



It looks OK, but can you really eat that?

What the rise of alternative proteins means for the meat industry

Gilles Boumeester
February 2018



Rabobank

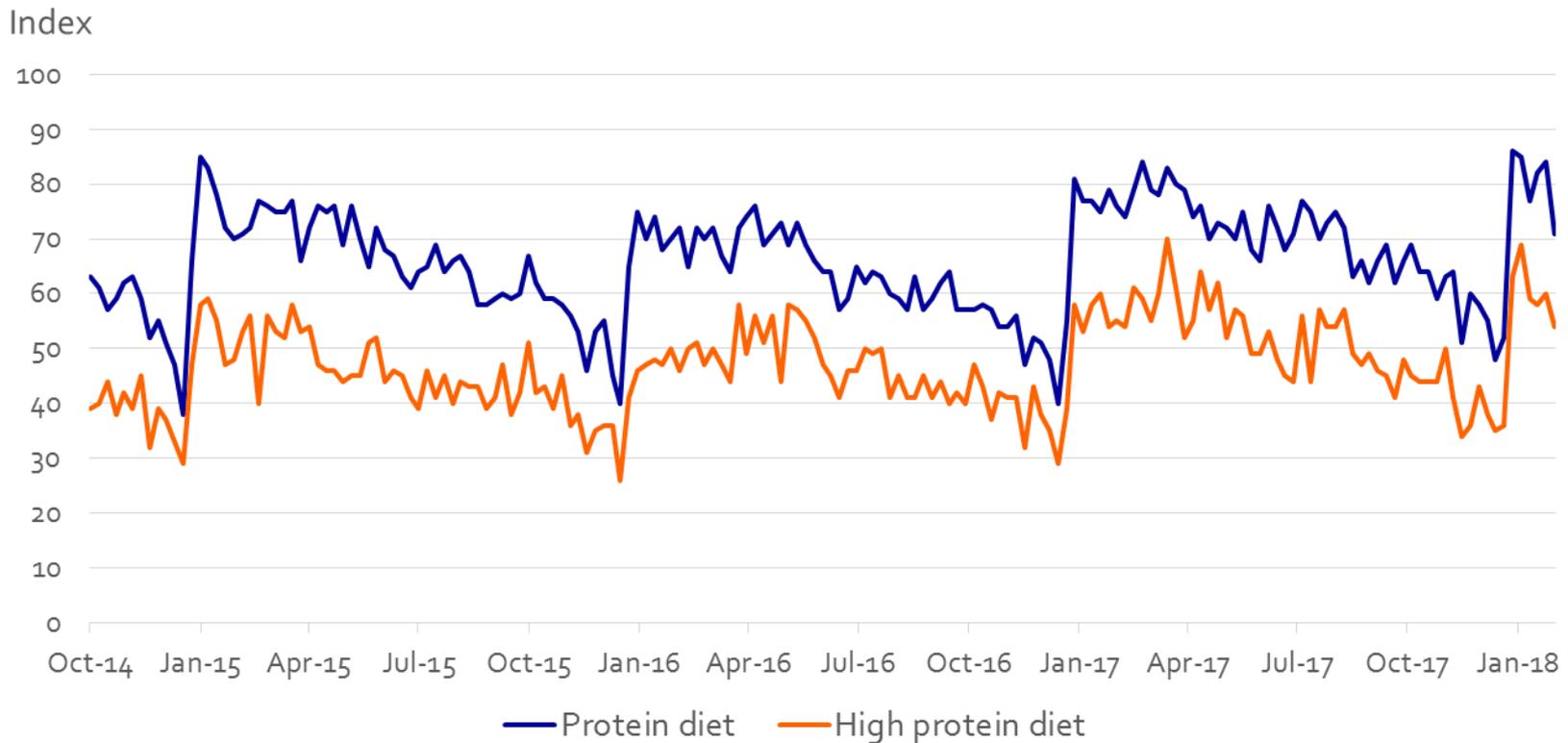


The disruptive consumer world

“I know protein is good for me”



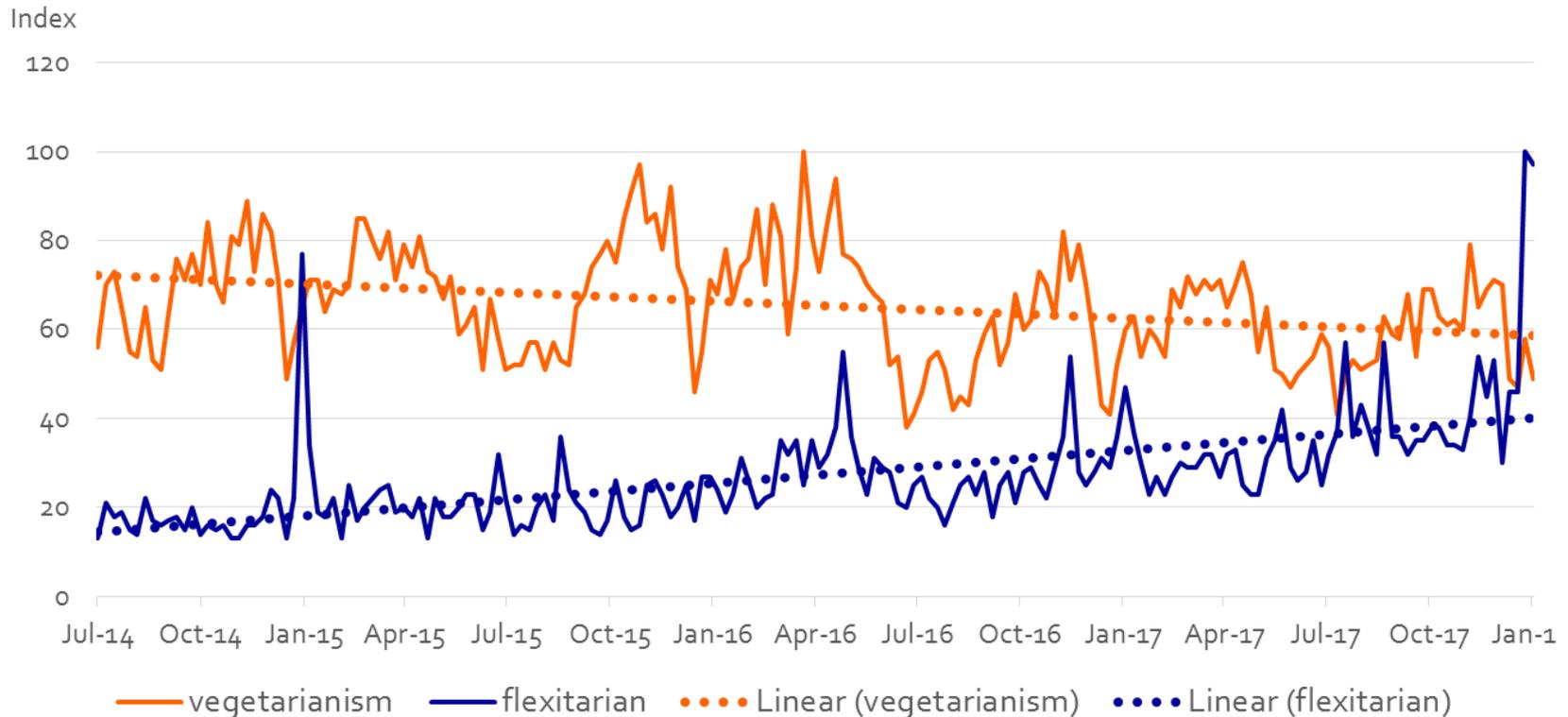
Worldwide google searches show how eating protein is connected to good intentions



But protein is no longer just about meat



Worldwide google searches show how 'flexitarian' is increasingly popular



Re-thinking meat consumption has become a global trend



Exclusive: An all-vegetarian Pret a Manger pop-up is coming to NYC

By Melissa Kravitz | April 5, 2017

Re-thinking meat consumption has become a global trend



**BE FRESH
MORE VEGGIES
LESS MEAT
MY#NEW PICKY#**

Overconsumption of meat can increase risk of high blood pressure, heart disease, and cancer. It also emits huge amounts of greenhouse gases, More than all cars, trucks, trains, planes and ships combined.

#New Picky#



野生救援
WILD AID



Three types of alternative proteins – at different stages of market maturity



Meat substitutes



Emerging alternatives

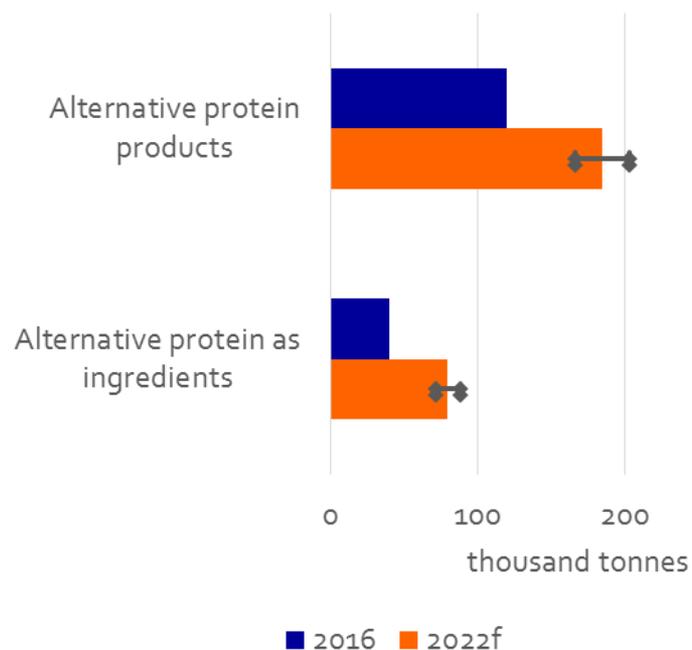


Lab-grown meat products

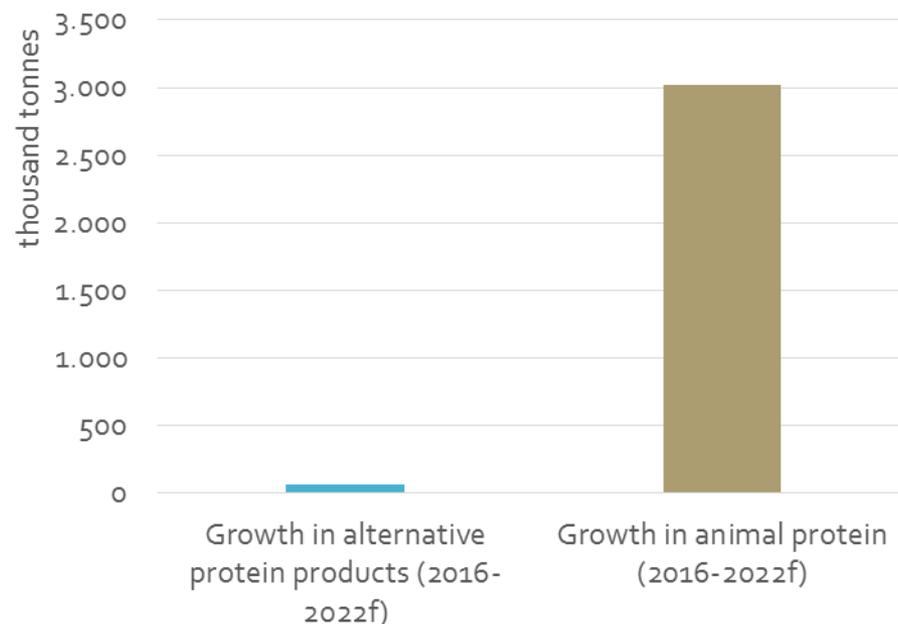
Alternative proteins are gaining market share – from a small base



The market in the US and Canada is still small, but is growing fast



The growth of alternative proteins is minor compared to animal protein growth

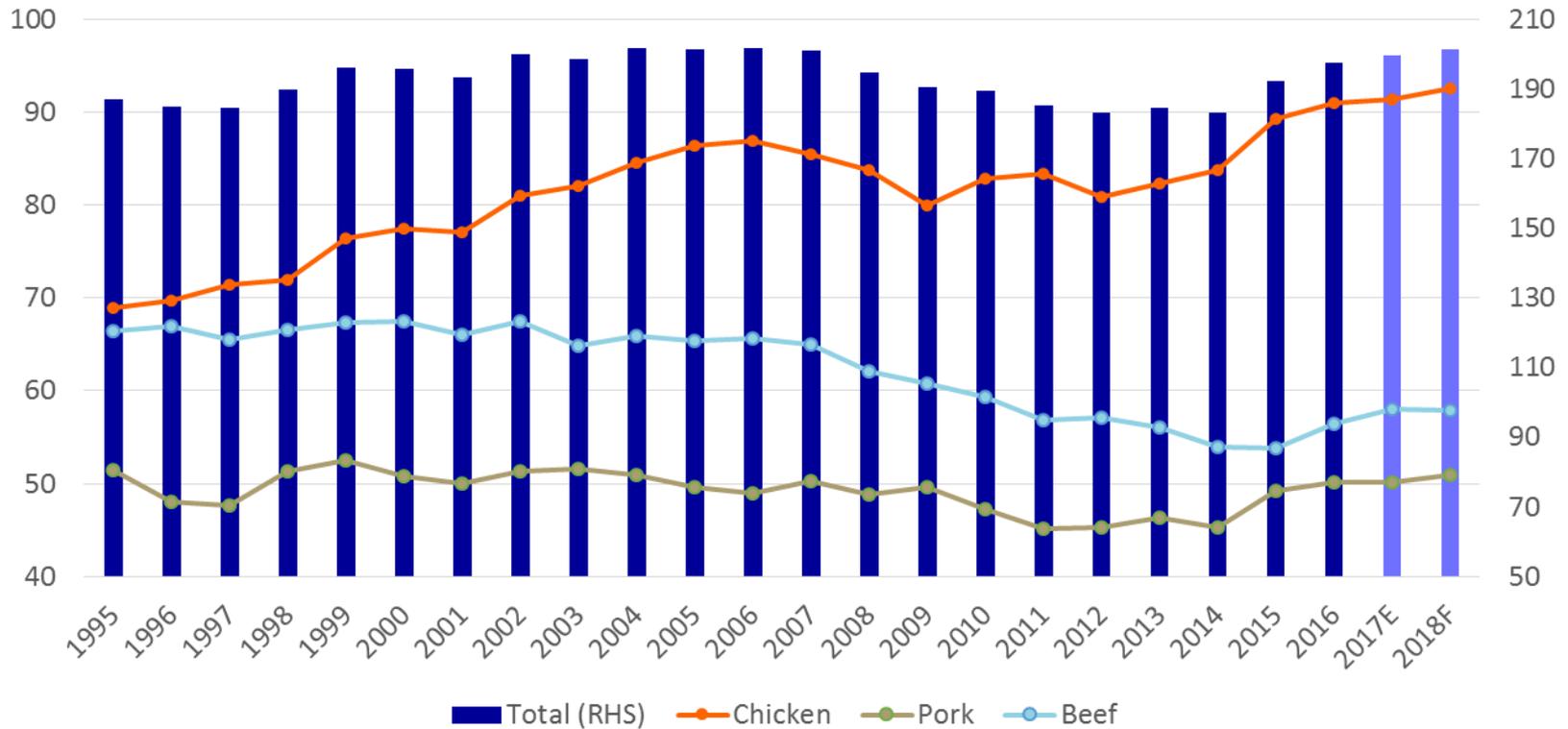


Strong per capita consumption



US per capita protein consumption approaching record levels

Pounds per person



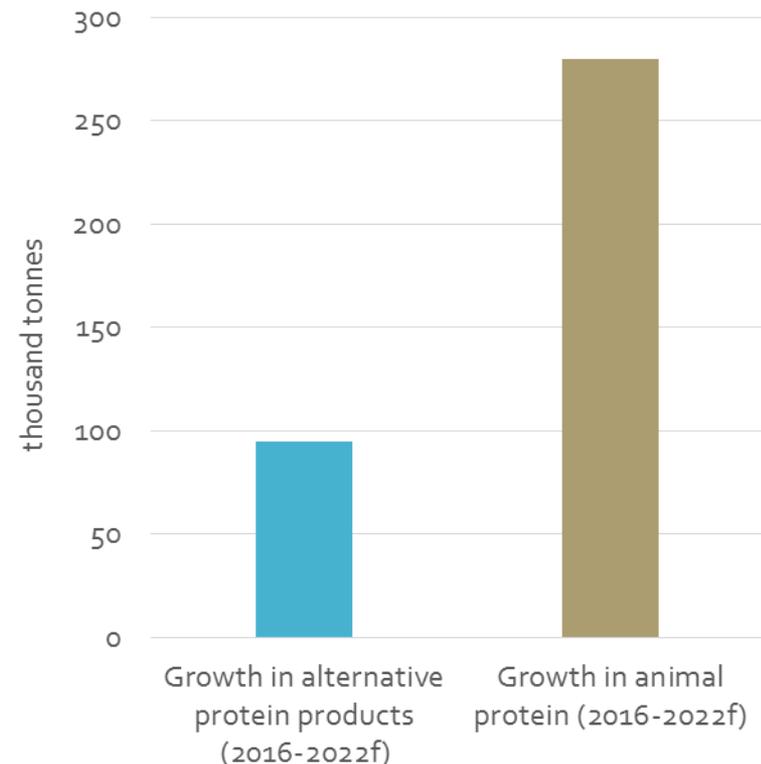
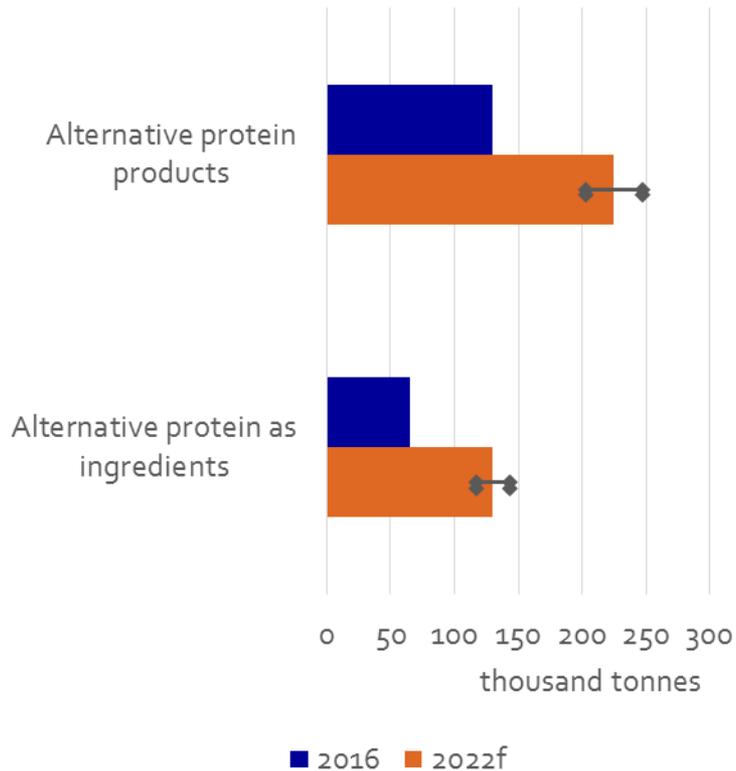
Sources: USDA; Rabobank estimates, 2018

Alternative proteins are poised to steal 'our' growth in Europe



The growth rate is slightly higher in the EU

One third of growth in Europe will go to alternative proteins



Alternative proteins are also gaining market share as feed ingredient

Insect based proteins



Very quick lifecycle,
sustainable, hypoallergenic,
high protein, limited land use

Algal proteins and oils



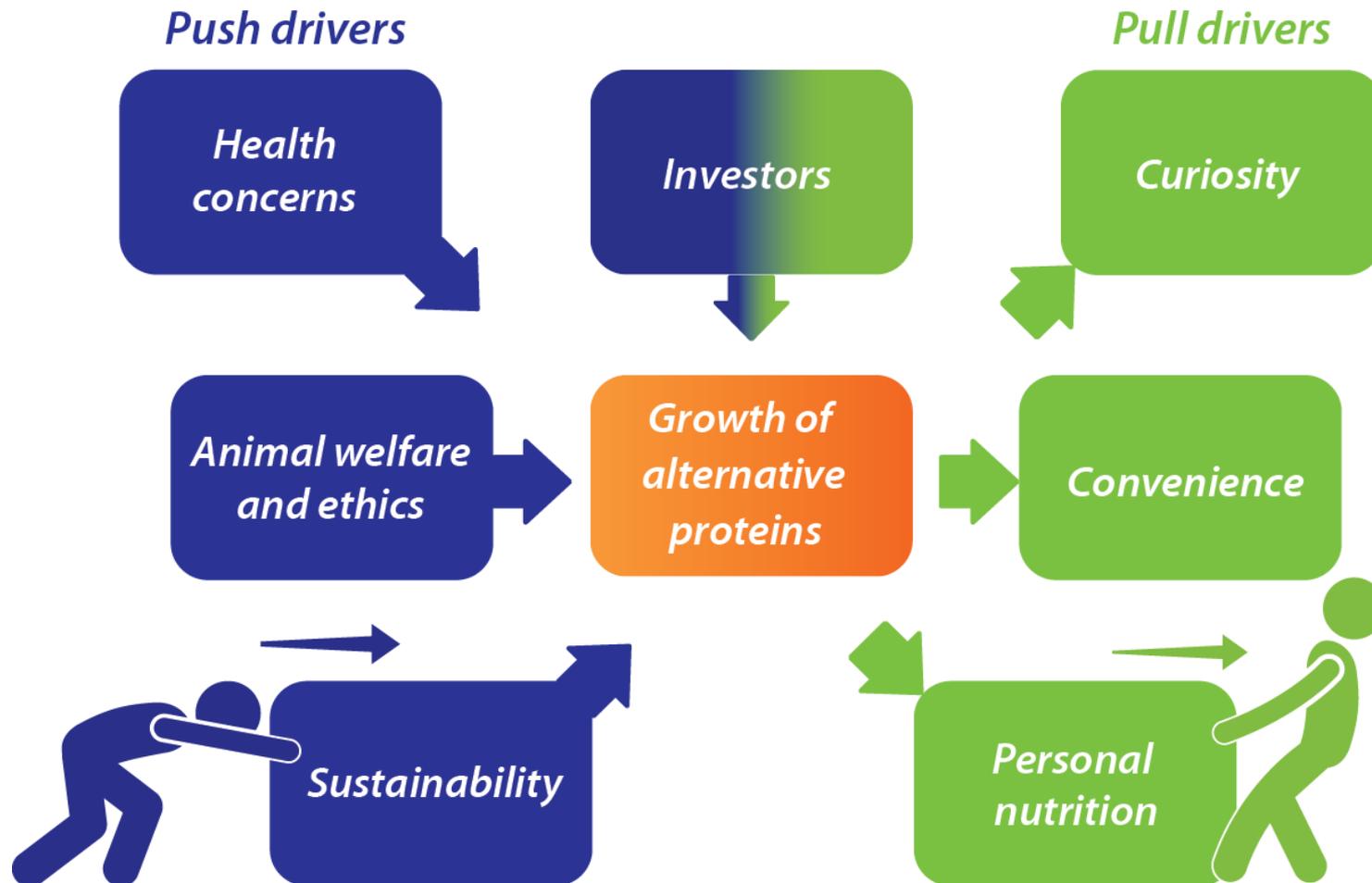
Sustainable, cost
efficient, reliable,
good for consumer
and animal health

Bacterial proteins



Sustainable, scalable,
reliable, non-GMO, high
protein, low lipid

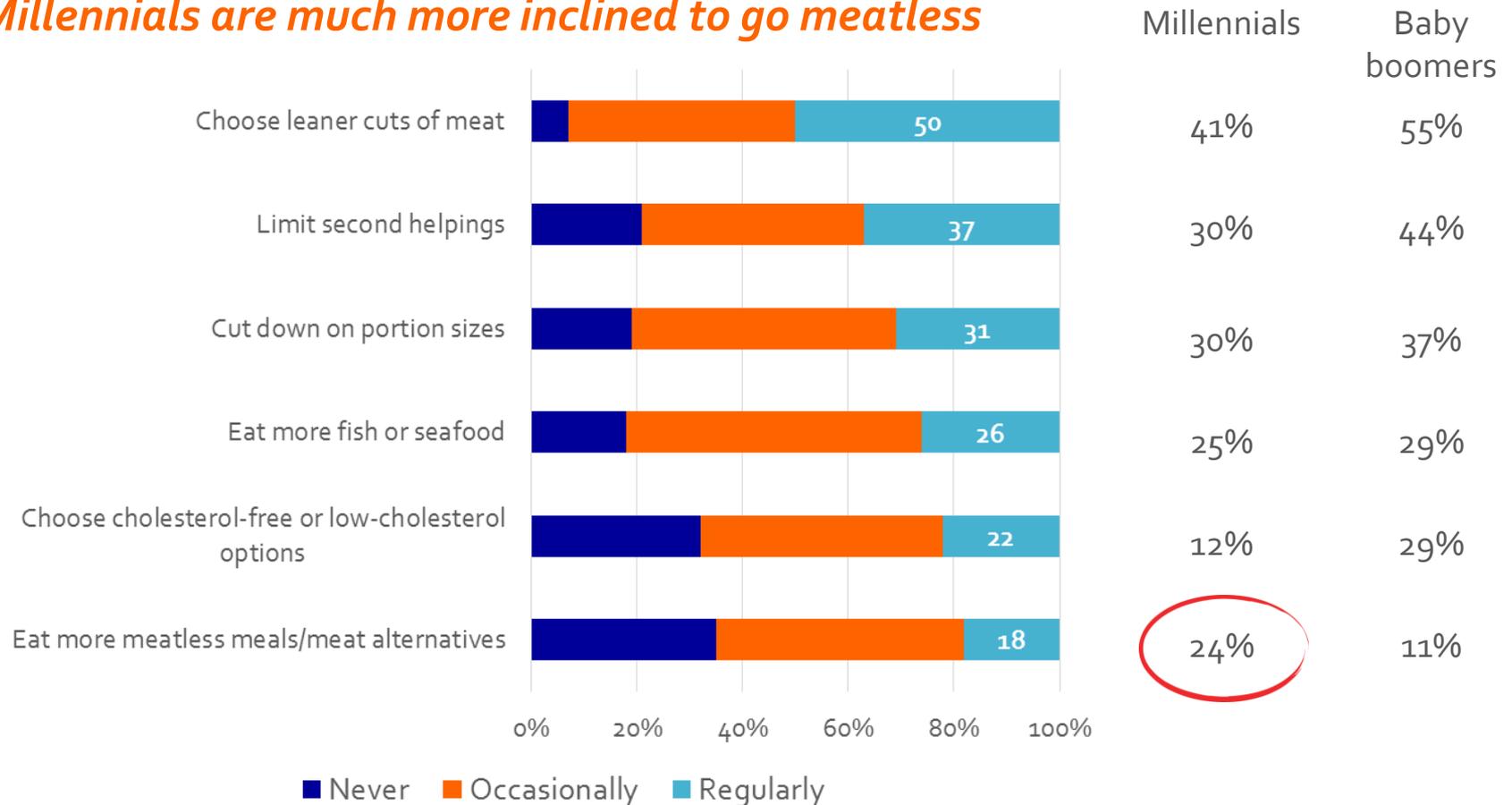
What is driving consumer interest in alternatives to meat?



US consumers go lean and less, before going without meat



Millennials are much more inclined to go meatless



Source: NAMI; Rabobank, 2017

Animal welfare concerns are insatiable

Philip Lymbery, **Compassion CEO**



ABOUT PHILIP BOOKS BLOG GUEST ARTICLES SPEAKING DATES

PHILIP LYMBERY > BLOG > 2017 > 10 > MCDONALD'S ANNOUNCES INADEQUATE GLOBAL WELFARE STANDARDS FOR BROILERS

MCDONALD'S ANNOUNCES INADEQUATE GLOBAL WELFARE STANDARDS FOR BROILERS



On Friday, fast food giants McDonald's announced their **new global welfare standards for broiler chickens**. I am disappointed to say that it completely ignores key principles of broiler welfare such as the problems with fast growth breeds and enough space for them to move freely.

The industry has recently seen leading companies tackle these very issues by signing up to the **US**  or **European** 'broiler asks' which demand compliance to these crucial

Welcome

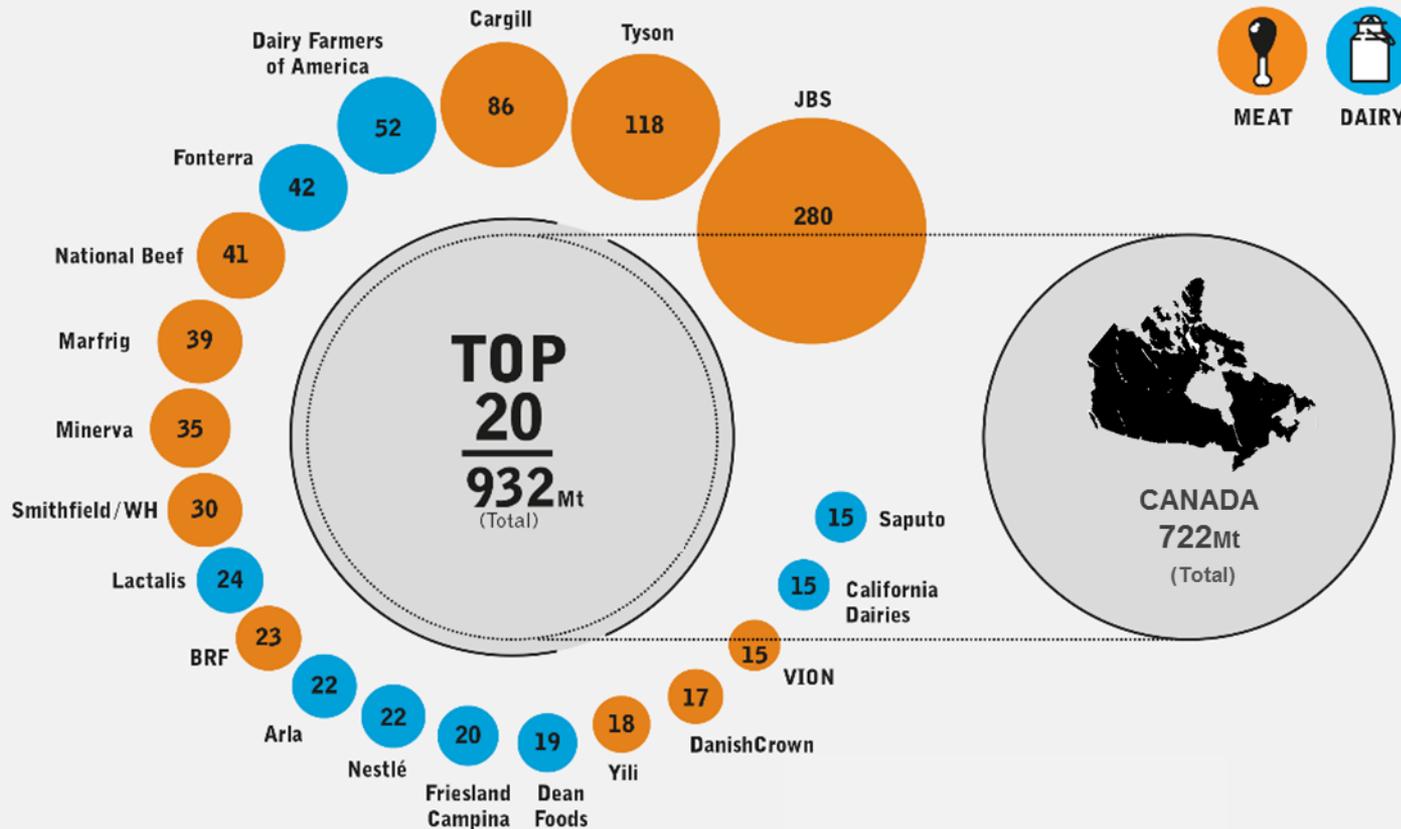
Compassion in World Farming campaigns to end factory farming. My new book, *Dead Zone*, explores the links between factory farming and the demise of our iconic wildlife, and what we can do to save it.



Philip Lymbery

Sustainability concerns are growing

THE TOP 20 MEAT AND DAIRY CORPORATIONS EMIT MORE GREENHOUSE GASES (GHGs) THAN CANADA



Investor signals are mixed



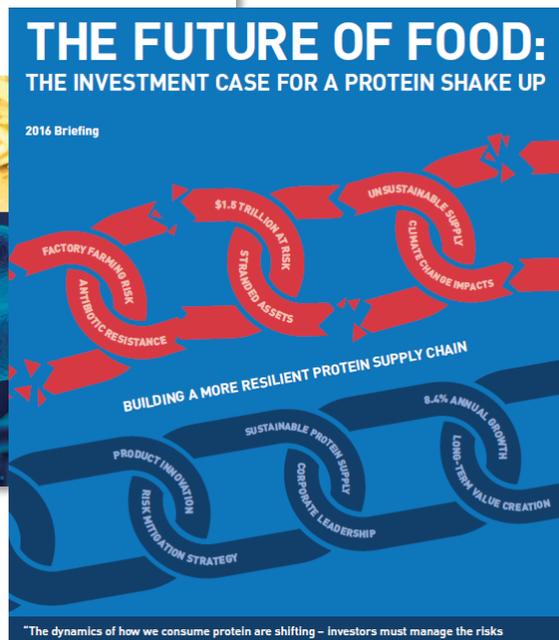
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FAIRR | FARM ANIMAL
INVESTMENT
RISK & RETURN
A COLLIER INITIATIVE

ShareAction»
the movement for Responsible Investment

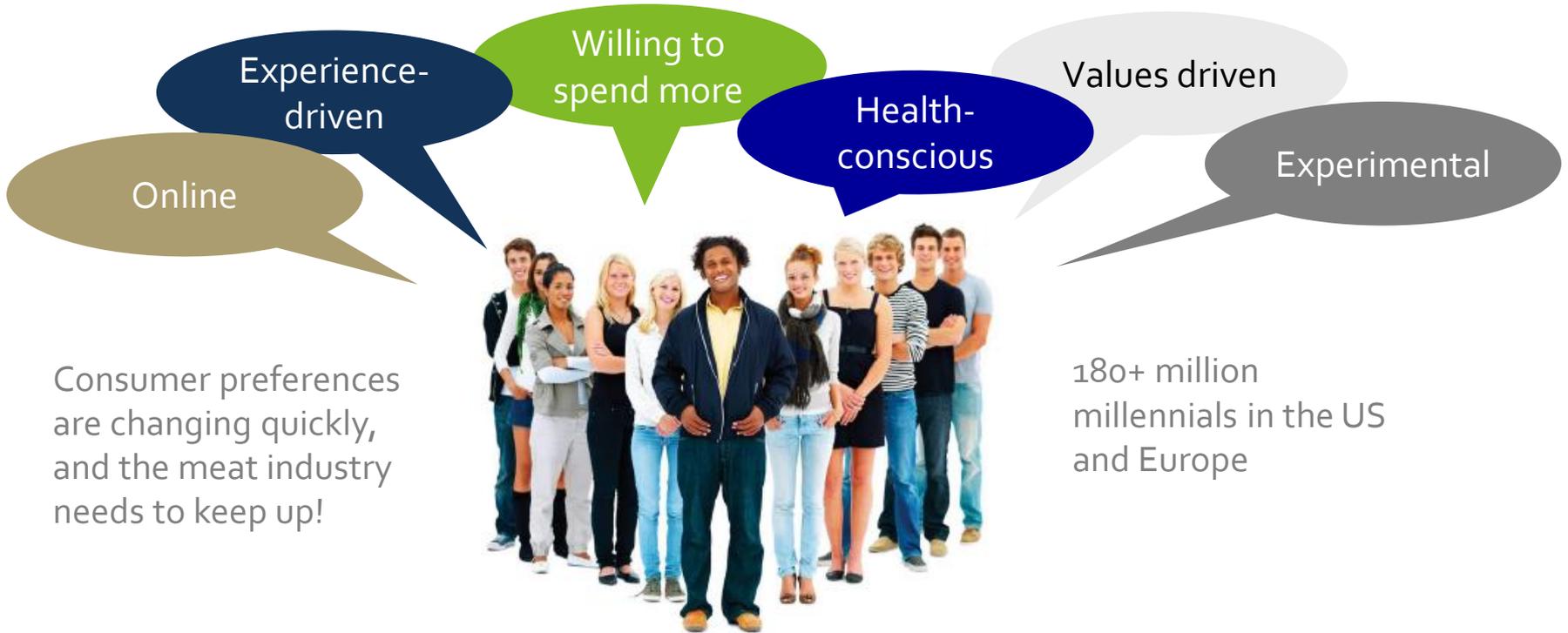
THE RESTAURANT SECTOR AND ANTIBIOTIC RISK

Progress Report, 2017



- **USD 13 bn**
 - M&A activity in alternative food companies since 2014
- **USD 20 mn – 400 mn**
 - Investments in leading alternative protein companies
- **USD 50 mn – 1 bn+**
 - Valuations of leading alternative protein companies, at very low or no revenue

“Dude, where’s my consumer?”



Consumer preferences are changing quickly, and the meat industry needs to keep up!

180+ million millennials in the US and Europe

Q: Who is driving consumption trends?

A: Millennials!

Q: When will they eat?

A: Any time!

Q: Where will they buy their food?

A: Everywhere!

Personalised nutrition



23% protein



11% protein



25% protein



10% protein

Find out what foods your body needs to be its best.

Now you can get a personalized nutrition plan to match what you eat to your body's unique make-up.

[SHOP NOW](#)

habit
FOOD, PERSONALIZED®

Source: Walmart, Habit, 2017

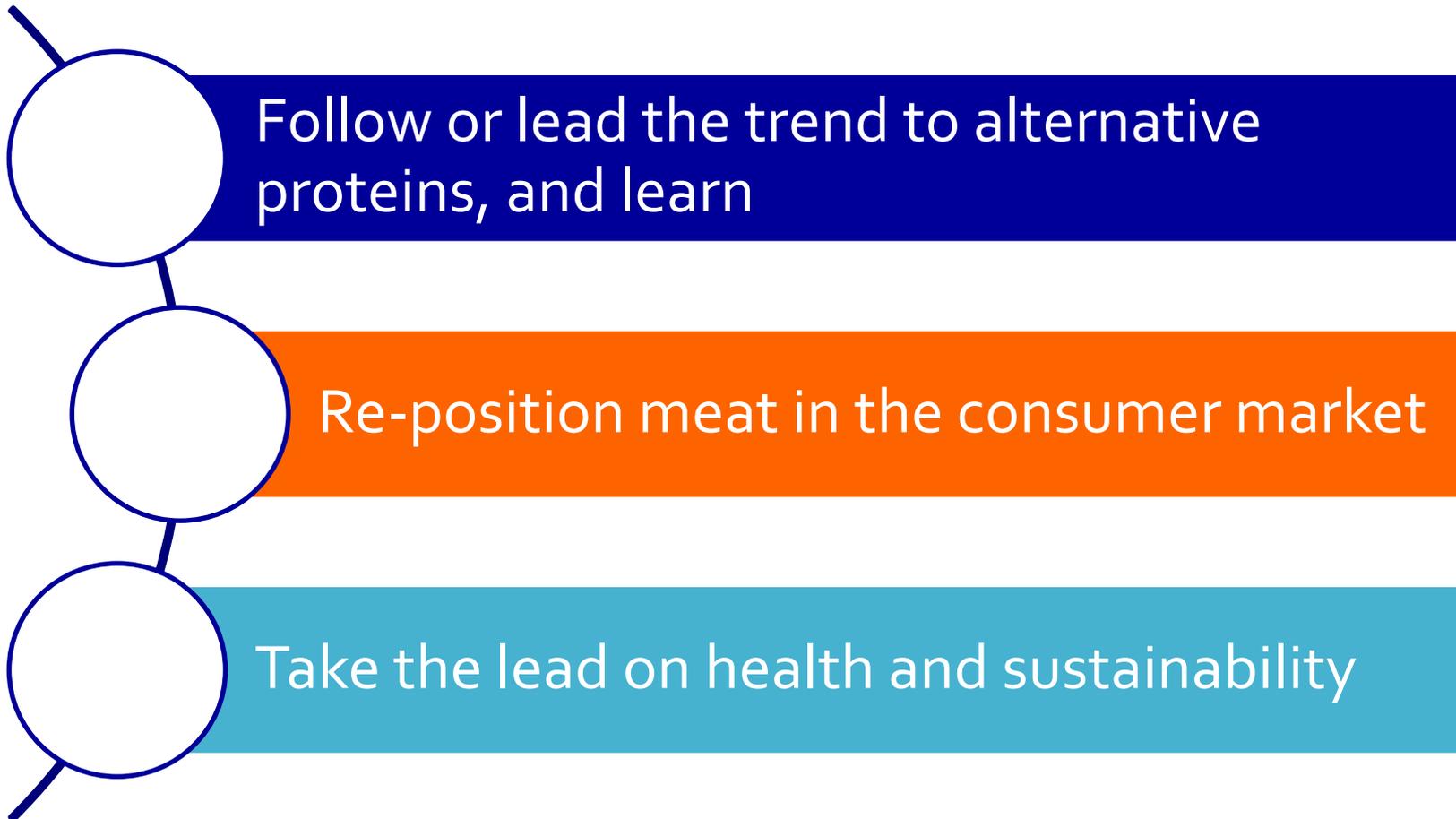
Product quality is already acceptable – and the only way is up...



A close-up photograph of two beetroot burgers on a rustic wooden cutting board. The burgers are made with a dark, textured beetroot patty, fresh spinach leaves, sliced red onions, and tomato slices, all served on a whole-grain, seed-studded bun. A wooden skewer is inserted into the top of the front burger. In the background, a glass of red tomato juice and a bowl of fresh vegetables are visible, creating a vibrant and healthy meal scene.

Successfully navigating a future
with alternative proteins

How can we be successful, given the growth in alternative proteins



Tyson Foods is the best known of many investors in alternative proteins

A video player interface showing a CNBC interview. The video frame displays Tom Hayes, CEO of Tyson Foods, on the left, wearing a dark suit and glasses, and Jim Cramer on the right, wearing a light blue shirt and orange tie. They are in a studio setting with a table of Tyson products. Behind them are screens with the Tyson logo and the text "Tyson SPREADING ITS WINGS?". A red "ON AIR" sign is visible at the top. A lower-third banner reads "MAD MONEY" in yellow, "DOW ▲ 58" in white, and "Hayes: People Want Cleaner Foods And Transparency - That's Not Something That's Going To Change" in black. To the right of the banner is a "EXEC. DECISION EXCLUSIVE" badge. The video player includes the CNBC logo, the text "MAD MONEY", the Twitter handle "@JIMCRAMER", and a duration of "08:30" from "8 hrs ago". Social media sharing icons for LinkedIn, Facebook, Twitter, and Email are also present.

ON AIR

Tyson SPREADING ITS WINGS?

Tyson

Tyson SPREADING ITS WINGS?

MAD MONEY DOW ▲ 58

Hayes: People Want Cleaner Foods And Transparency - That's Not Something That's Going To Change

EXEC. DECISION EXCLUSIVE

CNBC

MAD MONEY

@JIMCRAMER

Duration: 08:30 | 8 hrs ago

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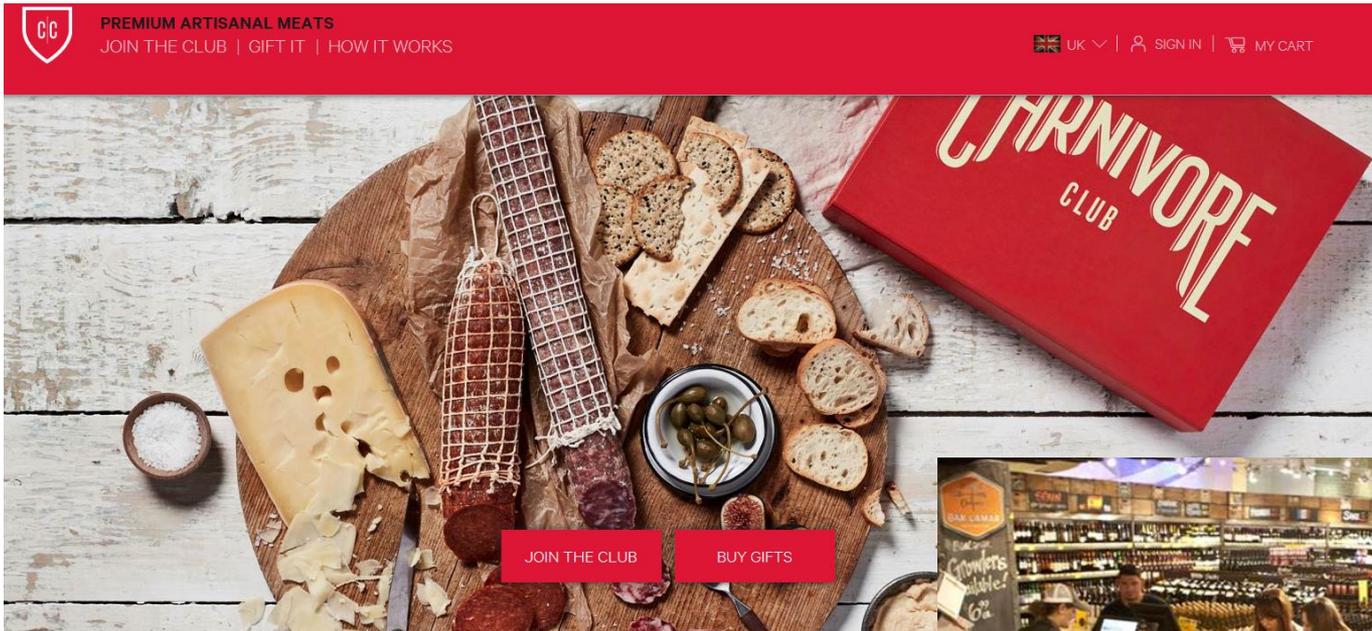
Email

Tyson CEO on sustainability: 'Big food has to get in the ballgame'

Jim Cramer sat down with Tom Hayes, the CEO of Tyson Foods, to talk about the future of meat products and sustainability.

Source: CNBC, 2017

Get (back) on-trend with consumers



Source: Carnivore Club; Eataly, 2017

Hybrid product opportunities exist – it's easy to follow the trends





Gilles Boumeester
Global Head RaboResearch Food & Agribusiness
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