



Imperial College  
London

# The World of Food Post-Covid: Implications for Agri-Food Businesses

Dr. David Hughes  
Emeritus Professor of Food Marketing

Farm & Food Care Canada  
Winter Speaker's Series

Wednesday, February 24<sup>th</sup>, 2021

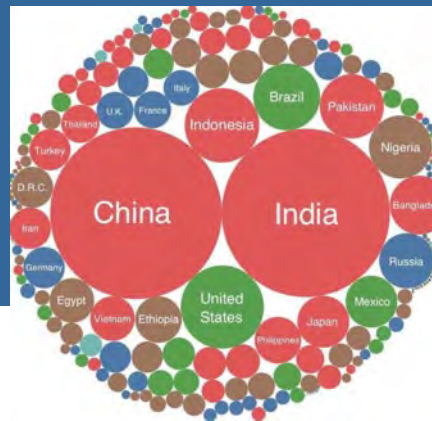
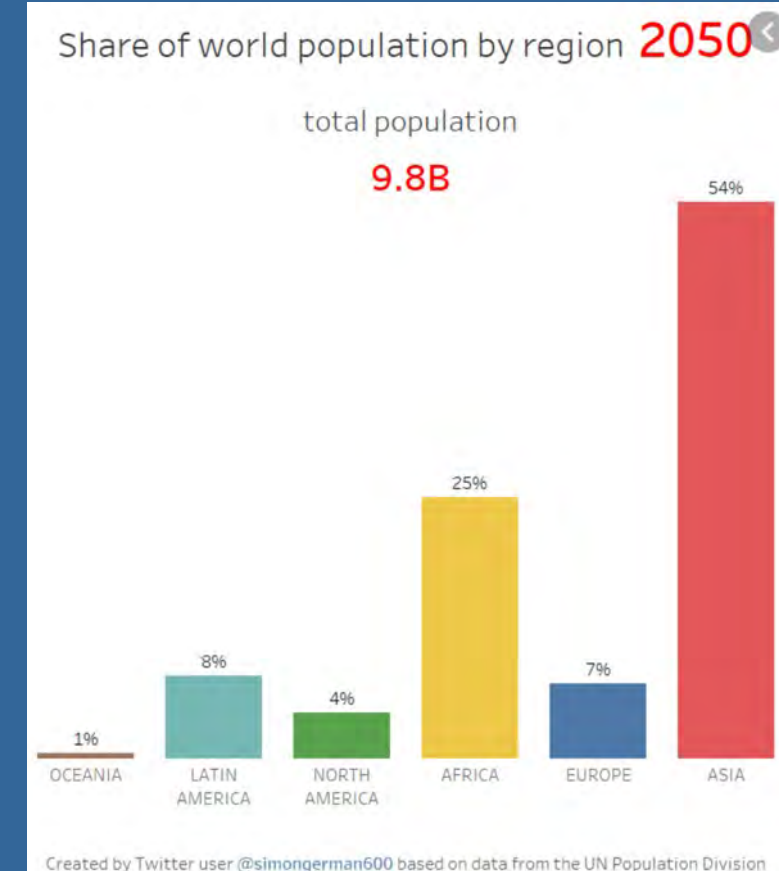
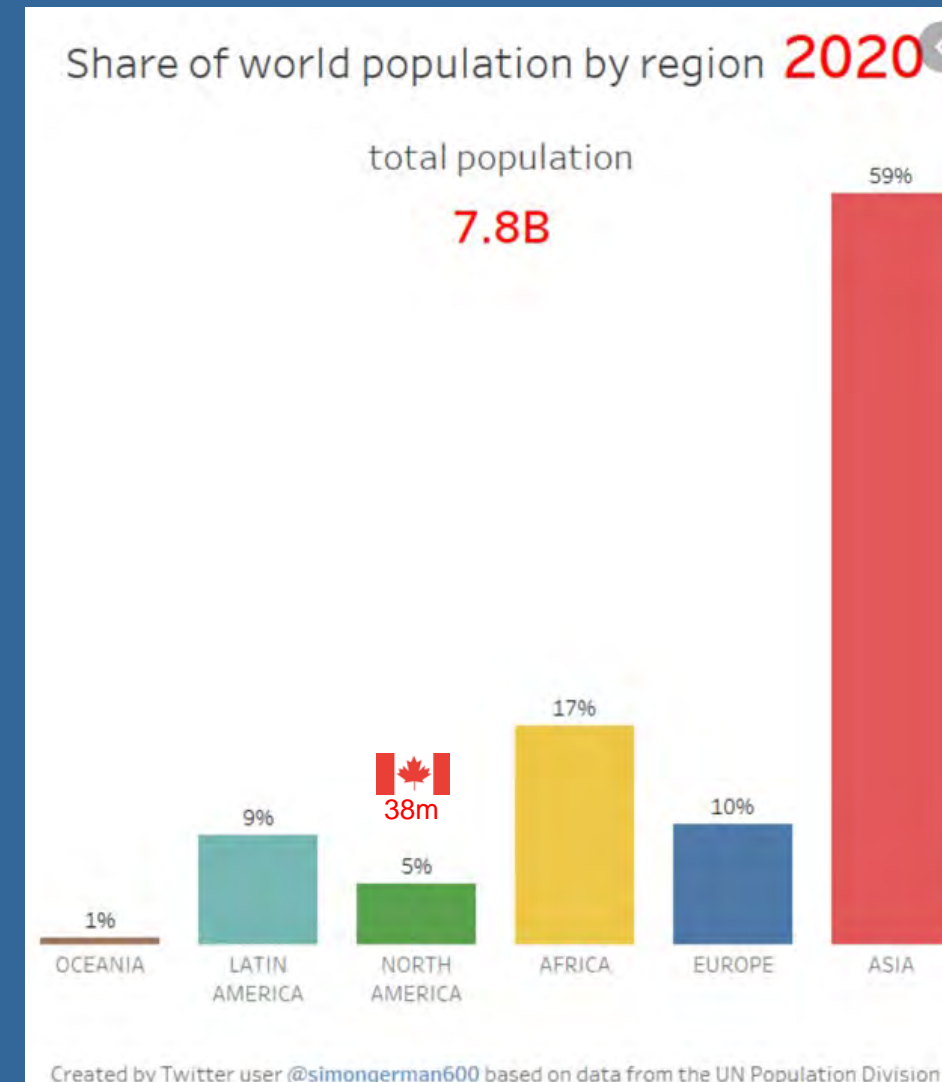
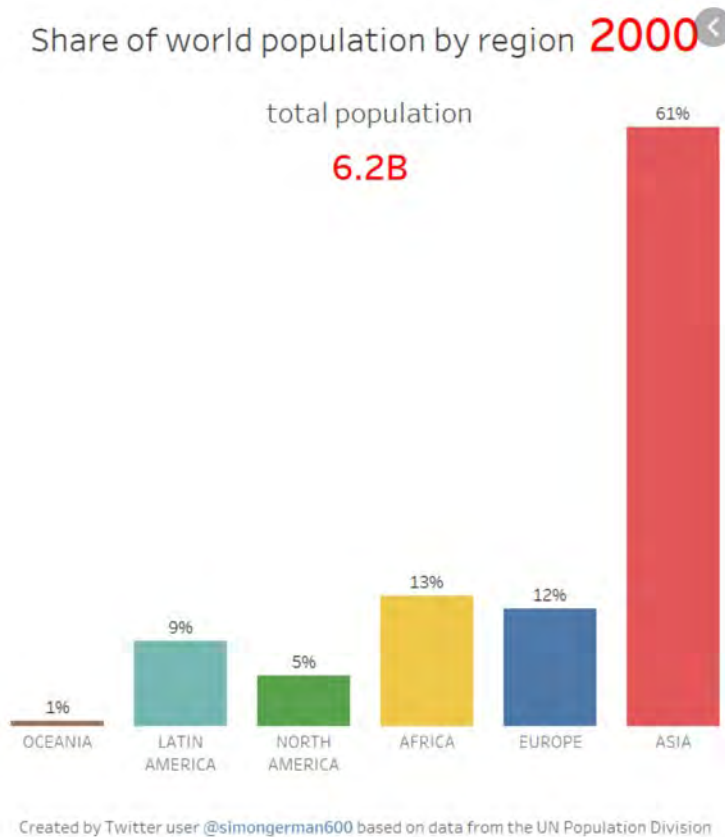


@profdavidhughes

[www.supermarketsinyourpocket.com](http://www.supermarketsinyourpocket.com)



# By 2050, 10 Billion People Will Live in Our World and 80% of Them Will Live in Asia & Africa



Growing at a slower pace, world population is expected to reach 9.7 billion in 2050 and could peak at nearly 11 billion around 2100 (June 22nd, 2020)





What Did We Rush to Buy?  
Comfort Food, Old Favourites,  
Storables, Indulgent Snacks,  
Staples, Value-Priced Protein!

# Covid-19 Cases & Deaths: UK, Canada and China, January 2020 to February 2021



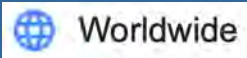
Population: 68 m. Covid Deaths/m. 1,779

Total cases	Recovered	Deaths
4.13M	-	121K

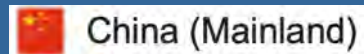


Population: 38m. Covid Deaths/m. 572

Total cases	Recovered	Deaths
850K	797K	21,723



Total cases	Recovered	Deaths
112M	63M	2.47M



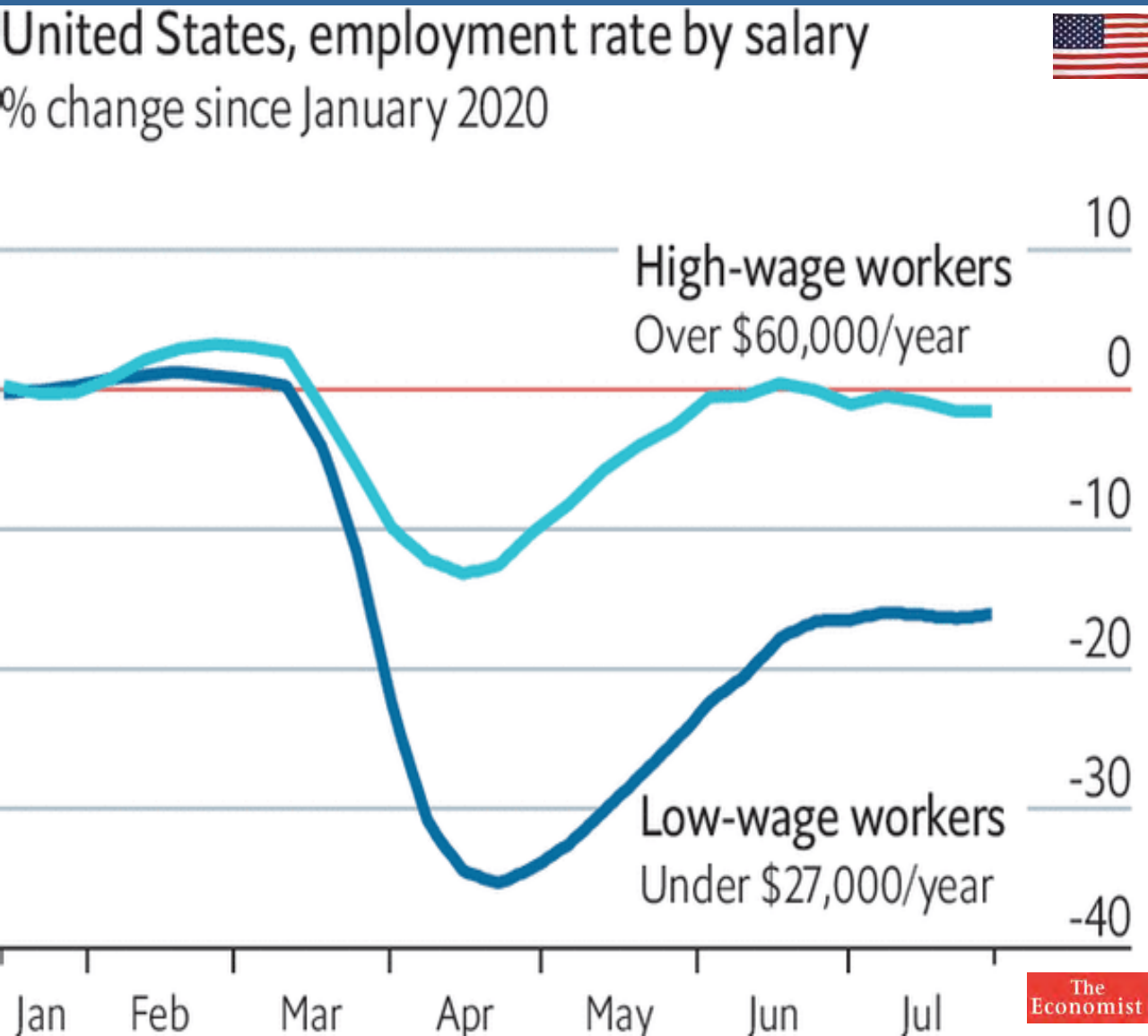
Population: 1.4bn. Covid Deaths/m. 3

Total cases	Recovered	Deaths
89,842	84,805	4,636

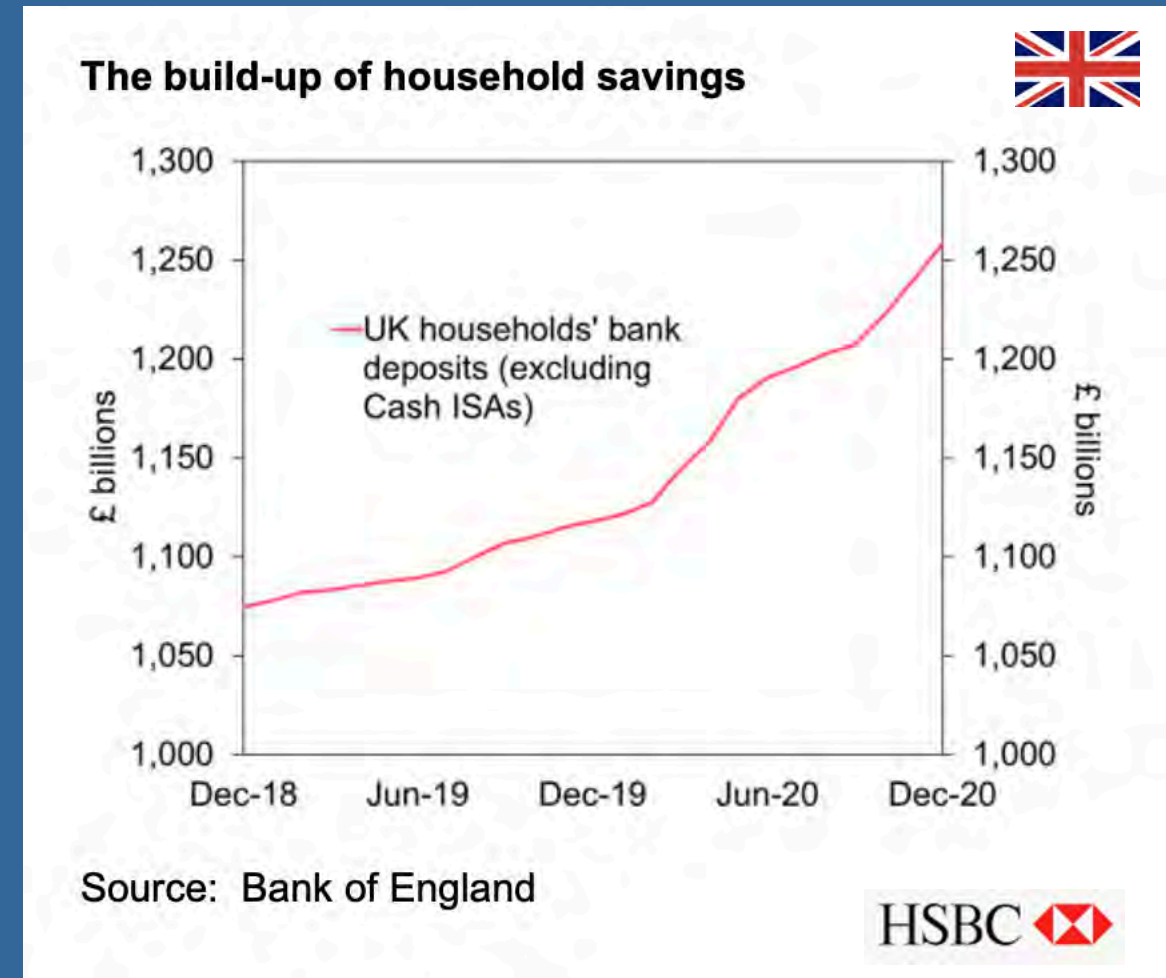
In Asia and Africa, Covid-19 Death Rates Generally Less than 10 People per 1 Million



In Many Countries Around the Globe,  
We've Been Seeing Polarisation of Markets.  
Covid-19 is Accelerating This Trend



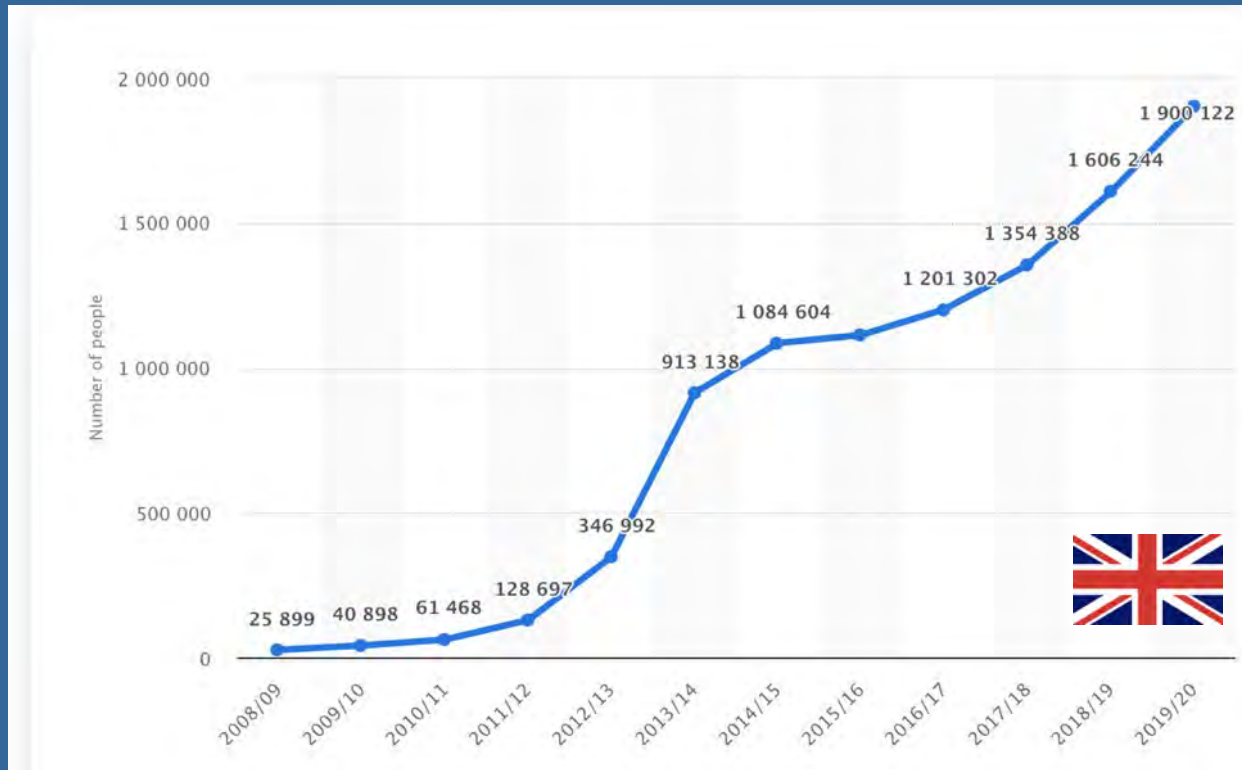
Some Higher Income Households  
Have Made Significant Savings  
During the Pandemic



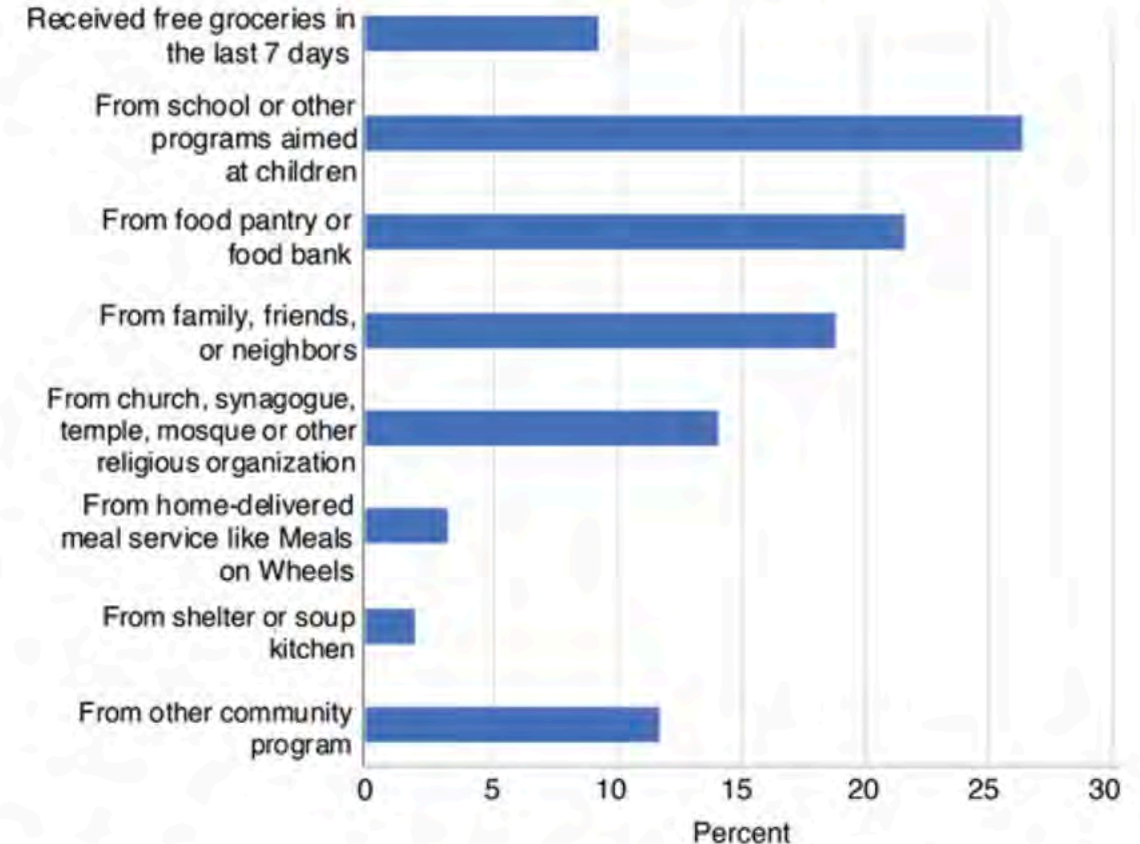
# There are Shocking Problems of Food Insecurity, Exacerbated by Covid in Most “Rich” Countries

Millions of Americans are Receiving Free Meals Or Free Groceries During the Pandemic

Number of people receiving three days' worth of emergency food by Trussell Trust foodbanks in the United Kingdom (UK) from 2008/09 to 2019/20



## Households receiving free groceries or free meals, December 9-21, 2020



Note: Provider totals for free groceries or meals may not sum to 100% as respondents were allowed to select more than one category.

Source: USDA, Economic Research Service using data from U.S. Department of Commerce, U.S. Census Bureau, Household Pulse Survey as of December 21, 2020.



# New Normal: How COVID-19 could change Canada's grocery landscape forever



Is online grocery the rising star on Canada's e-commerce horizon?

Ocado raises £1bn to continue investment in online grocery partnerships June 11<sup>th</sup>, 2020

Amazon's online grocery sales triple in Q2 as Prime spending swells 

July 31<sup>st</sup>, 2020



Alibaba GMV surpasses US\$1 trillion

May 25<sup>th</sup>, 2020

Grocery shopping online in China booms, even after stores reopen June 3<sup>rd</sup>, 2020



Demand overwhelms grocery-delivery services in Malaysia, Singapore April 7<sup>th</sup>, 2020



Ahold Delhaize's US digital sales soar 127% in 2<sup>nd</sup> Quarter 2020 (August 6<sup>th</sup>) 

UK online grocery sales likely to surge by a quarter amid lockdown May 5<sup>th</sup>, 2020



Ocado to raise \$1.3B as online grocery sales power ahead June 11<sup>th</sup>, 2020



US online grocery sales surge to new record in April May 5<sup>th</sup>, 2020

Consumers continue to use new buying channel as coronavirus lockdowns drag on.

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With the arrival of Covid-19, Britain's £25bn food-to-go sector was flushed away overnight. When, if ever, will it re-emerge?

## DOWN THE PLUG HOLE



## Can Europe's restaurants survive the coronavirus lockdown? May 1<sup>st</sup>, 2020

Covid-19 Decimates Food-2-Go Market in the UK November 2020



One million litres of milk discarded due to COVID-19, UK survey finds



"If the adage that it takes two months to form a habit holds, the economy that reemerges will be fundamentally different".

**consumers are anxious about dining out following COVID-19**

"Food Service in Doldrums Until Vaccine"

U.S.

## Coronavirus Forces Farmers to Destroy Their Crops

Amid pandemic, orders dry up; 'You don't want to see your crop rot and suffer'

Farmers Dump Milk, Break Eggs

as Coronavirus Restaurant Closings

Destroy Demand

SORRY  
WE'RE  
CLOSED  
DUE TO  
COVID-19

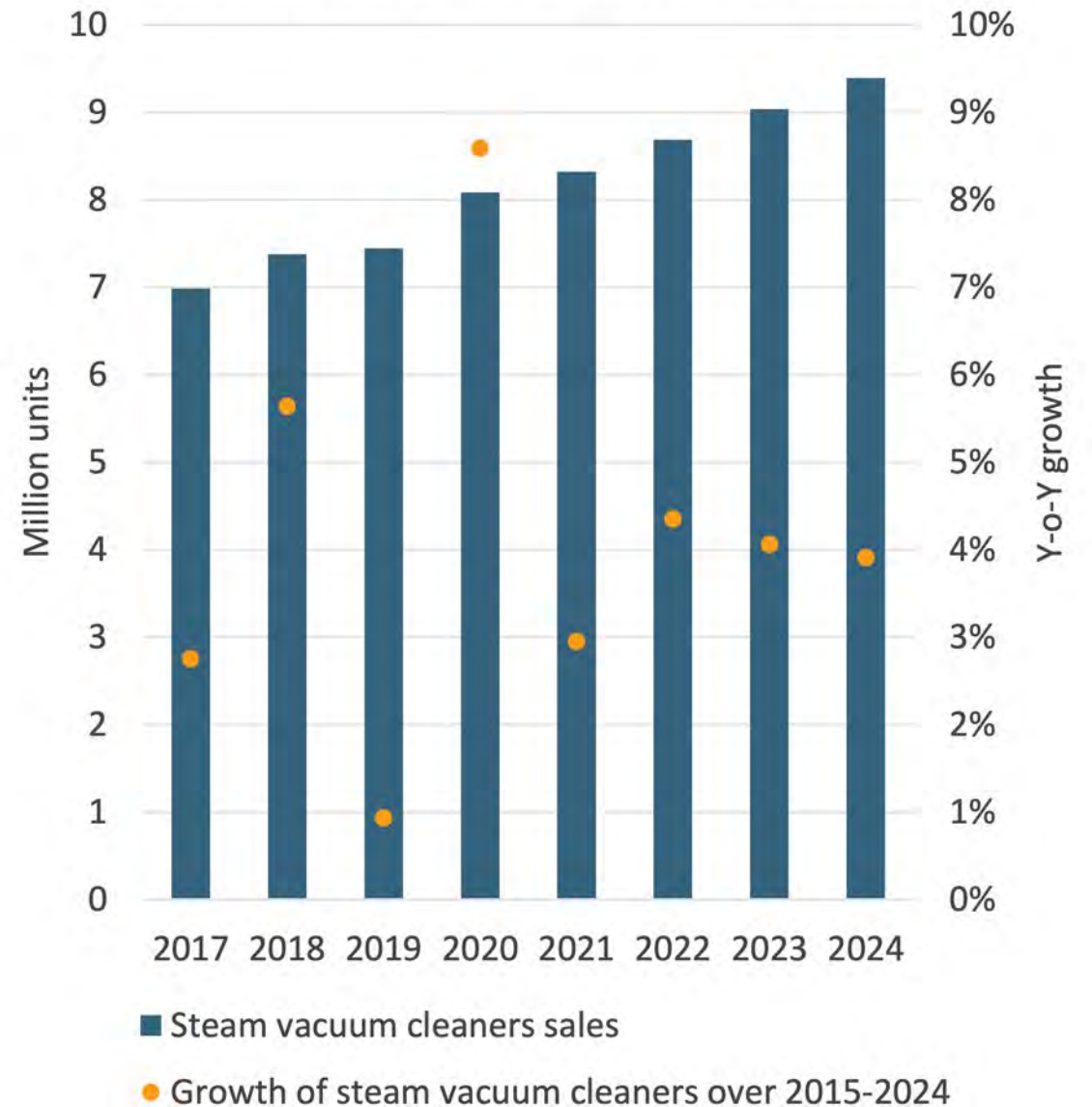
# More or Less: Impact of Covid19 and the Food Industry

More			Less	
Work	At Home	Home Snacking	At Office	Urban Food-2-Go
	Home Meal Prep	Local Food-2-Go		Work Socialising
Shop	Online	Local Shops	Shopping Malls	Frequent Shopping
	Local Suppliers	Frozen Food Meal Kits	Household Income	Premium Foods Secondary Brands
	Trusted Brands	New Routes to Consumers	Short Shelf-Life Food	Food Waste
Play	Home Entertainment	“Big Night In” Pets	Out-of-Home Eating	Theatre, Cinema, Gyms
	“Eat Out In”	Creative Cooking, Cooking Videos		
Health	Home Healthy Eating	Home Cleaning Fresh/”Natural”	Unhealthy Food?!	
	Home Exercise	Gov. Regs on Health & Environment		
Trade	Food Security	Food Safety	International Trade	
Travel	Home Holiday		Foreign Travel	Domestic Business Travel

# Safety Obsessed

Priorities shift to safety and hygiene

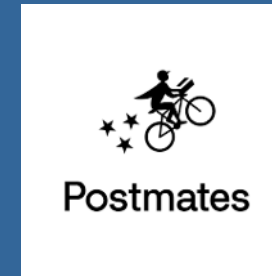
## Global Sales of Steam Vacuum Cleaners





## Uber buys Postmates in \$2.65B deal

July 6<sup>th</sup>, 2020



## Accelerated Concentration in Restaurant Meal Delivery

Just Eat Takeaway acquires Grubhub for  
\$7.3 billion to create largest food  
delivery firm outside China



## Share of USA Online Delivery Platform Sales as of October 2020 %

- DoorDash 51
- Uber Eats 23\*
- Postmates 7
- Grubhub 18\*\*

\* Uber acquires Postmates

\*\* Just Eat buys Grubhub

June 10<sup>th</sup>, 2020

GRUBHUB™

Just Eat and Takeaway.com cleared to  
form £6.2bn food courier giant

Jan. 10<sup>th</sup>, 2020



DoorDash valued at  
\$56 bn in Feb. 2021



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# HelloFresh acquires ready-to-eat meal company Factor75

November 27<sup>th</sup>, 2020



HelloFresh has agreed to buy Factor75, an Illinois-based firm that sells ready-to-eat meals oriented around health and wellness, according to a press release.

The transaction is worth up to \$277 million in cash, including \$177 million to be paid when the deal closes and \$100 million in the form of performance-based earn-out and management incentives.

Market Summary > Hellofresh SE

62.95 EUR

-4.40 (6.53%) ↓

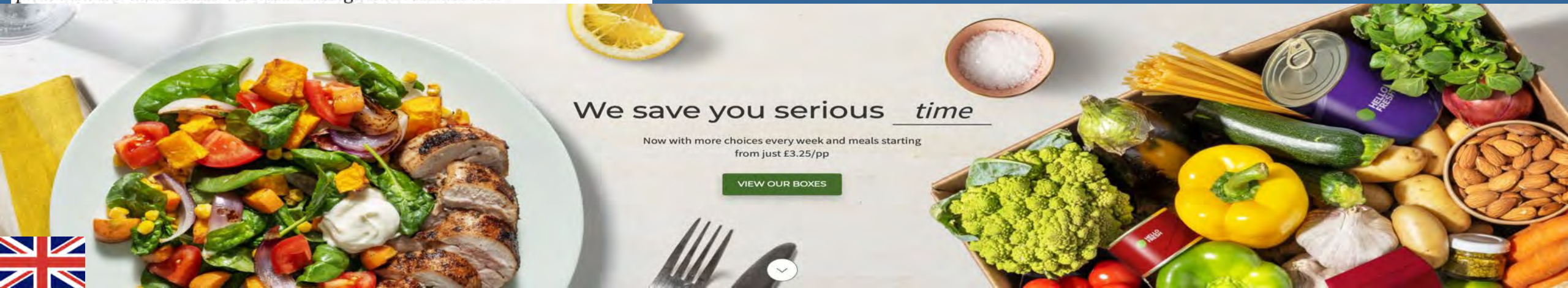
23 Feb, 12:00 CET · Disclaimer



1 day 5 days 1 month 6 months ytd 1 year 5 years max



HelloFresh Market Capitalisation: \$13bn



We save you serious time

Now with more choices every week and meals starting from just £3.25/pp

[VIEW OUR BOXES](#)





# Nestlé acquires prepared meal service Freshly to compete with HelloFresh, Blue Apron

Freshly was founded in 2015 and is now shipping more than 1 million meals a week to people in 48 states

October 31<sup>st</sup>, 2020



## Nestlé buys US meal delivery company Freshly in \$950m deal



love is on the menu

# DINE IN

with Fred Sirieix

Treat yourselves to a delicious dinner for two

Choose a

- STARTER
- MAIN
- SIDE
- DESSERT
- PROSECCO

ALTERNATIVE  
DRINKS AVAILABLE



£20

SERVES 2



Includes free  
chocolates!

FEB. 10-14, 2021

M&S  
— FOOD —



M&S

EST. 1884

Valentine's Day Deal  
C\$35 per Couple

**Rump steak with peppercorn sauce**

21-day-matured tender rump steaks served with a tasty peppercorn sauce

**Sirloin steaks with heart-shaped butter**

21-day-matured juicy sirloin steaks served with a heart-shaped butter

**Rack of lamb with mustard, honey and herb crust**

Beautiful British lamb coated in a mustard, honey and herb crust

**Plant Kitchen no-beef creamy peppercorn pie (Ve)**

Pea protein in an indulgent peppercorn sauce, encased in flaky pastry and



The Notion of “Climate-Friendly and Planet-Friendly Diets” are Gaining Substantial Traction. Just Ask Your Children/Grandchildren!

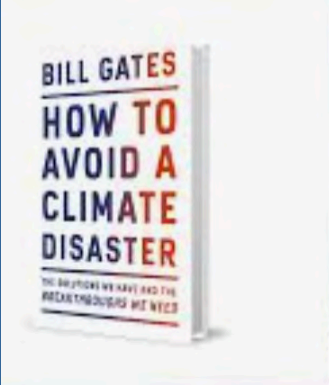


Global “Climate Change Strikes”  
Friday, September 20<sup>th</sup>, 2019

Student Climate Strikes Across Asia: “There Is No Planet B”



Covering Climate Now



February 14<sup>th</sup>, 2020

February 14<sup>th</sup>, 2021

Youth climate strikes sweep Asia ahead of UN Climate Action Summit



September 2019



Greta Thunberg: 'We are speeding in the wrong direction' on climate crisis  
Dec. 10<sup>th</sup> 2020



# Plant-based diets key in tackling climate change: UN report warns food systems must undergo significant change

The report also notes that food loss and wastage add up to US\$1 trillion each year

August 9<sup>th</sup>, 2019



## Davos 2020 urges dietary changes, sustainable supply chains and agri-food system transformation

January 21<sup>st</sup>, 2020

## Cut meat and dairy intake 'by a fifth'

January 23<sup>rd</sup>, 2020



**Sustainability charge for meat debated in European Parliament as new report urges price hikes by 2022**

January 31<sup>st</sup>, 2020

31 Jan 2020 --- The European Parliament will next week be presented with a plan to increase the price of meat across the EU to reflect its environmental costs, including CO2 emissions and biodiversity loss. The "sustainability charge" or fair-meat price



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# Eat well. Live well.

Eat a variety of healthy foods each day

Have plenty  
of vegetables  
and fruits

Eat protein  
foods

Make water  
your drink  
of choice

Choose  
whole grain  
foods

Discover your food guide at

[Canada.ca/FoodGuide](https://Canada.ca/FoodGuide)

The Unequivocal Evidence that Obesity and Diabetes Increase Health Risks Associated with Viruses will Increase Governmental Pressure on Citizens to:

- Eat Less and Much More Healthier;
- and Exercise More.

We Shall See MORE Regulation on Health Issues Related to Food (moving on from Nudging to Taxing!)



Select years with the slider to see historical data. Hover over states for more information. Click a state to lock the selection. Click again to unlock.

0 - 9.9%    10 - 14.9%    15 - 19.9%    20 - 24.9%  
25 - 29.9%    30 - 34.9%    35%+

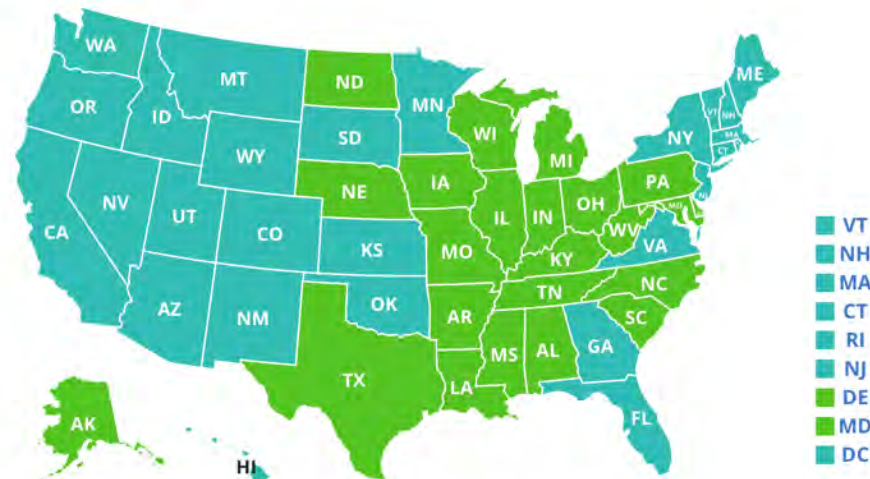
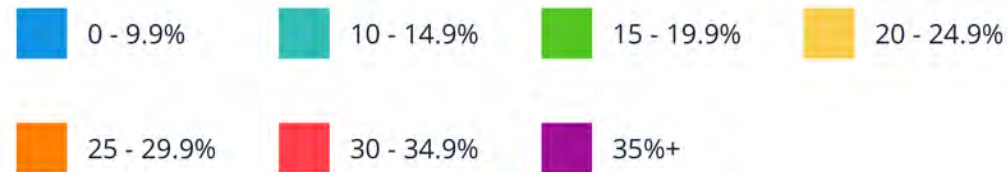




# Adult Obesity Rate by State, 1995

Select years with the slider to see historical data. Hover over states for more information. Click a state to lock the selection. Click again to unlock.

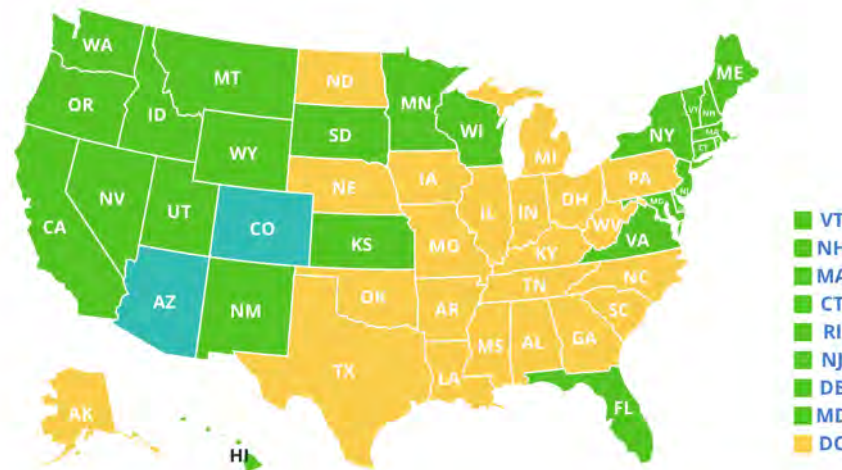
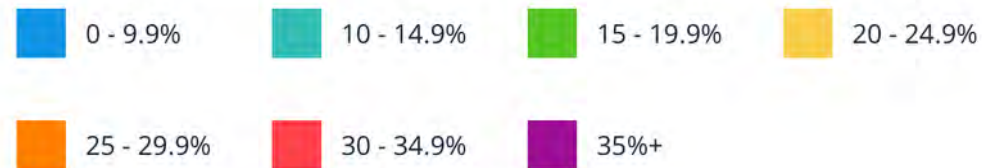
## Percent of obese adults (Body Mass Index of 30+)



# Adult Obesity Rate by State, 2000

Select years with the slider to see historical data. Hover over states for more information. Click a state to lock the selection. Click again to unlock.

## Percent of obese adults (Body Mass Index of 30+)

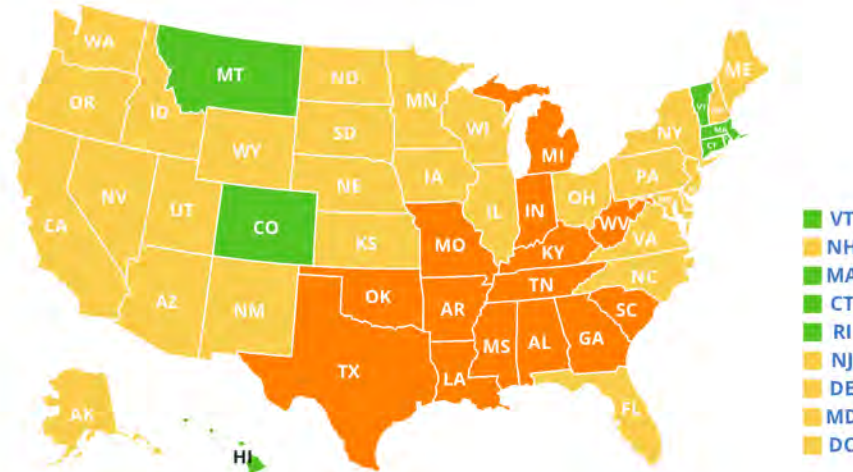
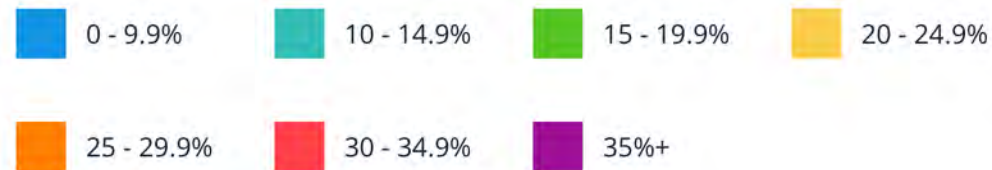




# Adult Obesity Rate by State, 2005

Select years with the slider to see historical data. Hover over states for more information. Click a state to lock the selection. Click again to unlock.

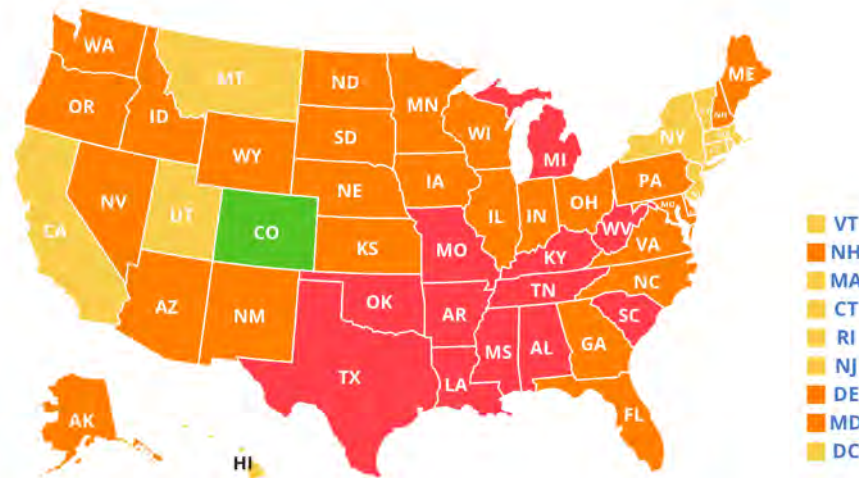
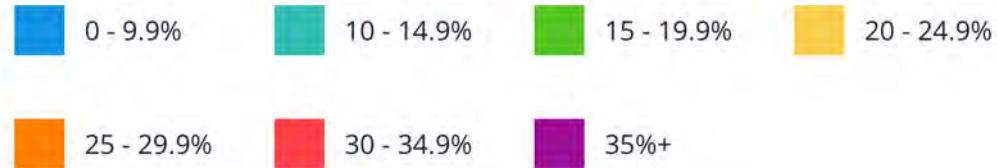
## Percent of obese adults (Body Mass Index of 30+)



# Adult Obesity Rate by State, 2010

Select years with the slider to see historical data. Hover over states for more information. Click a state to lock the selection. Click again to unlock.

## Percent of obese adults (Body Mass Index of 30+)

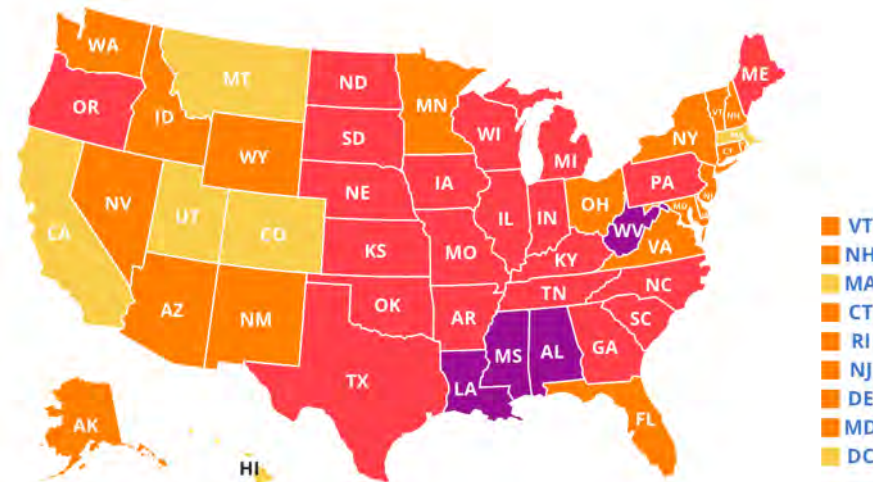
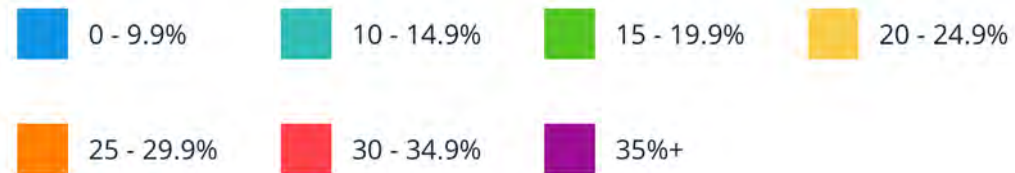




# Adult Obesity Rate by State, 2015

Select years with the slider to see historical data. Hover over states for more information. Click a state to lock the selection. Click again to unlock.

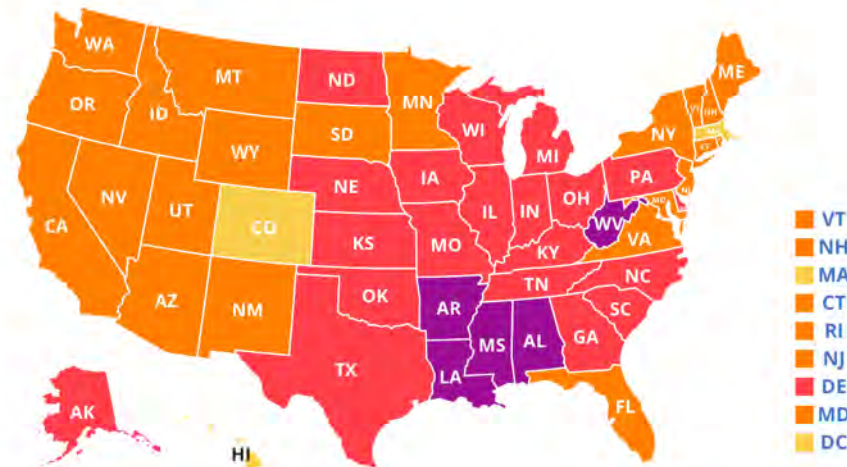
## Percent of obese adults (Body Mass Index of 30+)



# Adult Obesity Rate by State, 2016

Select years with the slider to see historical data. Hover over states for more information. Click a state to lock the selection. Click again to unlock.

## Percent of obese adults (Body Mass Index of 30+)

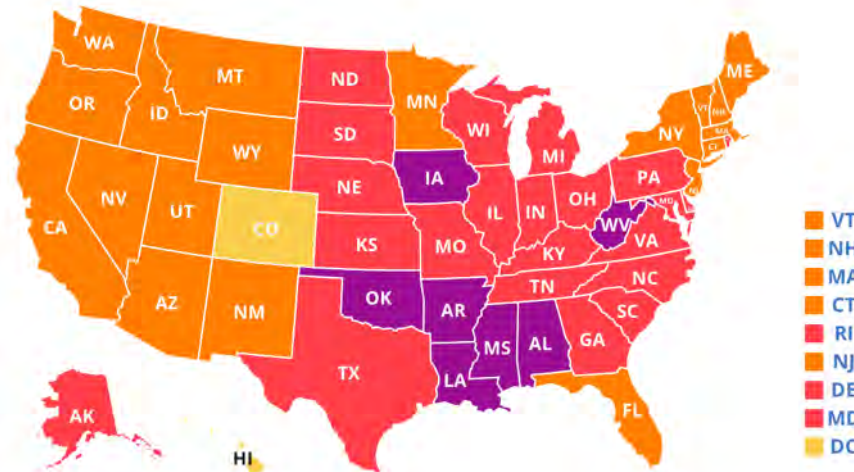
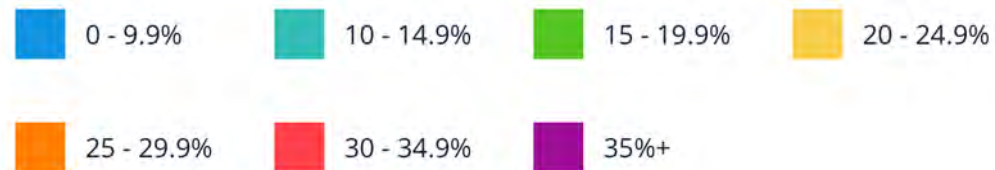




# Adult Obesity Rate by State, 2017

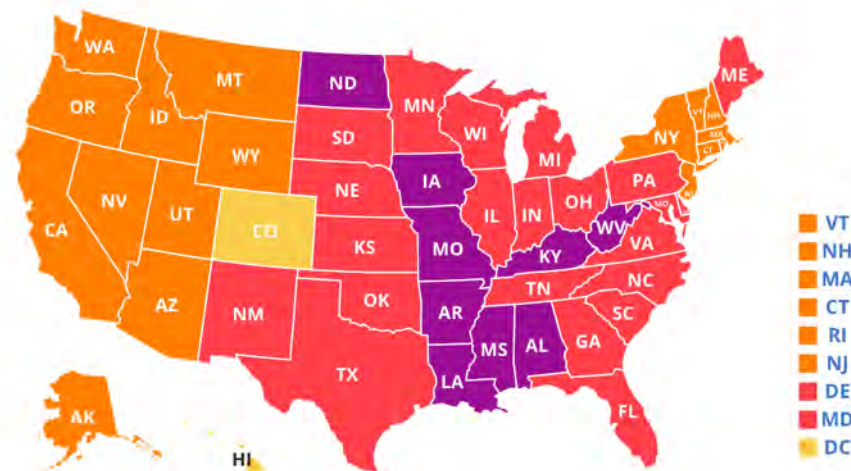
Select years with the slider to see historical data. Hover over states for more information. Click a state to lock the selection. Click again to unlock.

## Percent of obese adults (Body Mass Index of 30+)



Select years with the slider to see historical data. Hover over states for more information. Click a state to lock the selection. Click again to unlock.

0 - 9.9%    10 - 14.9%    15 - 19.9%    20 - 24.9%  
25 - 29.9%    30 - 34.9%    35%+

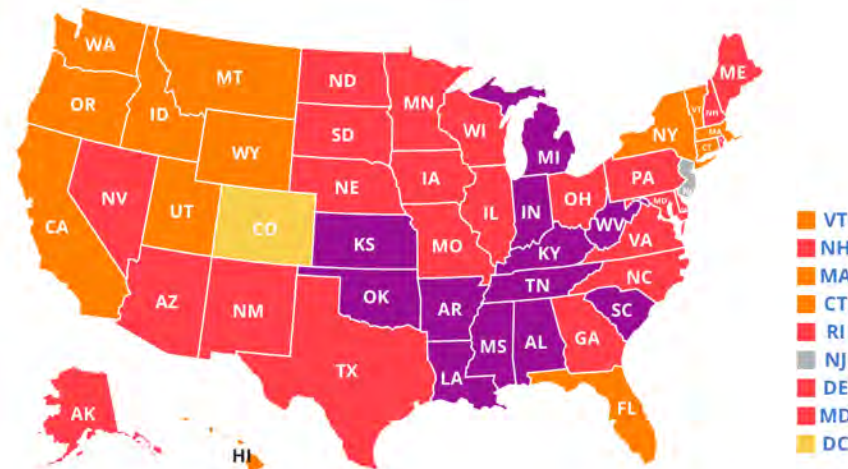
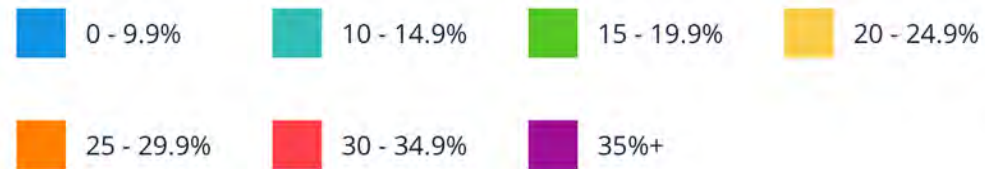




# Adult Obesity Rate by State, 2019

Select years with the slider to see historical data. Hover over states for more information. Click a state to lock the selection. Click again to unlock.

## Percent of obese adults (Body Mass Index of 30+)



Youth Obesity Rate Ages 2-19,  
2017-2018

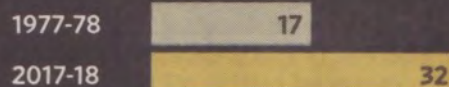
**19.3%**

Adult Obesity Rate Age 20+,  
2017-2018

**42.4%**



Percentage of daily calories  
consumed away from home



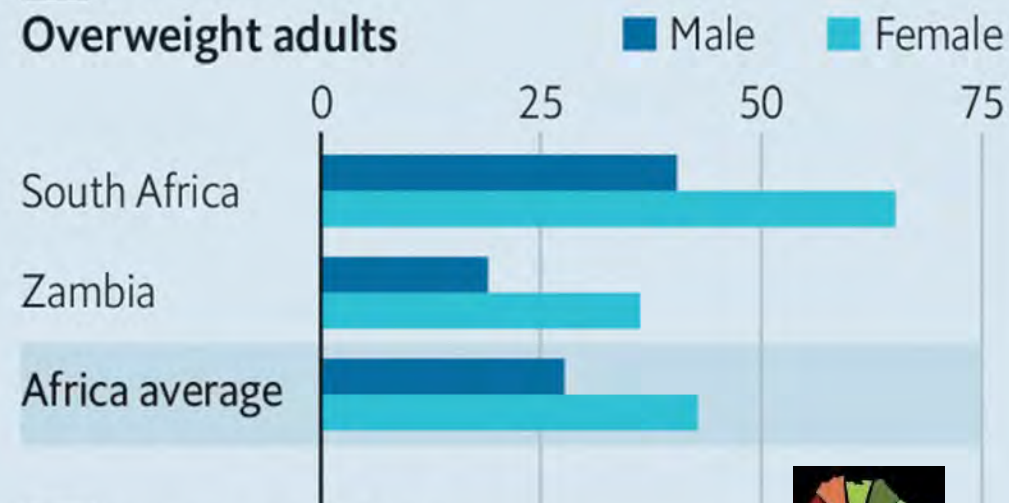
Percentage of daily calories  
that people get from snacks



## The unhappy median

Overweight adults\* and underweight children†  
2016, % of total

### Overweight adults



### Underweight children



\*BMI over 25 †5- to 19-year-olds below one standard deviation from the median BMI-for-age of the WHO growth reference

Source: Global Nutrition Report, 2020



# UK confirms move to curb 'junk food' promos

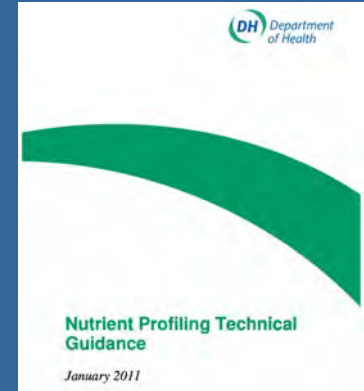
January 2021



From April, UK grocers will be banned from putting foods high in fat, salt and sugar on multi-buy promotions, the country's government has confirmed.

The move, put forward by the Government last summer, will prohibit promotions such as 'buy one, get one free' or '3 for 2'.

Under the new rules, retailers will also no longer be able to put "unhealthy promotions" in prominent locations such as checkouts and store entrances. The curbs would also cover online, including on the homepage and checkout pages of websites.



## Protejamos su salud, no la comida chatarra



HCC Press Release: Stunning Outcome Amidst COVID-19 As Mexico and Chile Deliver Healthy Results on Policies for Front of Package Labelling on Packaged Foods and Beverages

## Chile's drastic anti-obesity measures cut sugary drink sales by 23%

Experts welcome example of nation once drinking more per head than any other



▲ Bags of crisps, with warnings on calories and sodium level, on sale at a street stall in Santiago, Chile.







# Love Good Fats raises \$10.7m in equity funding

October 16<sup>th</sup>, 2020







## Health and environmental impacts of various foods

- Emphasized foods
- Optional foods
- Limited foods

### Diets for a Better Future:

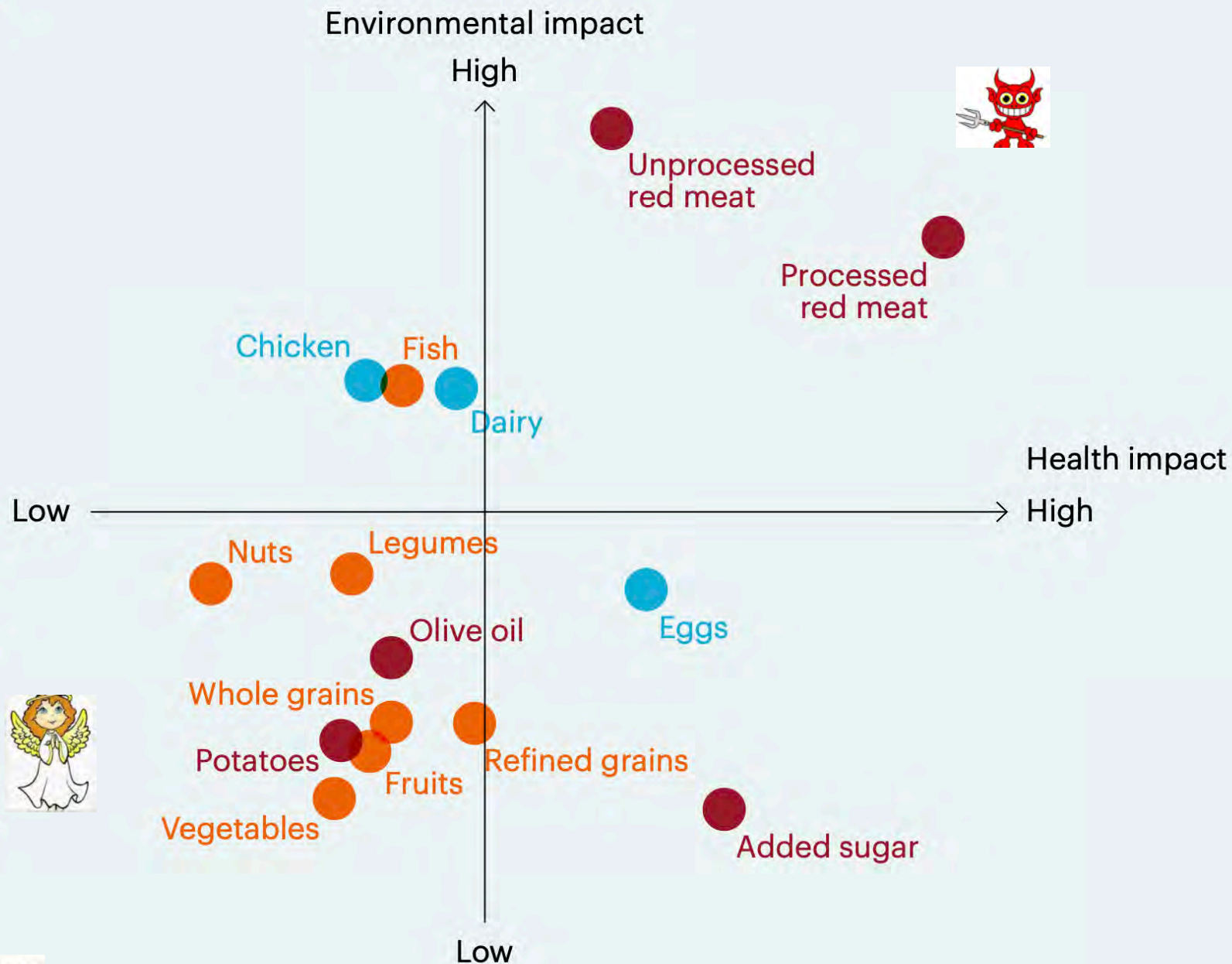
Rebooting and Reimagining  
Healthy and Sustainable  
Food Systems in the G20

**Figure 4.**

*The health and environmental impacts of various foods. Overconsumption of red and processed meats increases the risk to both human health and the environment. Plant foods tend to be good for both people and planet. Added sugar is a major driver of poor health but has much lower environmental impacts.*



**Source: Clark et al. (2019).<sup>17</sup>**



# Plant-based diets crucial to saving global wildlife, says report

February 3<sup>rd</sup>, 2021

**Vicious circle of cheap but damaging food is biggest destroyer of nature, says UN-backed report**



▲ More than 80% of global farmland is used to raise animals, which provide only 18% of calories eaten.

Photograph: Alamy

The global food system is the biggest driver of destruction of the natural world, and a shift to predominantly plant-based diets is crucial in halting the damage, according to a report.

## Relentless Release of Research on Need for “Climate-Friendly” Diets

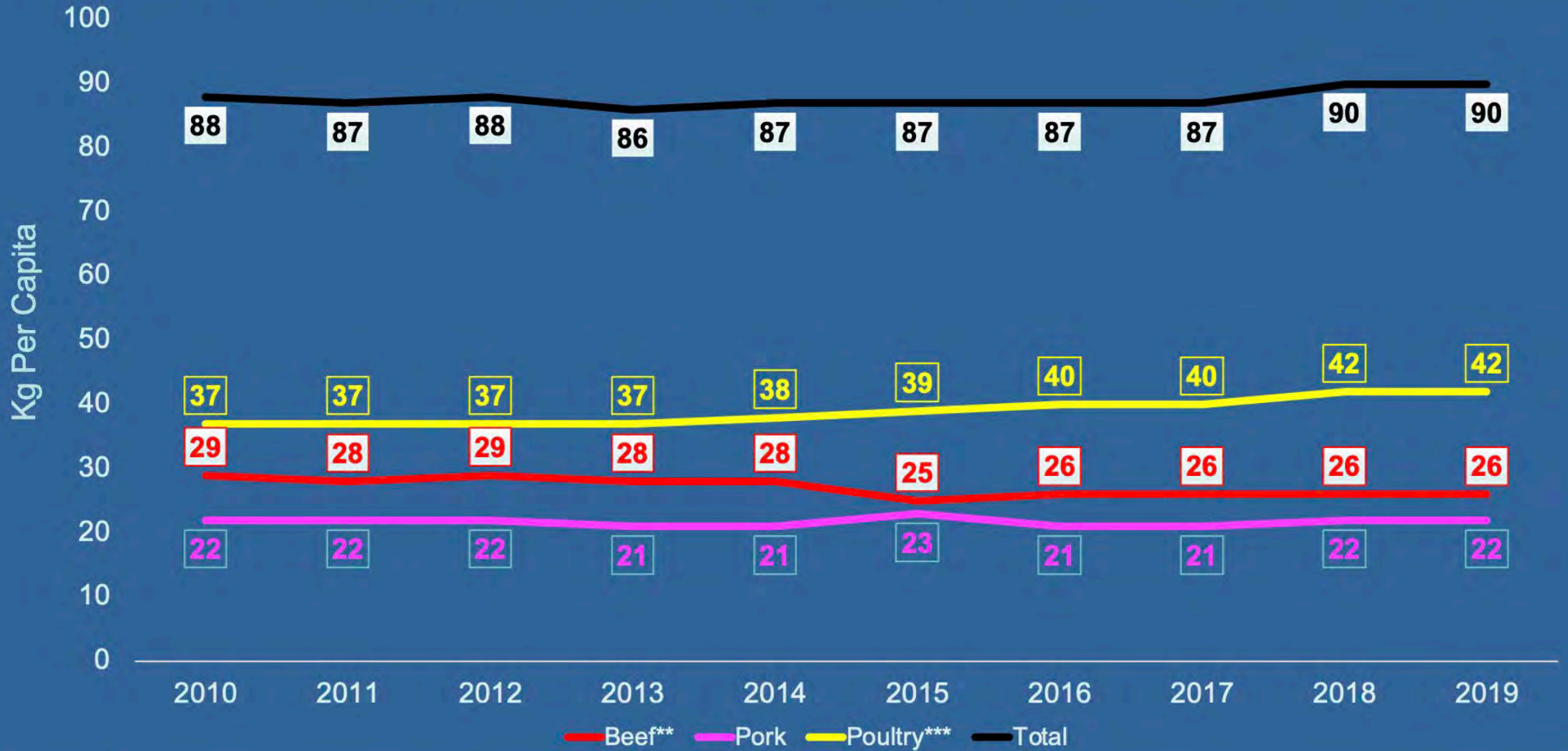


### Three Levers Recommended:

- Change diets (i.e. more plant-based);
- Leave more land for nature;
- Farm more sustainably.



# Canada Per Capita Disappearance of Meat\* 2010-2019, Kg Carcass Weight



Source: Statistics Canada \* not including fish & seafood \*\* including veal \*\*\* chicken, fowl, turkey

# Impossible Foods raises \$500M to invest in the future and expand

March 16<sup>th</sup> 2020



Lead Investor



## Investments in Plant-Based Meats:

- Impossible Foods \$1.5bn
- Beyond Meat \$450m



May  
2019

## Beyond Meat goes public with a bang



Markets

**Beyond Meat Maintains Rapid Growth  
Amid Restaurant Closures** May 5<sup>th</sup>, 2020



## Beyond Meat set to make China retail bow

July 1<sup>st</sup>, 2020



## Beyond Meat expands production capabilities in the Netherlands

June 11<sup>th</sup>, 2020





Starbucks China launches plant-based menu with Beyond Meat, Oatly, Omnipork April 21<sup>st</sup>, 2020

Asia pivots towards plants for protein as coronavirus stirs meat safety fears



 May 20<sup>th</sup>, 2020 Nestlé to build its first plant-based food facility in China

**Starbucks expands plant-based range in Asia Pacific** September 8<sup>th</sup>, 2020

Beyond Meat inks deal to open production facility in 

Growing Interest in Plant-Based Meats in China



**KFC Will Be Selling Plant-Based Chicken Nuggets In China Next Week** April 21<sup>st</sup>, 2020

Cargill planning plant-based expansion in China after KFC trial April 30<sup>th</sup>, 2020



# UK giant Unilever bets on vegan food with 'scary target'

November 2020



UNILEVER

The company is betting on growing its plant-based meat brand The Vegetarian Butcher, which it acquired two years ago, and now sells in 30 countries.

It's through this brand that Unilever supplies Burger King's plant-based Whopper in 26 countries, with the fast-food chain having plans to sell its plant-based nuggets.

Unilever also wants to push its vegan dairy ranges, which include Vegan Ben & Jerry's ice cream, Magnum Vegan, Vegan Cornetto, and Hellmann's Vegan mayonnaise.



One of the UK's biggest consumer goods firm is betting on more people eating vegan food and has set itself a "scary target" to increase sales.

Unilever wants to increase its annual sales of plant-based meat and dairy products five-fold within seven years, hitting €1bn (£900m) by 2027.

## Unilever's The Vegetarian Butcher expands plant-based Whopper roll out in Latin America, the Caribbean and China

January 6<sup>th</sup>, 2021

In the UK, there has been exponential growth in vegan food sales with sales of meat-free products in the UK up from £488m last year to £577m this year, according to analyst firm Kantar.



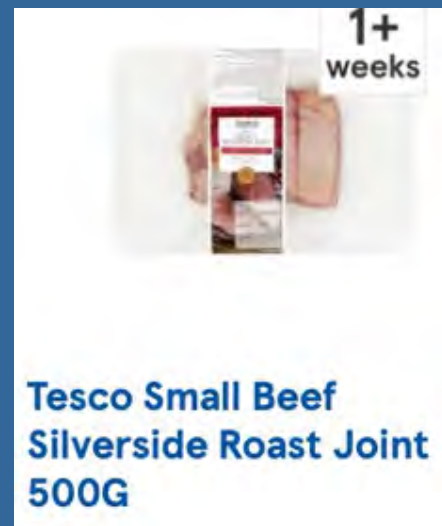




**Tesco Medium Beef  
Roasting Joint With  
Basting Fat**



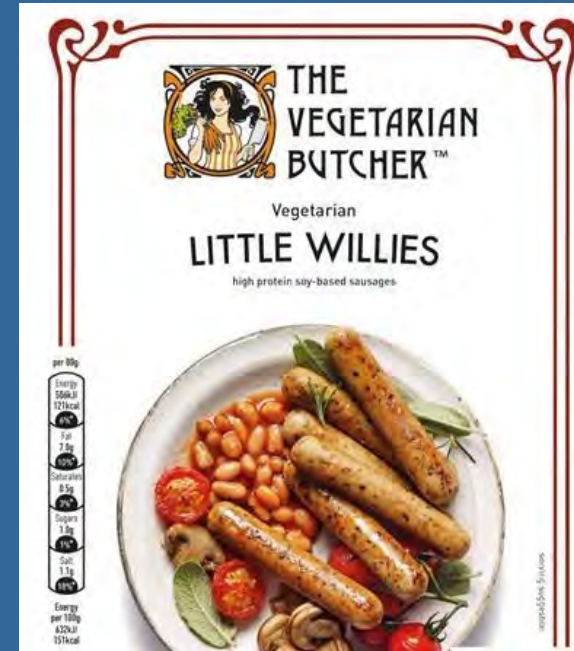
**Tesco Diced Beef 600G**



**Tesco Small Beef  
Silverside Roast Joint  
500G**



**Tesco Beef Brisket**



**THE VEGETARIAN BUTCHER™**

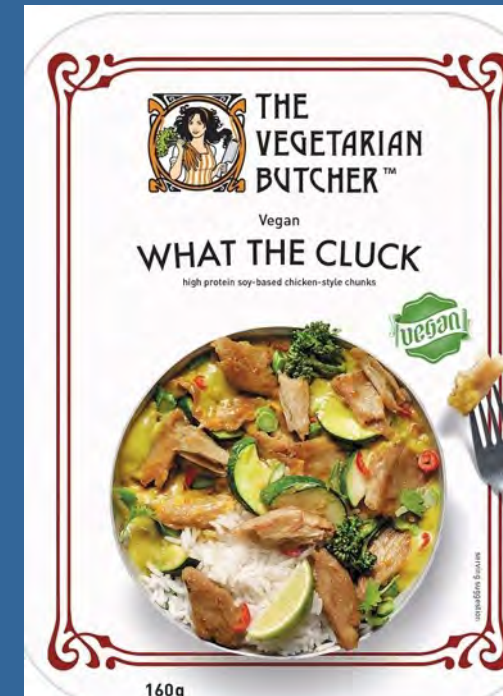
Vegetarian  
**LITTLE WILLIES**  
high protein soy-based sausages

per 100g  
Energy 556kJ  
133kcal  
Fat 7.5g  
Saturated fat 1.5g  
Sugars 1.5g  
Salt 1.1g

Energy per 100g  
133kcal



© 2018 The Vegetarian Butcher



**THE VEGETARIAN BUTCHER™**

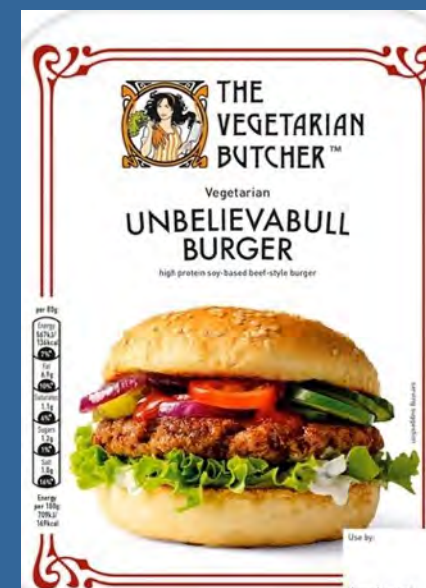
Vegan  
**WHAT THE CLUCK**  
high protein soy-based chicken-style chunks

vegan



© 2018 The Vegetarian Butcher

160g



**THE VEGETARIAN BUTCHER™**

Vegetarian  
**UNBELIEVABULL BURGER**  
high protein soy-based beef-style burger

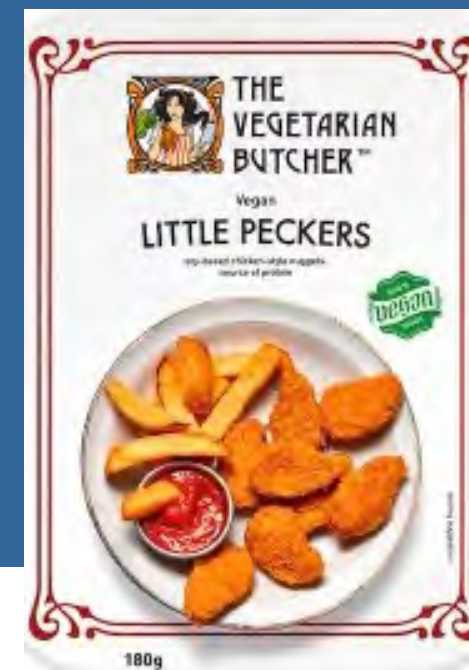
per 100g  
Energy 1414kJ  
338kcal  
Fat 14.5g  
Saturated fat 3.5g  
Sugars 1.5g  
Salt 1.1g

Energy per 100g  
338kcal



© 2018 The Vegetarian Butcher

Use by:



**THE VEGETARIAN BUTCHER™**

Vegan  
**LITTLE PECKERS**  
high protein soy-based chicken-style nuggets

vegan



© 2018 The Vegetarian Butcher

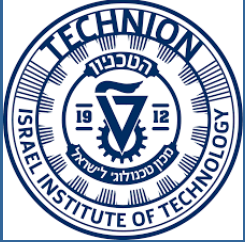
180g

Unilever Products are Consumer-Focused and Reflect Demand Pull Whereas, Often, Red Meat Products are Production-Led and Driven by Supply Push



# 3D meat printing: Aleph Farms unveils “thicker cut” cultivated ribeye steak

February 10<sup>th</sup>, 2021



10 Feb 20201 --- Aleph Farms and its research partner at the Faculty of Biomedical Engineering at the Technion – Israel Institute of Technology have cultivated the world’s first slaughter-free ribeye steak, using three-dimensional (3D) bioprinting technology. It’s a “thicker cut” version of the world’s first thin-cut steak that they have previously developed.

The Israeli food-tech company has developed the natural building blocks of meat – real cow cells, without genetic engineering and immortalization. Unlike conventional 3D printing technology, Aleph Farms’ 3D bioprinting technology is the printing of actual living cells.





## Cell-Grown Leather: A Prospective Disruptor of the Meat Industry



### EMPOWER INNOVATION

Inspired by the attributes of leather, we enable brands and designers to continue the journey toward the future of materials.



### BUILD WITH BIOLOGY

By unlocking the power of nature, biofabrication represents a fundamentally new approach to constructing materials.



OUR FIRST  
BIOFABRICATED  
MATERIAL: ZOA™



MODERN MEADOW  
**COW-FREE  
LEATHER?**





# Lots of Horsepower in Oats So, “Big Food” Piles In!



Made From Oats



# Nestle to launch rice-based vegan KitKat

February 16<sup>th</sup>, 2021



Nestle is to introduce its first vegan KitKat option – dubbed KitKat V – this year, addressing the increasing demand for plant-based confectionery.

“One of the most common requests we see on social media is for a vegan KitKat,” said Alexander von Maillot, head of confectionery at Nestle.

According to the company, KitKat V is certified vegan, and made from 100-per-cent sustainable cocoa sourced through the Nestle Cocoa Plan in conjunction with the Rainforest Alliance. It will be the first chocolate made entirely from the cocoa fruit.





# Canada's Three Farmers Foods gets investment

February 4<sup>th</sup>, 2021

Three Farmers Foods, a Canadian SME supplying packaged lentil and chickpea products to grocers including Loblaw, has secured investment from a local fund and Canada's export credit agency.



**HUGE Opportunity for Canada in Plant-Based Foods**





# General Mills and GoodBelly partner to launch probiotic cereal, yogurt

July 2019



GoodBelly Mission: We want to help people live happy and healthy lives through healthy digestion. We're trying to change the world one belly at a time!



# Mars snaps up remainder of US snacks maker Kind



## meet Daniel



Daniel Lubetzky is our founder and CEO. But he's also a little bit more than that. He's a champion of not-just-for-profit business. He's a visionary social entrepreneur, on a mission to build bridges between people. And he's also the author of the New York Times bestseller *Do The KIND Thing*.

[LEARN MORE AND GET INSPIRED](#)

November 18<sup>th</sup>, 2020



## communities

We believe when you feel good inside, you want get out and do good outside. So we use our bars to inspire acts of kindness. To foster communities. And to fuel our movement.





# Mondelez Agrees to Buy Rest of Paleo Chocolate-Bar Maker Hu

Maker of Oreo cookies and Ritz crackers has been adding to its snack portfolio as consumers' tastes turn toward healthier fare

January 5<sup>th</sup>, 2021



Mondelez takes minority stake in Hu through SnackFutures program

April 19<sup>th</sup>, 2019







# Reebok Has a Plant-Based Performance Running Sneaker Coming Soon — With Some Veggies on the Side

September 23<sup>rd</sup>, 2020



Reebok is set to deliver a USDA-certified, plant-based sneaker in the performance-focused run category.

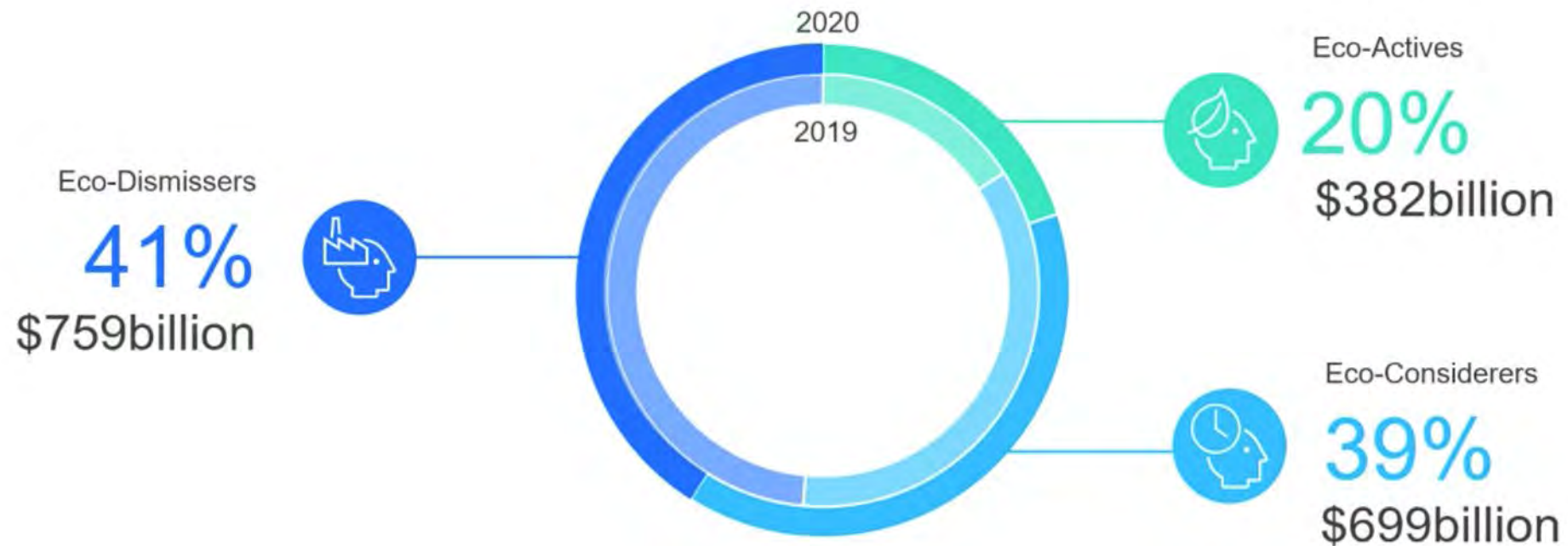
The athletic brand announced today that it will launch the Forever Floatride Grow next month, an athletic shoe crafted with breathable eucalyptus tree uppers, midsoles made from sustainably-grown castor beans, odor-fighting Bloom algae foam sock liners and real rubber tree outsoles.



Formula 1 champion Lewis Hamilton has revealed that his beloved British Bulldog Roscoe is thriving on a vegan diet

# Globally, Eco-Actives and Eco-Considerers on the Rise. Eco-Dismissers Shrinking!

**COVID has not dimmed consumer concerns about sustainability.**



**KANTAR**

Global WhoCares, WhoDoes? 2020 Kantar/ GfK/Numerator (US Spending)

KANTAR **WORLD**PANEL





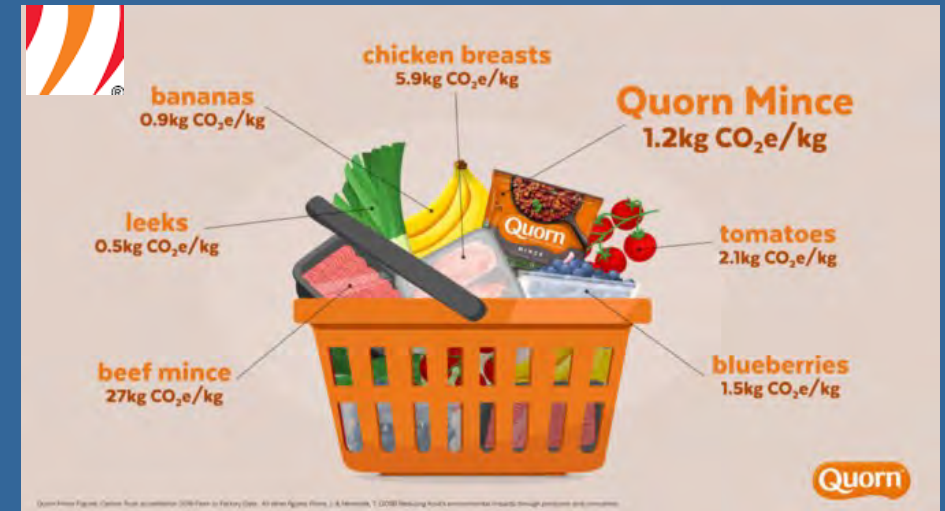
# New store in Sweden prices goods based on carbon emissions

October 2<sup>nd</sup>, 2020

In a world first, major Swedish food brand Felix has launched its own grocery store where products are priced on their climate impact: the more the carbon dioxide emissions, the higher the price.



What's the "Enviro-Score" for Your Food Products?



Imperial College London

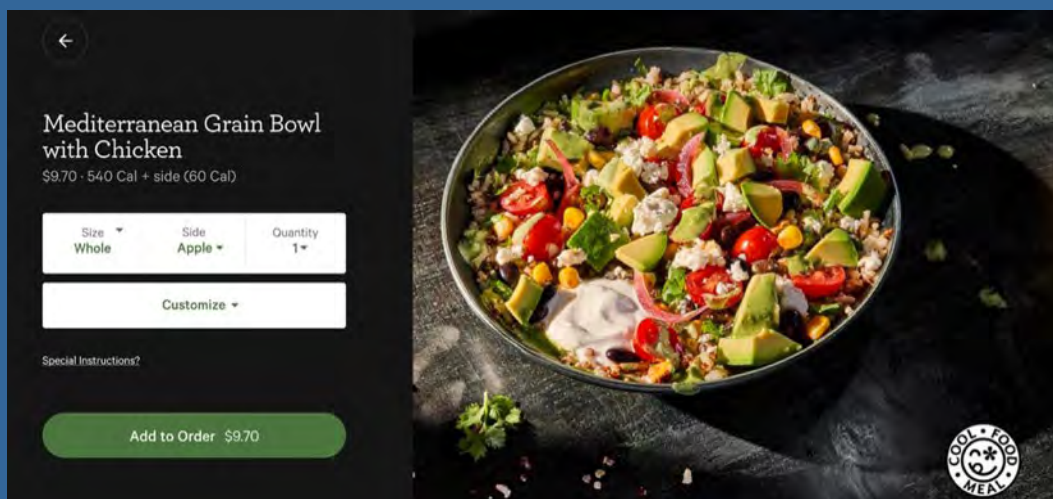


## Low Carbon Cool Food Meals

At Panera we believe you don't have to choose between absolutely delicious food and food that is good for the planet. We can have a positive impact on the climate simply by what we put on our plate. To help, Panera is labeling Cool Food Meals—meals with a lower carbon footprint.

Reduce your carbon footprint with Cool Food Meals.

Our planet is getting warmer and this is having a lasting negative impact on our communities and the world. Climate change is caused by the production of harmful greenhouse gases that trap heat and warm the planet. Approximately 25% of these gases result from agriculture and related food production, or simply, what it takes to grow, make and transport the food on your plate.<sup>1</sup>



## Chipotle Launches Tool to Tell You the 'Foodprint' of Each Ingredient

October 27<sup>th</sup>, 2020



**The Grocer**

December 2<sup>nd</sup>, 2020



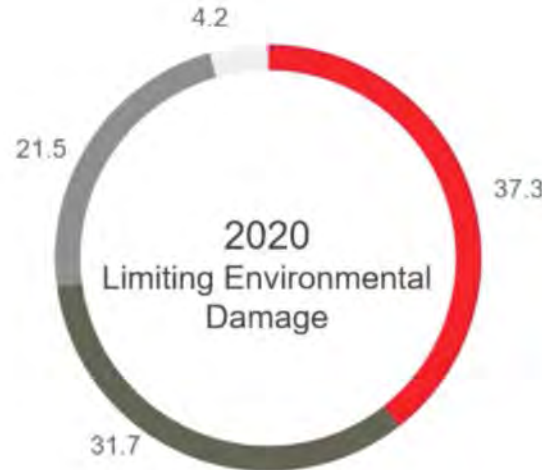
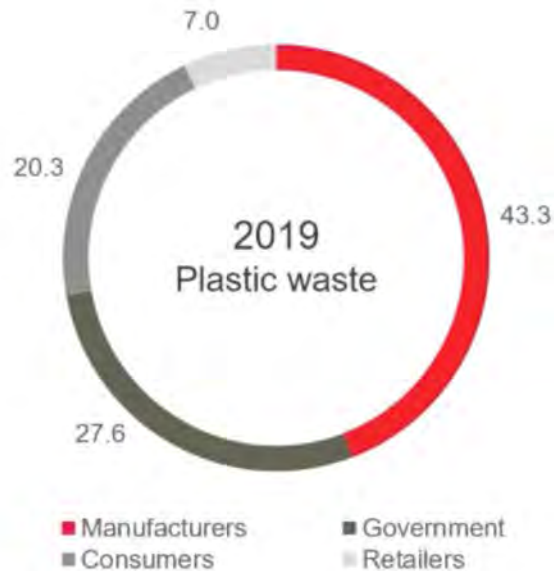
# Mandatory carbon labelling: suppliers brace for legislation



# Consumers Think Food & Drink Manufacturers Bear Most Responsibility for Environmental Issues

## Most Struggle to Name a Company Doing a Good Job!

Consumers place relatively little of the responsibility at the doors of retailers – and only 1 in 5 can name someone doing a good job.



22%

Name a brand doing a good job

Packaging

is the #1 area in which consumers expect a response

KANTAR

Q8. Who among the options below do you think could make the biggest difference to control and limit environmental damage? 2020 Q8a Can you name a brand that does a lot for the environment  
Wcnd 2020 Kantar, GfK. Global 84,000 sample



**PepsiCo targets 100% recycled plastic bottles for Pepsi brand by 2022**  
December 2<sup>nd</sup>, 2020



# Digital watermarks: PepsiCo, Nestlé, and Unilever back sorting tech for packaging recycling

September 2020





Frugalpac UK Paper Wine Bottle

## Nature Valley makes recyclable wrappers for granola bars



Courtesy of General Mills



Nestlé Goes Paper on Confectionery



## These new McDonald's trays are made from food waste

At franchises throughout Latin America and the Caribbean, you'll now get your food served on an innovative new material.



# Nespresso pledges to be carbon neutral by 2022



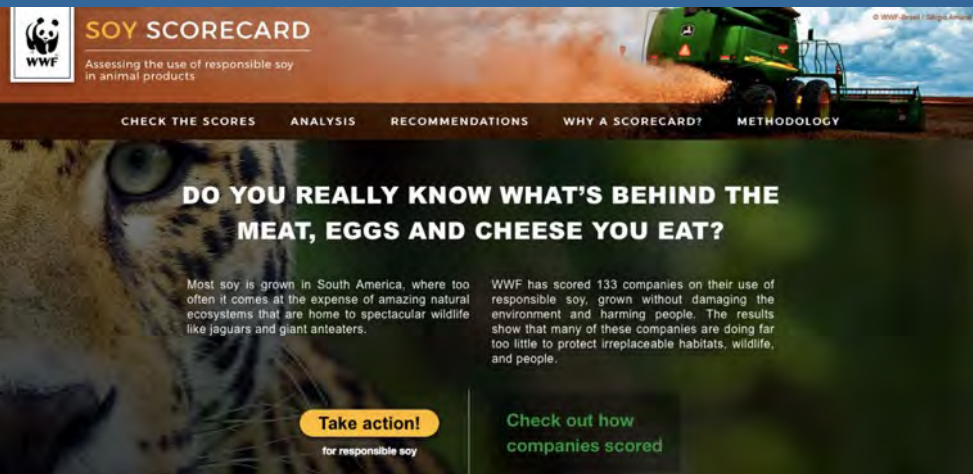
Nespresso extends its commitment to addressing climate change.

- Make a Promise
- Explain the Journey
- Report on Progress
- Deliver on the Promise

September 18<sup>th</sup>, 2020

Coffee brand Nespresso has pledged to create carbon-neutral cups of coffee by 2022, the next chapter in what has already been a decade-long program to reduce its carbon emissions.





**JBS among meat firms linked to slavery-tainted ranches in Brazil**

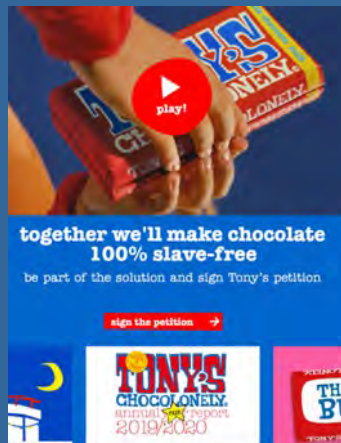


January 5<sup>th</sup>, 2021

# Social Pressures Dictating Choice Remind Me Again What We Can't Eat?:

- Anything with palm oil as an ingredient
- Chicken (eggs) fed soy from Brazil
- Fish that is unsustainably sourced
- Any meat/milk with hormones/antibiotics
- Food produced with slave labour
- Crops that have ravaged the soil
- Water-intensive crops
- Eggs produced by hens in cages
- Eggs produced with chick culling
- Beef that has destroyed the Amazon
- Pork from pigs confined in stalls
- Anything in a non-recyclable pack

**Post-Covid, What are the Major Social Issues which will Disturb Growth in Your Food & Drink Markets?**





Waitrose

**On Animal Welfare  
The Direction of Travel  
Is Only Going One Way**



### Pioneering mobile app measures emotional wellbeing of animals

At Waitrose, we put welfare first. But we always want to do better, which is why we're trialling an app to measure how farm animals are feeling.

The technology, which was featured on the BBC's Countryfile, is designed to help us understand and recognise how animal behaviour is connected to emotional wellbeing. Ultimately, the data will improve their quality of life, and raise welfare standards across the UK.



## SUPERMARKET PORK AT RISK OF FUELLING DEFORESTATION



**RISKY  
BUSINESS**

July 2020



ARGENTINA  
731,395 HA

BRAZIL  
534,573 HA

## UK retailer M&S swaps soy feed in milk supply chain with 'high performing' alternatives

October 6<sup>th</sup>, 2020



MARKS &  
SPENCER



Leading UK retailer, M&S, said it has now eliminated soy from the production of all its milk as part of its commitment to end deforestation.

## Switching soy for live insects to feed UK chickens could help produce carbon-neutral free- range eggs

August 2020

British poultry are normally fed soy grown on deforested land, but an environment-friendly alternative is available



**Barilla Eliminates Palm Oil  
From Over 50 Mulino Bianco**

Imperial College  
London



Google Cloud

# Unilever unveils deforestation-free supply chain promise



December 22<sup>nd</sup>, 2020

Consumer goods giant Unilever has promised to eliminate suppliers who are linked to deforestation in the production of palm oil, soy beans and packaging as part of a broader commitment to addressing climate change.

The multinational – one of the world’s largest buyers of palm oil – says it will demand ethical and sustainable transparency from its suppliers.

The company said it wants visibility on exact sourcing locations and will no longer rely on the so-called ‘mass balance system’ which does not allow for accurate verification of deforestation-free sourcing of derivatives from commodities.

Unilever has also teamed up with Google Cloud to capture satellite images of the forests, biodiversity and water cycles that intersect the company’s supply chain, a partnership which, according to the company, will help raise its sustainability standards and allow it to see a more complete picture of the ecosystems connected to the raw materials the company sources from around the world.





**Unilever promises living wage across value chain and  
€2bn towards diversity**      January 21<sup>st</sup>, 2021

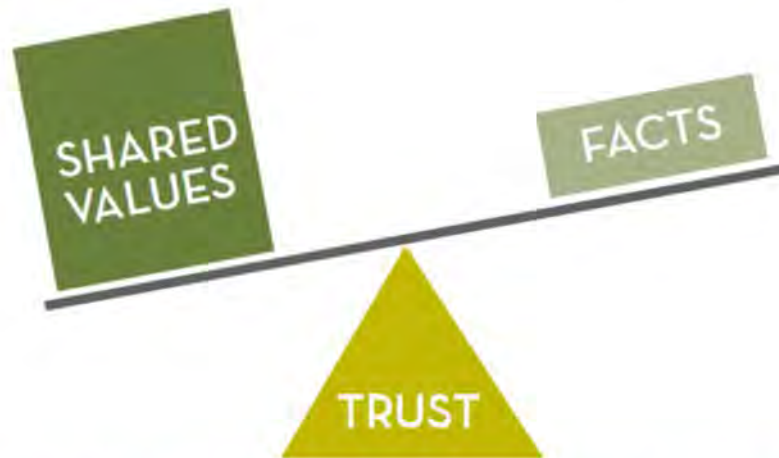
Unilever's latest pledge will ensure that people who directly provides goods and services to the company will earn at least a living wage or income – which it defines as one that covers a family's basic needs and that breaks the cycle of poverty.

While Unilever claims it already pays its own employees at least a living wage, it wants to secure the same for more people beyond its own workforce, specifically focusing on vulnerable workers in manufacturing and agriculture.



# It's simple: when it comes to building trust, connecting through shared values is the first step.

- 2016 Canadian Public Trust Research



Leading with shared values is 3-5x more important to building trust than sharing facts or demonstrating technical skills/expertise

Understanding Consumer Values  
(which are often amorphous)  
Critical for ALL in Food Supply Chain







## Taste & Convenience ALWAYS Trump Health!

### Servings

Serving Size: 1 Package (58 g)  
Servings Per Container: 1

#### Amount/Serving

Calories	220	Calories from Fat	35
----------	-----	-------------------	----

% Daily Value\*

Total Fat	3.5g	5%
Saturated Fat	2g	10%
Trans Fat	0g	
Cholesterol	5mg	2%
Sodium	530mg	22%
Total Carbohydrate	39g	13%
Dietary Fibers	1g	4%
Sugars	5g	
Protein	7g	
Vitamin A		0%
Vitamin C		0%
Calcium		15%
Iron		8%

\* Percent Daily Values are based on a 2000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

## Ingredients

ENRICHED MACARONI PRODUCT (WHEAT FLOUR, GLYCERYL MONOSTEARATE, NIACIN, FERROUS SULFATE [IRON], THIAMIN MONONITRATE [VITAMIN B1], RIBOFLAVIN [VITAMIN B2], FOLIC ACID); CHEESE SAUCE MIX (WHEY, MILK, CORN SYRUP SOLIDS, MILKFAT, PALM OIL, MODIFIED FOOD STARCH, MILK PROTEIN CONCENTRATE, SALT, MALTODEXTRIN, CONTAINS LESS THAN 2% OF CALCIUM CARBONATE, SODIUM TRIPHOSPHATE, MEDIUM CHAIN TRIGLYCERIDES, DRIED BUTTERMILK, SODIUM PHOSPHATE, CITRIC ACID, CREAM, LACTIC ACID, CALCIUM PHOSPHATE, CHEESE CULTURE, NONFAT DRY MILK, GUAR GUM, WITH PAPRIKA, TURMERIC, AND ANNATTO ADDED FOR COLOR, ENZYMES, NATURAL FLAVOR, XANTHAN GUM); MODIFIED FOOD STARCH, MALTODEXTRIN, POTASSIUM CHLORIDE, ACETYLATED MONOGLYCERIDES, SALT, MEDIUM CHAIN TRIGLYCERIDES.

**Score:** 8.8/10

In the end, the classic macaroni and cheese brand took the crown. That's right, your standard box of Kraft is really the best packaged mac and cheese out there! Costing less than a dollar a box, we're not complaining!

### Trend 1. Transparency Triumphs

A clear winner: brands are upping their transparency game to meet evolving consumer demands

### Trend 2. Plant-Forward

Mainstream appeal for “plant-based” is driving expansion to more market categories and regions

### Trend 3. Tailored to Fit

Personalized nutrition is in the spotlight as consumers look for food and beverage that fit their unique lifestyles

### Trend 4. New Omnichannel Eating

As foodservice and retail domains overlap, consumers can eat what they want, when and where they want it

### Trend 5. In Tune with Immune

Ongoing anxiety stemming from COVID-19 will continue to push consumers toward prioritizing their immune health



## Consumers can trace coffee beans through new blockchain app January 6<sup>th</sup>, 2020



Credit: [Coffee cup to go](#)

## Tech Giant IBM Unveils 'Thank My Farmer' App for Coffee Drinkers



LEADING BRANDS  
IMMERSE PEOPLE IN  
THE STORY



ORIGIN GIVES  
REASSURANCE OF  
QUALITY AND SAFETY

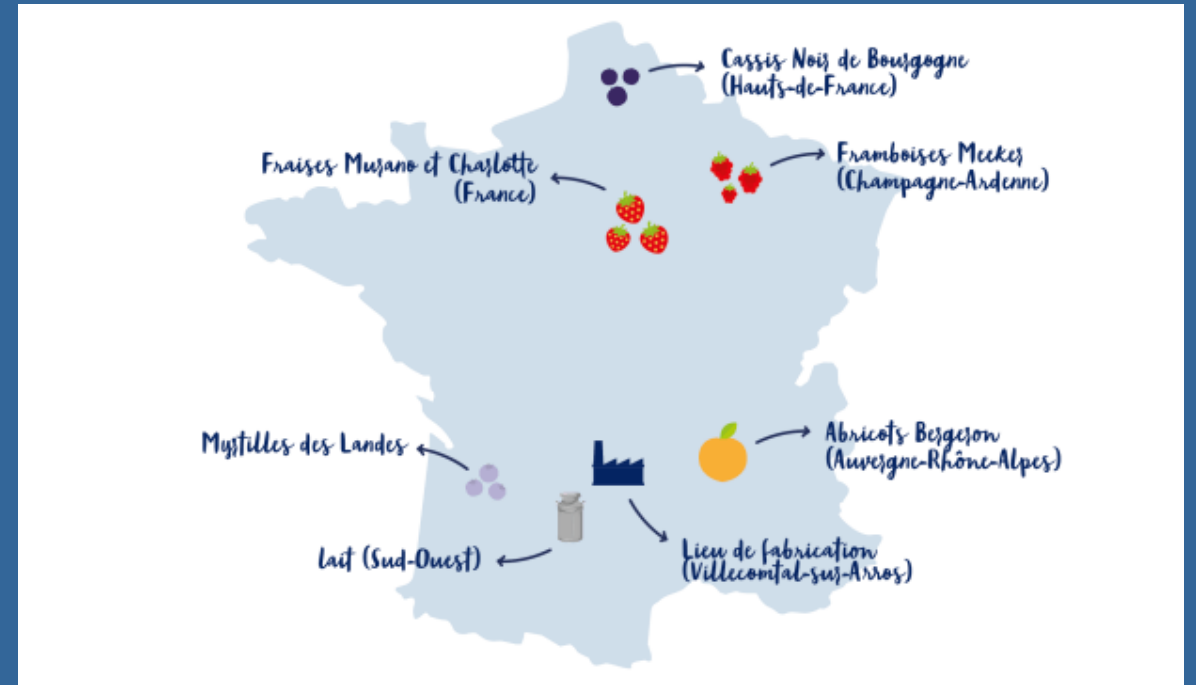


Mars teams with NSIP for 100% sustainable cacao supply chain  
January 9<sup>th</sup>, 2020



Imperial College  
London







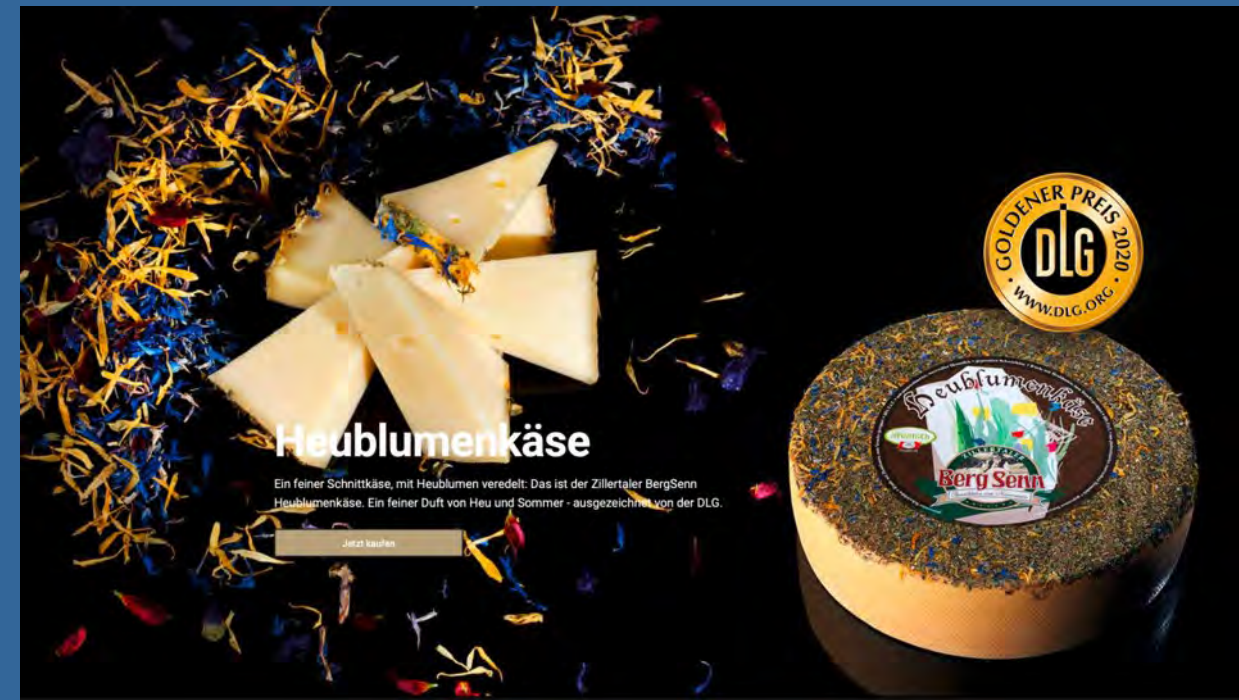
# MOUNTAIN FARMERS HEUMILCH



## 100% mountain farmer hay milk makes the difference

The production of hay milk is the most original form of milk production. For us, the quality of the hay milk starts with the feeding of the cows. For centuries, dairy cows have been fed according to the seasons: in summer our farmers drive the cows to the pastures or the cows come to the alpine pastures for summer refreshment.


The meadows are mown, the grass is dried and the hay obtained in this way is stored in barns for the cold season. The hay industry also has a positive effect on nature. Mowing and grazing promotes great biodiversity.



**The Margin is in the Adjectives NOT the Nouns!**




**OmegaQuant** launched a blood sample collection kit that allows consumers to test vitamin D levels at home. The test requires a prick of the finger and a couple of drops of blood for analysis, similar to OmegaQuant's range of omega 3 blood tests. Research continues to bring to light **the crucial role** vitamin D likely plays in a variety of health issues, ranging from cardiovascular disease to immune function and obesity.



# Omega-3 Index

THE ORIGINAL  
**Omega-3 Blood Test**



## Omega-3 Index

Because knowing matters  
Starting at \$49.95

[PURCHASE](#)



### Benefits of Knowing Your Omega-3 Index



**Imperial College  
London**



# 你的身体在Q你

新上市  
诺萃怡刻智能个人健康轻餐

宋茜  
品牌代言人

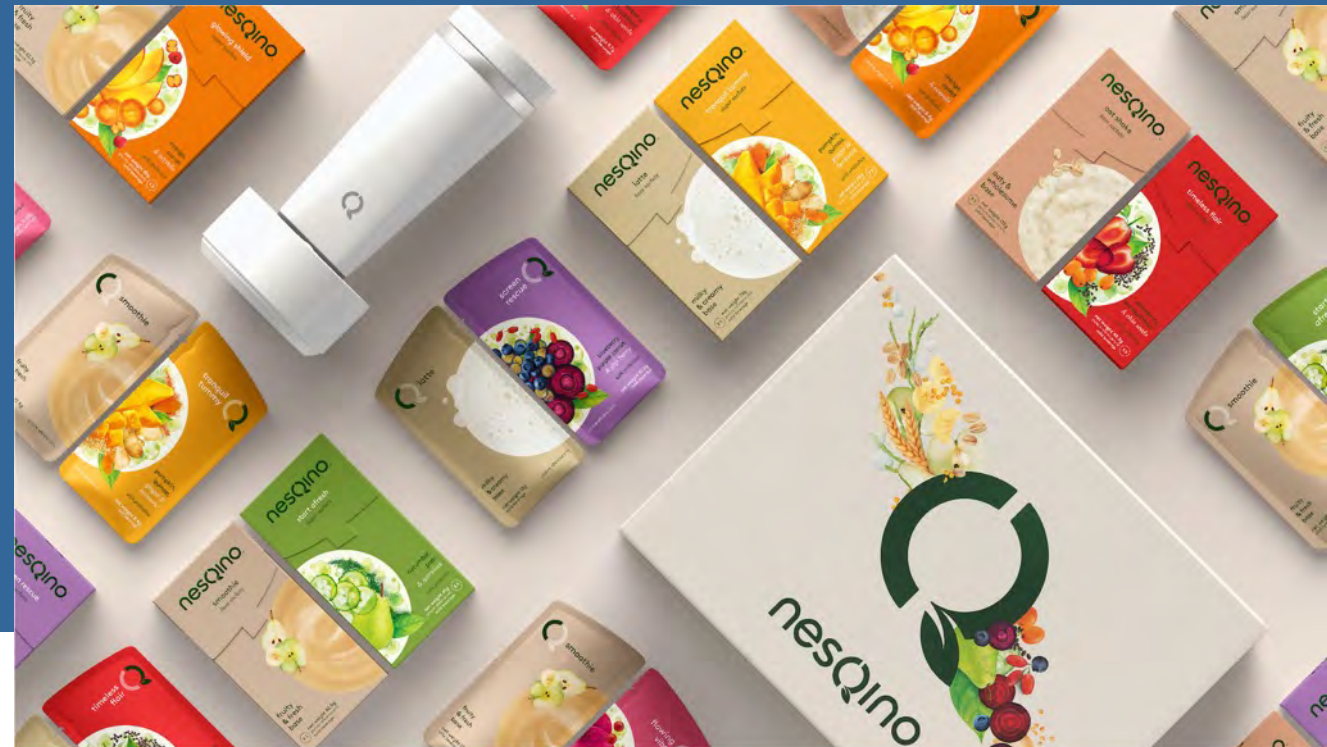


## Customizing superfood drinks: Nestlé's NesQino reinvents personalized "good for you" beverages April 2020

Three Base Sachets:

- Smoothie
- Milk shake
- Oat shake

Plus "superfood" stuff!







# Longevity Tastes Good...

Plant-Based Nutrition, Smartly  
Crafted for Adults >50

You've Got to be Careful Selling Special Food to Old Folk:  
Lots of Old Folk Don't Think They're Old Folk!



# 54%

of global consumers say that, due to COVID-19, they have **spent time educating themselves on ingredients and procedures that can boost their immune health**



“Which elements do you find most important to achieve immune health?”

1. **Getting enough sleep**
2. **Being healthy physically**
3. **Choosing foods naturally high in nutrients (vitamins, minerals, antioxidants)**





# PepsiCo wants to help the caffeinated masses get better sleep with its new relaxation drink

Say hello to Driftwell. The perfect nighttime antidote to . . . soda?

September 2020



[Photo: PepsiCo; rawpixel]

nootropic

/,nəʊə'trɒpɪk/,nəʊə'trɒpɪk/

adjective

(of a drug) used to enhance memory

or other cognitive functions.

Natural nootropic drinks for better focus and productivity.



My Choice!





# Overall Winner (Nostalgic Indulgence)



2020



Egg-Free (Aquafaba)



- Fibre
- Vegan
- -Free
- Oats
- Nostalgia
- Home Baking
- Indulge





Join us for

# Ice Cream for Breakfast Day

Jeni's Central West End  
389 N. Euclid Ave.

**Saturday, Feb. 2**  
**9 am – noon**

**100% of all profits will  
benefit She Should Run,**

a nonprofit committed to getting  
250,000 women to run for elected  
office by 2030.



*jeni's*  
ICE CREAMS



## SUNSHINE

Sunshine ice cream is a play on the mind. The color is muted and as gray as a rain cloud, but it tastes like a ray of sunshine—a geyser of sunny citrus and tropical fruit—on your tongue.

When we were creating this flavor earlier this year, inspired by Depressed Cake Shop and in honor of Mental Health Awareness Month, we had no inkling this is what the world would look like. We thought about not releasing it, but then realized that while the world has changed, the message is still the same. That when gray clouds descend on our lives, the sun always shines again.





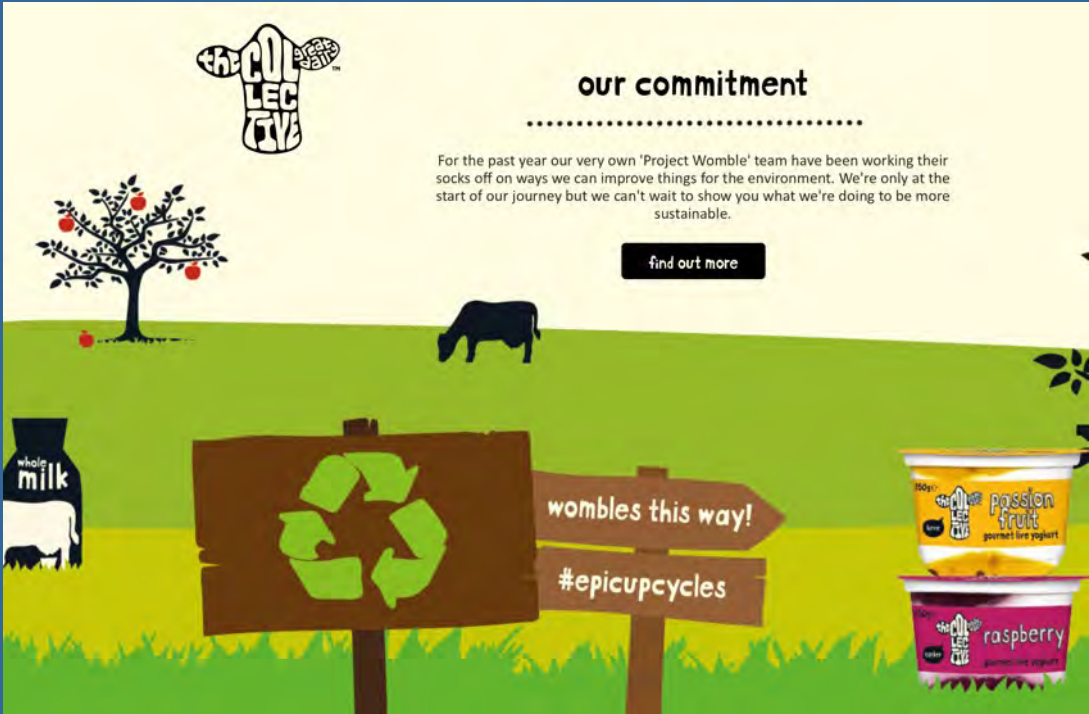


# Purpose/Values/Mission Marketing: Building an Empathetic Link with Your Consumers



**HOW IT WORKS**

Every time you make a purchase, we send a packet of life-saving food to a child in need.





## Danone sets out stall to become better corporate citizen

May 20<sup>th</sup>, 2020

Danone announces it's to become “enterprise à mission” company whose purpose & objectives in the social and environmental fields set out in its articles of association. Annually, Danone’s performance will be measured by an Independent auditor on:

- Consumer health & nutrition
- Water
- Agriculture
- Biodiversity
- Packaging
- Social innovation
- People & social matters

Danone’s Mission:  
To bring health through food  
to as many people as possible.

## Danone restructures business to become “local-first”

November 27<sup>th</sup>, 2020

Danone has announced new cost saving targets, up to 2,000 staff cuts and plans to reshape into a “local-first” company, as part of its efforts to become a more efficient organisation in a post-Covid world.

The owner of Activia and Alpro is shifting from a category-led to local organisation, focusing on geographical areas rather than product categories. The move to “reinvent itself” will reportedly enable local business units to regain autonomy and will shorten decision-making processes.





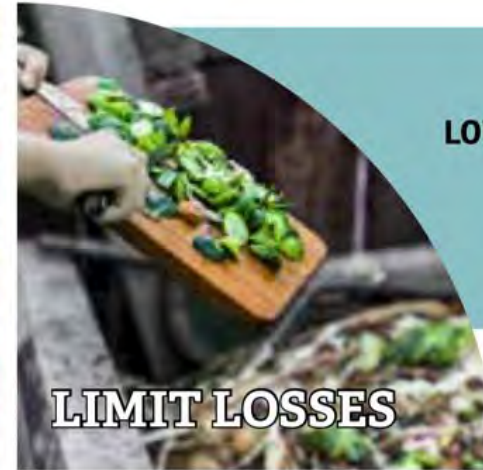
## NECESSARY CHANGES IN THE FOOD SYSTEM

Source: Rabobank 2020

HEALTHIER DIETS  
LOWER-IMPACT DIETS  
CONSUMING LESS



LOWER RATES OF WASTE  
AND LOSS ALONG  
THE SUPPLY CHAIN



USE RESOURCES  
RESPONSIBLY



MORE RESPONSIBLE  
USE OF RESOURCES

TREAD MORE  
LIGHTLY



LOWER NEGATIVE  
IMPACT ON PLANET  
AND PEOPLE



# Regenerative agriculture for dairy: Danone leads alliance with DSM

The alliance, Farming for Generations, is convinced that agriculture is a solution to making the food system sustainable

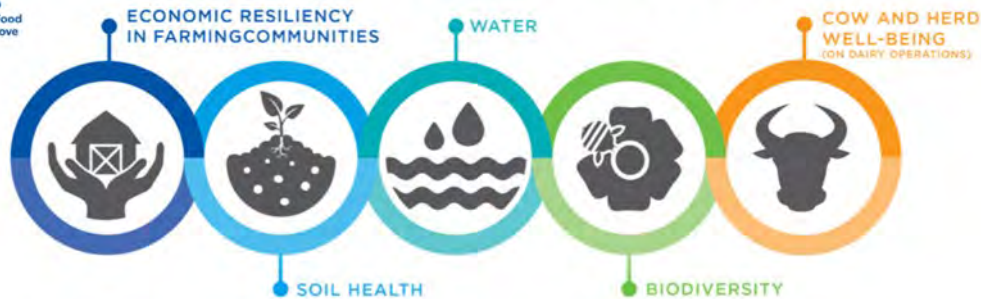
June 27<sup>th</sup>, 2019



We will advance regenerative agriculture on 1 million acres of farmland by 2030.



WE ARE MEASURING IMPACT ACROSS 5 KEY GOALS:



## Cargill joins regenerative agriculture movement, sets goal for 10 million acres

September 16<sup>th</sup>, 2020

Company says it will help farmers convert farmland to regenerative practices.

## Big Food Turning to Regenerative Agriculture to Meet Sustainability Goals and Satisfy Concerned Stakeholders







## McCain Foods unveils raft of sustainable agriculture pledges

July 14<sup>th</sup>, 2020

### McCain Foods invests in Farms of the Future initiative

This program will collaborate with universities, technology companies and other agri-centric companies on dedicated commercial farms that will pilot regenerative potato farming practices and emerging agriculture technologies.





## CONTACT POINTS:

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