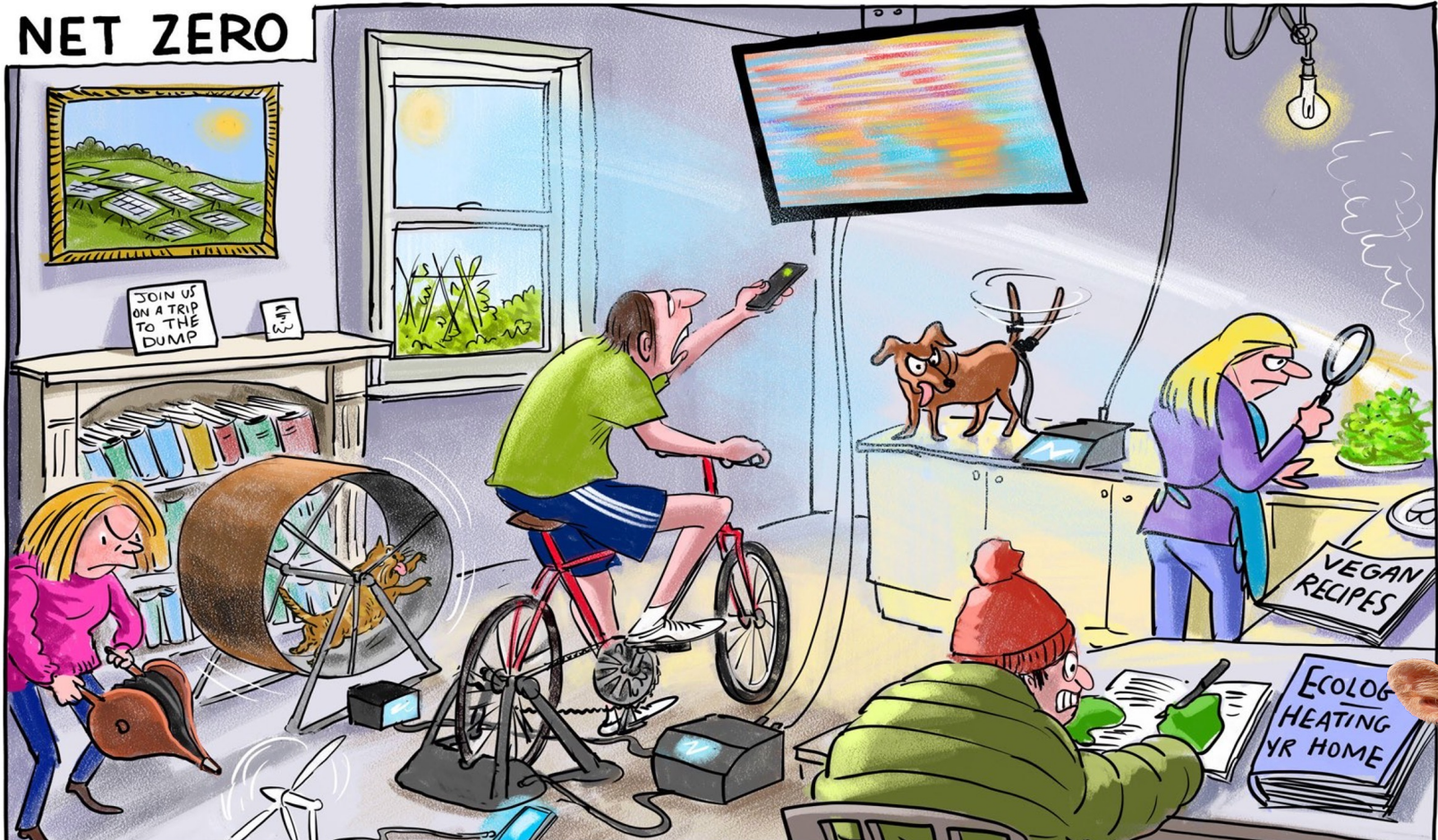
3rd December 2021

Source: Dr. Jude L. Capper, 2021

BSAS/CIEL Net Zero Event



Net Zero is a clear priority



Source: Created by Dr. Jude L. Capper, 2021. Cartoon from: <https://twitter.com/Cartoon4sale/status/1384537729460056067?s=20>

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Retailers face challenge of meeting net zero commitments

50% reduction in food-related GHG emissions by 2030 is possible, but only if we take

URGENT ACTION

wrap.org.uk/GHGPathway



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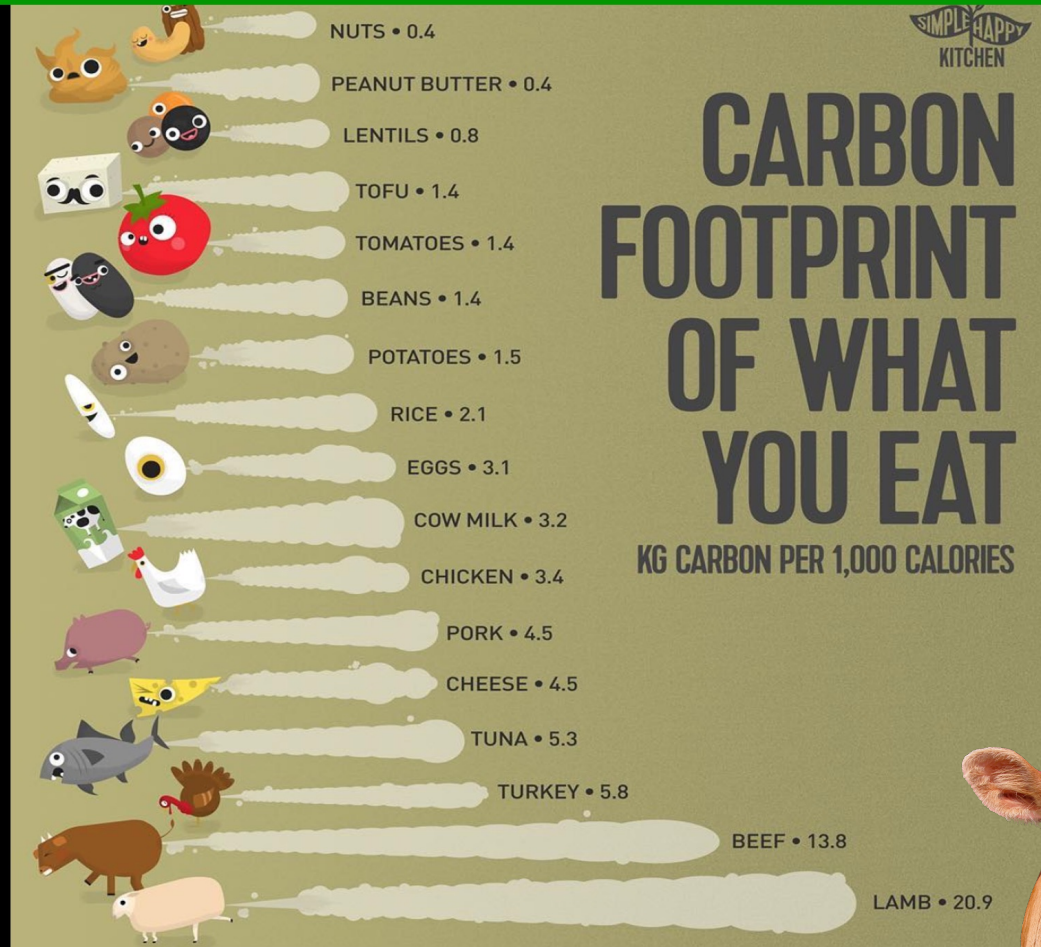
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Source: Created by Dr. Jude L. Capper, 2021. Infographic from: https://wrap.org.uk/sites/default/files/2021-10/WRAP_UK_food%20systems_GHG_Report_TWITTER_Urgent%20action.jpg?itok=8txblEnz

B

Global averages are meaningless

The carbon footprints of the foods we eat vary considerably – global average figures are inappropriate when food production is regional



Source: Created by Dr. Jude L. Capper, 2020, infographic from: https://www.instagram.com/simple_happy_kitchen/

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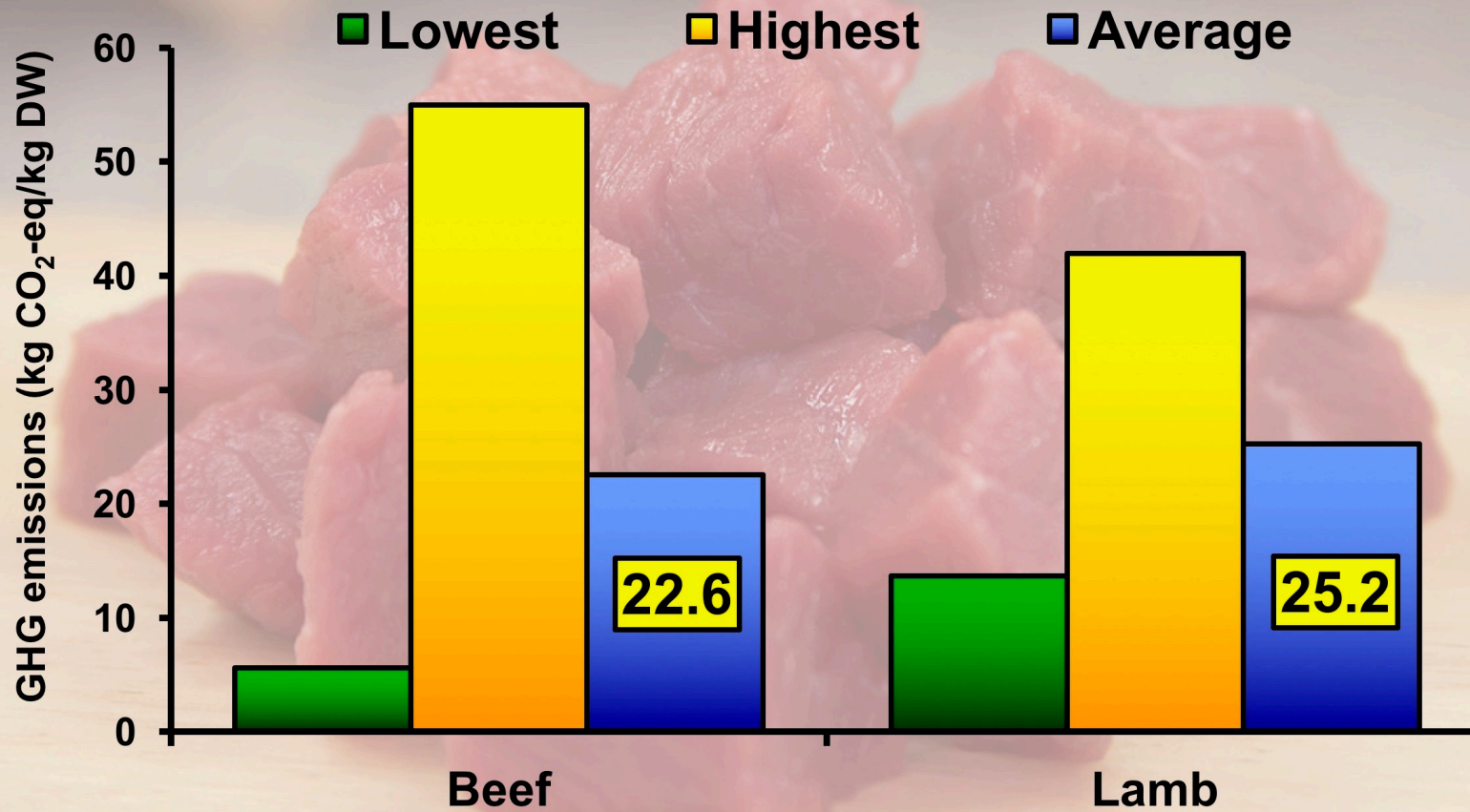
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Carbon footprints of English beef and lamb show significant variation



Source: Created by Dr. Jude L. Capper, 2016; data from 131 beef units and 57 sheep units analyzed by E-CO₂ and reported in: EBLEX (2012) Down to Earth – The Beef and Sheep Roadmap – Phase Three. AHDB, Stoneleigh, UK.

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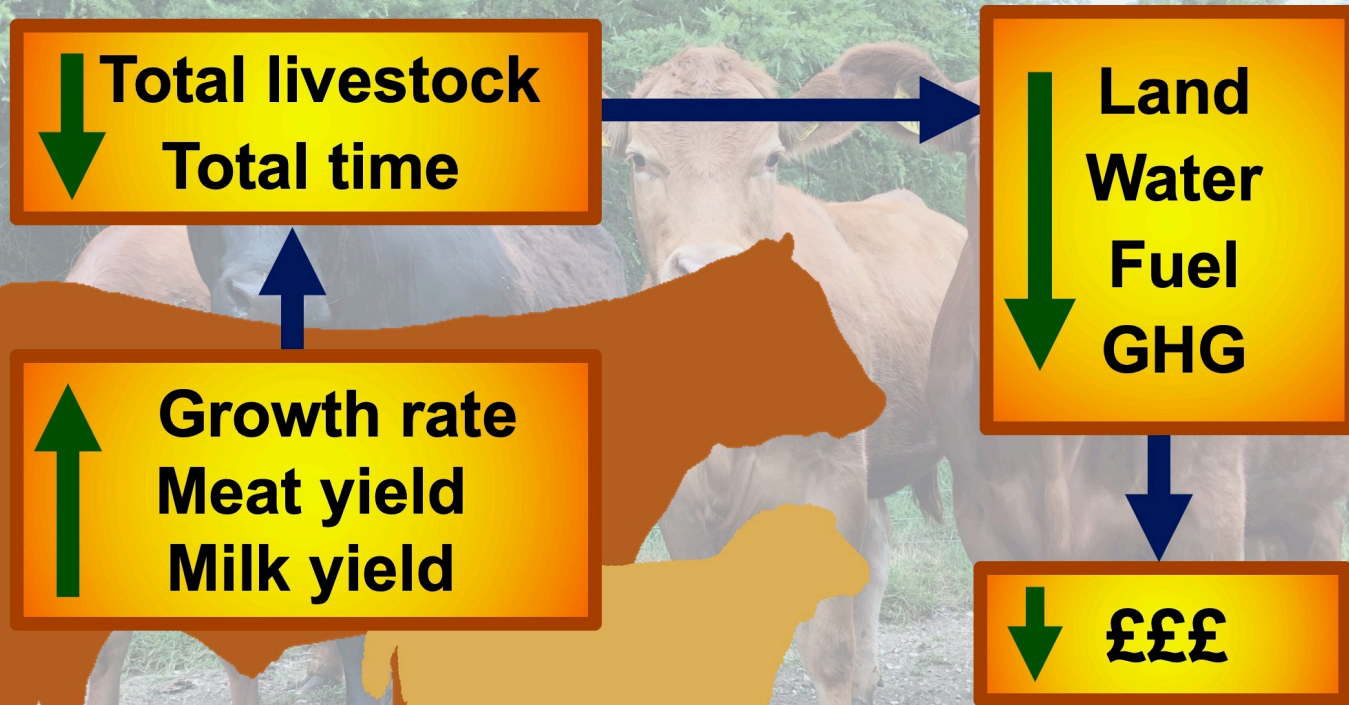
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Improving animal productivity reduces the environmental impact of milk and meat



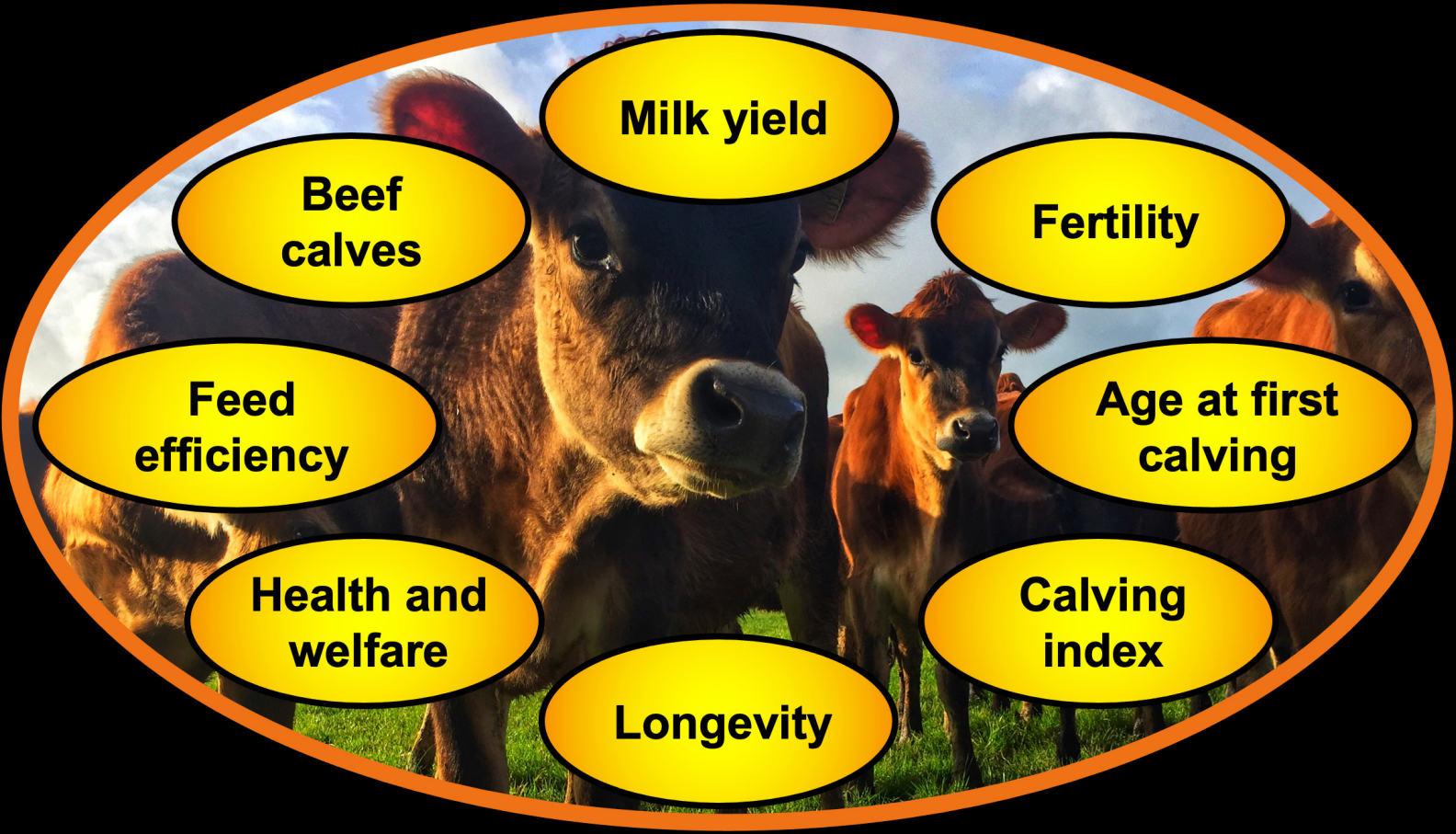
Source: Created by Dr. Jude L. Capper, 2020. Data from: Capper, JL. 2015. Sustainability and One Health. In: Cockcroft, P. *Bovine Medicine*. Wiley-Blackwell, Oxford, UK.

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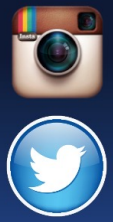


D

Improving performance indicators reduces GHG emissions...but how do they compare?



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Source: Created by Dr. Jude L. Capper, 2021

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How do we balance consumer perceptions of animal welfare with GHG emissions?

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Source: Created by Dr. Jude L. Capper, 2021. Photo credit: Neil Baker, Bakers of Haselbury Plucknett.

AH

Disease losses are significant and preventable, but the sustainability impacts aren't quantified



At the worldwide level, average losses due to animal diseases are more than 20% (OIE, 2008)

Source: Created by Dr. Jude L. Capper, 2020. Data from: World Organization for Animal Health. 2008. <http://www.oie.int/for-the-media/editorials/detail/article/feeding-the-world-better-by-controlling-animal-diseases>



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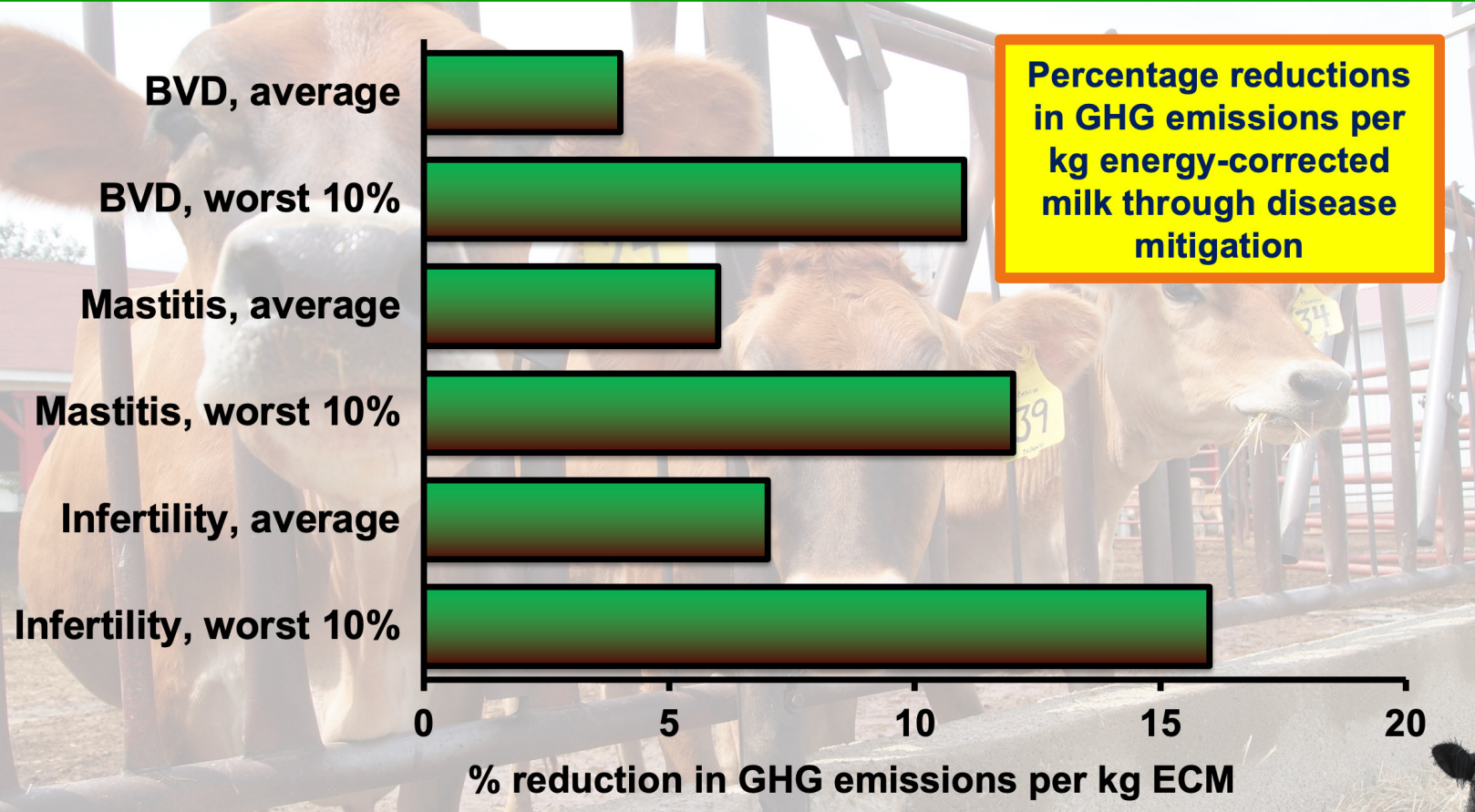


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GHG emissions could be cut significantly by mitigating dairy diseases - UK



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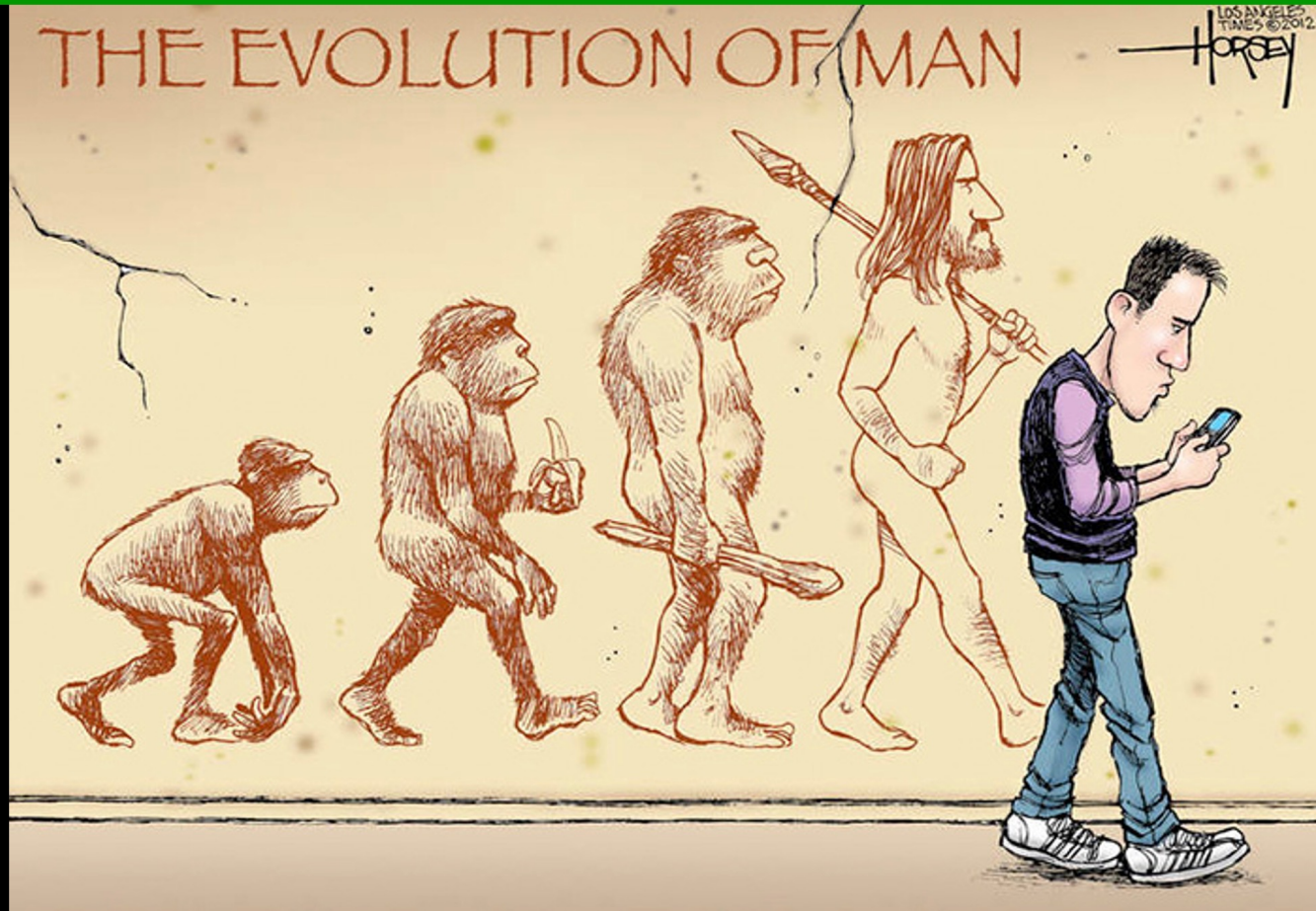
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Source: Created by Dr. Jude L. Capper, 2021. Data from: Statham et al. 2021. Dairy Cattle Health and Greenhouse Gas Emissions Pilot Study: Chile, Kenya and the UK. Available from: <https://dairysustainabilityframework.org/wp-content/uploads/2020/10/Dairy-Cattle-Health-and-GHG-Emissions-Pilot-Study-Report.pdf>



COM

We've got the technology –
now we need to use it to its potential



Source: Created by Dr. Jude L. Capper, 2021. Cartoon from: https://static.boredpanda.com/blog/wp-content/uploads/2016/02/funny-satirical-evolution-charles-darwin-day-251_700.jpg

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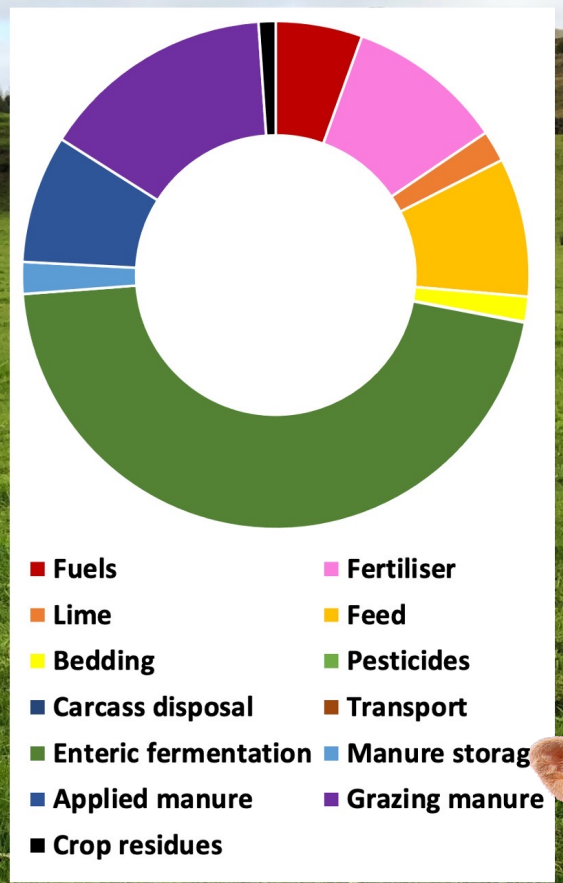
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Standard footprinting tool urgently needed across the industry

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Source: Created by Dr. Jude L. Capper, 2021. Example carbon footprint results based on a beef finishing farm.

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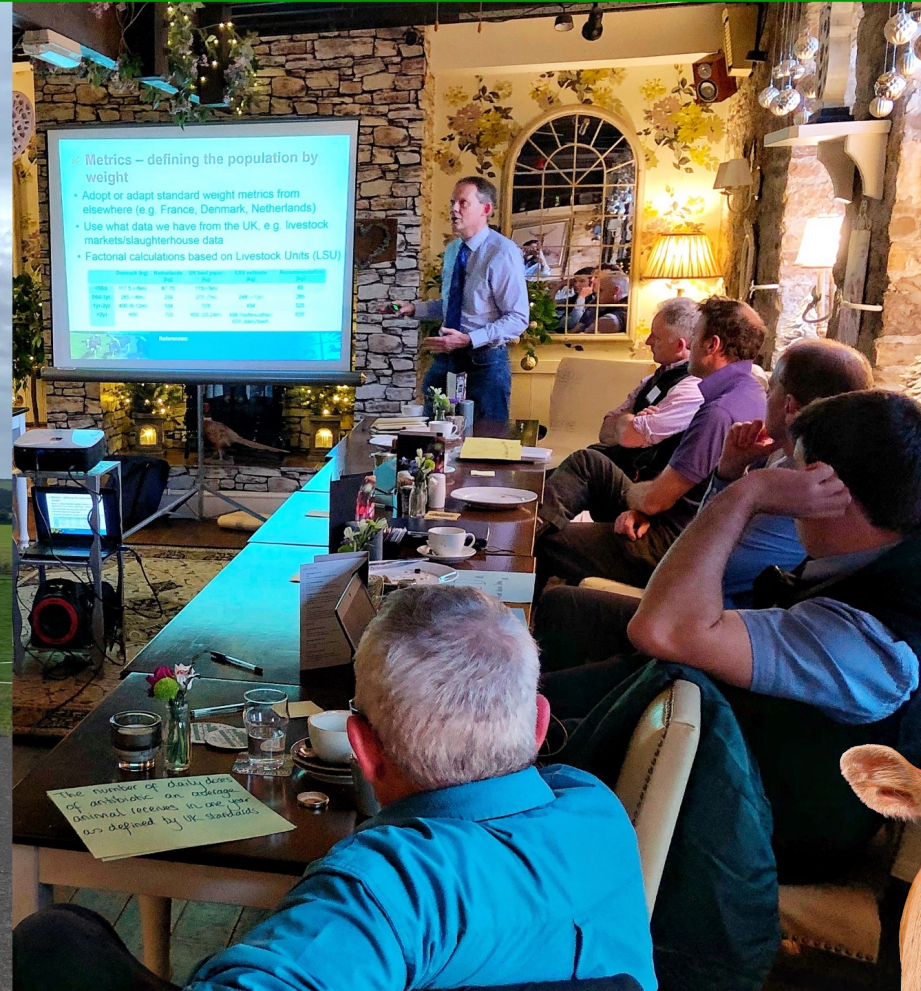


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Peer-to-peer learning, discussion groups and farmer incentives aid behavioural change



Source: Created by Dr. Jude L. Capper, 2021.

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Thank you!

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<http://bovidiva.com/presentationlinks>

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Questions?



Source: Created by Dr. Jude L. Capper, 2020. Cartoon from: <http://snipurl.com/methanecartoon>