THE FOOD REVOLUTION BAROMETER

FUTERRA BLOOM



What is the Food Revolution?

A revolution in the way we talk, share, question and think about our food system is underway.

Our barometer has been tracking how people talk about food and beverages in English language social media since 2018. We started this journey before the global pandemic and continued to track those online conversations during the crisis.

From growing anxiety, challenging assumptions, and huge shifts in the role of food in people's lives to changing behaviour and learning more; people's relationship with food has shifted, sometimes wildly, during the pandemic.

Deep social listening allows us to take a near-to-immediate pulse check on what people are discussing when they talk about these changes online. Throughout this report, we've paired this insight into people's online posts with expert inspiration about what could happen next.

The year-on-year findings of the Food Revolution Barometer tell the story of the societal shift in our relationship with food, both at an individual level and, increasingly, from a systemic perspective. It tells the story of where we were heading (The Past), and of how the COVID-19 pandemic has challenged or reinforced that trajectory (The Pivot). It also explores what the pandemic and other social and environmental pressures could mean for the future of food (The Possible).

Recent global events have shaken us all, greatly accelerating several shifts, while also challenging us to pause, reflect and slow down in other ways. More than ever, there has been a profound call to respect life on earth and each other.

Listening to people's explosion in concern, questions and solutions has been a humbling experience for everyone involved in this momentous project. The Futerra, Bloom and Danone teams have been working together for years to truly understand the Food Revolution, and it is our pleasure to share the results of that effort.

Our collective conclusion is that the health of our planet and the health of the people who inhabit it are inextricably linked by food. We hope the Food Revolution Barometer helps to further solutions to both.

Futerra & Bloom

Executive summary

Since 2018, there has been an explosion in the scale of online English language debates about food, from 30 million conversations in our first barometer (Oct-Nov 2018) to an unprecedented 107 million in our most recent (Apr-May 2021). Every food topic is more widely discussed, questioned and shared. But some issues, especially on the social impact of the food system, have risen exponentially.

THE PAST: 2018-19



The link between food, health, people and planet was stabilising before the pandemic. We tracked a steady growth in concern over broken systems becoming mainstream, and there was an increasing appetite for change.

From personal preference to collective concerns

People were already using food to manage their health, and they also saw the critical role food plays in broader public health. Barriers to everyone accessing healthy food – price, convenience (food deserts), lack of information and regulation – were a concern. People struggled with questions like 'are meat alternatives healthy or over-processed?' and 'is water pure or does it contain microplastics?'

From ecology only to social inequality

More people became increasingly aware of critical injustices within the food system, such as essential workers receiving substandard pay and farmers going hungry. Smallholder farmers were seen both as victim and solution in the climate challenge.

Trust and joy were generated by food conversations

Positive momentum grew as new issues entered the mainstream. In some cases, this meant the conversation shifted from problems to solutions such as plant-based diets. Messages from experts also came to play a big part, being shared widely by the media. This helped to renew trust, as well as taking the conversation away from more polarised extremes that had previously alienated many.

THE PIVOT: 2020-21



The pandemic crisis shook our relationship with food and led to a breakthrough in how we talk to each other about it. Some uncomfortable truths about how our food system treats workers became impossible to ignore. The collective experience of the pandemic shaped collective outrage, as well as a shared vision for something better.

The pandemic has amplified existing challenges

The global pandemic further inflamed the debate on food, by greatly accelerating awareness of issues relating to food, health, and food justice. Lack of access to good food became a global concern and strict lockdowns necessitated a shift towards digital models of food access.

The social impacts of food have been laid bare

As borders shut down and farms report massive labour shortages, fears have risen of food scarcity, and of a decline in the quality of food. The impacts of the pandemic are greatly accelerating awareness of the social cost of a broken food system, particularly food insecurity for vulnerable populations and the injustice of poorly paid frontline food workers.

Sustainable and healthy eating have become the new normal

Health and sustainability are now basic requirements in the way many people on social media make and express their food choices. During the pandemic people are attempting to take back control of their physical, mental and immune health through their food choices. Following a plant-based diet, through daily, flexible and easy to adopt habits, is now recognised as a key solution to environmental sustainability.

Everybody is now a potential food revolutionary

As food information becomes more available, animosity towards decision makers is rising, and more people are mobilising around food-related causes. It's no longer the activists alone drumming up awareness, as more people, encouraged by celebrities, are engaging in the debate. Consequently, NGOs, institutions and experts are less visible in the conversation.

BLOOM

THE POSSIBLE



It is clear now that there is a new breakthrough in the way people talk about food. The Food Revolution will emerge from the pandemic with new energy and resolve. Our broken food system has been exposed, and with communities galvanised by a new sense of solidarity, the work to build back better begins.

Food justice

Structural barriers to food access will be a priority for those looking to build a healthier food system. Regarded as the building block of lifelong health and resilience, food will no longer be seen as just personal - it will be evaluated on nutritional and cultural merit first, while also being used to increase biodiversity and fight climate change.

Fair livelihoods

Those who work in our food systems will be recognised for their important contribution to our society. Employers, governments and NGOs will help to bring about living wages and adequate safety protections for workers. Greater importance will be placed on income diversification and incentives to farm both productively and as environmental stewards.

Positive consumption

With the new consumer contract, purchases will not just be purchases they will be votes for a better world. Underpinning this new relationship will be technologically enabled transparency at scale. Tools like blockchain will mean customers will come to expect full disclosure on provenance, farming methods and all elements of their food's journey.





Contents

How to use this report	5	1 People Behind Our Food	15	Methodology	
Bloom analysis	6	2 New Activism	22	References	
The shifts of the Food Revolution	8	3 Food as Medicine	29		
The Food Revolution	9	4 Fair Food	36		
THE PAST: 2018-19 findings	10	5 New Natural	43		
THE PIVOT: 2020-21 findings	12	6 The Planetary Diet	50		
THE POSSIBLE	13	7 Better Self Through Food	57		
		8 Eating With Purpose	64		
		9 Loving Local	71		
		10 Innovation Through Tech	78		
		11 Honest Products	85		
		12 Food On Demand	92		
		13 End of Waste	99		
		14 Good Packaging	106		



113

How to use this report

There is a wealth of ideas and insight in this report. No matter where you fit into the food system, you can use this report to help drive change.

Entrepreneurs

Gain insight into a rapidly changing market and see the business opportunity that lies in the Food Revolution.

Investors

Discover promising areas for growth and use investments to incentivise innovation.

Research & Development teams

See what people want, and where they're at on key areas of innovation and let it guide your work.

Sustainability & ESG teams

Find the data you need to support your efforts within your organisation so you can keep fighting the good fight.

Procurement & Sourcing teams

Identify ways you can use the power of the purse to drive better possibilities by making smarter choices about the goods and services you support with your budgets.

Brand & Marketing teams

Combine the logic and the magic to build brands and communications that are honest, relevant, actionoriented and impactful.

CEO and leadership teams

The Food Revolution
Barometer can help you
navigate volatility. Use it
to understand the context
we're in and pre-empt what
may happen next.

Policy & Campaigns NGOs

Change is easiest when there is consensus. Use this data to fight for the areas where there is most grassroots energy. Public will begets political will.

FUTERRA

Retail & Food Service

Use this information to plan inventories and choose stock that supports the values of your company and your customers.

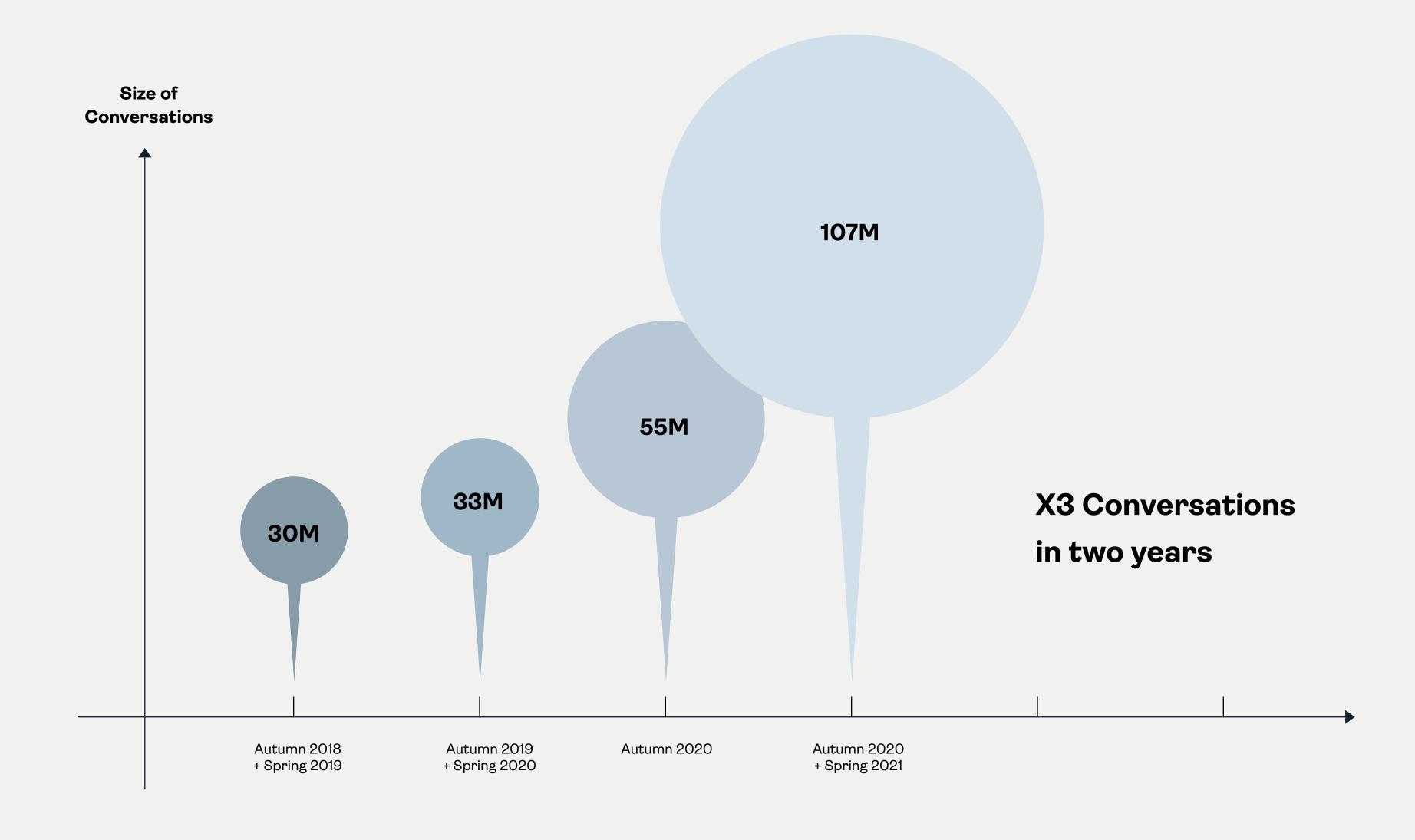
People who eat

You have the power to change the world for better. Every time you eat and drink you vote for the world you want.

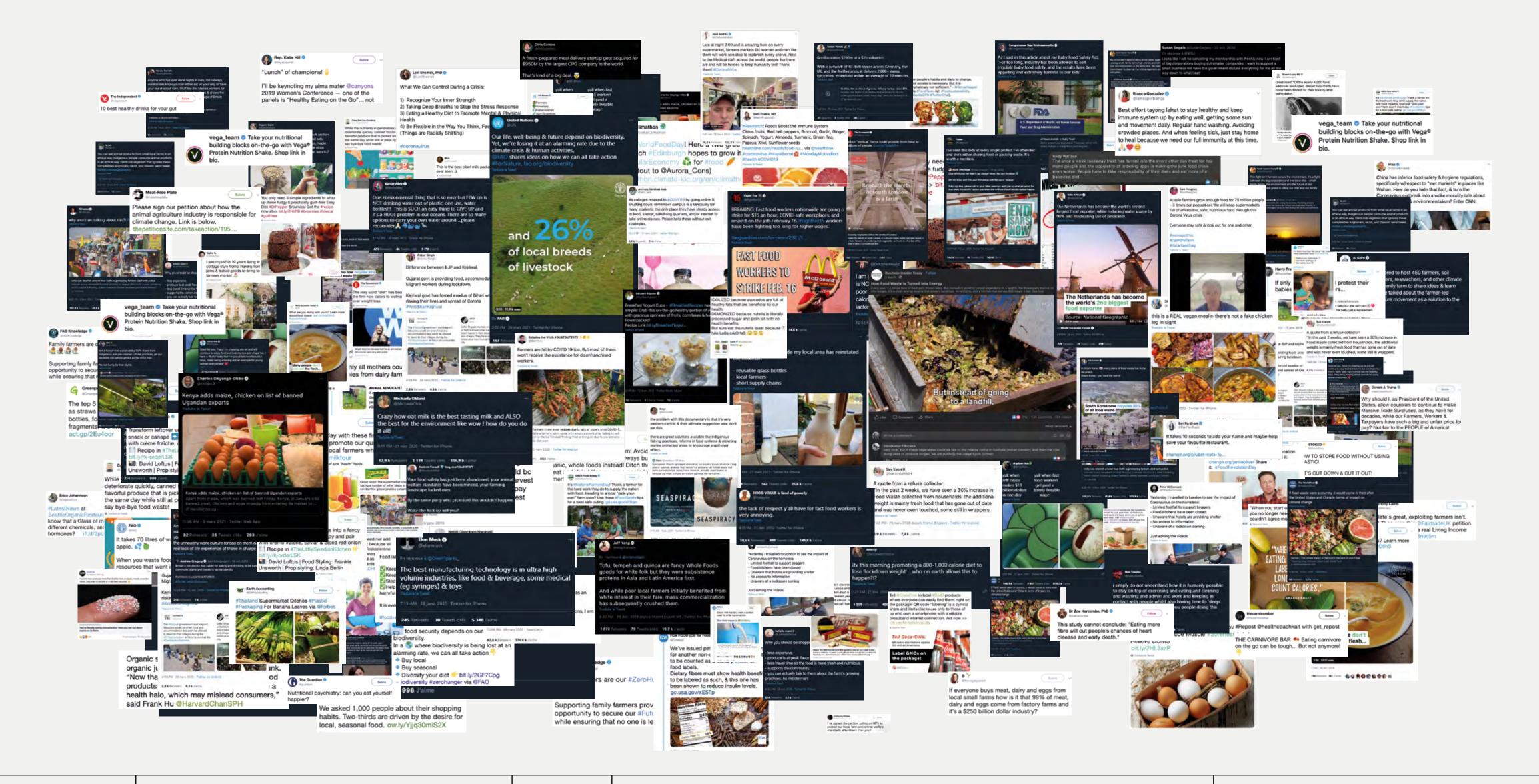


Bloom analysed 225 million online conversations about food for this report.

These conversations are articulated as ecosystems of topics and authors, all interconnected. The barometer does not track percentage changes in consumer responses to survey questions, it is a pulse check on what the biggest conversation topics of the Food Revolution are, and what sub-topics exist within them. It's about what topics are at the centre of the Food Revolution, and which topics connect and gravitate around them. It's about voices and virality, who is leading the conversation and what is driving motivation and engagement.

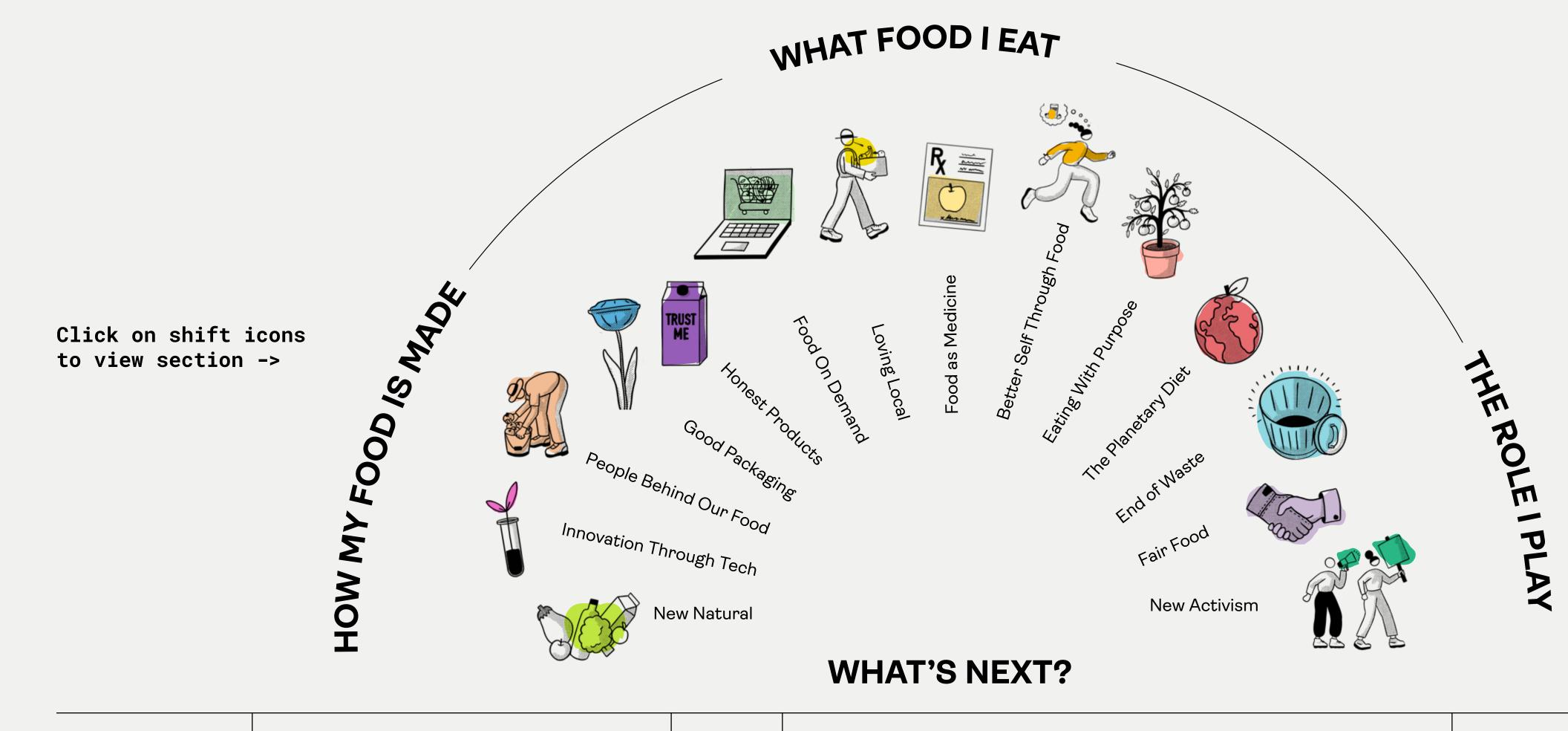






The shifts of the Food Revolution

The 14 shifts that emerged from an analysis of social media conversations span a wide range of topics and can be organised into the timeless categories of food consideration.





The three acts of the Food Revolution

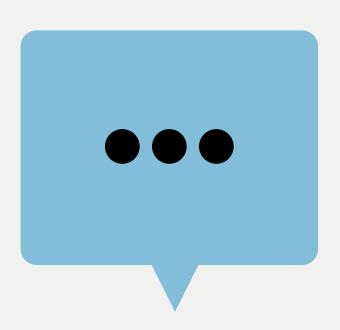


THE PAST

The status of the shifts in 2018-19, before the COVID-19 pandemic.

What we looked at:

Social listening data from Oct-Nov 2018 and Oct-Nov 2019.

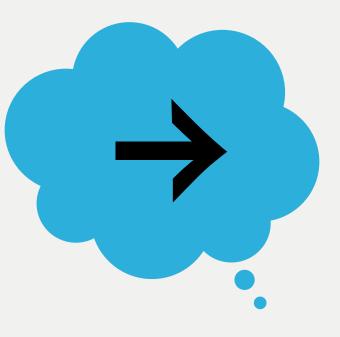


THE PIVOT

The moment of pause and provocation that started in 2020 and continues into 2021, as the COVID-19 pandemic swept the globe and upended daily life in almost every country.

What we looked at:

Social listening data from Oct-Nov 2020 and Mar-Apr 2021, news media and prominent reports.



THE POSSIBLE

The positive future outcomes that are more likely following this pivotal era.

What we looked at:

Expert opinion from thought leaders, think tanks, policy makers and market analysts.



THE PAST: 2018-19 Findings

Autumn 2019 (Oct-Nov)

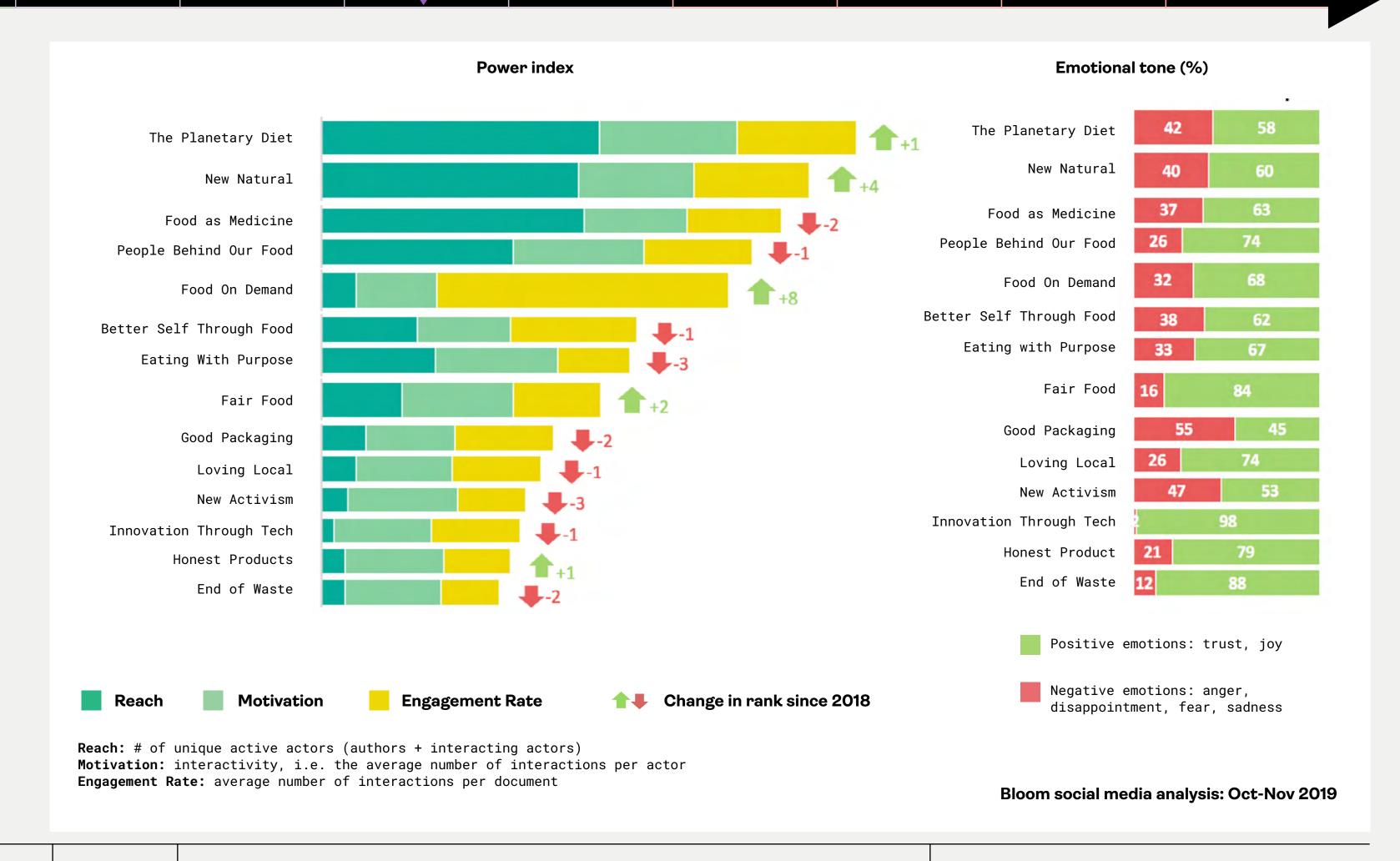
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In Autumn 2019, the incidence of Food Revolution conversations was already rising. 33 million conversations about food and sustainability occurred online, more than we'd tracked in 2018. We had identified and categorised shifts in our first year of tracking and they all remained relevant, but some – The Planetary Diet, New Natural, Food On Demand – rose further up the agenda in 2019.

An emerging theme of the Food Revolution Barometer is how food sits at the nexus of human health, planetary health and social progress, as evidenced by the consolidation of the top four topics in 2019. Food as Medicine, The Planetary Diet, New Natural and People Behind Our Food all demonstrated how interlinked these concerns are. While there were interesting shifts in the debate before the pandemic, the trajectory seemed clear.

The rise in conversations overall meant that more people were talking about even the least important themes than the year before and the emotional tone became more positive on issues as they entered the mainstream.

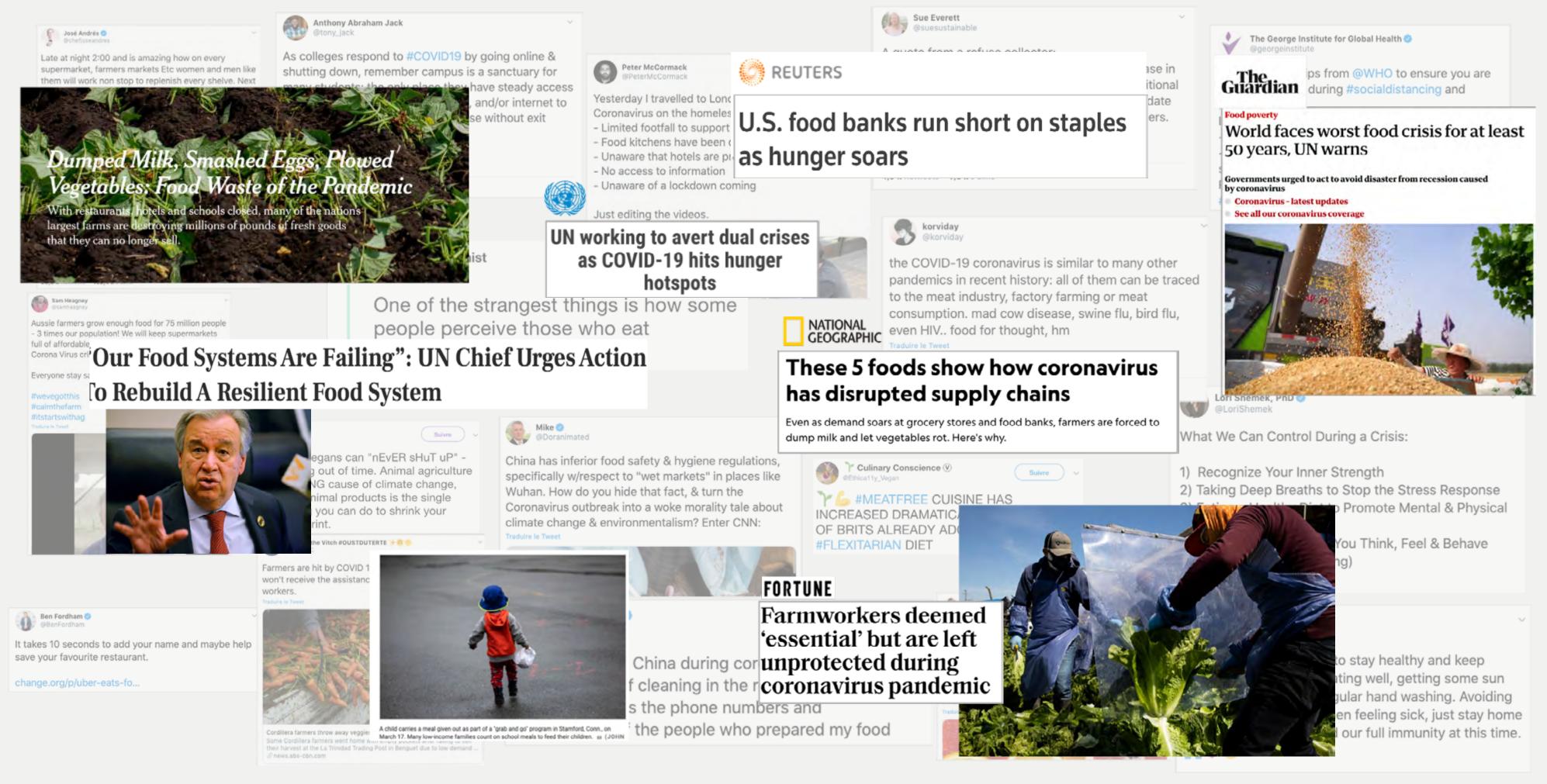






When the world shakes, our food system is the first to feel it.

The convergence of multiple crises has thrown the vulnerabilities, inequities and opportunities within the food system into sharp relief.





THE PIVOT – 2020-21 Findings

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COVID-19 impact

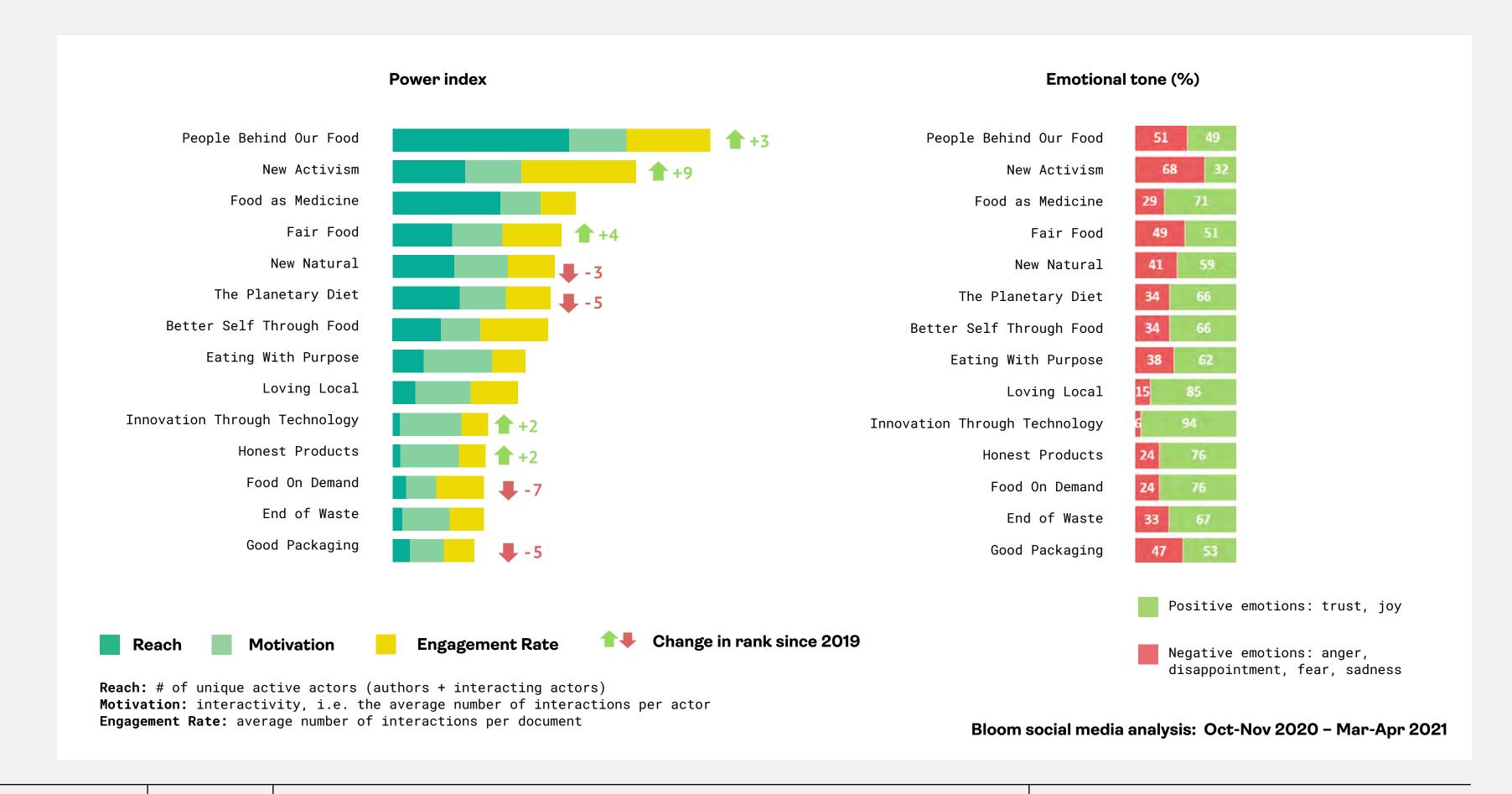
The COVID-19 pandemic and subsequent lockdowns dramatically shifted the conversation around sustainability and food. The Food Revolution conversation tripled in size to 107 million conversations. By 2021 there were 80 million more conversations about food and sustainability than there were in 2019.

With the onset of the pandemic, health topics soared as people looked to food to boost their immune systems and maintain their physical and mental health during tough lockdowns.

The fear of food shortages brought on by stockpiling underlined the absolute necessity to protect everyone in the food chain, from farmers and producers to suppliers, retail staff and delivery workers.

Consequently, conversations on social topics like People Behind Our Food, New Activism and Fair Food greatly increased over the past year, continuing a two-year trend. At the same time, sentiment in these conversations grew more negative in tone as people in the midst of the pandemic expressed animosity towards an evidently unjust food system.

While environmental topics increased in size, they did not experience the same surge of interest as social topics. As these concerns became normalised and entrenched in behaviours, they took on a more practical and positive tone.







THE POSSIBLE

In recent years people have displayed deepening awareness and increasing literacy when it comes to issues pertaining to people, planet and food. They have also expressed a newfound sense of solidarity for those underserved by the current food system.

These findings suggest nine beautiful possibilities for a better food system. These conclusions are drawn from science, research and expert recommendations on how to fix our food systems. We hope to see more of these topics enter public online debates in the coming years.

HOW MY FOOD IS MADE

Food produced within planetary boundaries is possible.

From soil and biodiversity enhancing farming practices to short, low-carbon supply chains and waste recovery, the way foods are produced doesn't have to degrade our ecosystem.

It's possible for farming to be a desirable and viable career.

Whether they are near or far, the people who produce our food should be valued and supported, as both environmental stewards and providers of the essential nutrients underpinning public health.

Essential work can be dignified work.

From pickers to shelf-stockers, servers to delivery workers, all jobs in the food chain, whether flexible or full-time, can be safe, well-paid, stable and protected.

WHAT FOOD I EAT

Healthy food for all is possible.

No matter who or where, it's possible for everyone to enjoy nutritious, culturally appropriate diets tailored to individual needs.

Zero-waste food is possible.

From ingredient production to packaging and consumption, food systems can be designed to be circular – eliminating unnecessary waste and creating abundant supply.

It's possible to restore public trust

The combination of traceability technologies, local supply chains and direct, human honesty from brands could make product claims simple to understand and easy for anyone to verify at the touch of a button.

THE ROLE I PLAY

It's possible to empower everyone.

Credible food information can be easy to find, simple to understand and people can feel equipped to make responsible choices.

Change through food activism is possible.

Values-driven consumers can take a greater role in shaping the food system to be more equitable and more sustainable.

It's possible to find balance.

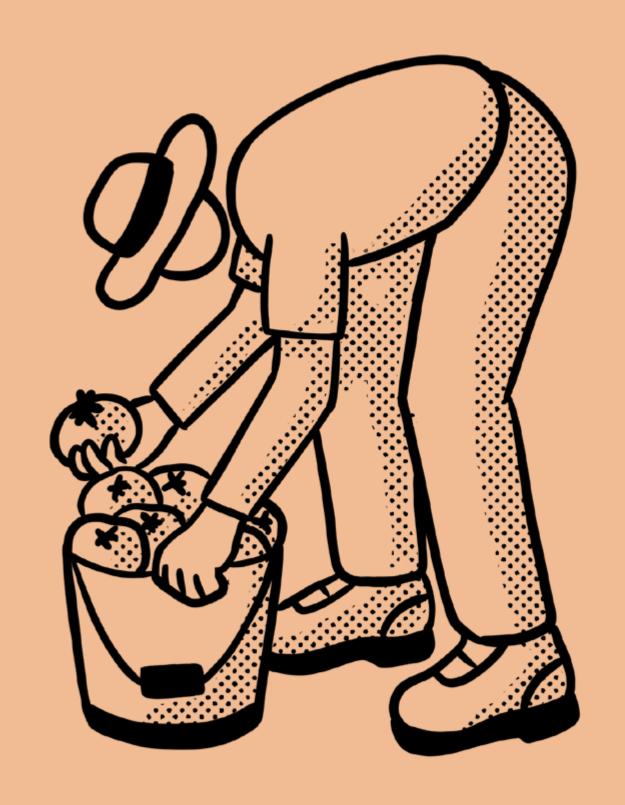
Food is not just sustainable and fair

– it's also good, pleasurable food,
free from shame or judgement, that
makes consumers feel healthy and
happy.



SHIFT DEEP DIVES





People Behind our food

THE PAST



The exploitation of workers in the food system drew criticism, and support was growing for small and vulnerable food producers.

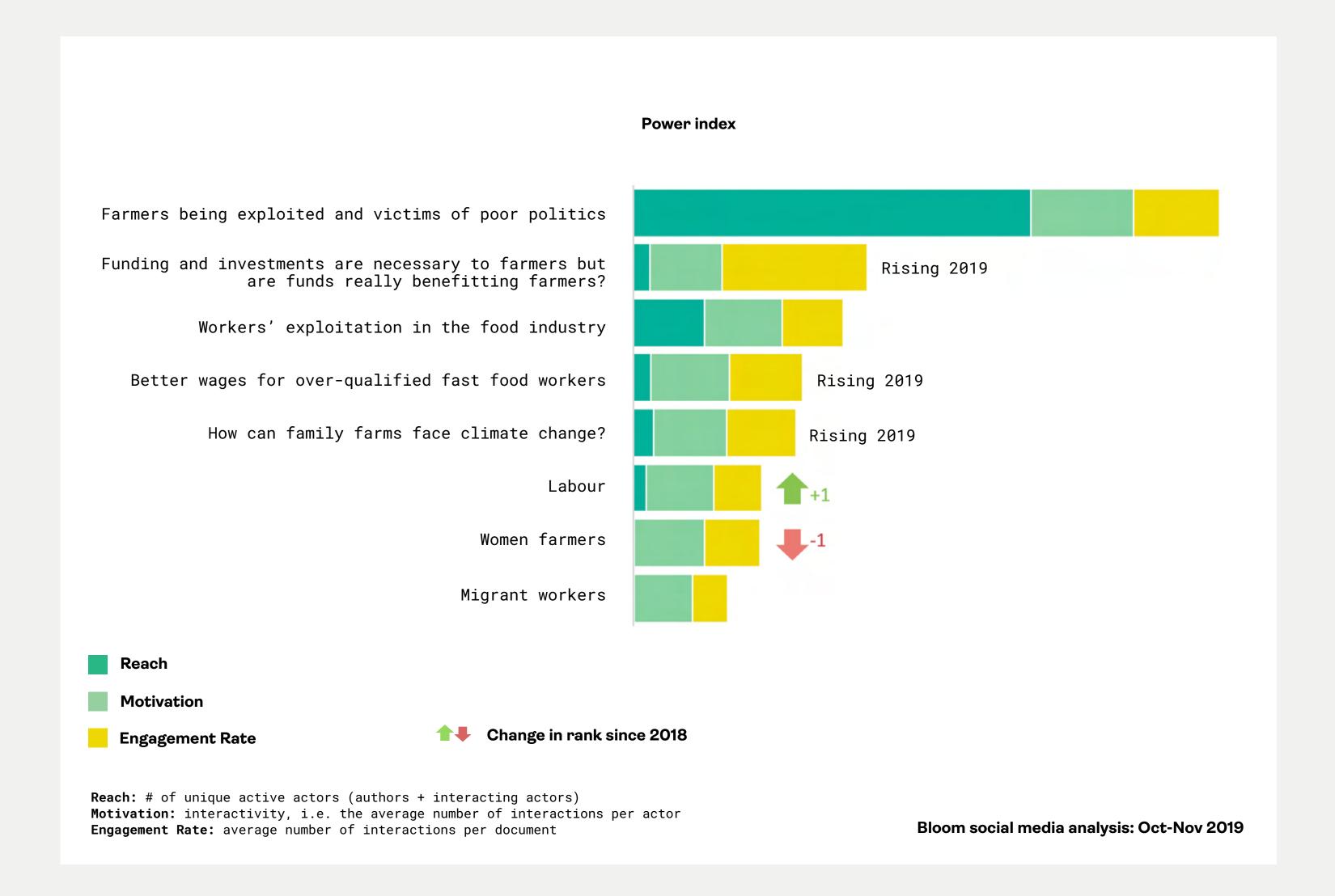


THE PAST



People behind our food

- People began to recognise the injustice of underpaid yet essential work. The conversation was evolving beyond farmers and farm workers to include all labour in the food industry grocery stores, delivery methods, and even restaurants.
 These 'invisible' people and jobs came to be seen as essential.
- People were making commitments in support of small and vulnerable food producers, such as family farms, which were coming to be seen as victims of, and critical actors on, climate change.
- The food system was criticised for profiting off exploitation of the poor. There were active calls for better protections for vulnerable populations working in food, such as women and migrants.





THE PIVOT



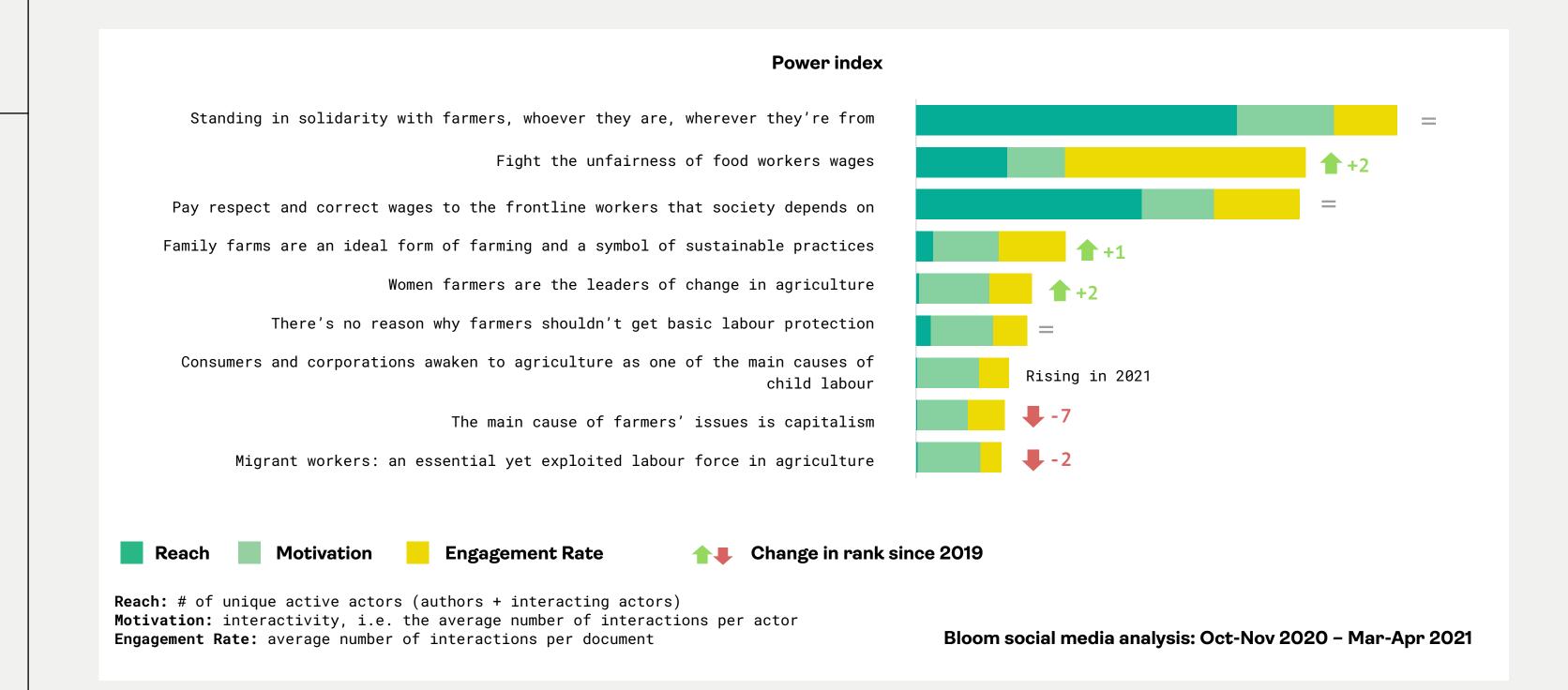
The pandemic highlighted the injustices faced by all those working to feed us. Consumers rallied to show solidarity, demanding better rights and wages for these frontline workers.



THE PIVOT



- Once barely visible to consumers, the human cost of food has been exposed with the crisis. When people talk about food workers, they now consider everyone working in the food chain, from production through to distribution.
- With this new awareness has come a sense of injustice as people realise the extent to which, in Western cultures, front line food workers' essential contribution to society is undervalued. To many people, this appears undignified and unfair, raising indignation and eliciting calls for greater solidarity. They demand more than platitudes for these frontline workers – specifically, better wages and more rights.
- Farmers continue to be seen as popular heroes. Their struggles and protests over wages and social protections are finding support both locally and internationally. They are seen as victims of an unfair and precarious economic system, themselves forced to employ cheap migrant workers to work in difficult conditions or to continue practicing child labour, especially in poorer countries.
- In this context, female farmers are rising as role models. Female farmers, and to a lesser extent family farms, carry hope for the food system. While they are promoted by some for their leadership in sustainable food production, people believe they are being overlooked.



"Across the world, food system workers face insecurity and [are] among those most at risk from economic disruption in food supply chains and beyond."

IPES, 2020

[A KFF report concluded that] "Hispanic workers and undocumented people are overrepresented in the food production industry, but workers in this sector overall face greater health and financial risks due to the coronavirus pandemic."

Vox, 2020

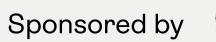
"Wages in U.S. food manufacturing were 3.4% higher in Q3 2020 than in Q3 2019 (amounting to an extra \$900 million) because employers offered higher wages, bonuses, and incentive pay, at least temporarily."

Food Industry Executive, 2021

People behind our food



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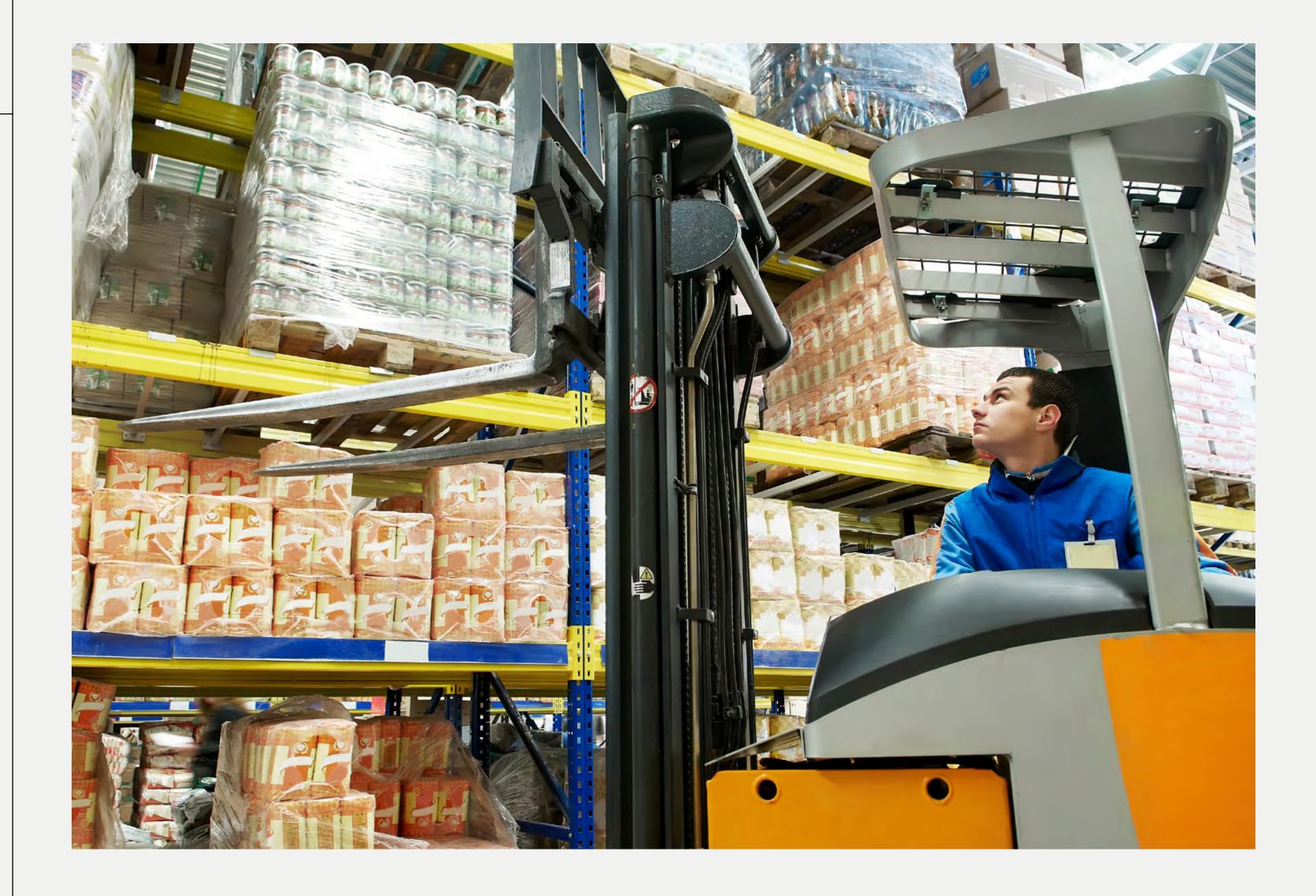




THE POSSIBLE



Imagine if working anywhere in the food chain was highly desirable – safe, dignified and well-rewarded.



THE POSSIBLE



SMALLHOLDER FARMERS TREATED LIKE CLIMATE HEROES

Farmers are empowered with resilient farming methods and celebrated for their valuable work.

"Farmers should be helped to diversify their incomes and incentivised to farm both productively and as environmental stewards."

Sarah Farley, Managing Director, Food Initiative, Rockefeller Foundation and Sara Scherr, President and **CEO**, EcoAgriculture Partners

"A set of proven GHG-efficient farming technologies and practices - which are already being deployed - could achieve about 20 percent of the sector's required emissions reduction by 2050."

McKinsey & Company's 'Agriculture and climate change: Reducing emissions through improved farming practices'

ADEQUATE PAY AND PROTECTIONS FOR ESSENTIAL WORKERS

Protections and compensation for workers across the food supply chain are redesigned to reflect the essential service they provide - regardless of their location, role or contract type.

Supporting essential workers with a bill of rights that provide health and safety protections, premium compensation and paid sick leave.

Petition supported by 33 NGOs

"Businesses will need to reimagine their social purpose to make a difference in the lives of essential workers."

Members of The Consumer Goods Forum

"The EU institutions and national governments should act now, to make sure the food we eat is not produced by exploiting people and planet."

Giulia Lagana, Senior Policy Analyst for Migration, Open **Society Foundation**

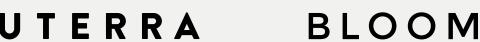


Relevant SDG: 2.3 – By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment

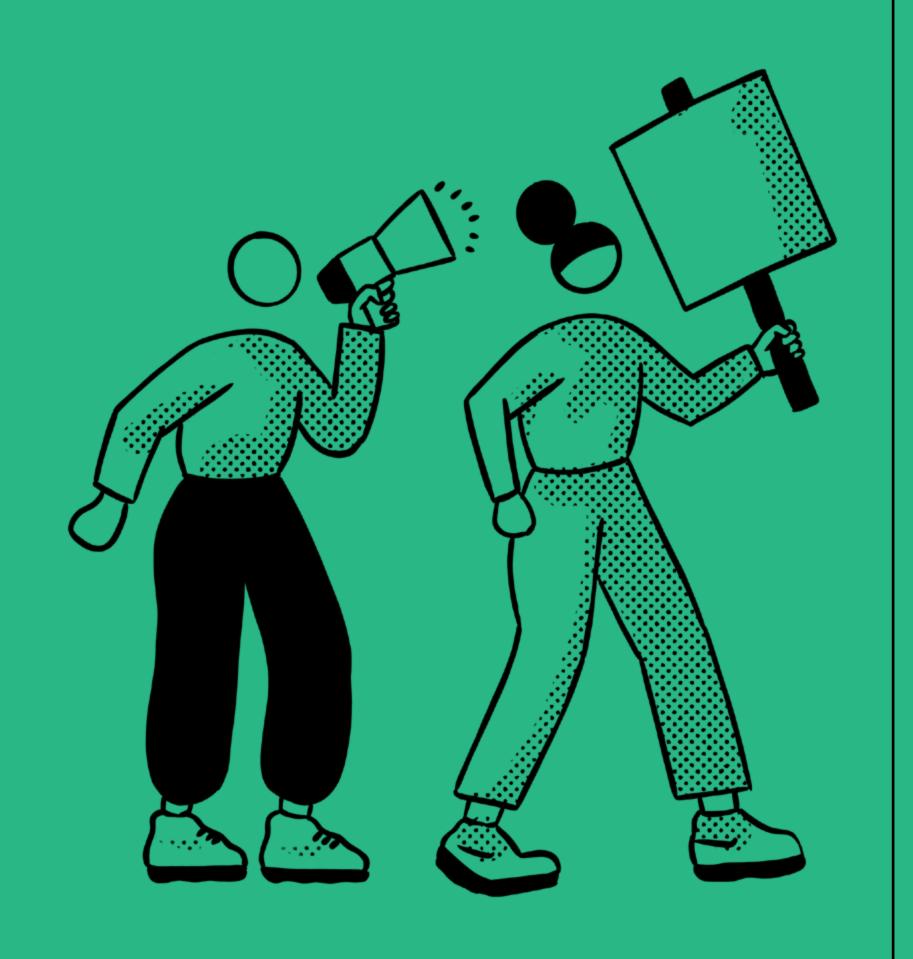


Relevant SDG: 8.5 - By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities and equal pay for work of equal value











THE PAST

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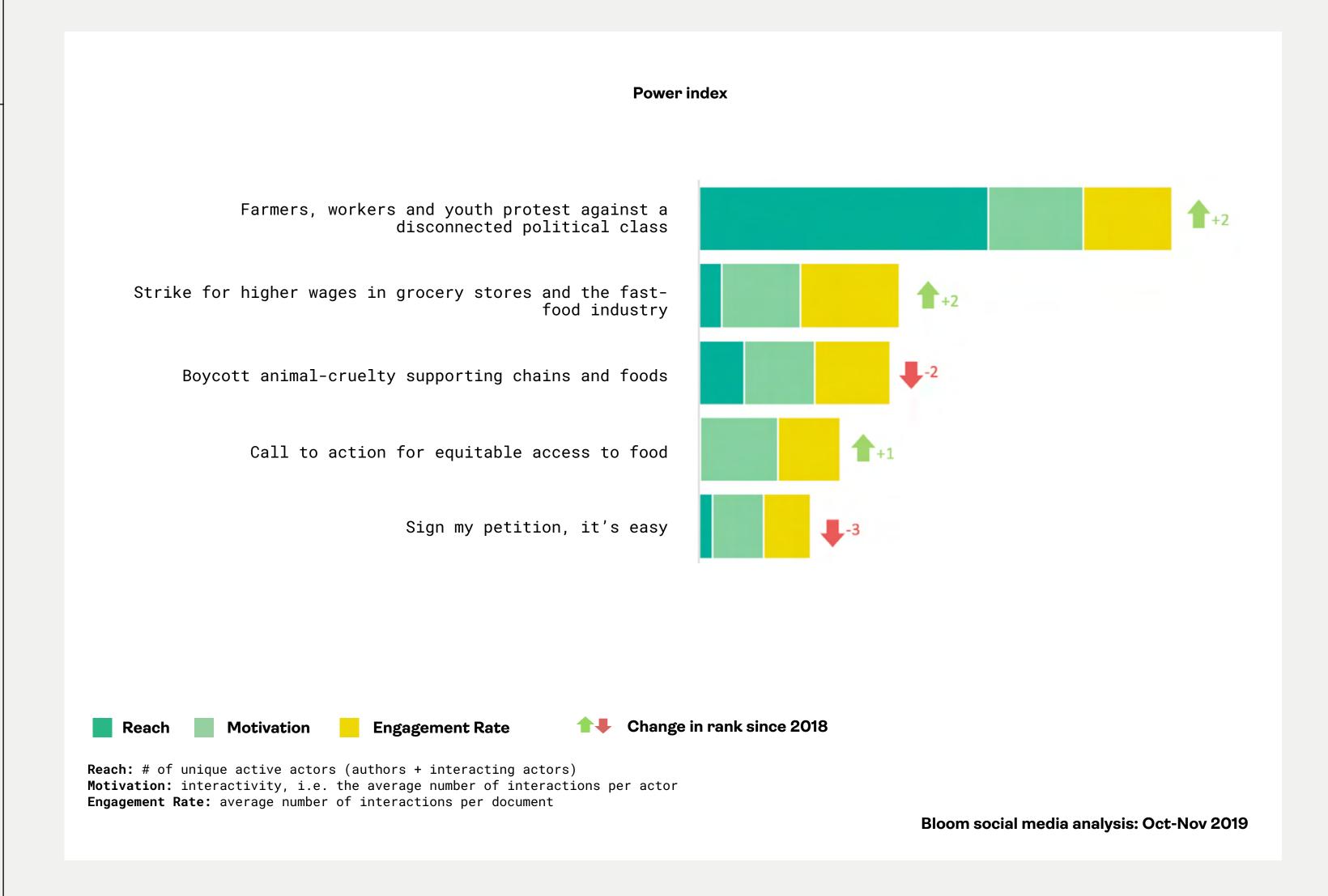


Activism had gained momentum, and conversations began to move beyond environmental concerns to include social struggles.



THE PAST 🗲

- The conversation around protests was growing quickly and involving more people.
- Farmers prompted a wave of protests in Europe against government regulations to protect biodiversity and the environment. This generated conversation both in support and in disagreement.
- Conversations had previously focused on climate change, but began broadening to include social issues such as wages.
 Animal cruelty remained a prevalent topic and reason for people to boycott brands and products.
- The government and politicians came under fire in these conversations, and were seen as responsible for the issues being raised.
- The actions being discussed became more radical. Soft tactics like petitions were replaced with other forms of action like protest showing a new level of anger and frustration.



Mew activsm



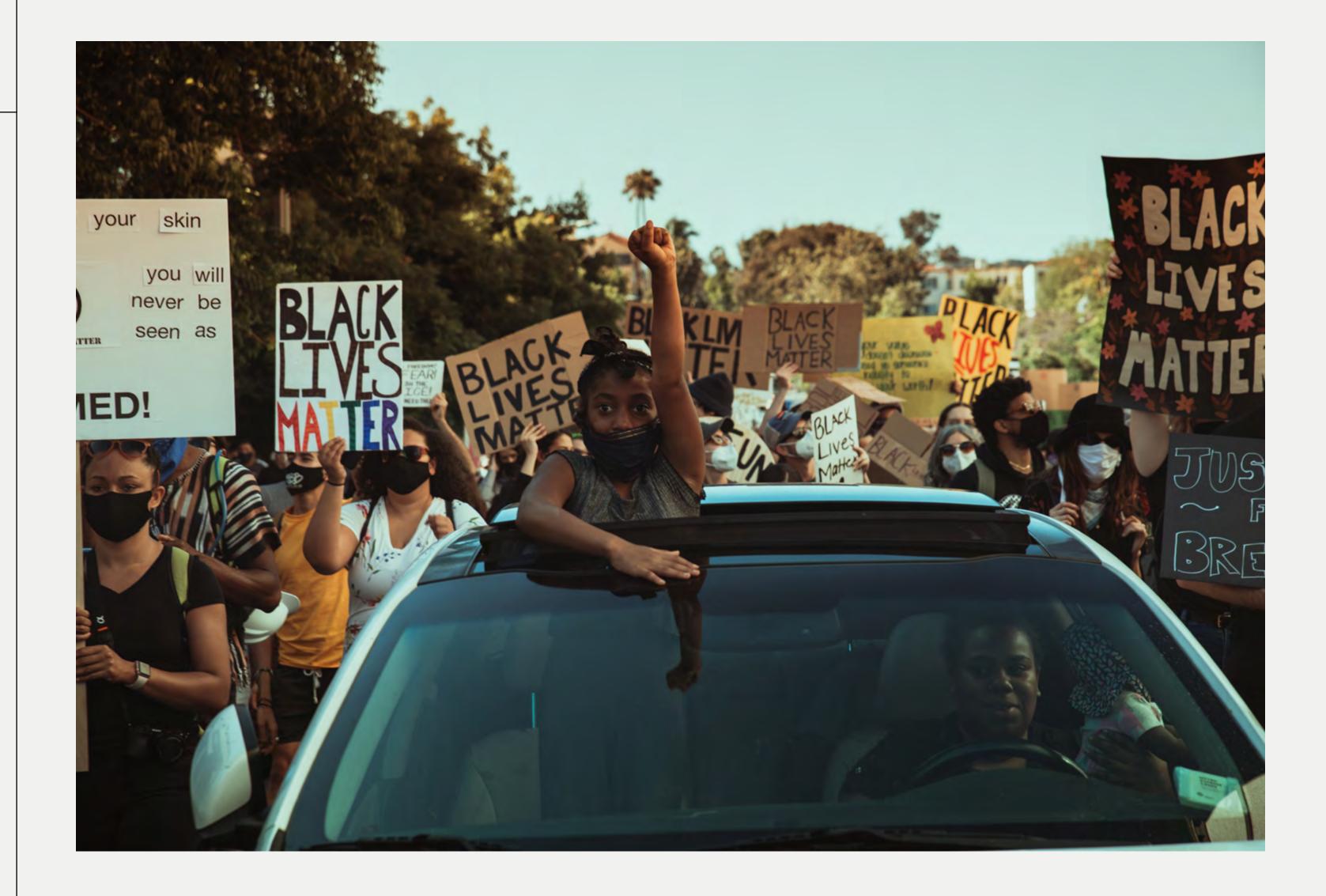
BLOOM



THE PIVOT



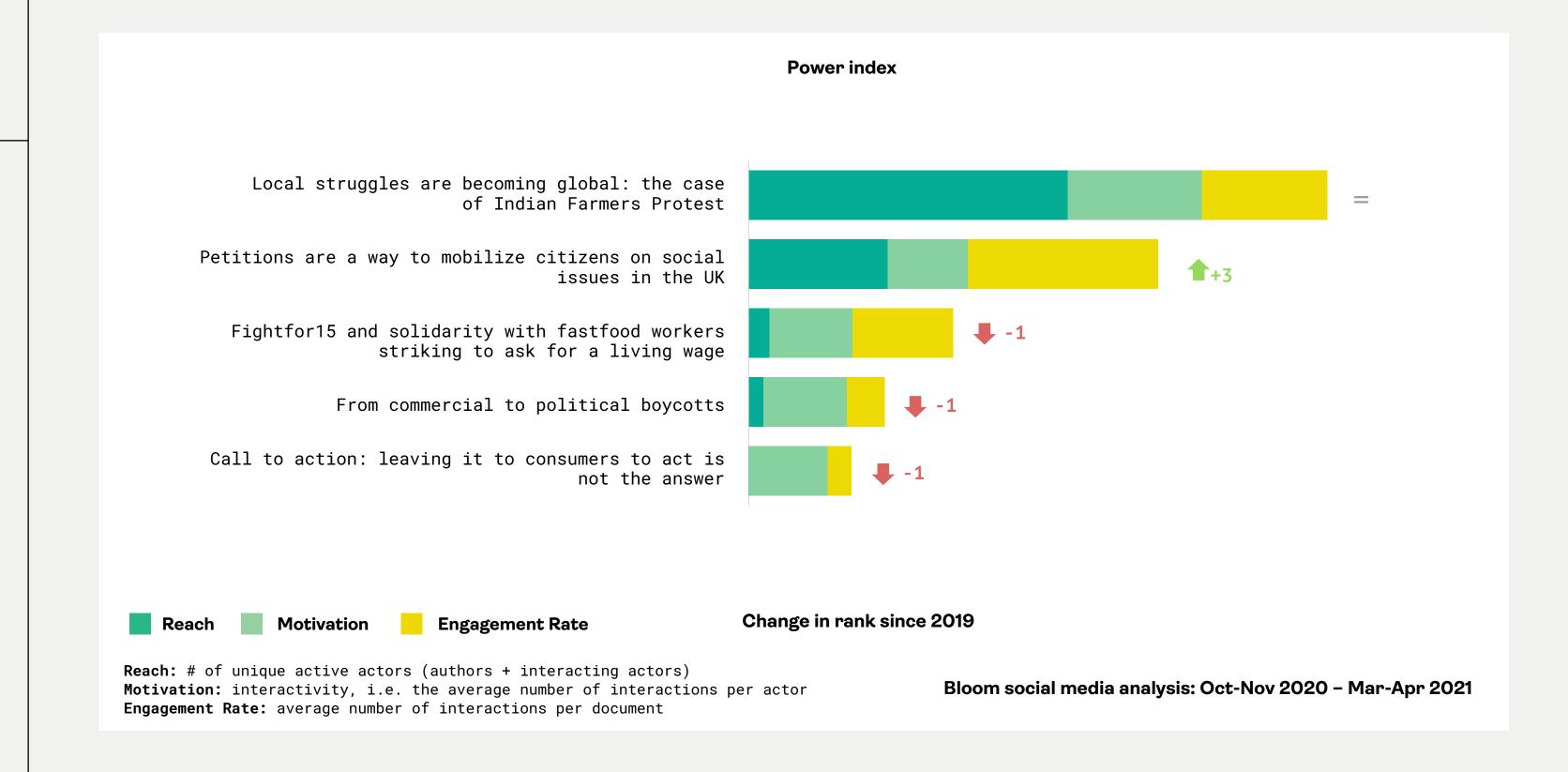
The pandemic year shone a clear spotlight on people and our social connections. The global amplification of local struggles was enabled via social networks, elevating food as both a cause to fight for and a symbol of solidarity in tough times.



THE PIVOT



- Increased reporting on the multiple and intensifying struggles
 of vulnerable and marginalised populations around the globe
 has shown the need and desire for greater social equity.
 Protesting farmers have shown that the viability and appeal
 of this critical profession is in question. More allies around
 the world, including celebrities, are showing solidarity with
 those fighting for better wages and better living or working
 conditions.
- Attacks towards brands are still present, but to a much lesser extent than in the past. The political sphere is now the central point of criticism. Leaders are blamed for the rising precarity of the population, and people are demanding greater accountability from them.
- Petitions are particularly local but continue to be effective, especially in the UK where Marcus Rashford's petition to end child food poverty raised 1.1 million signatures and triggered a parliamentary debate on the topic.
- Food is both a topic of protest and a means of expressing support during moments of social unrest. Food donations enable more people to join protests and to sustain their fight for longer. Bringing food to protests, especially local and fair foods, is seen as an act of solidarity.



US Consumers Are Keeping a Close Eye on How Brands Handle the Coronavirus Crisis.

ADWEEK, 2020

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"The database Freedge, which maintains a map of community fridges around the world, displayed 12 fridges in the US in March 2020. Now, 160 fridges can be found across 28 states."

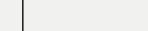
Vox, 2021

FUTERRA

On 24 May 2021, MPs debated the No Child Should Go Hungry petition launched by Marcus Rashford in 2020. The petition received more than 1.1 million signatures, resulting in a government U-turn over providing free meals to disadvantaged children during the Christmas holidays.

ITV News, 2021

Mew activsm



BLOOM

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THE POSSIBLE

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Imagine if a new age of digitally enabled food activism meant leaders and businesses could finally be held to account.





FOOD AS A LEVER FOR SOCIAL CHANGE

Social justice is accelerated through food-based interventions.

"Food is a universal connector. As global momentum for racial justice and climate health builds toward a crescendo for life, impact investors can be an important part of a holistic solution. By deploying conscious capital targeted at a reenvisioned food and agricultural system, impact investors have a unique potential to address racial inequity and build a better future."

Walter Schindler, Chairman and CEO, Transformation

"Soul Fire Farm is a people-of-color-led community farm in Grafton, New York. We are committed to ending racism and injustice in the food system and we do that in three ways. The first is by stewarding 73 acres of land using Afro-Indigenous farming and distributing food through a farm-share program; that's a subscription service bringing fresh, healthy, nourishing, nutritious food right to the doorsteps

of people. The second is our training programs for farmers, activists, and builders. The third thing we're working on is reparations and repatriation – the returning of land and resources back to those from whom it was stolen."

Leah Penniman, author, educator, activist and Cofounder of Soul Fire Farm

"A resilient food system is an ecological food system, designed to help people and the environment rather than make profits for multinational corporations. It supports food justice — with 'communities exercising their right to grow, sell, and eat healthy food' and acknowledging differences such as class, ethnicity, and gender in shaping solutions to meet their food needs."

Éric Darier, Greenpeace

Relevant SDG: 1.4 – By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance

MILLIONS SPEAK TRUTH TO POWER

Online movements lead to an increase in accountability for decision makers.

"Human rights are at a crossroads. A perfect storm of pandemic, global economic crises, climate change and rise of authoritarian governments has put them under existential threat. On the other hand, massive social protests have opened a window of opportunity for the full integration of a rights-based approach in the peace, development and sustainability agenda. Which path will prevail will depend on the ability of the multilateral system, particularly the UN, to garner a unity of purpose by reforming its decision-making structures. It will also depend on the ability of civil society to mobilise ordinary citizens and sustain the pressure for change."

Irene Khan, Overseas Development Institute

"Far from condemning social movements to obsolescence, the pandemic – and governments' responses to it – are spawning new tools, new strategies and new motivation to push for change.

What is clear is that people power is adapting to, and

even flourishing within, the unprecedented global crisis... movements around the world are adapting to remote organizing, building their bases, sharpening their messaging, and planning strategies for what comes next."

Erica Chenoweth, Austin Choi-Fitzpatrick, Jeremy Pressman, Felipe G Santos and Jay Ulfelder, 'Methods of Dissent & Collective Action Under COVID', writing in the Guardian

"This moment of focus on social solidarity is an ideal period to attempt to reconnect the public with public institutions and to also think about how power and resources are distributed in our societies."

Liam O'Farrel, University of Birmingham's City Region Economic and Development Institute (City REDI)

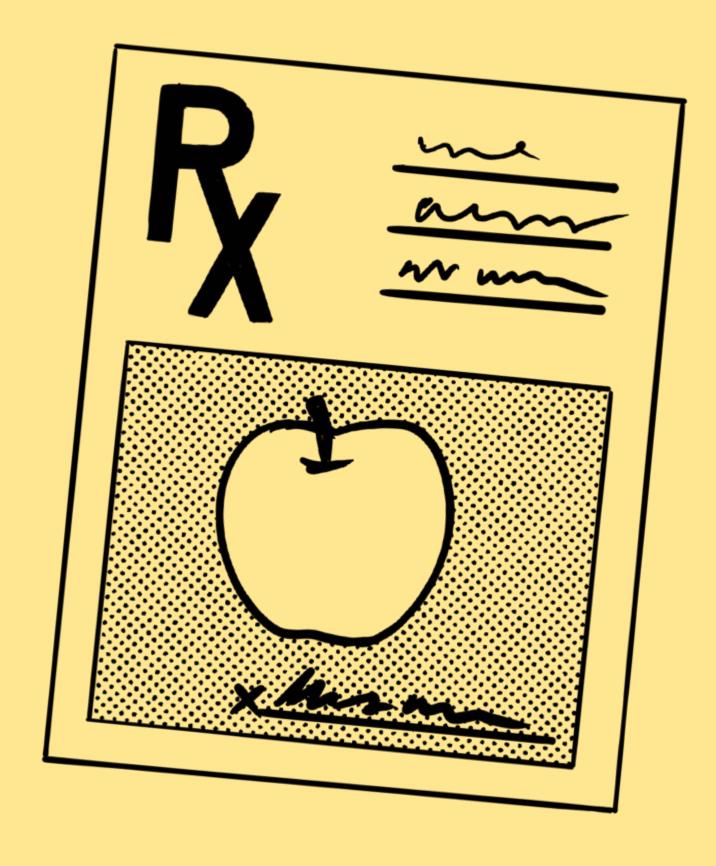


Relevant SDG: 16.7 – Ensure responsive, inclusive, participatory and representative decision-making at all levels









Food as medicine

THE PAST

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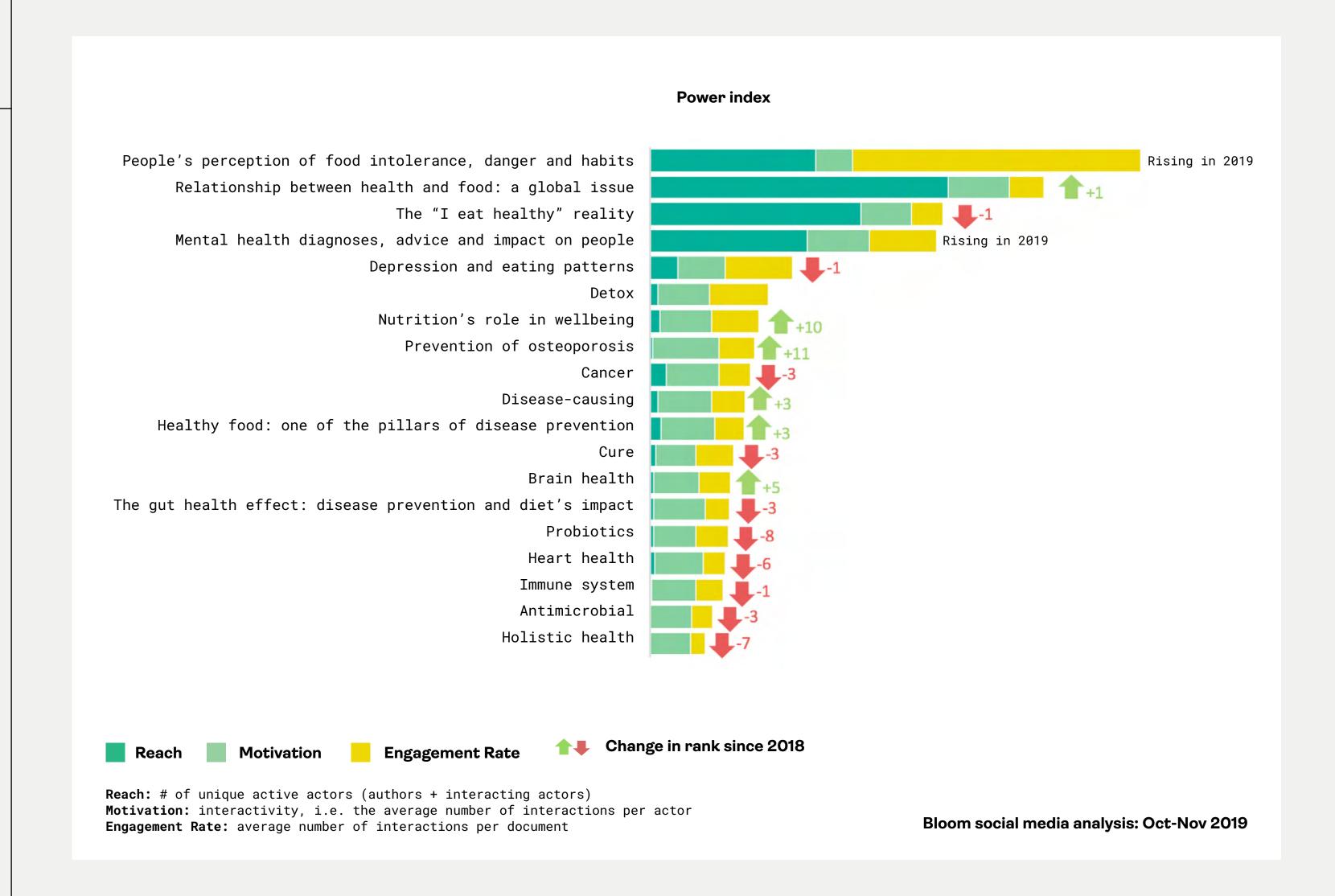
As people became better informed about health, food was recognised as one of the pillars of disease prevention and cure.



THE PAST



- The relationship between food and health had been made by experts, and became clear to consumers too. While people had talked about wellbeing and healthy food previously, the conversation was becoming more medicallyoriented. Food was coming to be seen as one of the pillars of disease prevention and cure. The role of nutrition in mental health, such as depression and eating patterns, continued to provoke debate.
- People were becoming better informed. They were searching for more information and debating the impact of specific diets on diseases. People were also able to denunciate medical advice they considered invalid and debate the difference between health and wellness.
- Medical experts were not always in agreement about exactly how food impacts health. Medical recommendations were occasionally divergent and official dietary guidelines sometimes drew criticism.
- Food was coming to be seen as a massive global health issue. Many began asking questions about how food could make global health issues better or worse.











THE PIVOT



With health as a top global priority, the role of food as a pillar of health was pulled into even sharper focus.

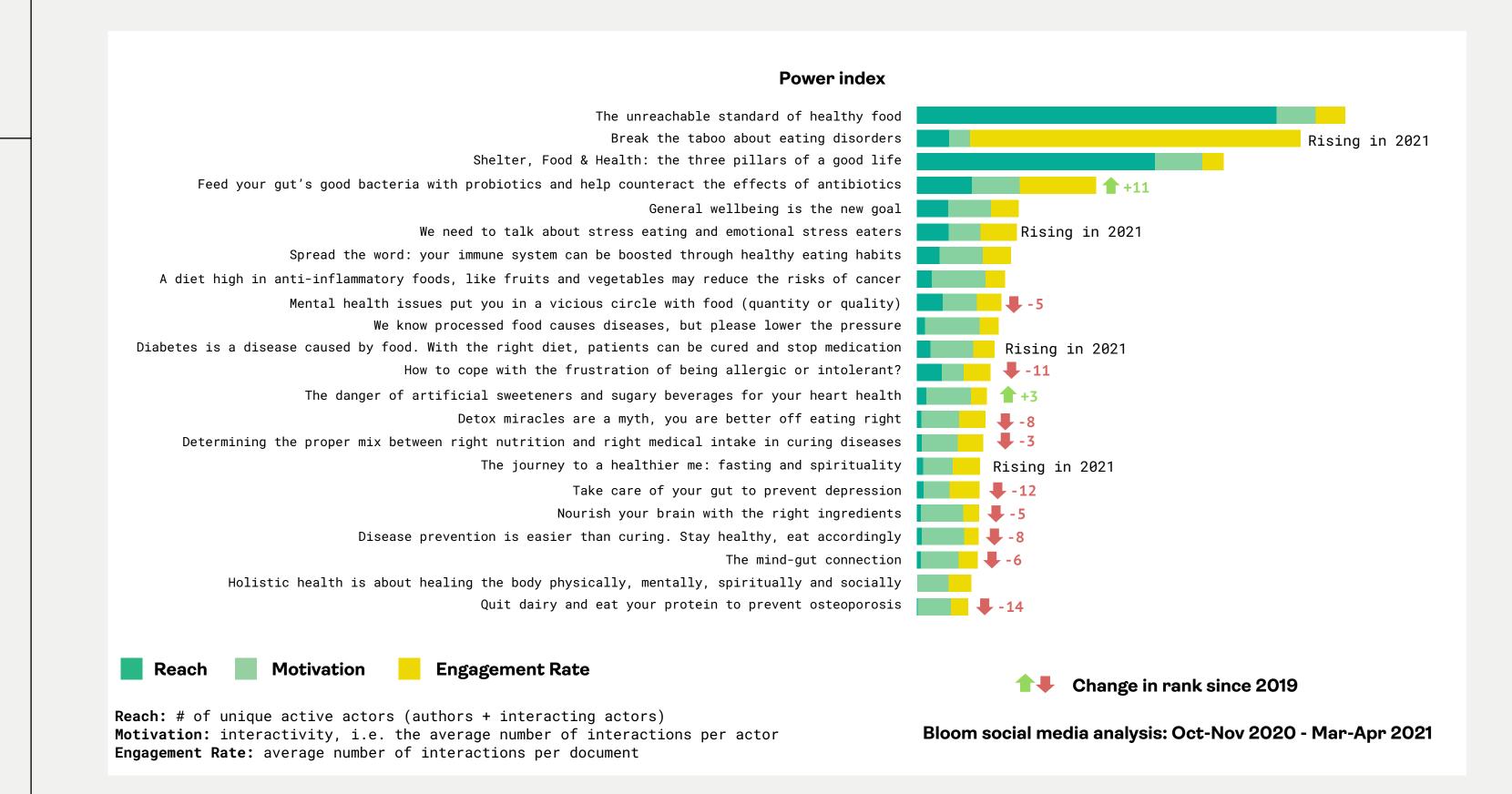
Consumers became more informed than ever, but also increasingly frustrated over a lack of credible and reliable information.



THE PIVOT



- The relationship between food and health is now beyond dispute. What's new is the widespread discussion about how food supports the immune system. During a time of crisis, people have become frustrated by the lack of education or instructions on how to boost their immunity.
- People have started to make the link between gut health and overall health, leading to mentions of foods rich in probiotics (especially yogurts) and anti-inflammatory foods. Plant-based eating has come to be considered as a solution to drastically improve people's health.
- A rising trend in this space is the idea of finding wellness and health through an entire routine – one that counts healthy eating among other habits like exercising, sleep and meditation.
- Pandemic-related stress has led to a renewed focus on mental health and illnesses such as eating disorders. Consumers are asking for less pressure on individuals to eat better, which they say creates a toxic relationship with food.
- Facts, rumours, and fears around food information have mixed and dispersed. Previously, people wanted more information; now they seek better information.



"Certain nutrients in foods have been shown to reduce anxiety or spur the release of neurotransmitters such as serotonin and dopamine - and we all want to feel as good as we can during these times of uncertainty."

Harvard Health Publishing, 2020

Coronavirus and Obesity: Doctors Take Aim at Food Industry Over Poor Diets.

Food Navigator, 2020

"Innova Market Insights reports that 45 percent of global consumers are consuming more food and beverage products that boost their immune system since COVID-19."

Food Processing, 2021

tood as medicine

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THE POSSIBLE



Imagine if a well-informed global population could make smart food decisions to manage their health and vitality.



THE POSSIBLE



FOOD SYSTEMS THAT PROMOTE NUTRIENT EQUITY

A redesigned food chain distributes essential nutrients where they are needed.

"We don't need to produce more. Rather, we need to be distributing nutrients in a more nutritionally-targeted way, through more equitable supply chains designed to empower and benefit local populations."

Emma Bryce in Anthropocene Magazine on Hicks, et. al. 'Harnessing global fisheries to tackle micronutrient deficiencies', Nature

"Looking beyond the present pandemic emergency, there is a need for well-functioning, well-funded and coordinated preventive public health strategies that pay attention to food, nutrition, health and social protection. We must learn from the challenges posed by COVID-19 and turn them into opportunities to accelerate actions needed to address inequities across malnutrition in all its forms."

The Global Nutrition Report's Independent Expert Group

FOOD ENVIRONMENTS THAT PROMOTE HEALTHY FOOD RELATIONSHIPS

Structural changes to how food is sourced, cooked, presented and eaten make nutritious food the natural choice.

"You know, we have thousands of young people come through Soul Fire Farm every year. And they all eat the food because they grew it; they cooked it; they participated. So the idea that somehow black and brown folks need to be educated to eat right is really a smokescreen. It's not the issue. It's about resourcing really good meals for our young people."

Leah Penniman, author, educator, activist and Cofounder of Soul Fire Farm

"The food systems must be strengthened to make them nutrition-sensitive, so that at every step of the chain, from the production, to the transformation, transportation, and consumption of food, mechanisms are put in place to ensure that what we eat all across Africa is nutritious."

Assia Sidibe, Carl Manlan, 'Food security in Africa: The menace of the 'three Cs"

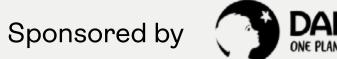


Relevant SDG: 2.1— By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round



Relevant SDG: 4.7— By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development









THE PAST \leftarrow

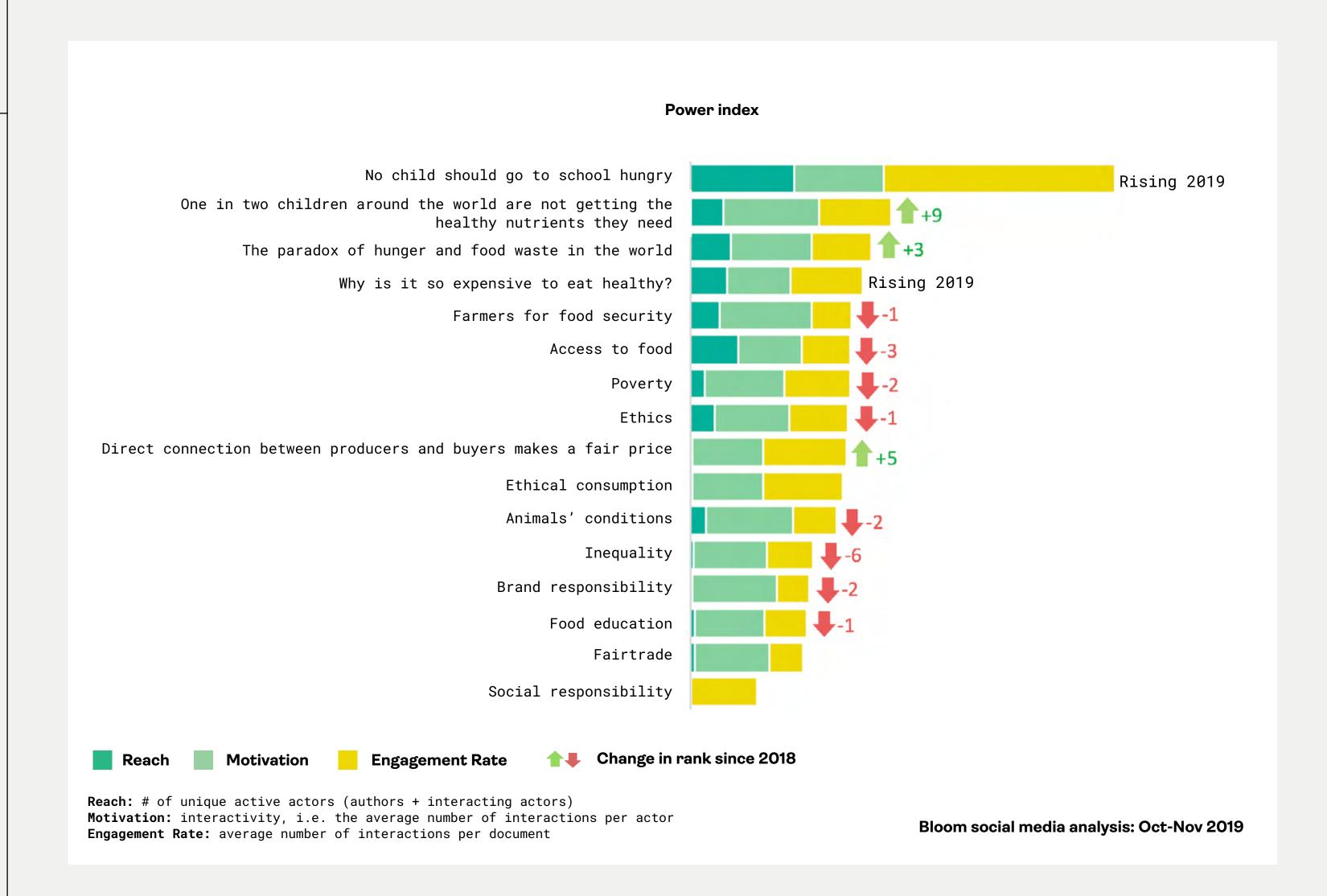


A fragile, unjust, and wasteful food system left the most vulnerable in our society, like children, hungry and undernourished.





- Hunger became the major concern in the Fair Food conversation, with a specific focus on children. It was recognised that, in every country, equal access to food has not been achieved and children are the first to suffer.
- People understood the direct link between hunger and education, and how a lack of access to food inhibits learning.
- The conversation was not only about filling every stomach, but about getting everyone the right nutrients. It was acknowledged that, problematically, healthy food is generally more expensive – creating a vicious circle of injustice.
- People had begun looking to a new model for improving food security, that focused on farmers. If farmers could go direct to consumer, rather than involving a middle man (e.g. supermarkets), this could keep prices down while improving accessibility.
- Awareness that many still face hunger meant that food waste was fought against more than ever.











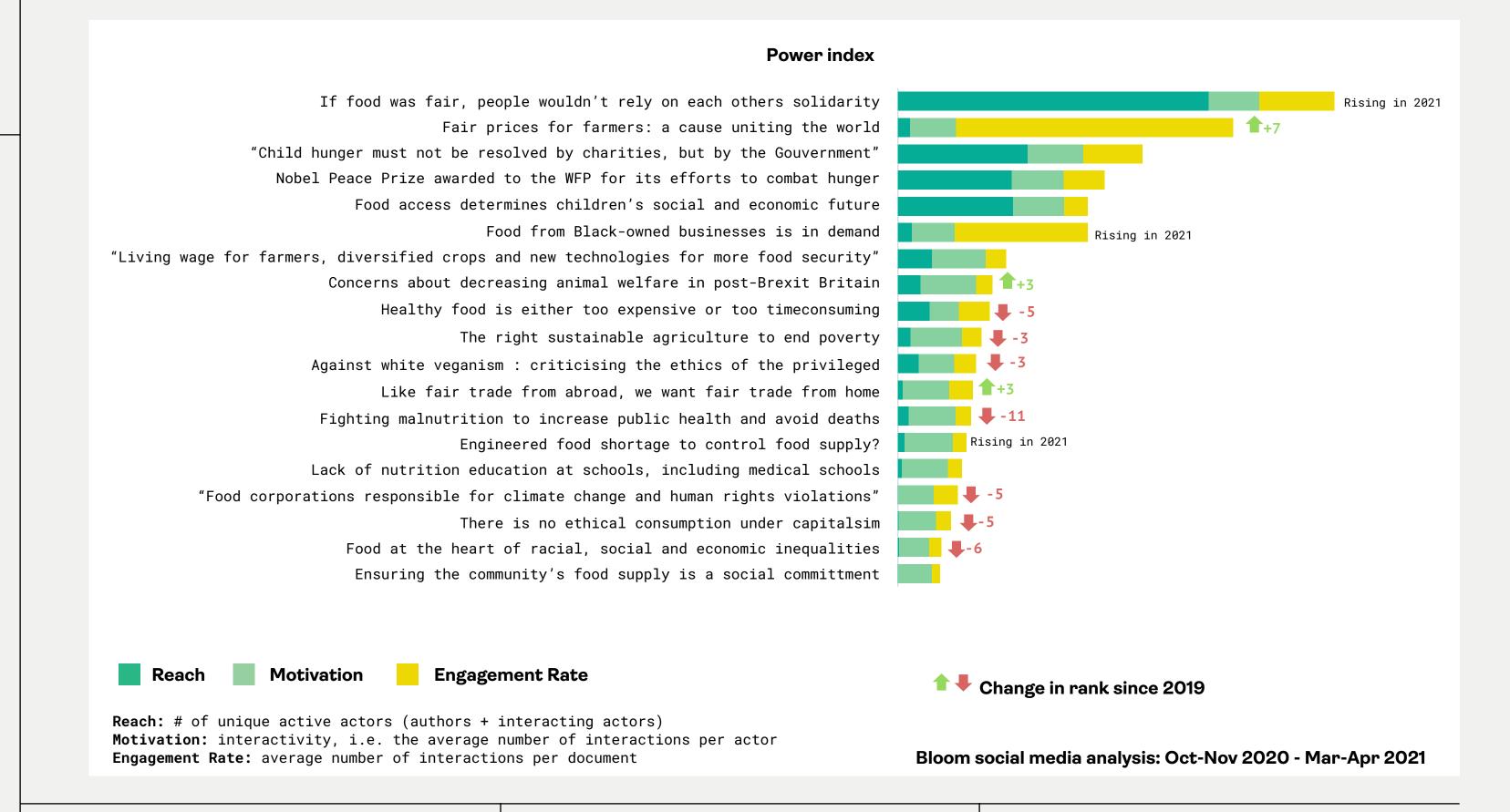


Sudden food insecurity meant that the fear of going hungry became universally relatable. This highlighted the fact that food access should be considered a basic right. Solidarity and community food became key solutions.





- Fair food has become no longer only a question of affordability but also a question of geography and time. Pandemic-related food shortages in many places increased awareness of the fact that food access is a universal right. However, with some communities affected worse than others, it has become clear that the right to food is not equally shared.
- Concerns and worries about children's access to nutritious food remain, with the link between healthy nutrition and cognitive performance well established. Many people are challenging governments to address nutritional inequities as evidenced by the support for initiatives like the 'No Child Should Go Hungry' petition.
- Following a year of global awareness and action around racial equality, conversations are growing in support of Black-owned businesses and local community initiatives.



Futures of 370 million Children in Jeopardy as School Closures Deprive Them of School Meals. "School is so much more than a place of learning. For many children it is a lifeline to safety, health services and nutrition."

UNICEF, 2020

"Global food prices have risen by 40% since January 2020. Surging prices reflect strong demand, along with weather uncertainties, macroeconomic conditions, and COVID-19-related supply disruptions, even though the global production outlook for major grains remains good."

World Bank, 2021

"As of April 2021, the World Food Programme (WFP) estimates that 296 million people in the 35 countries where it works are without sufficient food – 111 million more people than in April 2020."

World Bank, 2021

Fair food

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Imagine a food system designed to meet the nutritional needs of every person on the planet, while wasting nothing and restoring the climate.





CLIMATE FRIENDLY FOOD FOR ALL

Food security for everyone on the planet, through resilient supply chains that minimise food waste and fight climate change.

"While there is more than enough food in the world to feed everyone, more than 820 million people still do not get enough to eat, and numbers no doubt will rise. To eradicate hunger, we must ensure inclusive access to healthy and nutritious food."

António Guterres

"Governments need to urgently overhaul their agricultural policies with a view to self-sufficiency and account for the cost of externalities in the price of food products through appropriate economic interventions. If this were done, there is no doubt that we would see agribusinesses reduce their relentless expansion, distributors reduce transmission losses and consumers reduce plate-wastage."

Chandran Nair, Founder and CEO, Global Institute for Tomorrow (GIFT)

ACCESS TO GOOD NUTRITION IS A BASIC HUMAN RIGHT

Healthy food is distributed more equally, ensuring school children and low-income populations have enough nutritious food.

"We need to move from a 'me' food culture to a 'we' food culture."

Tim Lang, Professor of Food Policy, London's City University and author of 'Feeding Britain: Our Food Problems and How to Fix Them'

"We need to rebuild our food system so that good food, which helps us stay healthy, is the norm."

Anna Taylor, Executive Director, the Food Foundation

"If what we are doing on the other side of COVID is not about addressing some of these inequalities that we have seen – the right to food as a basic human right, the right to better nutrition as a basic right – then we are basically not addressing the problem."

Agnes Kalibata, United Nations Special Envoy for the 2021 Food Systems Summit



Relevant SDG: 2.4 — By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

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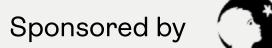
Relevant SDG: 2.1— By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round

Fair food





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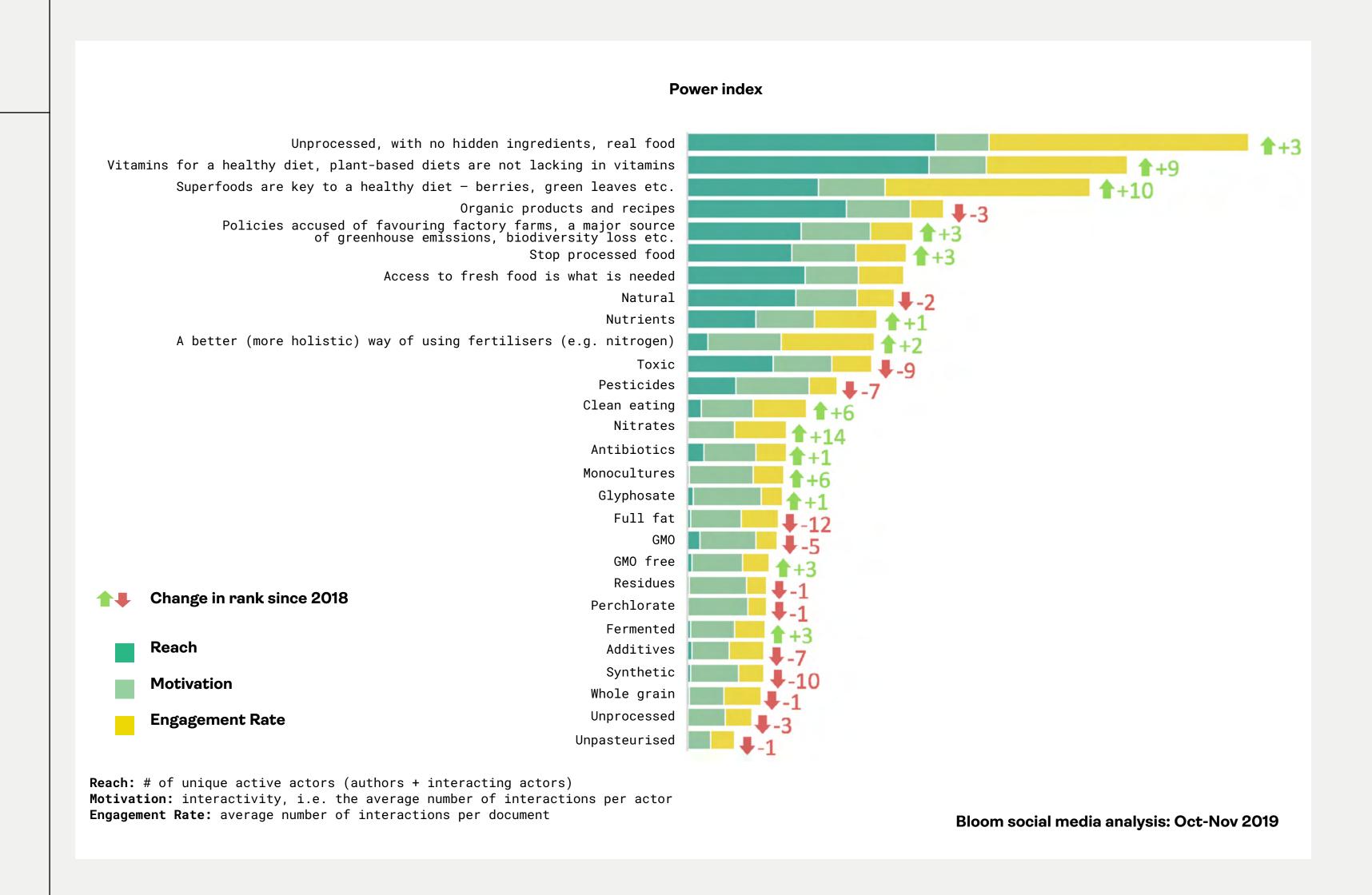


Natural had come to mean more than organic – it is 'real food', that is unprocessed and contains no hidden ingredients.





- Organic' was no longer seen as the only answer to healthy eating. The conversation was evolving to focus on the need for 'real food', which was defined as unprocessed and with no hidden ingredients.
- In acknowledging the key role 'real food' plays in supporting health, many recognised the fact that for low-income households 'real food' isn't always affordable.
- Many started to reject highly processed foods of any kind.
 The debate around 'real food' made a predictable villain of junk food but also identified popular plant-based foods as problematic.
- Industrial farming was associated with heavy processing, fertiliser and pesticides rather than 'real food'. Government policies came under fire for supporting industrial farms when a report showed they are a major contributor to climate change.













Natural and real food became the default answer to multiple health and environmental needs, leading to a strong rejection of processed food of any kind. The privilege of eating and accessing natural food was felt more starkly in this time when health and immunity became front of mind.





- Unsurprisingly, during the pandemic, people looked to nutritious food to support their health. Surprisingly, at a time when hygiene was front of mind, consumers dismissed pasteurised and synthetic food as inauthentic and not aligned with modern values. Eating unprocessed and fresh food has come to be identified as the common answer to multiple needs, from staying in shape, to preventing diseases and even fighting climate change.
- Barriers to natural food for low-income communities, children and people of colour have raised concern. Blame for poor nutrition shifted away from individuals towards the wider food system. Greater emphasis is now placed on structural barriers which inhibit people from finding and choosing foods that are best for them.
- Advocates for the environment are now also advocates for public health. Unethical and unsustainable practices were seen to be responsible for diseases and therefore the pandemic. Organic and ethical farmers are recognised as the pioneers leading change in agriculture, and eating organic food is still considered proof of a commitment to one's health and the environment.

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Power index

Eating healthy is eating organic, a basic environmental commitment that is considered elitist Antibiotics overuse in farms Access to fresh food is a privilege The emergency of phasing out factory farming, a cause of pandemic and diseases Keeping toxic chemicals away from kids and ensuring baby food safety is a priority Sleep, exercise, eat properly and take your vitamins Stop processed food to prevent diseases Choose food that provides nutrients to your body Choose natural over all The brexit impact on pesticide use and food standards

Is synthetic food the future of sustainable food? When technology helps to produce the ultimate superfood Monocultures are a contributing factor in environmental issues and pandemics Clean eating and workout, the best duo to be in shape

Eat real food its a life changer Don't trust the digital agriculture that overuse toxics and GMO Ban glyphosate to preserve biodiversity and public health safety Fermented dairy the best choice to optimize your gut health Expensive and Toxic fertilizers vs organic and affordable ones Babyfood's contamination and children's exposure to perchlorate Tired of purity culture : we want raw and unpasteurized dairy Thanks to additives, food is a cause of illnesses

Eating unprocessed food and exercising are fundamentals for mental and physical health Wholegrain are beneficial for health

> The reality of hormonal and pesticides residues in food Protect bees and aquatic life: ban Neonicotinoides Breaking news : fullfat dairy is healthier

Agriculture the biggest source of nitrate pollution (environmental and public health disasters) GMO free food is too unaffordable

Engagement Rate

Change in rank since 2019

Reach: # of unique active actors (authors + interacting actors) Motivation: interactivity, i.e. the average number of interactions per actor Engagement Rate: average number of interactions per document

Bloom social media analysis: Oct-Nov 2020 - Mar-Apr 2021

More than two in five (43%) of the French public said they had bought more fruit and vegetables since the beginning of confinement.

Motivation

YouGov, April 2020

"A study about people's preferences since the pandemic started highlighted that 37.9% of those polled desired real food made with natural and simple ingredients, plus fewer additives."

CGF, 2021

In the UK, the Soil Association's 2021 Organic Market report found that organic food and drink sales hit a 15 year high, increasing by 12.6% to £2.79bn last year.

The Grocer, 2021

1+4

4 -9

Rising in 2021

New natural











Imagine if well-priced, whole and fresh foods sourced from regenerative farms made up the bulk of all calories consumed.





NUTRIENT DENSE WHOLE FOOD AT AFFORDABLE PRICES

The shift away from highly processed, nutrient-poor foods positions whole foods as the affordable staple of every diet.

"We must redesign supply chains with nutrition and human health in mind. The global food system isn't built for diverse, healthy diets: 80% of the world's food supply is grain and grain-fed livestock, while fruit, vegetables, pulses and fish are expensive and much less accessible."

Sarah Farley, Managing Director, Food Initiative, Rockefeller Foundation and Sara Scherr, President and Chief Executive Officer, EcoAgriculture Partners

"[Public policies] should ensure that staple healthy foods are affordable by and available to all, when appropriate by fixed prices, and encourage and protect cultures and dietary patterns based on freshly prepared meals."

Food and Agriculture Organization of the United Nations, 'Ultra-processed foods, diet quality, and health using the NOVA classification system'

"Ultra-processed food manufacturing [should] be viewed by investors as "stranded assets" comparable to the fossil fuel industry's own."

Tim Lang, Professor of Food Policy, London's City University and author of 'Feeding Britain: Our Food Problems and How to Fix Them'

REGENERATIVE AGRICULTURE IS THE NORM GLOBALLY

Climate-restoring agricultural practices provide highly nutritious and safe food grown in a truly natural way.

"The key to improving human health lies in both what we eat and how it was produced and requires shifting to a regenerative health model that incorporates regenerative organic agriculture and nutrition into all levels of our food and medical systems."

Rodale Institute and The Plantrician Project, 'The Power of the Plate: The Case for Regenerative Organic Agriculture in Improving Human Health'

"The adoption of sustainable land management could deliver up to \$1.4 trillion in increased crop production, without using any more land."

Economics of Land Degradation (ELD) Initiative, 'A global strategy for sustainable land management'

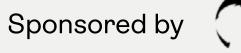


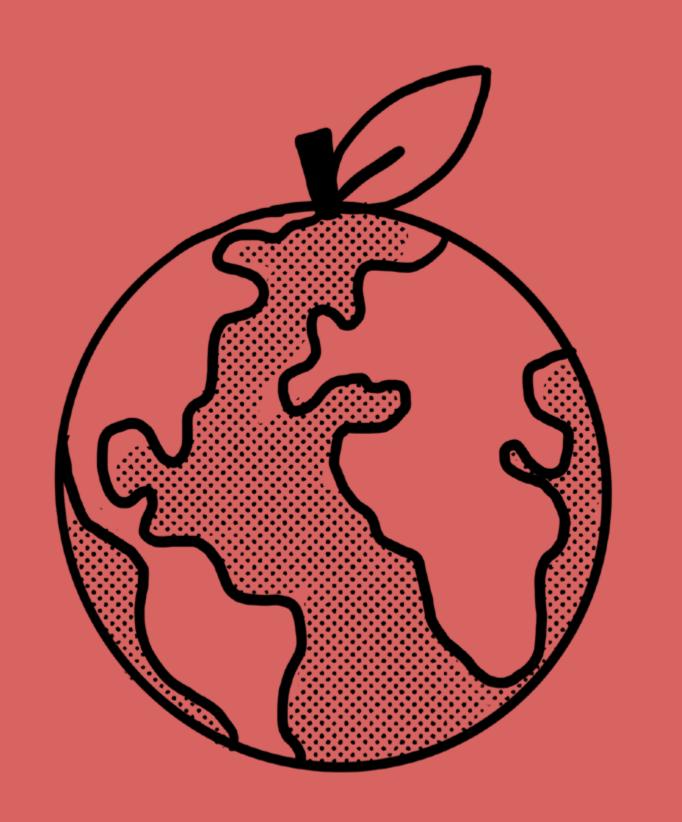
Relevant SDG: 2.2 - By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons



Relevant SDG: 2.3 - By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment







The planetary diet

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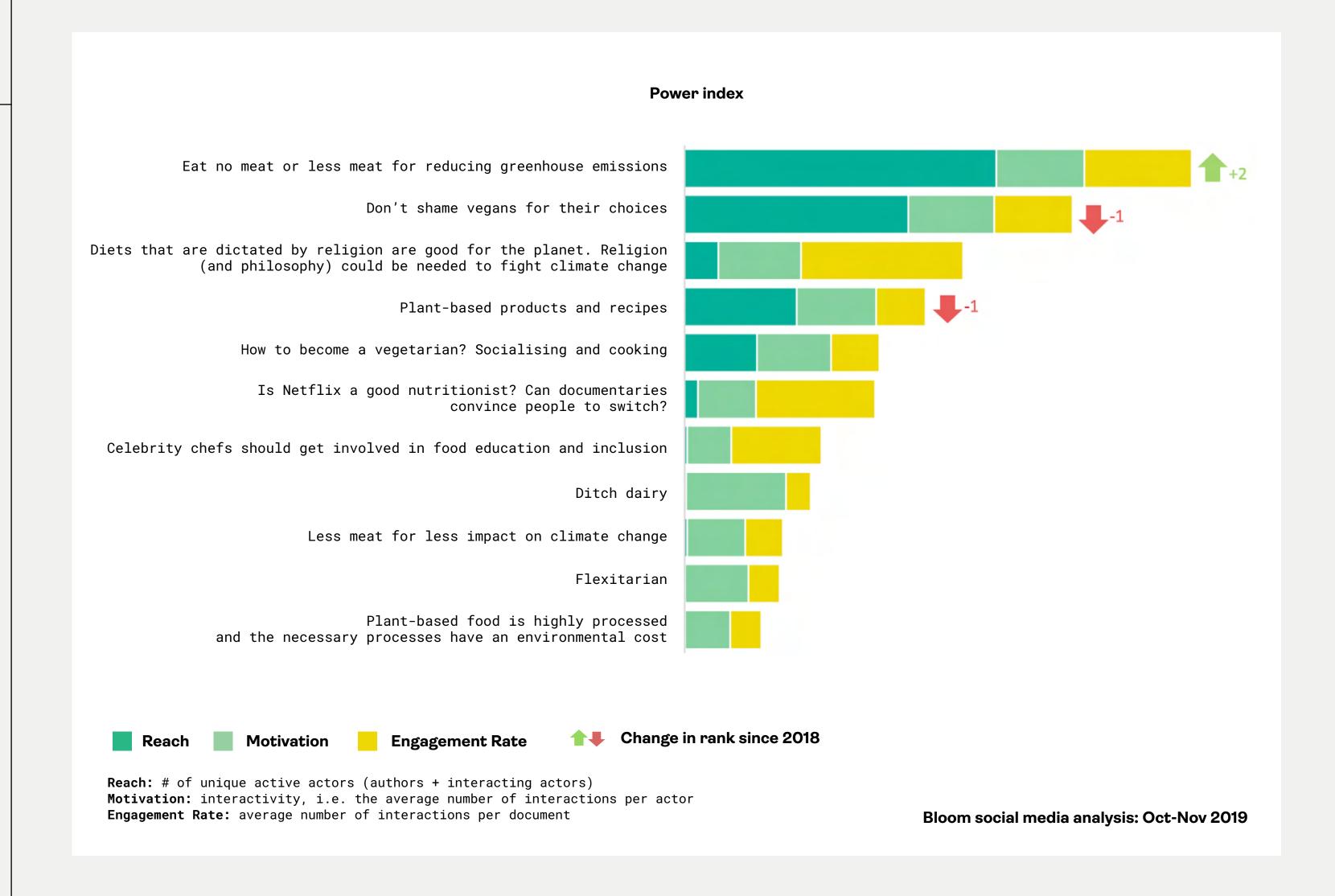


The low-carbon diet was starting to enter mainstream consumer culture, with the concept of 'plant-based' broadening the umbrella of what was once a polarising animal rights movement.





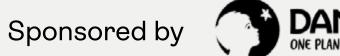
- The planetary diet was becoming mainstream. People had started to make the direct link between their food and climate change, and began to change their eating habits.
- Prominent publications and documentaries helped to drive the shift. Reports by the Intergovernmental Panel on Climate Change and EAT Lancet, as well as Netflix's Gamechangers, had significant influence. However, some – particularly the media – questioned the authority of these sources.
- Conversations were becoming less polarised and inflammatory. A more balanced and nuanced approach started to be championed over vegan absolutism.











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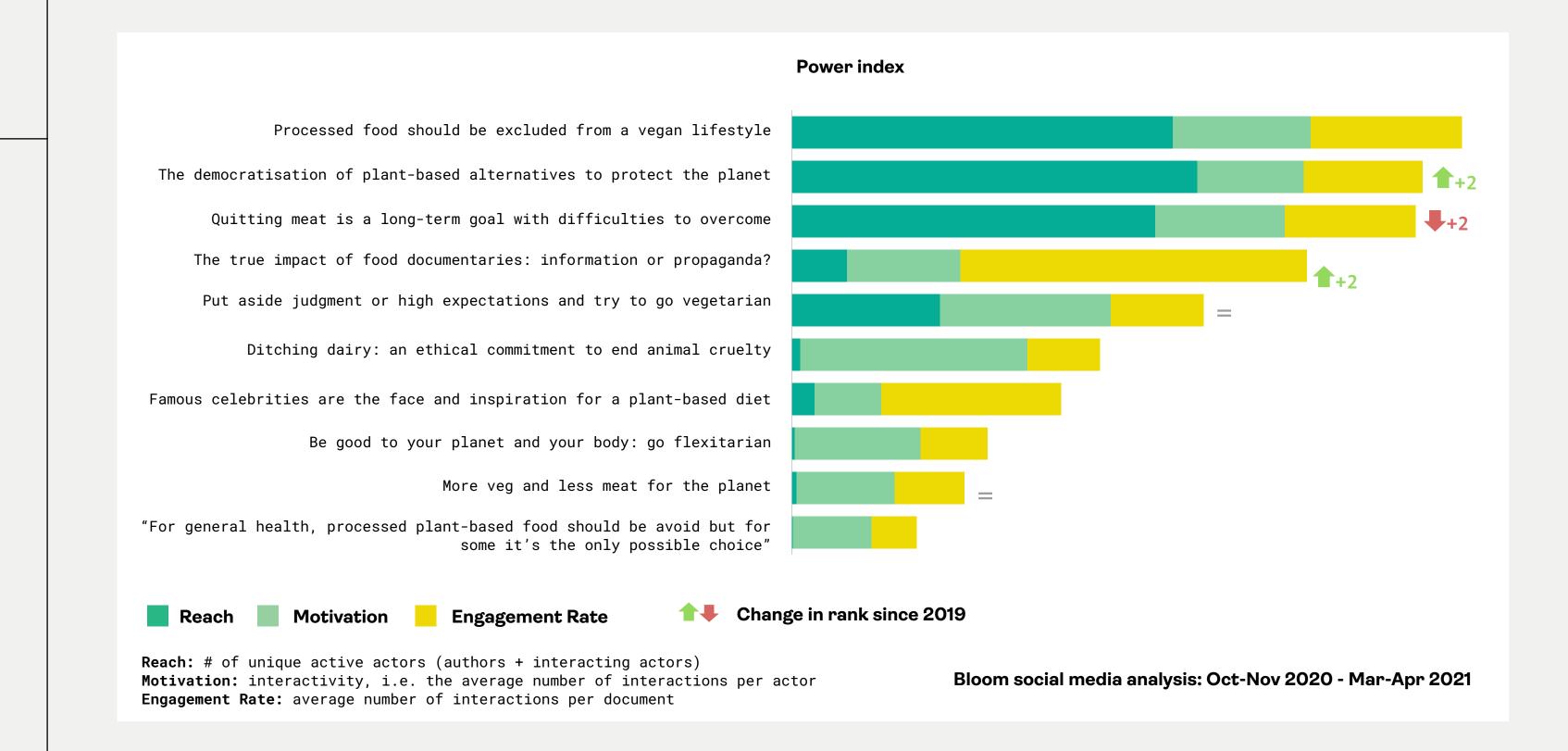
Plant-based foods became cemented as the central element of the planetary diet yet people sought compromises and balance to lessen the pressure and enjoy food again.





- Despite the importance of following a plant-based diet becoming commonly understood, consumers have struggled to follow a plant-based diet in practice. Whether it be finding the right plant-based alternatives, avoiding the guilty pleasure of meat, or changing daily habits, eating for the planet is proving to be a challenge.
- While some promote a vegan philosophy that excludes processed food, many have turned to unhealthy, processed plant-based foods because of the convenience, affordability and flexibility they offer.
- Consumers have become more informed and reasonable in their discussions, helping one another navigate veganism and vegetarianism, and insisting on the importance of self-determination. They have come to demand less pressure on individuals, and to accept the need to indulge.
- The polarisation in the debate between meat eaters and 'veggies' has become less visible, except for conversations surrounding documentaries which focus on the impact these films have on individuals, and on their factual accuracy.
- Critics of the dairy industry continue to call on consumers to ditch dairy over concerns of animal cruelty and ethics.

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Plant-based Meat Sales in the US are up 264 percent Since March.

The Verge, 2020

Plant-based Diets Could Prevent A Future Pandemic Say Doctors.

EURONEWS, 2020

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When asked about what changes they are likely to make in order to combat climate change, the public show the least intention to make higher impact changes such as dietary changes.

Ipsos Global, 2021

The planetary diet

54

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Imagine the most popular diet on the planet was a diet that sustained the planet and the people on it.





NEW FOOD ECONOMIES SHAPED BY PLANETARY BOUNDARIES

THE TRUE COST OF FOOD IS WIDELY UNDERSTOOD

An optimal mix of plant-based foods, sustainable meat and 'future foods' make up the global food economy.

"Eating an array of rapidly emerging, alternative 'future foods' – including lab-grown meat, seaweed, and insect protein - would not only do more to protect the planet, but would actually provide us with more and better nutrients than switching to an exclusively plant-based diet."

Emma Bryce, Anthropocene Magazine

"To bring global diets back in line with planetary boundaries and make them healthier for human bodies. global meat consumption needs to substantially decline. Traditional meat production, with small-scale animal husbandry and live-animal markets, has been associated with significantly lower production and consumption of meat and hence would more naturally complement... plant-heavy diets."

Ivica Petrikova, Jennifer Cole and Andrew Farlow, 'COVID-19, wet markets, and planetary health' in The **Lancet Planetary Health Journal**

Consumers are incentivised to make choices that support both their health and the health of the environment.

"Two-thirds of consumers support carbon labelling on products, according to a new international survey of over 10,000 consumers across France, Germany, Italy, the Netherlands, Spain, Sweden, the UK and the US."

The Carbon Trust

"Cheap meat is an impediment to sustainable development and poverty alleviation. Current market mechanisms are being distorted through vast agricultural subsidies which, together with marketing techniques, is deceiving consumers."

UN Sustainable Development Goals Partnerships Platform

"We know we have been throwing away 30-50% of food that's produced globally. We need to turn this linear wasteful system into a circular regenerative one, where food and organic materials are returned to the land, replenishing the soil and Earth's living systems so she can continue to feed the whole of humanity."

Kate Raworth, Co-Director of the Doughnut Economics Action Lab, speaking at Eat Forum 2020



Relevant SDG: 12.2— By 2030, achieve the sustainable management and efficient use of natural resources



Relevant SDG: 12.8— By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature





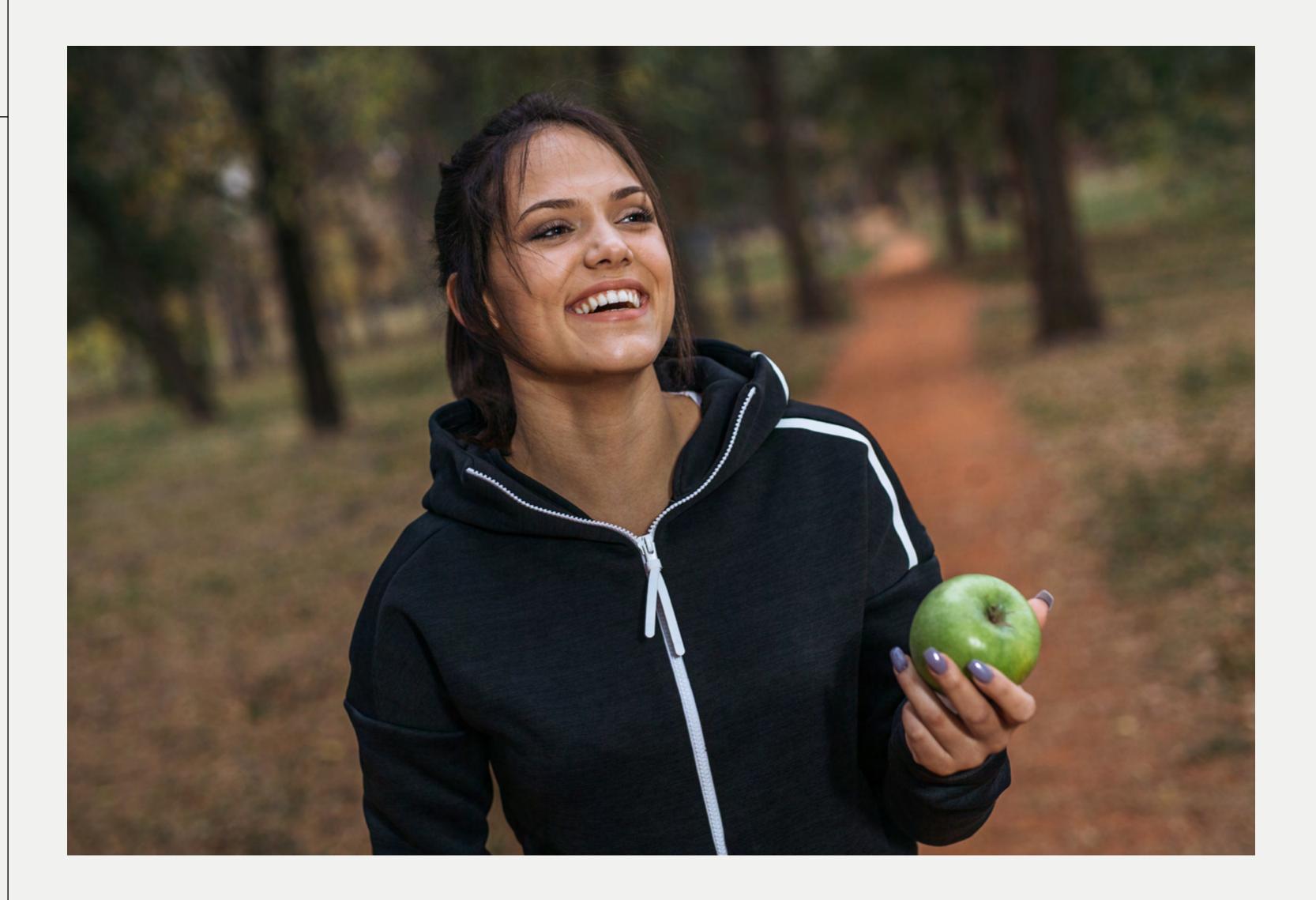


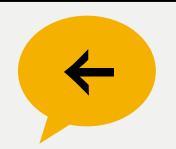




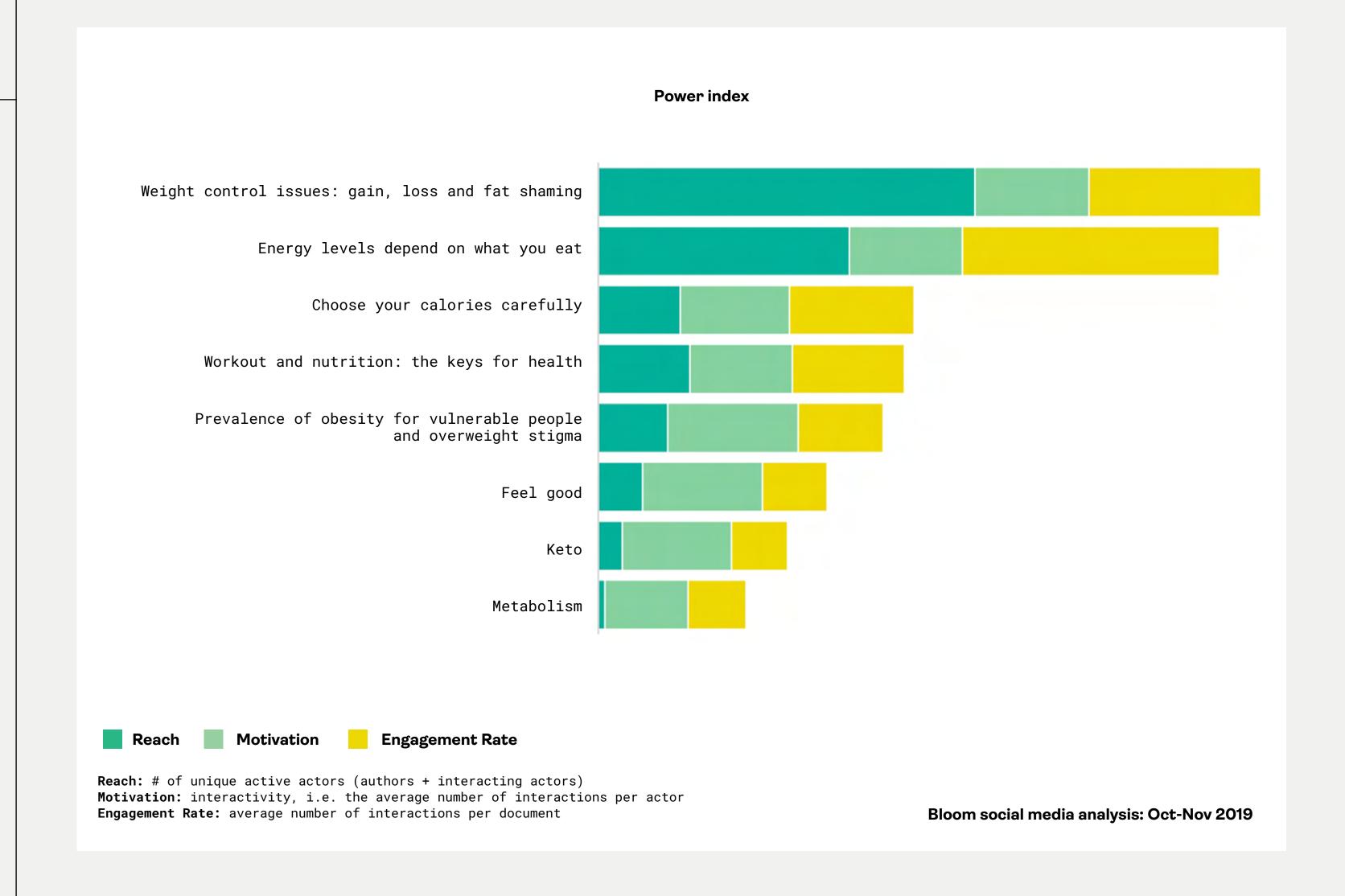


Fitness came to be more about health than aesthetics, and tied into a bigger conversation about recognising that diverse bodies have diverse needs.





- The conversation moved from a sole focus on aesthetics to include more holistic health concerns. This was no longer a female-led conversation – recognition of the importance of finding harmony between diet, body and mind became more widespread. Weight gain and loss still featured heavily and people continued to share tips on diets and workouts, but overall the topic was broadening to include other aspects of mental and physical health. People became more interested in the nutritional quality of the calorie intake than in the quantity.
- There was growing recognition that being fit is not within everyone's control. People came to understand that people should not be blamed for being unable to make choices that support their fitness and health. There was growing support for different diets and body shapes, and the idea that people should not be judged for their food choices. Increasingly, 'fat shaming' was discouraged.
- Obesity was a key part of this conversation. While it was seen as a problem that needed to be dealt with, the governmental response was often perceived as further penalising those who already faced challenges linked to poverty and food.











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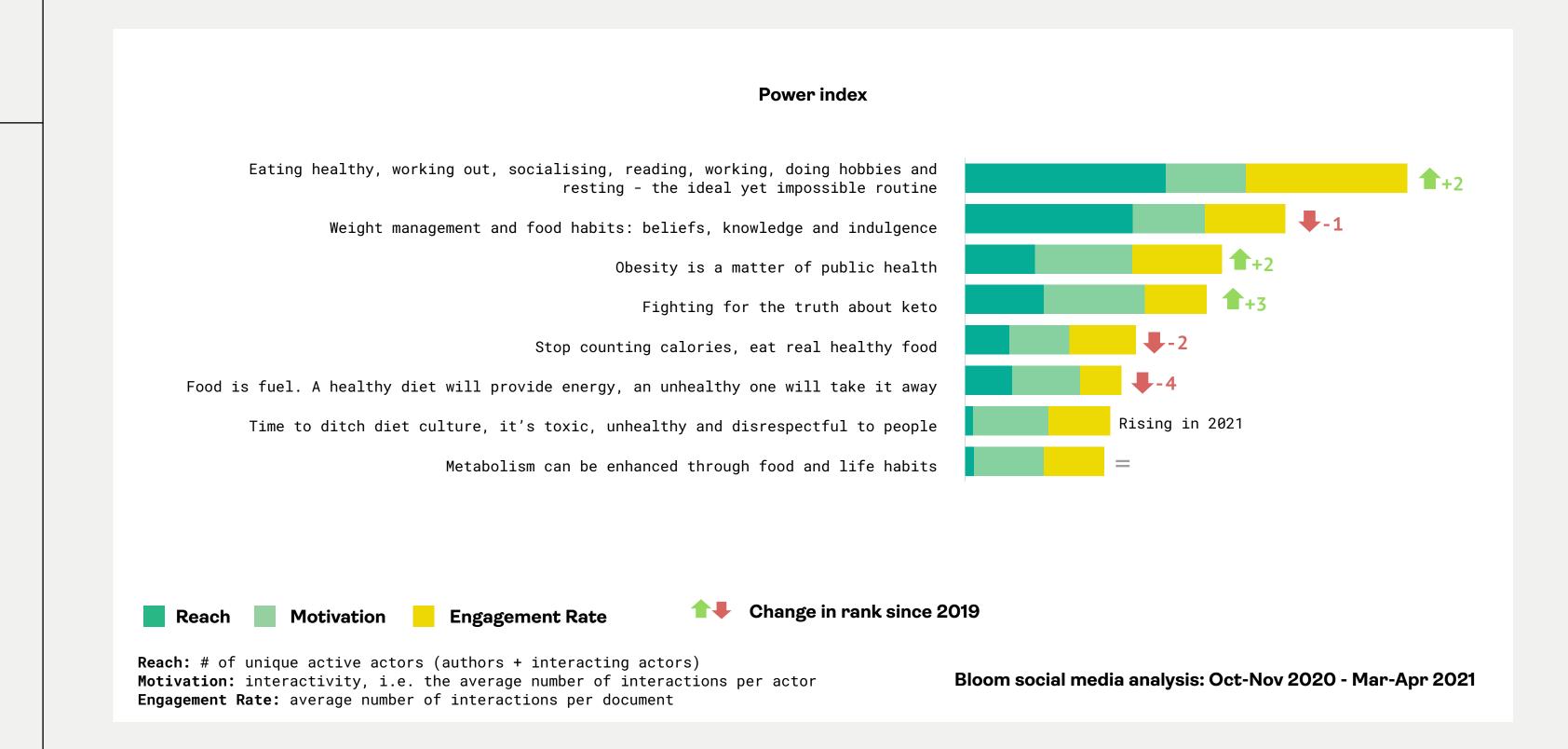


A simultaneous reckoning with both the obesity epidemic and toxic diet culture took the pressure off individual lifestyle and dietary decisions by shifting the focus onto systemic drivers.





- After a year of health challenges and sedentary national lockdowns, people have started expressing concern for the poor state of health among the broader population. Foodrelated diseases like obesity are of particular concern and people are now calling on public authorities to treat obesity as a public health emergency.
- An emotional backlash against diet culture has also emerged. The current state of poor health and the toxic relationship many people have with food is attributed to decades of harmful and misleading dietary recommendations. Diet plans, calorie counting and obsessive weight management programmes have come to be considered unsustainable, unhealthy and disrespectful of individual needs.
- This has led to a more relaxed approach of informed indulgence, with people raising warnings about the danger of diet foods and habits, and spreading helpful information on nutrition.
- Weight loss stories are still heavily present, with people sharing their experiences and kudos. But people continue to denounce 'fat shaming' and endorse holistic methods of achieving a 'better self' through both exercise and mindfulness.



An NHS audit in the UK revealed over three quarters of critically ill coronavirus patients are overweight, leading to calls for the food industry to take action post-crisis.

Food Navigator, 2020

59% of UK Millennials said they experienced considerable weight gain during lockdown, owing to a rise in comfort eating and alcohol consumption.

Cambridge Weight Plan, 2020

The Body Coach fitness app, which creates customised fitness sessions and meal recipes, saw 130,000 new users in one day and generated £9 million in a single week at the beginning of 2021 after thousands signed up to help them stay fit during lockdown.

Business of Apps, 2021















Imagine if it was difficult to consume empty calories, so anyone on any budget could easily optimise their health through food.



FOOD FORMULATIONS HAVE TO PASS A FOOD FITNESS TEST

REVERSAL OF THE GLOBAL DIABETES AND OBESITY CRISES

Negative impacts on people's health start to reverse as the industry implements strict food fit guidelines that guarantee minimum levels of nutritional value in all food.

"Poor diet is the primary biological factor that's driving increased [COVID-19] death rates. I think from that perspective the food industry will have to change. The question is are they going to wait for government to regulate, or are they going to get ahead of the curve and crackdown on this to shift the balance towards minimally processed foods and try to get rid of ultraprocessed foods."

Dr Aseem Malhotra, cardiologist, author, researcher and Professor of Evidence-Based Medicine

Unfortunately, too many labels today focus on outdated targets like total fat, total calories, and total saturated fat, rather than more holistic assessments of foods that incorporate healthy components such as fruits, vegetables, nuts, or beans or the extent of

processing, giving lower scores for highly refined and rapidly digested food and higher scores for minimally processed and slowly digested food."

Dariush Mozaffarian, M. D., cardiologist and dean of the **Tufts Friedman School of Nutrition Science and Policy**

"What we eat in turn gives our body the means to grow, repair, thrive. There is no health or wellness without good nutrition. Most common disorders, often referred to as lifestyle disorders or metabolic syndrome, are preventable or reversible through right nutrition"

Shikha Mahajan, Holistic Nutritionist

Dietary changes cause a sharp decline in the prevalence of noncommunicable diseases around the world, especially in the global south.

"Accurate food information that overrides false claims is critical to protect populations from misleading marketing, which affects decisions on feeding, often to the detriment of breastfeeding, healthy complementary feeding and healthier family food choices."

World Health Organization, 'Action Plan to Reduce the **Double Burden of Malnutrition in the Western Pacific** Region (2015 - 2020)'

"New stakeholders need to join existing ones to power a food system revolution if ending all forms of malnutrition is the goal. Among these stakeholders are advocates for planetary health; faith-based leaders; innovators and investors who are financing fair and

green companies; and city mayors with responsibility for enabling access to nutritious and affordable food for the world's increasingly urbanised populations. There is a role for food producers. Farmers are increasingly affected by extreme weather events and small and medium enterprises are central to efforts to achieve environmental sustainability and more inclusive growth. Consumer associations also have a role in demanding transparency and accountability. Needless to say, the meaningful engagement of children, adolescents, and young people is vital."

The Lancet, 'A new nutrition manifesto for a new nutrition reality'



Relevant SDG: 2.1— By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons

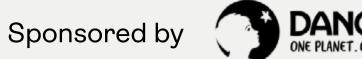
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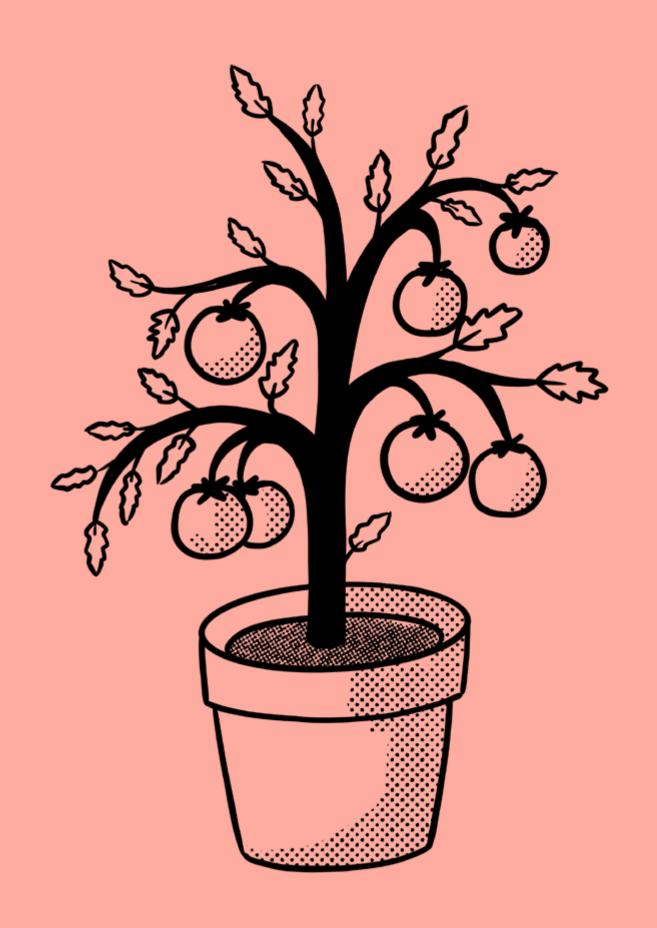


Relevant SDG: 3.4 - By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being









Eating with purpose

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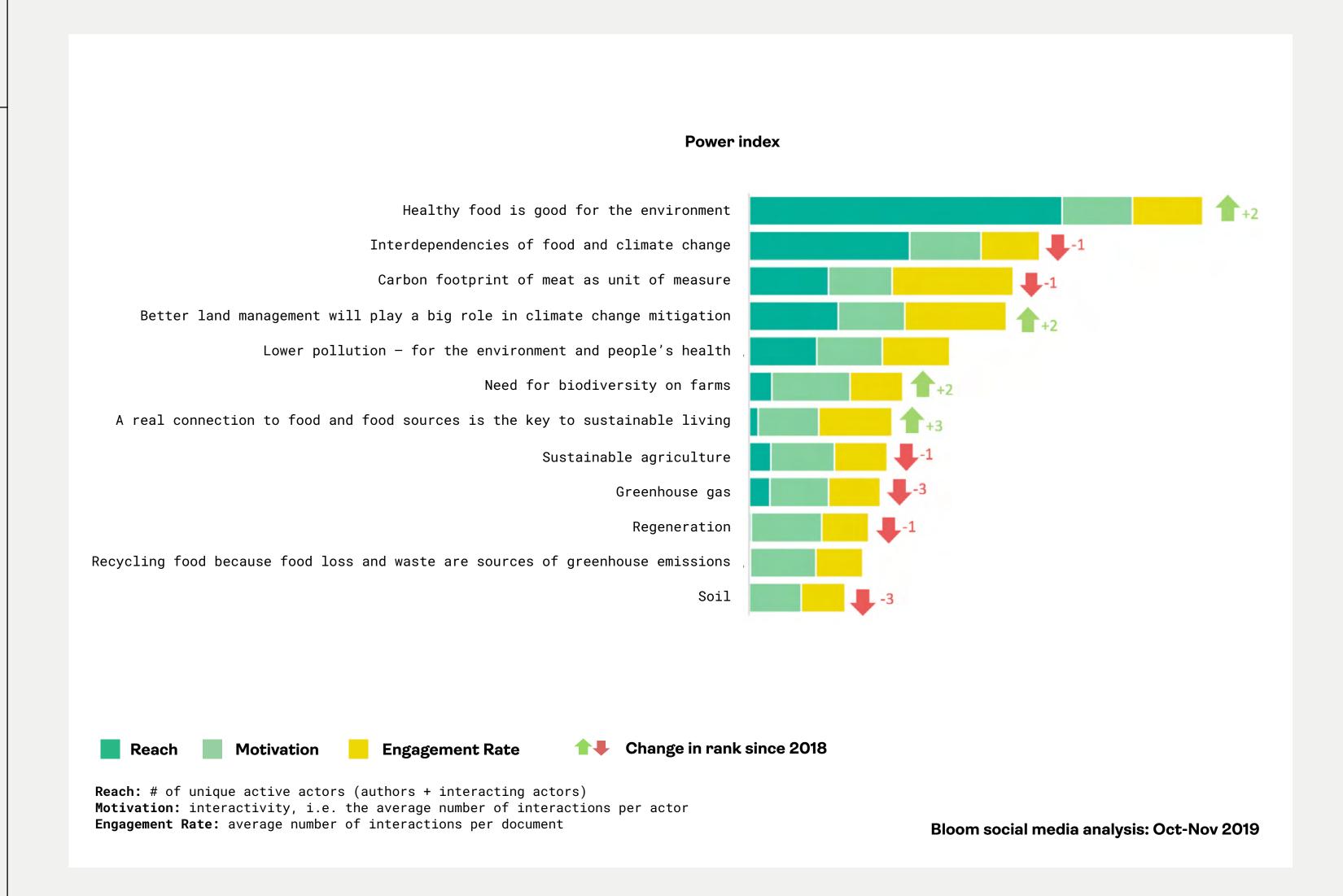


This topic originally concerned lifestyles and the change individual actions such as composting, recycling and bulk buying can make. However, the conversation evolved from being about food and climate change, to how people can actively change the food system to positively impact the planet.





- People saw the close link between healthy food and sustainable food. Eating well can protect the planet, and vice versa.
- Despite a backdrop of ecological crises, conversations had a positive tone. People were solution-oriented – recognising, for example, the critical role of agriculture as a carbon sink.
- There was growing awareness that human impact can be positive – for instance, how land management can restore biodiversity and fight climate change.
- The focus on positivity and solutions generated more activity and therefore enlarged the reach of the topic. It became less activist-led, even though there was still a desire to push the debate.



Eating with purpose

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The pandemic made clear the extent to which the current food system is failing, with sustainable farming practices being recognised as the solution.





- Now more heavily informed, consumers are increasingly considering the functioning of the whole system when making food choices. In this context, following a plantbased diet remains the most popular solution for those looking to eat sustainably.
- Political leaders, international institutions and NGOs have driven growing awareness that the prevailing methods of food production aren't sustainable. The current food system has been proven to cause harm to the environment and wildlife, and is now held responsible for the pandemic. From pollution to deforestation and loss of biodiversity, industrial agriculture, especially farming, is repeatedly accused of causing severe damage to the planet.
- That said, farm workers have benefitted from both political and public support, especially those involved in sustainable practices. More sustainable farming practices such as sustainable and regenerative agriculture, the circular economy and biogas are getting more visibility. People now believe farmers play a critical role in creating a sustainable food system, and recognise that they require more support and training.

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Power index Be good to the environment, go plant-based Farmers are at the front line of climate change everywhere in the world The difficult balance of land and biodiversity preservation with food production Achieving sustainable agriculture by associating farmer's knowledge and judgement with technology and innovation Farming industrially is a terrible threat for biodiversity, farming sustainably can be an opportunity Three quarters of deforestation is driven by agricultural production like cattle and soy Rising in 2021 Investing today in soil health to prepare an abundant future Changing what livestock eat could make a difference in greenhouse gas emissions In the UK and New Zealand, net zero carbon farms are spotlighted We have a plastic pollution crisis Farm waste and fertilisers are a leading cause of water pollution impacting vulnerable populations Rising in 2021 Regenerative food systems to avoid going further down the path that created the crises we're in Circular economy and sustainable land management, the winning plan for resilient cities Biogas creates a virtuous circle tackling food waste and reducing the carbon footprint of farming Rising in 2021 Change in rank since 2019 **Engagement Rate** Motivation **Reach:** # of unique active actors (authors + interacting actors) Motivation: interactivity, i.e. the average number of interactions per actor Bloom social media analysis: Oct-Nov 2020 - Mar-Apr 2021 Engagement Rate: average number of interactions per document

"A large body of evidence is beginning to

accumulate showing how climate breakdown is likely to affect our food supply. Already farming in some parts of the world is being hammered by drought, floods, fire and locusts."

The Guardian, 2020

"Search interest in 'How to live a sustainable lifestyle' has increased by more than 4,550%."

Google, 2020

"The coronavirus pandemic has inspired many people to try gardening, drawn by the call of the outdoors and the lure of homegrown food. At the same time, there has been a shortage of seeds... In 2020, seed companies saw 8 to 10 times more orders than in the previous year."

DCist, 2021

Eating with purpose

FUTERRA

BLOOM







Imagine an empowered global population making positive food choices to drive systemic change.





CONSUMER PRODUCTS DESIGNED TO DO GOOD

New and improved products flood the market making sustainable living more accessible than ever.

"It's in businesses' interest to find new solutions that enable sustainable consumption and production patterns. A better understanding of environmental and social impacts of products and services is needed, both of product life cycles and how these are affected by use within lifestyles... Businesses can also use their innovative power to design solutions that can both enable and inspire individuals to lead more sustainable lifestyles, reducing impacts and improving well-being."

The UN

"The Good Life Goals are the personal actions that everyone around the world can take to help support the Sustainable Development Goals... Use them to develop new products and services that support more sustainable lifestyles. The Good Life Goals can help you identify innovation opportunities that will help people to live better."

World Business Council for Sustainable Development

SUSTAINABLE LIVING IS THE NEW NORMAL

Sustainable living is no longer for any one group – it's desirable and attainable for all people.

"If taking action on climate conflicts with a preexisting identity that someone holds, they are more likely to reject climate action than go against their identity... Climate communications can benefit from more personal, non-polarizing stories that focus on a positive future. These stories start from imagining what a better, lower emissions society looks like, and celebrating the stories of people that are living that story. By telling these stories, we can help people see how their identity fits into a future that is acting on climate change."

Per Espen Stoknes, author of 'What We Think About When We Try Not to Think About Global Warming'

"Lifestyle change and system change are two sides of the same coin... The emissions gap remains, and the world is currently not on track to meet the Paris Agreement goals of limiting global warming to 1.5°C. To be on track, everybody - governments, businesses, individuals (particularly those with the biggest footprints) – has a part to play. When social norms start to shift, low-carbon lifestyles become desirable and mainstream. Infrastructure shifts to 'lock in' positive changes and governments will heighten their ambition and commitment to ensuring we reduce emissions."

Léane de Laigue, Climate Outreach



Relevant SDG:12.6 - Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle

70



Relevant SDG: 4.7— By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development













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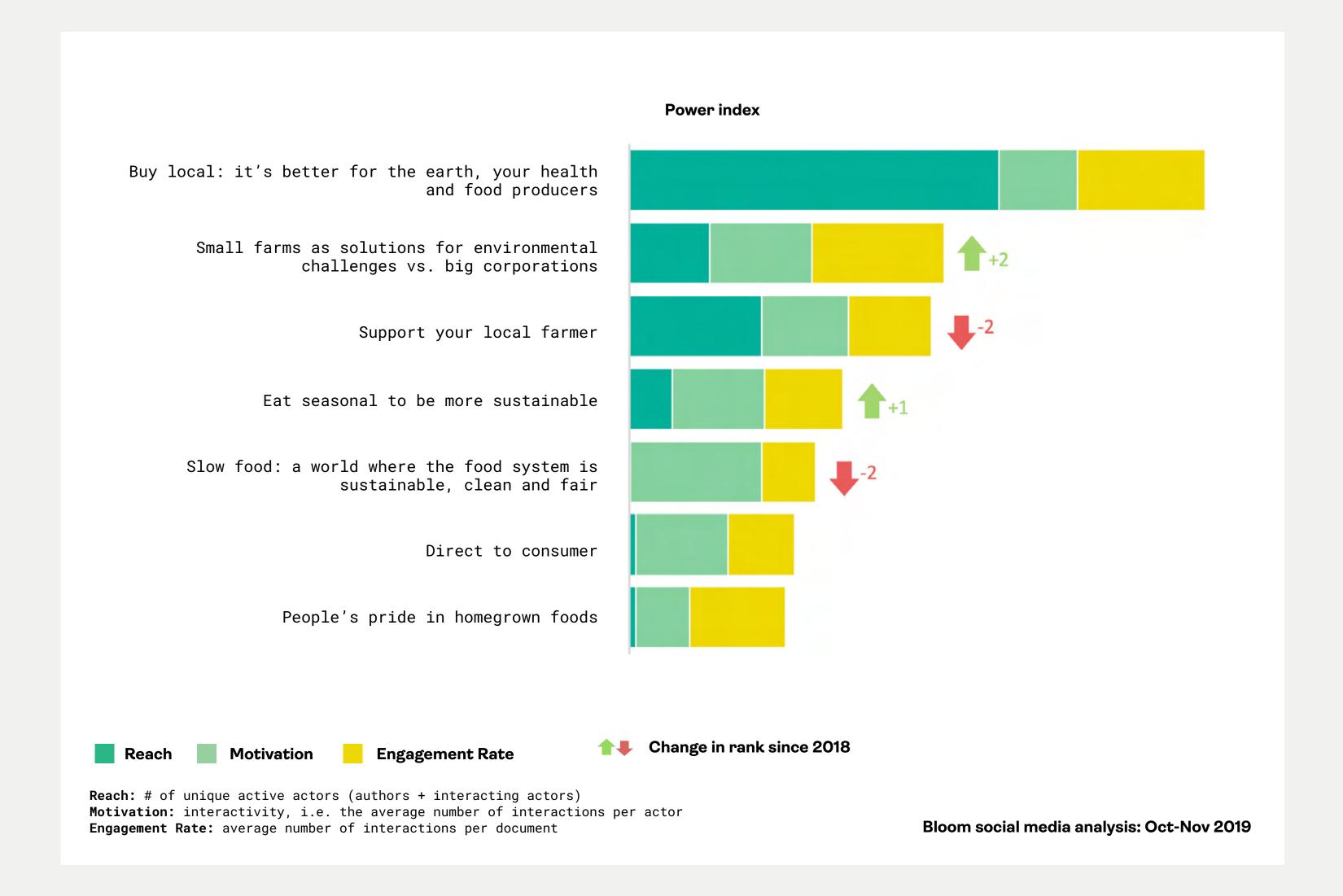
Local was coming to mean much more than simply proximity – it also meant fresh, nutritious, tasty, trusted, high quality and sustainably produced.



THE PAST



- 'Local' became a primary cue of quality, alongside claims like 'organic' and 'fairtrade'. It indicated freshness, health and nutrition, as well as safety and trust.
- Consumers saw local food as being more sustainable. Many believed food with a shorter supply chain was produced more sustainably and with fewer airmiles. Small local farms were idolised as a major solution to environmental challenges such as climate change.
- Some people linked 'local' with 'ethical'. Small-scale or family farms were seen to offer fair compensation and pricing. This was contrasted against industrial farming, which was perceived as unethical and unsustainable.



Loving local



BLOOM



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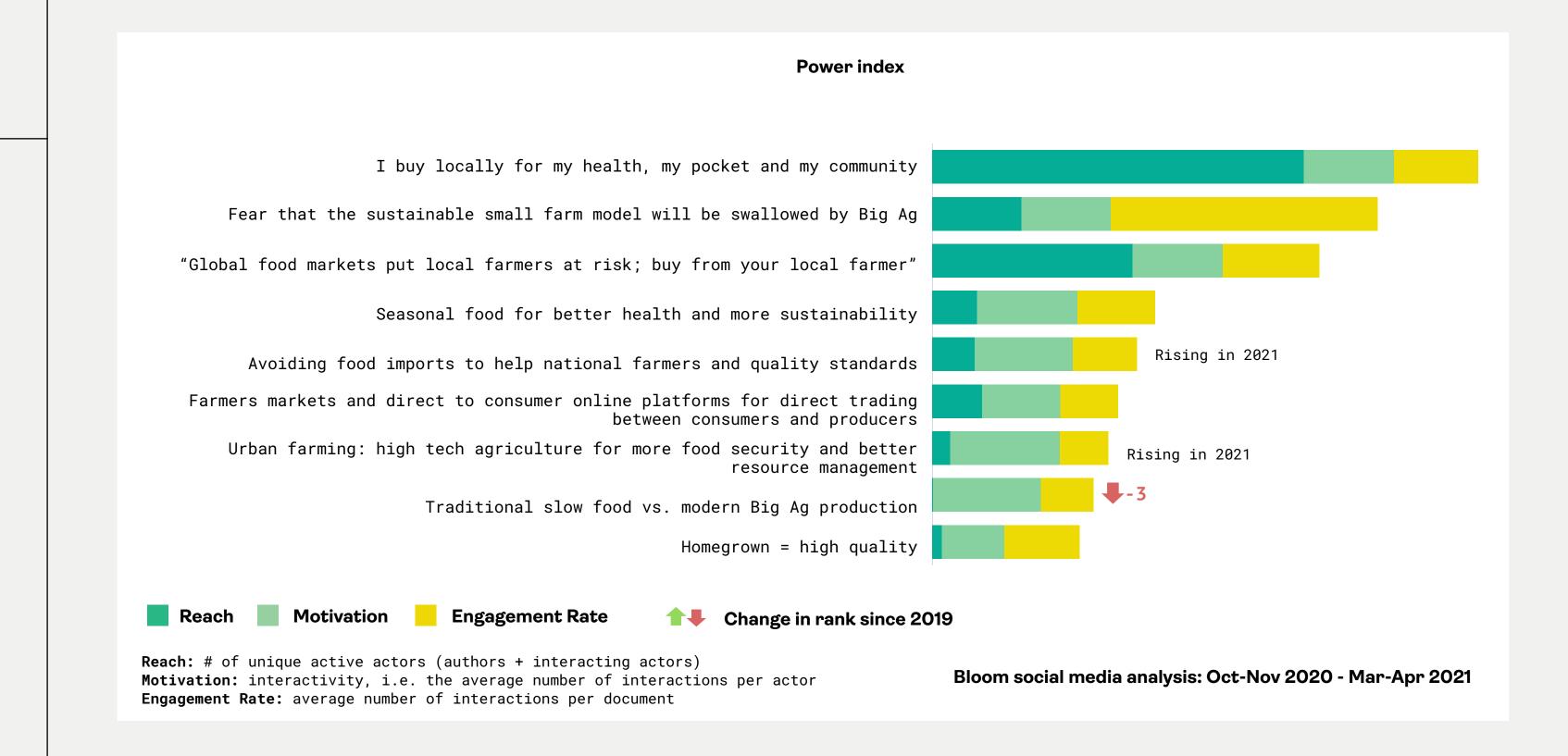


Consumers - motivated by flavour, health, cost as well as support for local food sovereignty – eschewed globalised food corporations in support of local food producers.





- Conversations about local food had previously centred on environmental concerns, but the crisis brought more immediate and personal issues to the fore. Firstly, local and seasonal food is perceived to be the highest quality, and offer the best flavour and health benefits. Secondly, locallysourced food cuts out middlemen to connect consumers directly to farmers, resulting in a fairer deal for both.
- The pandemic revealed challenges in the existing food chain, provoking criticism of how these systems put farmers at risk. Imported foods raise fears of shortages, a decline in quality and an increase in food safety risks.
- Consumers recognise that buying local has an impact on national food sovereignty and allows them to challenge a global food system that they distrust. It helps build trust in the product and production model, and offers a way to support the local community and its food producers.
- During lockdowns, direct to consumer models became a lifeline for both consumers and farmers. However, labour shortages meant meeting demand became difficult. Urban farming and high-tech agriculture were promoted as ways to increase food security and maximise resources.
- There was also a renewed interest in homegrown food, which is perceived to be more flavourful and nutritious.



Coronavirus boosts demand for local and functional foods in France: market study by Mintel.

Food Navigator, 2020

75

"Almost 6 in 10 people around the world (57%) say eating a locally produced diet, including meat and dairy products, is a better way to reduce an individual's greenhouse gas emissions."

Ipsos 2021

78% reported buying food from local shops (i.e. farm shops, veg box) at least once a month or more.

Food Standards Agency, 2021

Loving local

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Imagine if hyperlocalised, equitable and resilient supply chains provided communities with good jobs and tasty, nutritious food.





SHORTER, STRONGER, MORE EQUITABLE SUPPLY CHAINS

New investment in hyperlocal food systems creates strong and sustainable micro-economies.

"We can begin by supporting local food systems with shorter, fairer and cleaner supply chains. While national policy-makers can provide critical perspectives and frameworks for change, local and regional stakeholders must be able to shape their own food systems to reflect local values, resources and priorities."

Sarah Farley, Managing Director, Food Initiative, Rockefeller Foundation and Sara Scherr, President and Chief Executive Officer, EcoAgriculture Partners

"Shorter supply chains boost resilience in a crisis and help small-scale sustainable farms, which helps farmers get grants and loans."

Jayce Hafner, Cofounder of FarmRaise, in an interview with the World Economic Forum

"To address these issues and build a more equitable food system, many experts say going back to the way things were before the pandemic is not an option. 'We should be talking about a complete and total dismantling of our corporate food system and building infrastructure locally from the ground up."

Food Tank article quoting Devita Davison, Director of FoodLab Detroit

LOCAL AS A DIETARY REQUIREMENT

A legion of consumers seeking local produce pushes "locavore" into the mainstream, alongside vegan and gluten-free.

"In most countries, consumers also express strong preferences for local brands over international ones, across all categories. For instance, in Australia more than 80 percent say their preference for local brands has increased since before the outbreak began... To address these consumer shifts, retailers have a clear role to play. They should rethink their offerings and provide healthier, more locally sourced products (including ready-to-eat and ready-to cook items) with a smaller environmental footprint."

McKinsey & Company, 'Reimagining food retail in Asia after COVID-19'

"I think it was a wake-up call for consumers to realize they can easily go directly to the source and buy from farmers who ship right to doorsteps all over the U.S. as easily as an Amazon package."

Mary Heffernan, a cattle rancher in Fort Jones, California, quoted in Politico

"I think when consumers realise they can get a beautiful box of restaurant-quality veg for the same price as Tescos, delivered to their homes, it'll be hard to go back to traipsing the aisles of their local store."

Amelia Christie-Miller, Head of Sales & Marketing, Foodchain



Relevant SDG:11.a - Support positive economic, social and environmental links between urban, per-urban and rural areas by strengthening national and regional development planning

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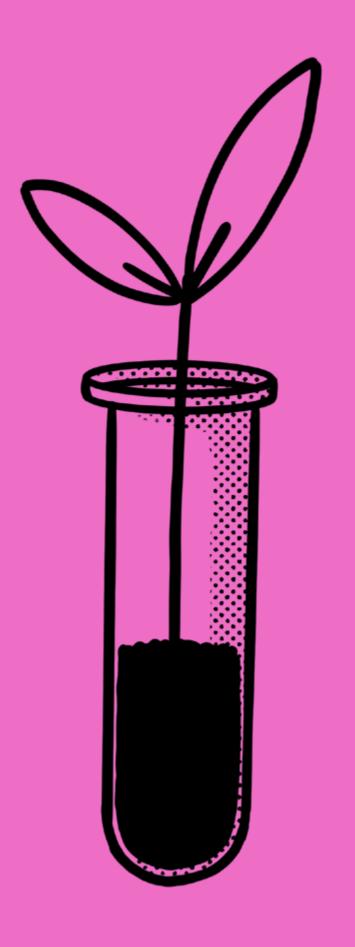


Relevant SDG: 12.8— By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature







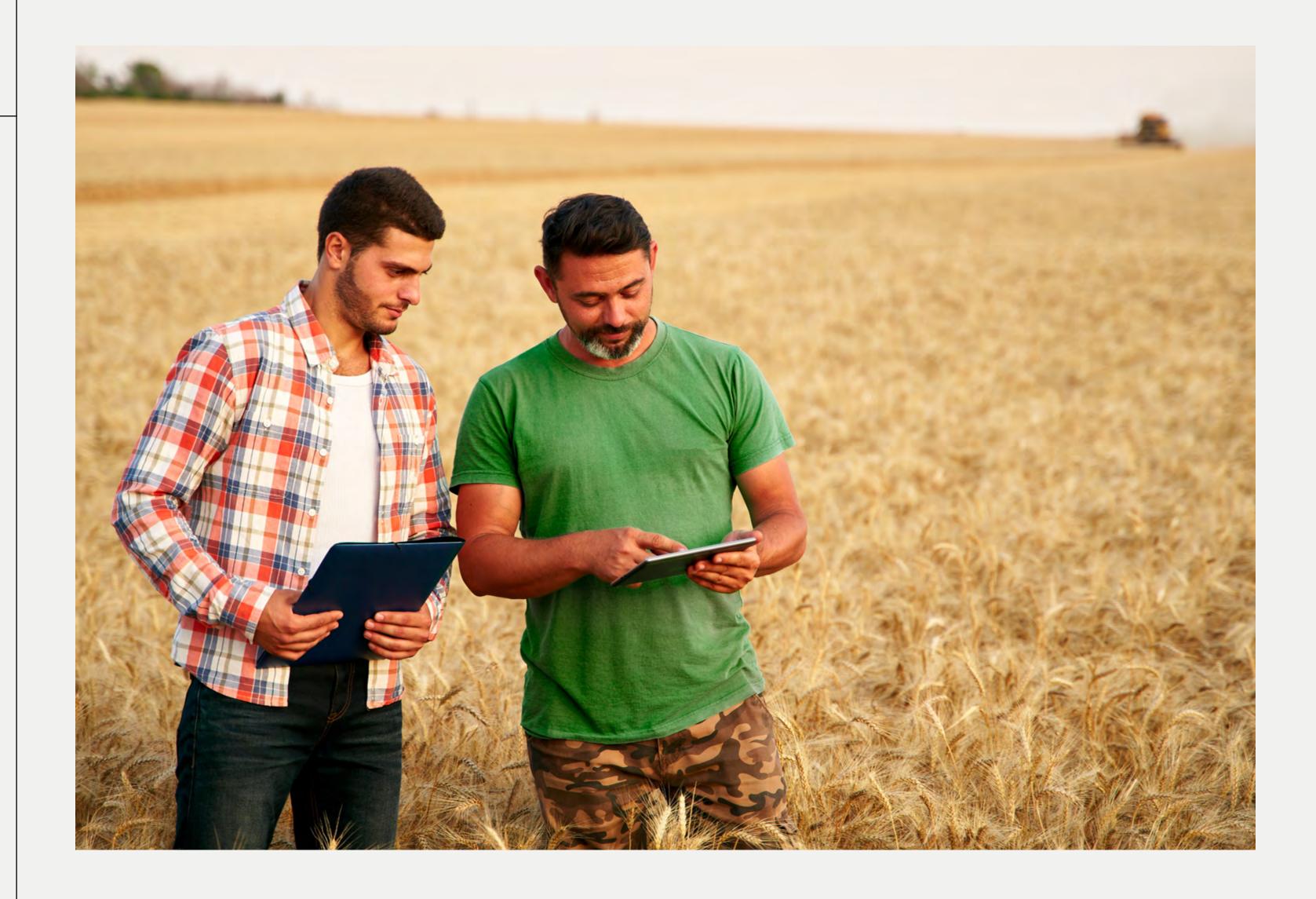


Innovation through tech

THE PAST \leftarrow



After an initially tight focus on consumer needs, the conversation broadened to include environmental and social improvements further up the food chain.

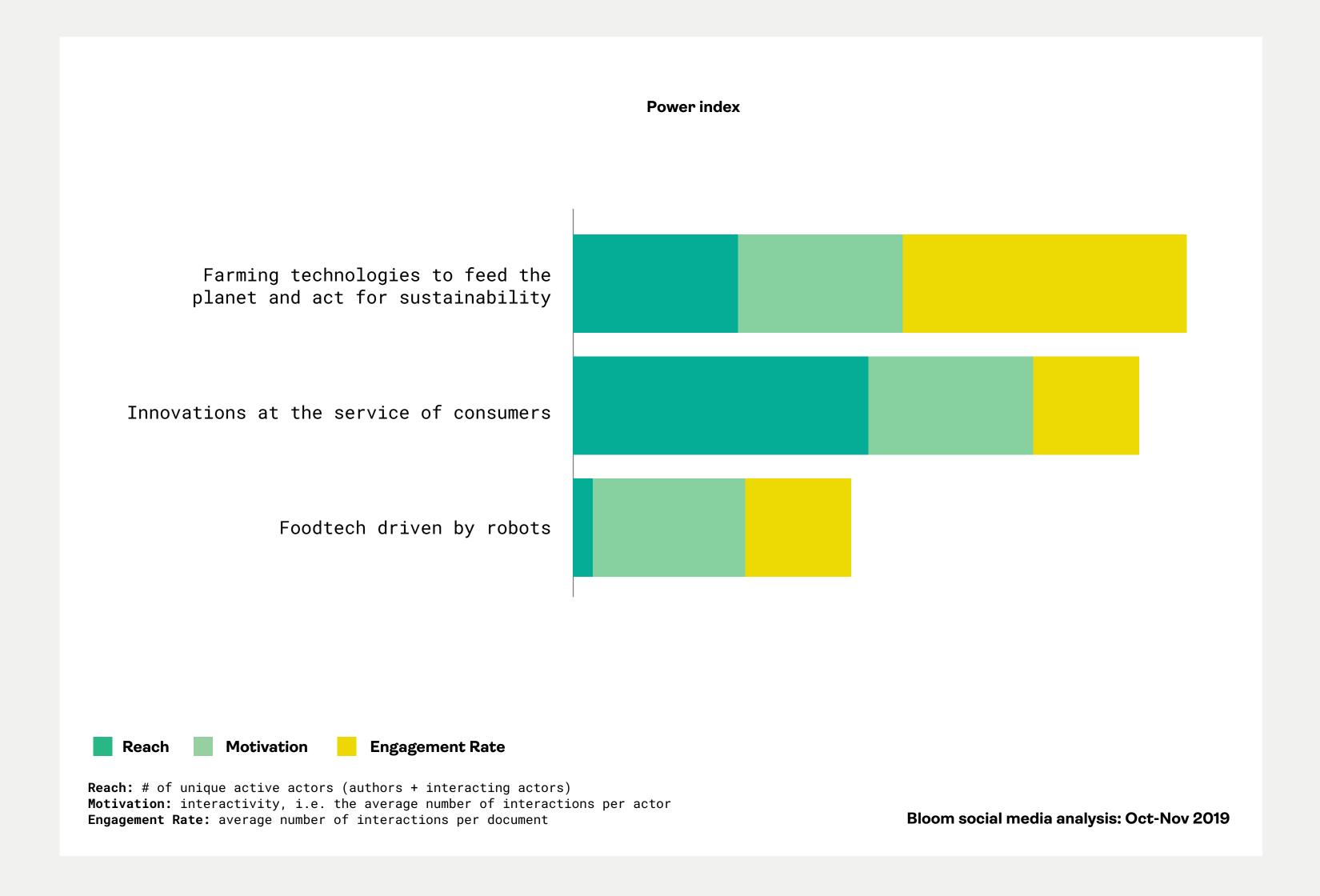


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THE PAST



- New technologies showed promise in helping farmers reduce their environmental impact, and helping local producers better compete with larger industries on crop and animal care as well as distribution. This was especially relevant in developing countries where small producers play an essential role in feeding the population.
- Disruptive innovation was also recognised as benefitting consumers. Better supply management meant products are always available, food waste is reduced, and local producers can find business



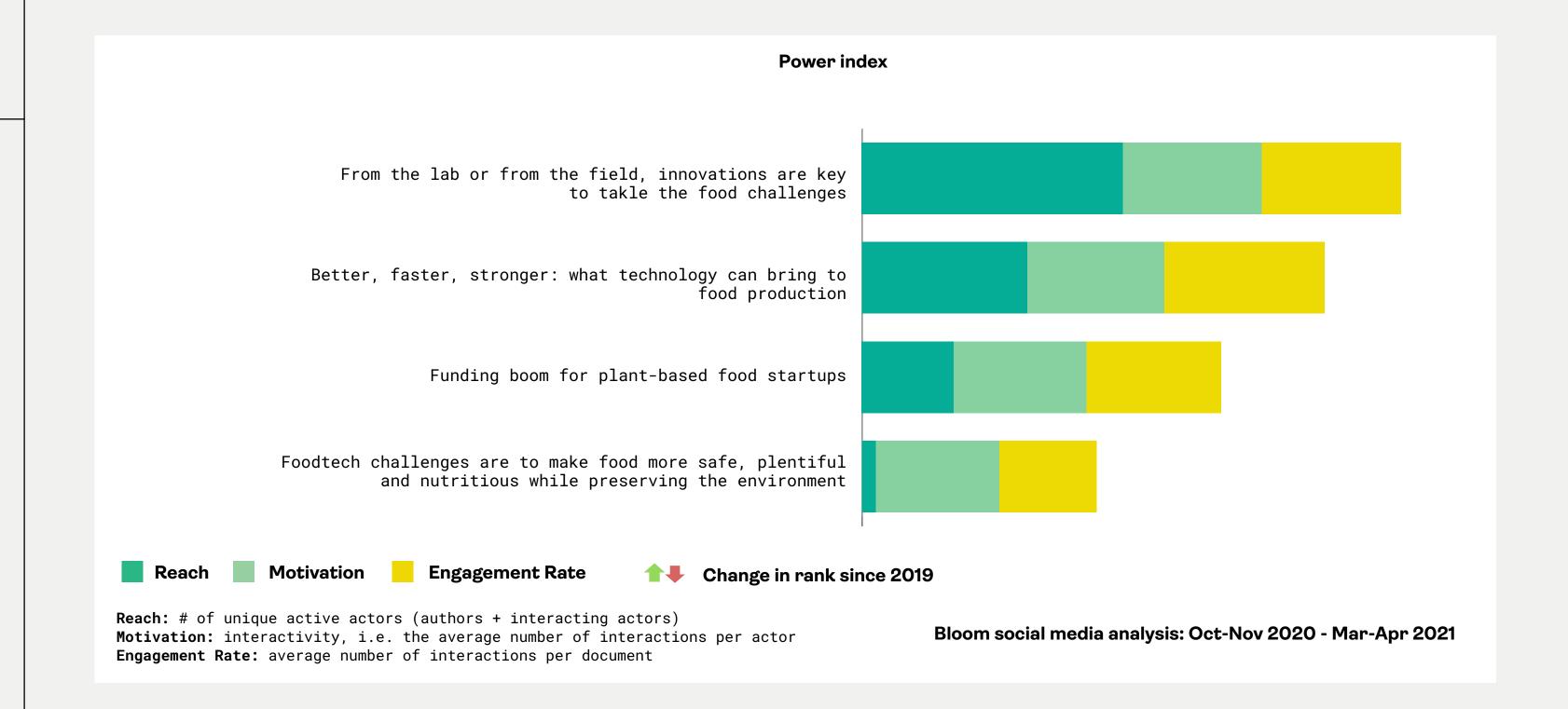


A hopeful conversation concentrated on problem-solving technologies for farmers and the food industry, as well as excitement around lab grown and ultra-convenience foods for consumers.





- The conversation around innovation and technology in food became highly enthusiastic and positive. There is growing optimism about the potential of new technologies, like Al and robotics, to increase the quantity, pace and efficiency of agricultural yields. On the other hand, discussion on the broader, slower concept of innovation centres around human ingenuity, including breakthroughs in the lab and in the fields.
- Within this topic, most innovators and businesses remain focused on consumers, with a notable boom in plant-based and cellular foods, as well as ultra-convenience solutions such as meal kits and food delivery.
- Better farming models and techniques from across the world are being shared, with a particular focus on African countries where ingenuity and innovation could transform the region into the world's next breadbasket.



"Food and agriculture start-ups attracted a record \$22.3 billion in venture funding last year – twice as much as these segments raised in 2019, according to a new study by Finistere Ventures."

CNBC, 2021

"In terms of revenue, the global agritech market was valued at US\$ 17,442.7 million in 2019 and is projected to reach US\$ 41,172.5 million by 2027; it is expected to grow at a CAGR of 12.1% during the forecast period from 2020 to 2027."

The Insight Partners, 2021

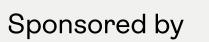
"Farm robots given Covid-19 boost: Shortage of agricultural workers behind 40 per cent rise in funding for sector start-ups."

Financial Times, 2020













Imagine if most breakthrough innovation in food technology was aimed at serving people, planet and health.





A FOOD SYSTEM OPTIMISED THROUGH DATA

From system-mapping and smart tracking of resource use to hyperpersonalised health and nutrition data, new insights enable laser-targeted interventions to increase yields, save resources and improve wellbeing.

"There's a lot of data latent in the system we're not collecting and analyzing, so software will play a big role in optimizing our food system – from oncoming weather patterns, to the hydration of a farm, and into the quality of calories and macronutrients we're ingesting. Unlocking all the insights in this data will have a profound impact on the food industry as well as the way we manage our precious resources."

Brain Frank, FTW Ventures quoted in AgFunderNews

"New research and nutrient tracking will give us the ultimate understanding of how nutrition affects our metabolism, and what we can do to get the most out of the things we eat, in a very personalised way. Since our genetic makeup varies from individual to individual, it inadvertently affects how we react to the food we consume. With the increased availability of DNA sequencing, we can now have a better idea of what we should be eating and when."

Caroline Hobkinson, food anthropologist quoted on FoodNavigator.com

A FOOD TECH RACE FOR GOOD

The biggest bets are made on innovators addressing social, environmental and economic challenges to food production and consumption.

"We cannot afford to continue externalizing the negative impacts of current food systems and related dietary patterns, or perpetuating practices that knowingly degrade the air, water, and land we all rely on. Rather, we must embrace the technological developments taking place within the food sector that will allow both our communities and industries to thrive for the long term."

Albert T. Lieberg Ph.D, UN Senior Adviser and former FAO country representative, writing in 'The Need for Change: Impact of animal-based diets on natural resources, climate change, and human health'

"Alternative protein production has emerged as a powerful economic engine in Asia, potentially creating lucrative job opportunities for skilled young people from across the novel food industry landscape.

[Nanyang Technological University's Food Science and

Technology Programme] has developed a number of groundbreaking innovations for alternative protein production and is therefore well-positioned to host and contribute to this historic university course on Future Foods—the first of its kind in the APAC region. We look forward to working with other Asian universities to prepare students for a future technology-driven world, contribute to enhanced food security, and create real societal impact in the region."

Emmanuel Delerm, Blockchain Project Manager, Carrefour, speaking to Reuters at a conference



Relevant SDG: Target 12.a - Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production



Relevant SDG: 9.2 - Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries





Honest products

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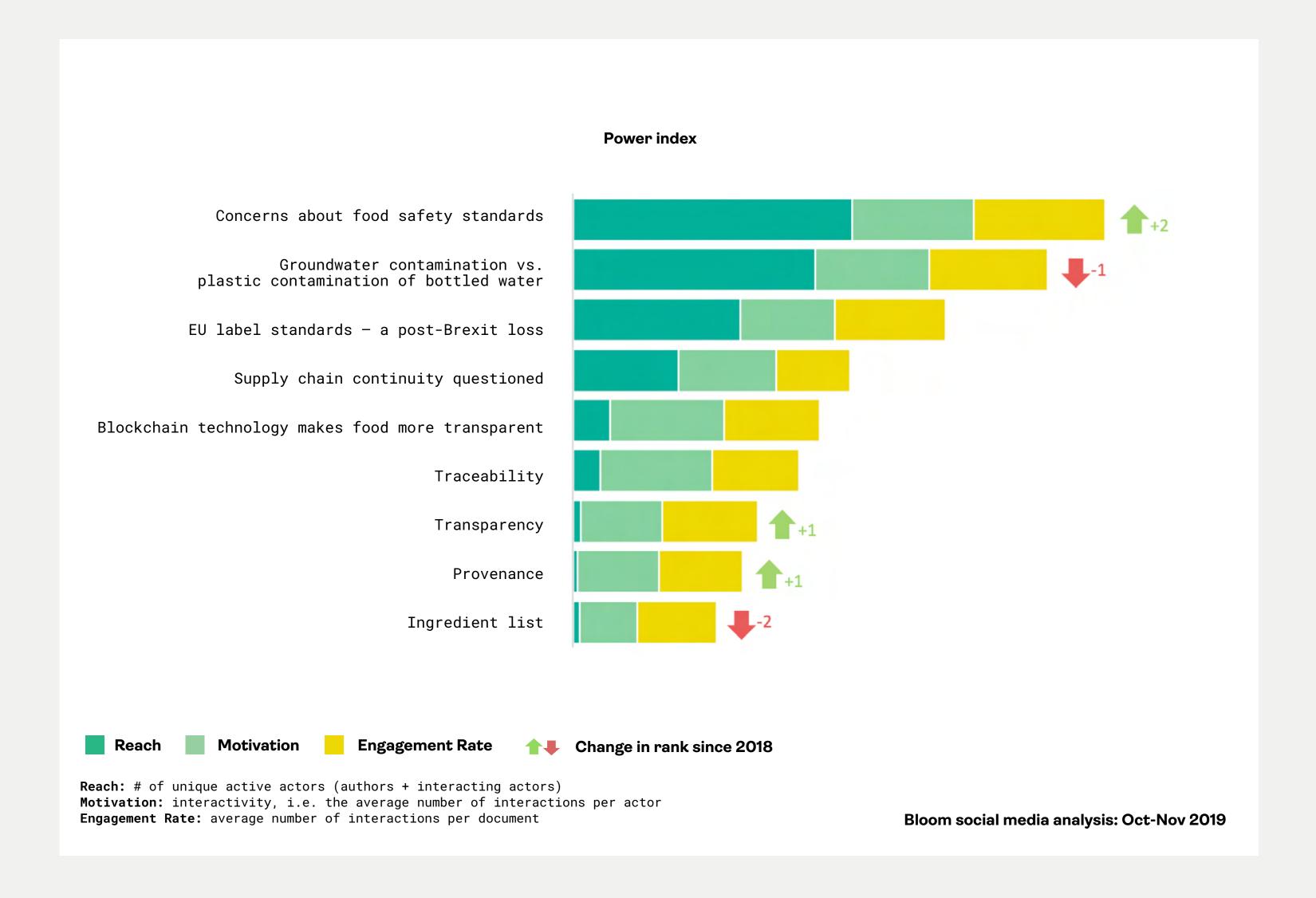


A global crisis of trust meant that, despite increased communication around food safety, product labelling and certifications, consumers did not feel reassured.



THE PAST

- Huge political and economic changes including Brexit, US-China relations and globalisation – drove concern around the stability of the food system.
- Consumer confidence in food safety standards was shaken. Trusted labels were suspected of overlooking hidden substances like heavy metals and pesticides residues in baby food.
- International institutions were communicating even more guidance on food safety, but the general public remained unconvinced.
- The need for transparency and traceability in the food system was being picked up in the tech space. Blockchain, Al, data and patented labels were being discussed as ways to provide better information for consumers.



Honest products



BLOOM



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THE PIVOT ""

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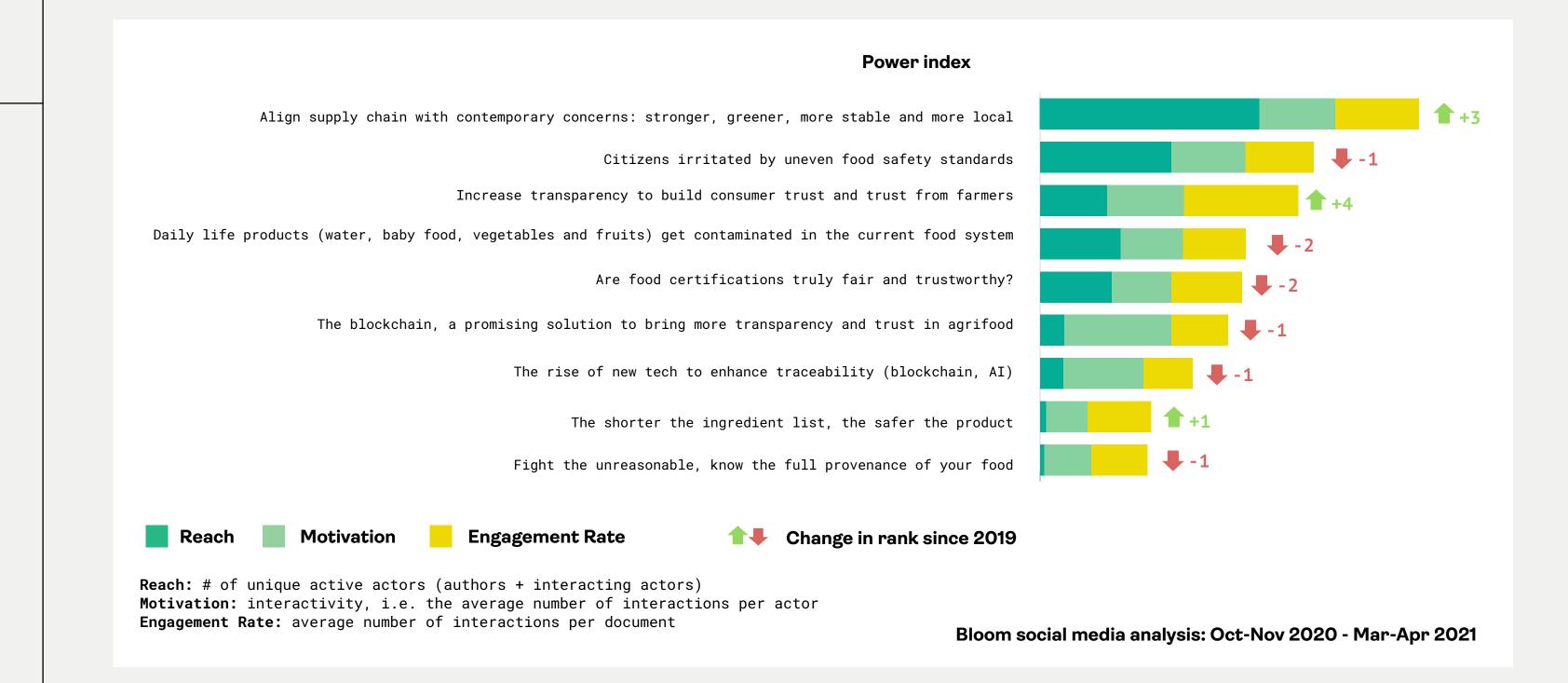


The need for transparency became stronger than ever, with food safety and quality major concerns during the crisis. A new model emerged that combined old fashioned markers of authenticity with new traceable technologies.





- The pandemic brought attention to the complexity and inequality of the food system, which fails to live up to people's expectations of strength, quality, sustainability, honesty and fairness.
- The need to build consumer trust through transparency became stronger than ever. There is a fear of not getting the best available, or getting lower quality products than previously expected. In the UK especially, worries over uneven standards and a decline in food quality reflect shaken public confidence.
- Certifications are no longer enough to feed the public's appetite for transparency and responsible practices. There is a growing sense that, if people can no longer trust or rely on brands or laws, then technologies or simpler processes might help meeting their expectations. A suggested solution combines simple food of local provenance with modern technologies such as blockchain.
- Developments in agri-tech have helped to build trust in so-called sustainable agriculture, by providing proof of better farming practices, the living and working conditions of labourers, and the ethical stewardship of land, water and animals.



Chinese online food retailers Meituan and Eleme are providing customers with information on the body temperature of the cooks, food packagers and couriers for every order, as well as their daily disinfecting routines.

Financial Times, 2020

Transparency emerges as number one in Innova Market Insights' Food and Beverage Trends for 2021. Their Consumer Survey revealed that six in ten global consumers are interested in learning more about where foods come from.

PR Newswire, 2020

First Nutri-Score for Nutrition, Now Eco-Score for the Environment: New FOP Lands in France. "78% say they are not provided with enough information on environmental and health impacts of food products when making [purchase] decisions."

Food Navigator, 2021

a Honest products

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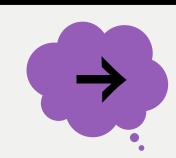


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Imagine if products earned consumers' trust by providing straightforward information about safety, quality, ethics and sustainability.





SUPPLY CHAINS FULLY ENABLED FOR TRACEABILITY & TRUST

Fully traceable and transparent information is provided via food blockchain, as technologies rapidly reach economies of scale.

"To rebuild disrupted networks, trust and the ability to verify information will be essential. Blockchain technology offers the building blocks to provide trading partners and consumers the transparency of trusted and secured data, and to synchronize processes through a mutually agreed ruleset. This potential is especially attractive for businesses contending with supply chain disruption due to the pandemic."

World Economic Forum, 'This is how blockchain can be used in supply chains to shape a post-COVID-19 economic recovery'

"Take a closer look at the breakthrough new consumergoods brands of the last decade, and you'll discover that transparency is an article of faith for them. These brands don't only out-compete on purpose, digital responsiveness or targeting. They are also setting new standards in product transparency – and reaping the rewards of trust."

CGF & Futerra, 'The Honest Product Guide

"Blockchain is the future for sure. In five or 10 years, everybody's going to be on blockchain and saying 'what's the big deal?"

Susan Testa, Director of Culinary Innovation, Certified Origins

TRUSTED PRODUCTS TELL ALL ON THEIR ORIGIN STORIES

Honest and transparent products win the dollars, trust and hearts of customers.

"I expect traceable, transparent products to seriously compete with non-traceable ones soon – if not for the sake of legislation then for the sake of a company's due diligence or consumer demands."

Marten van Gils, Tech Lead, Fairfood

[With the food blockchain] "you are building a halo effect: 'if I can trust Carrefour with this chicken, I can also trust Carrefour for their apples or cheese'... We had a positive impact on the chicken versus the non-blockchain chicken."

Emmanuel Delerm, Blockchain Project Manager, Carrefour, quoted by Reuters "Brand transparency was already on the rise, but in these uncertain times, people are more vulnerable than ever; trust in who a brand is and what it stands for is critical and likely to infiltrate mass consumer mindsets."

Maura Regan, Forbes Business Council



Relevant SDG: 9.5 - Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending



SDG 12.8— By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature







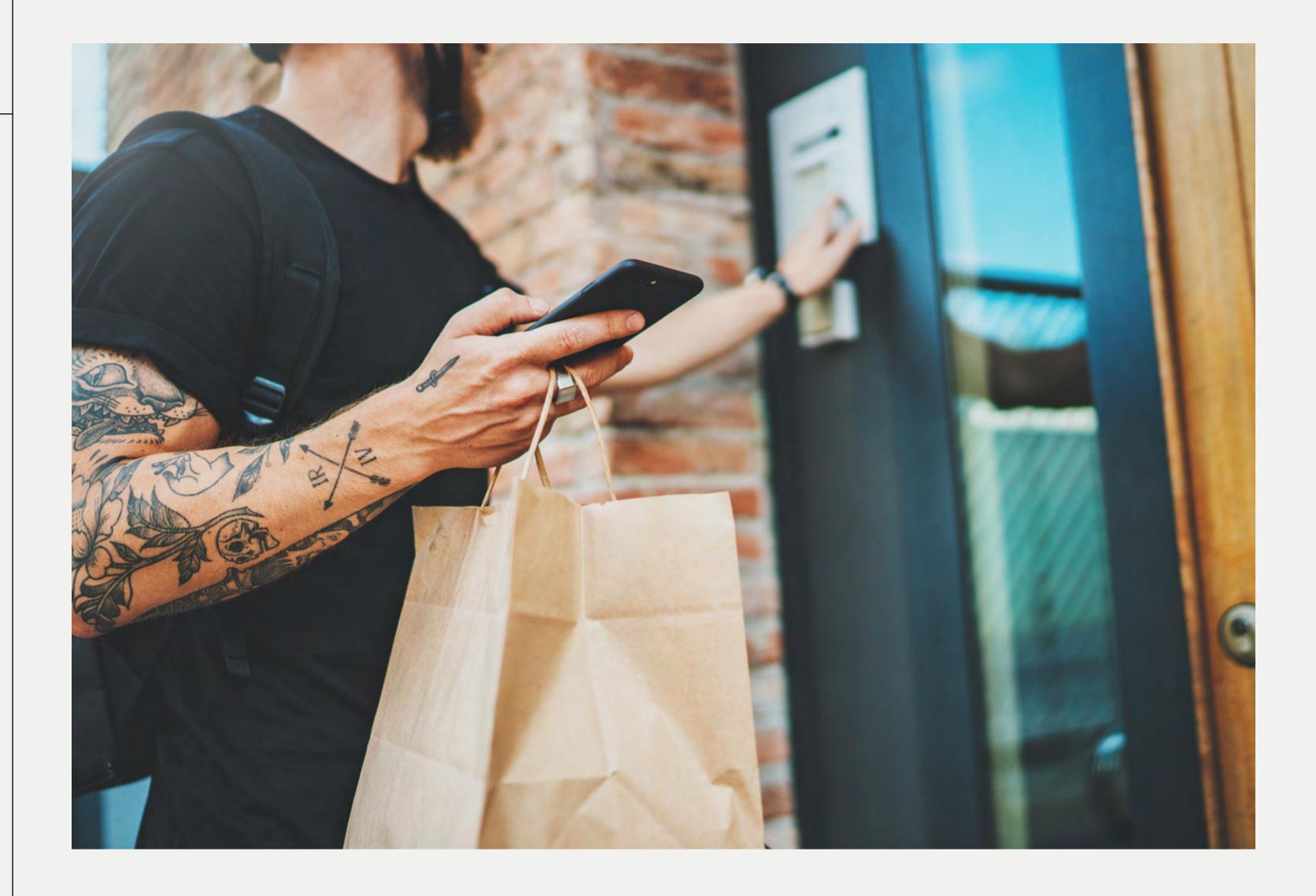


THE PAST

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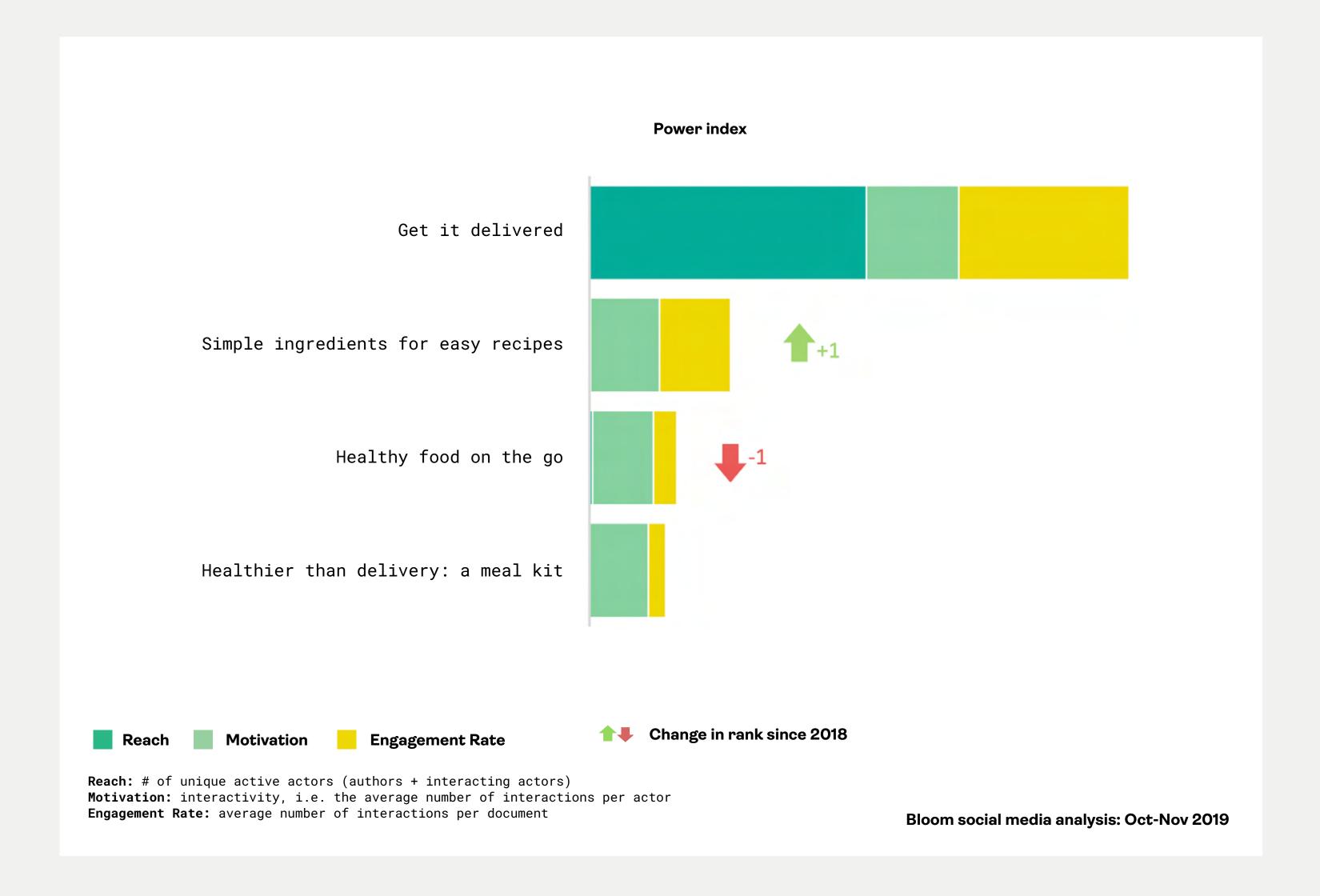


In a world where food can be delivered to their doors, people embraced the breadth of "do it for me" options even when they wanted to do it themselves.



THE PAST

- Ordering food had become a mainstream guilty pleasure for adults and younger people alike, and food delivery services were also used to show care and support to loved ones. For young people 'comfort food' reigned supreme. If a particular meal wasn't easy to eat, easy to order or easy to cook, it was off the menu.
- Meal kit delivery services changed the way the general public approached home cooking. Healthy, fresh, sometimes organic meals were found to be easy and quick to make, creating a new kind of 'convenience' food. Many proud home cooks, especially mums, took to social media to share their successes with such kits, contributing to a rise in DIY 'food porn'.
- Debates over working conditions in the food delivery space were not discussed as much as in other food sectors like agriculture. However some consumers did think about their influence in this area, and stood up against perceived discrimination and abuses.
- Some people began to criticise the impact of automation on working conditions and unemployment.





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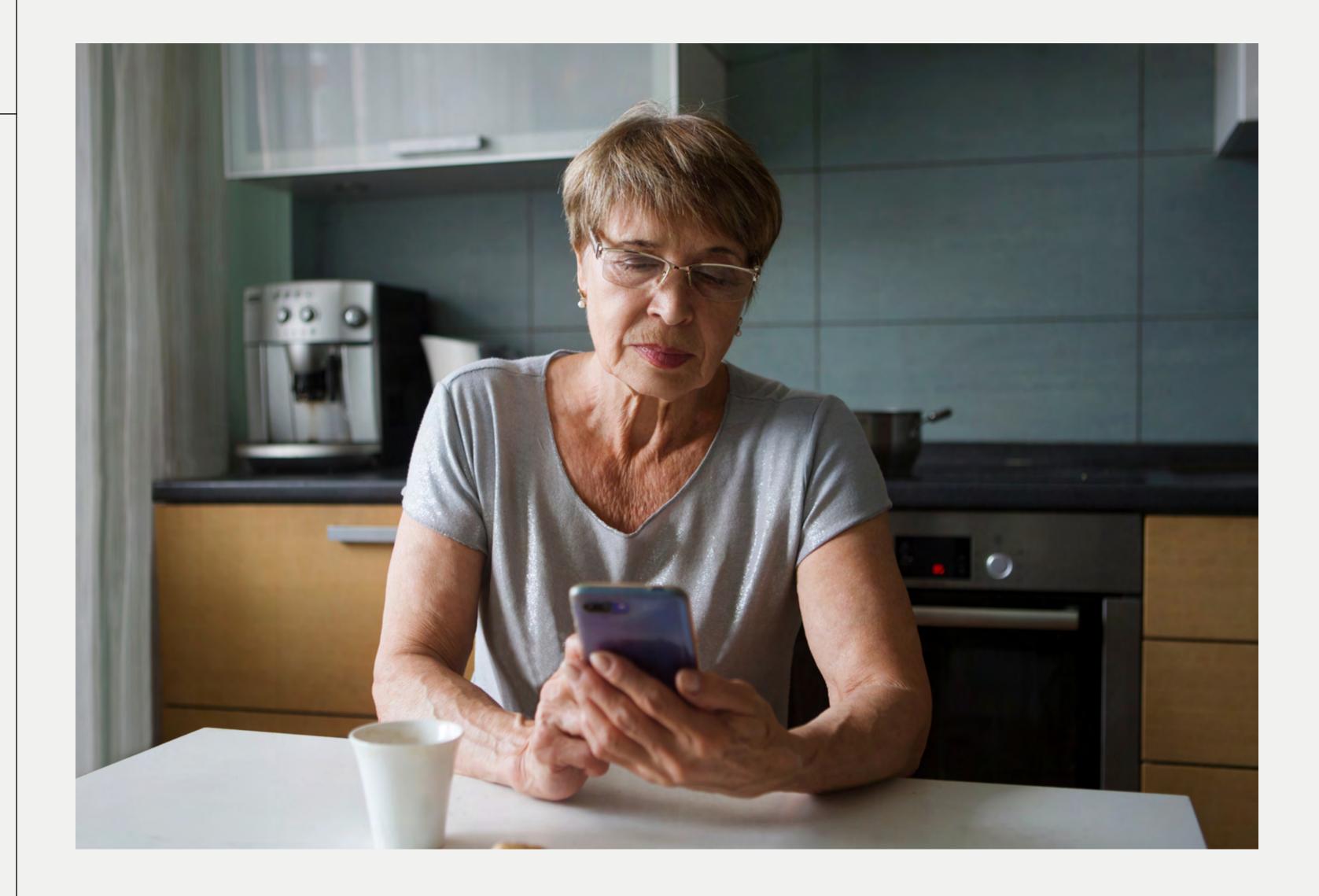




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After being celebrated as a lifeline for many people during lockdowns, food delivery became once again primarily about convenience and indulgence. However, as the trend continued to grow, people became concerned that business interests may overshadow social good.

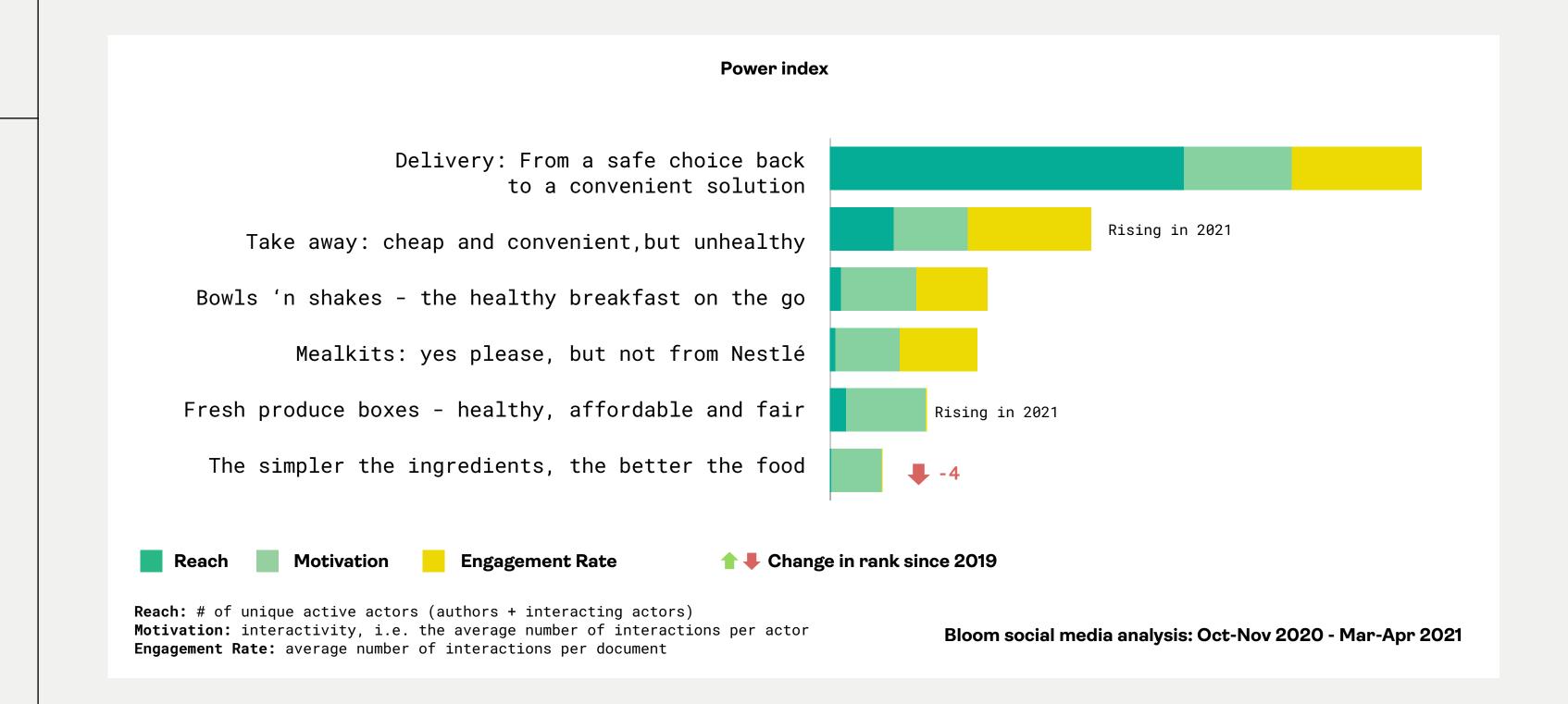


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- For many, food delivery became the only safe way to access food during the pandemic. However, as the crisis wears on, people have come to rely less on delivery systems as their only solution. The conversation has re-centred on the convenience, pleasure and technological innovations in food delivery. Criticism over delivery fees is driving people to question who is making the biggest profits from this rising trend, with many becoming wary of food delivery apps that charge both restaurants and customers.
- The health impacts implicit in food delivery are also causing concern. At first, ordering-in was seen as a way to support restaurants during lockdowns, however the rise in takeaways came to be considered a potential health risk. People began to question whether cheap take-aways are replacing healthier home-cooked meals.
- Meal kits and fresh produce boxes present a solution to health and convenience, however people prefer these to come from small businesses rather than the big fish, as evidenced by the boycott of Freshly after it was bought by Nestlé.

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"Amazon is hiring hundreds of extra workers to keep up with the demand. This raises an ethical dilemma: is it morally acceptable to ask others – normally in less secure jobs with worse pay – to take on a risk that you don't want to?"

The Guardian, 2020

"In 2020, food and drink e-commerce, in particular, posted 53% growth – the highest of any product category... Euromonitor forecasts that food and drink e-commerce will still expand by 8% in 2021."

Euromonitor International, 2021

"Globally, 23% of consumers report eating takeout and home-delivered meals from locally-owned restaurants more often, and 45% as often as they did before the pandemic."

Ipsos, 2021

Food on demand

96

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Imagine if all people around the world could source high quality, affordable, sustainable food in an instant.





RESILIENT, DIGITALLY-ENABLED SUPPLY CHAINS

Digital technologies efficiently connect supply with demand, especially in volatile times.

"This structural shift will continue to gather speed as consumers are becoming more comfortable with the direct to consumer model, helping to build a resilient, sustainable and distributed agricultural system."

Dan Miller, CEO of Steward in JWT Intelligence's Future 100 2.0.20

"As businesses and governments around the globe continue to combat the coronavirus crisis, the rapid responses of the Chinese e-commerce giants offer guidance on how digital-savvy retailers capable of accessing mass markets in Europe and the U.S. can play their part in keeping the supply chain flowing. The experience from China suggests that the most valuable contributions will come both from leveraging their

digital logistics platforms and their high-tech last-mile delivery capabilities and from quickly engaging newly available workers with transferrable skills from other sectors."

Chengyi Lin, writing in the Harvard Business Review

"The most marked increase in online grocery shopping is within the over-55 age group, where regular online shoppers have nearly trebled (8% in 2019 to 23% in 2020). Last year, less than half of over-55s (47%) did some of their food shopping online. Now 74% do. And 48% of this age group say they will shop more often for groceries online post-lockdown, compared to 40% of the general population."

How Britain Shops Online: Food and Drink Edition

GREATER PROTECTIONS FOR GIG WORKERS

New protections for gig workers keeps these essential players in the food chain safe and secure.

"This crisis is really a breakout moment for gig companies and for delivery companies in particular. That shift to e-commerce, which was already happening very rapidly, is just going to accelerate. In short, gig jobs are becoming relatively more attractive and secure in some ways."

Julia Pollak, an economist at ZipRecruiter

"Will the current crisis propel a response from stakeholder groups (e.g. gig based work platforms, governments, individuals, trade unions etc.) to change the trajectory and precarity inherent in the gig economy? Based on the findings of our recent interdisciplinary analysis of the gig economy, any hope for improvements after COVID-19 remains unlikely without significant legislative change."

Elaine Yerby and Rebecca Page-Tickell, LSE, 'Where next for the gig economy and precarious work post COVID-19?'

"To change the game of the gig economy, in principle all platform workers must be considered as employees."

Agnes Jongerius, Dutch MEP and European parliament spokesperson for the employment and social affairs committee



Relevant SDG: 8.2— Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labor-intensive sectors

98



Relevant SDG :12.3— By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses











Endofwaste

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THE PAST \leftarrow

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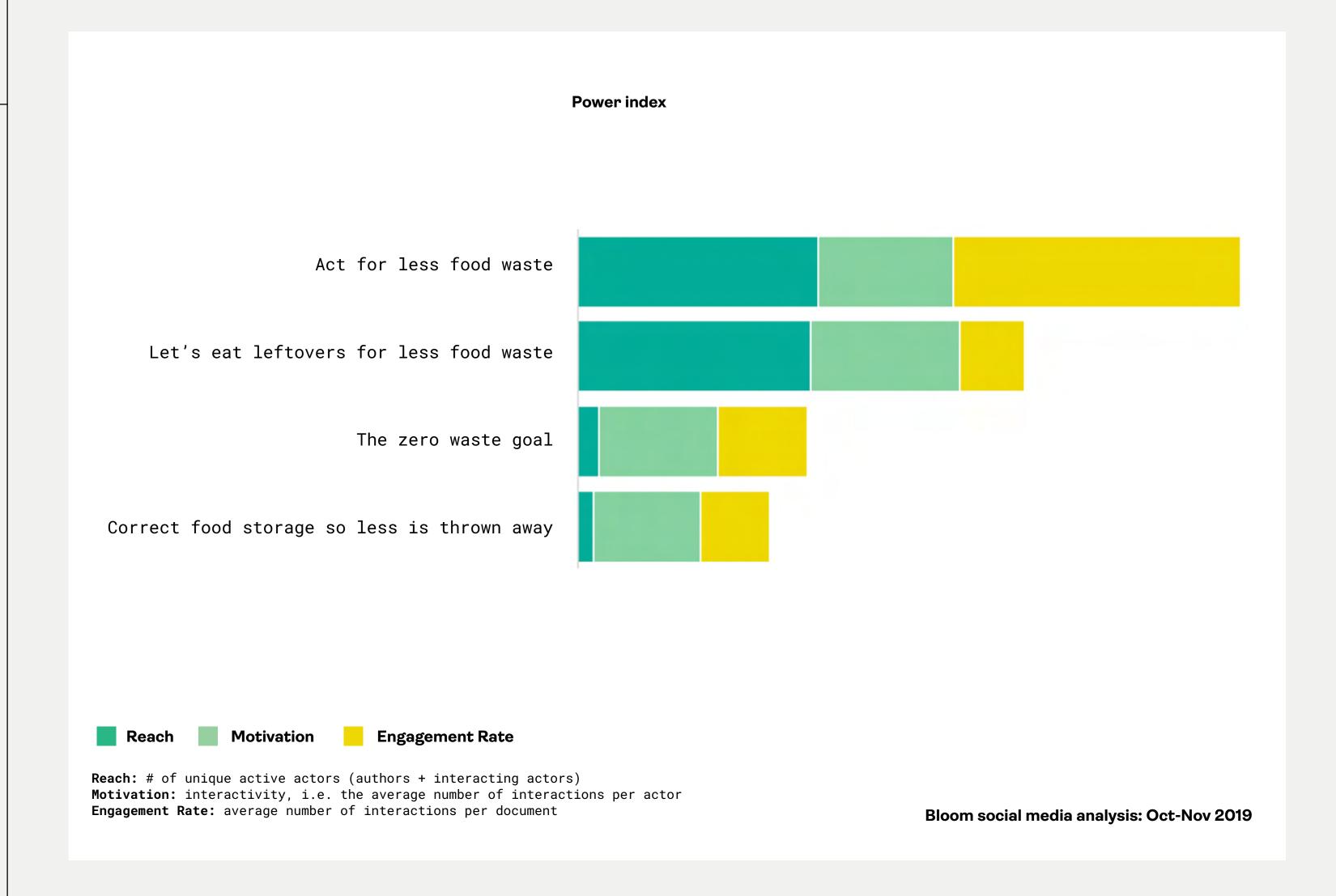
The problem of food waste was becoming clearer and consumers were looking for solutions.



THE PAST



- Food waste was coming to be seen as a major issue, both for humanitarian and environmental reasons.
- Consumers were discussing solutions at all levels of food production and consumption – from recycling industrial food waste and buying less, to storing food correctly and cooking and donating leftovers.
- Conversations about food waste also included concerns about a resulting increase in packaging waste. Whether at the growing stage, transportation, storage or distribution, people had started calling for smart solutions to food waste that don't increase packaging waste, specifically plastic.











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The food waste conversation remained stable during the pandemic year with increased emphasis on solidarity and community initiatives.

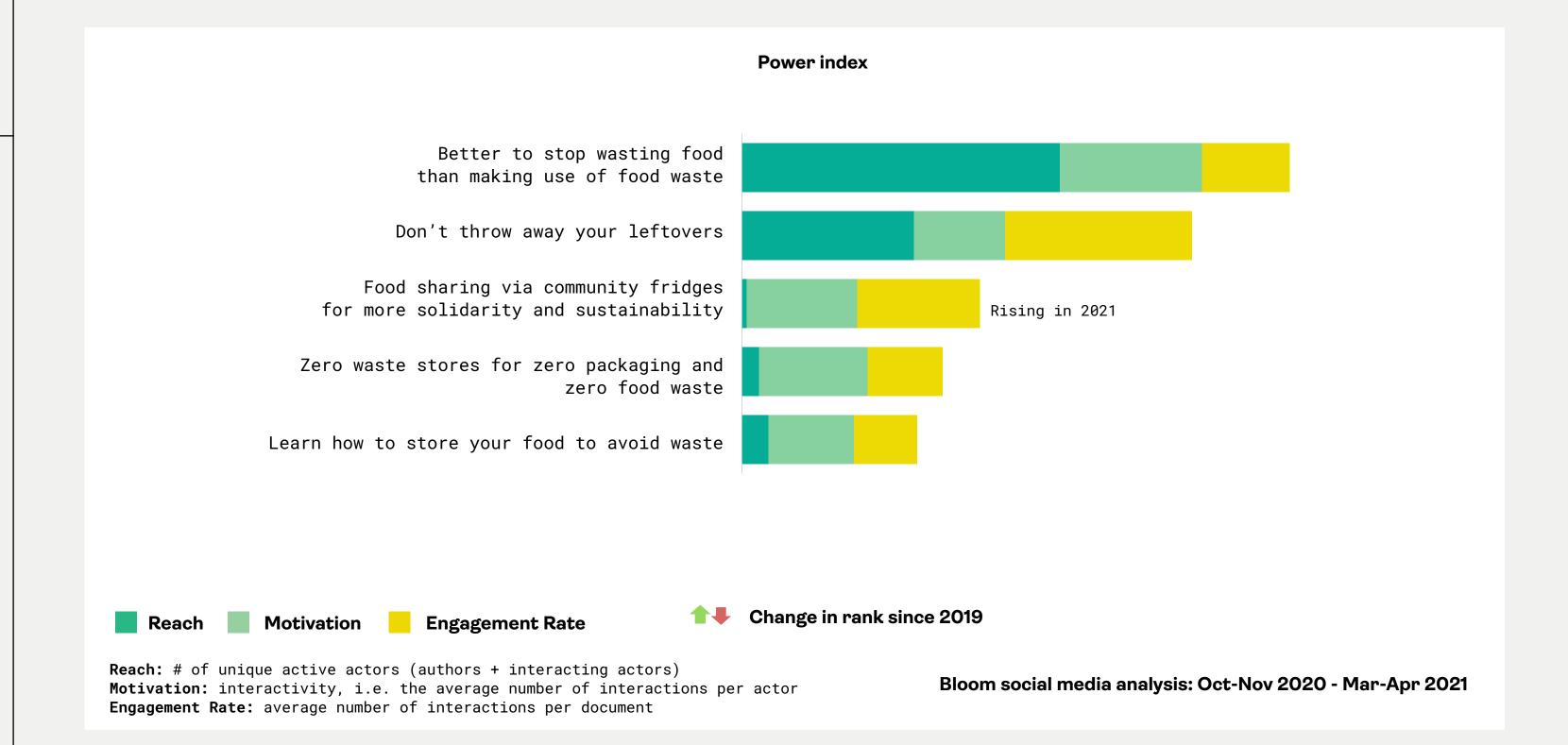


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End of waste



- Reducing food waste is still viewed as a key solution to addressing environmental, social and individual issues. People are empowering themselves to end food waste by learning how to buy, store and cook food in a way that reduces waste.
- Food sharing initiatives like community fridges flourished during the pandemic. Community fridges are spaces where locals can share surplus food, including donations from food businesses, producers, households and gardens. This has become a way for people to show solidarity with their local community, supporting those in need and reducing food waste.



"64% of consumers said they're focusing more on limiting food waste and will likely continue to do so going forward."

Accenture, 2020

103

"Because of the complex logistics of the food supply chain, diverting food supply away from wholesalers directly into the hands of consumers can be costly. Experts... are concerned that more food waste will be produced in 2020 than in previous years."

GreenBiz, 2020

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"With a staggering 3 billion people that cannot afford a healthy diet (FAO, 2020), the message of this report is clear: citizens need help to reduce food waste at home." An estimated 17% of food is wasted at the consumer level.

UN Food Waste Index report, 2021

a End of waste

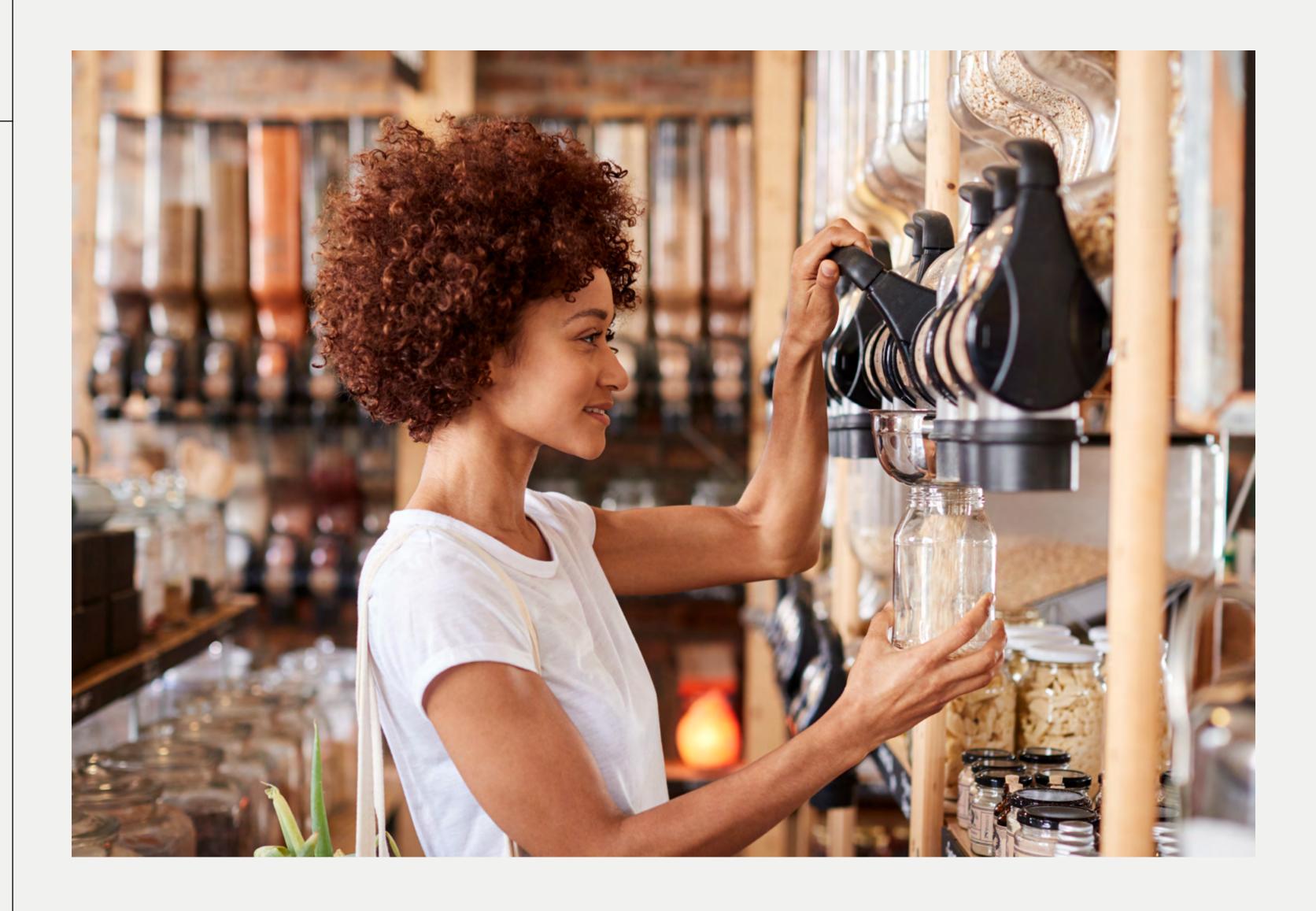
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Imagine if every gram of edible material in the food chain was used to meet everyone's nutritional needs.





End of waste

FUTERRA



A HYPER-EFFICIENT CIRCULAR FOOD CHAIN

An intelligent food system optimises harvesting and storage, and upcycles by-products to avoid waste.

"By helping design out food waste, Al can generate an estimated economic opportunity of up to USD 127 billion a year in 2030, calculated as growth in top-line revenue. This is realised through opportunities at every step of the value chain, from farming, processing, logistics, and consumption. Specific applications include: using image recognition to determine when fruit is ready to pick; matching food supply and demand more effectively; and enhancing the valorisation of food by-products."

Ellen MacArthur Foundation's 'Artificial Intelligence and The Circular Economy: Al as a Tool to Accelerate The Transition'

"Upcycled food prevents [food waste] by creating new, high-quality products from otherwise wasted – but perfectly nutritious – ingredients. 60% of people want to buy more upcycled food products, and that's because 95% of us want to do our part to reduce food waste."

Upcycled Food Association

WASTING FOOD IS CULTURALLY UNACCEPTABLE

A shift in consumer attitude has led to renewed consciousness around portion size and storage, and wasting food becoming a taboo.

"Food waste needs to be tackled at all the levels of the supply chain. However, in Europe, the "fork" level is particularly relevant. The largest share of food waste in Europe happens at the consumption stage, accounting for around 53% of it."

Chiara Aricó, Food Waste Europe

"[A Dutch] study found food waste goes up with the increase of money in our pockets, possibly reaching more than twice the levels we thought previously...

[The researchers] say behavioural change is important, such as encouraging shoppers to switch from buying in excess or hoarding to buying 'enough', with the thought that you can always buy more. And food must be valued and appreciated more in society."

BBC article, 'We're worse with food waste than we think'



Relevant SDG :12.3— By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses

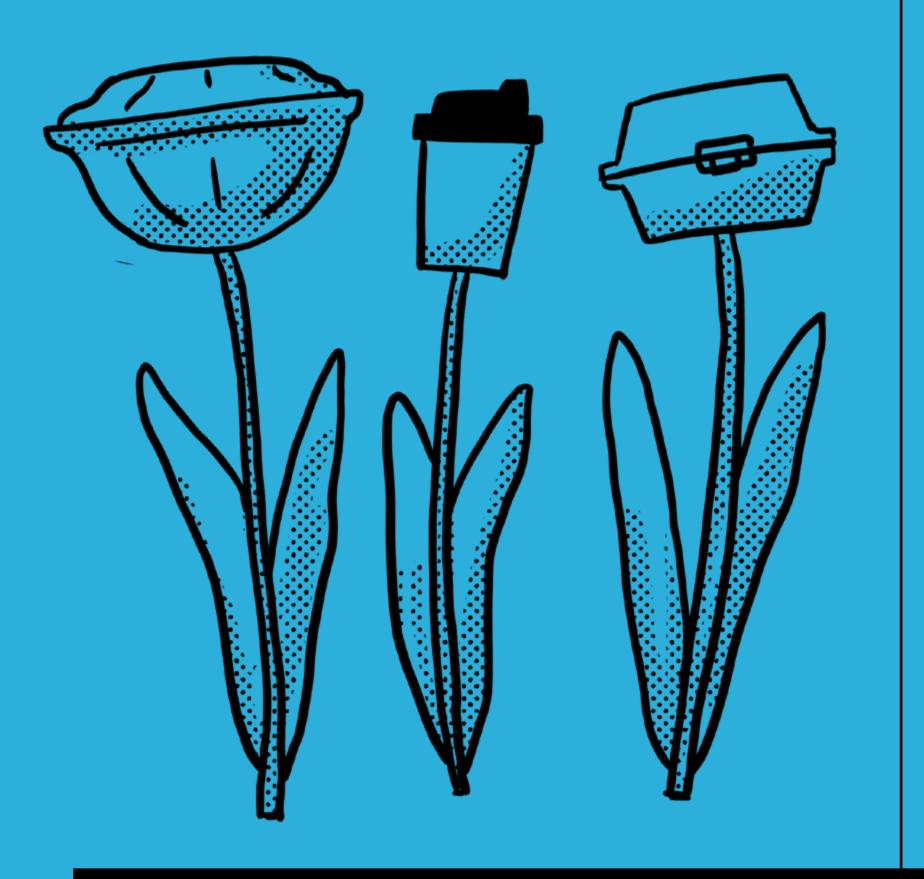


Relevant SDG: 12.8— By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature











THE PAST \leftarrow

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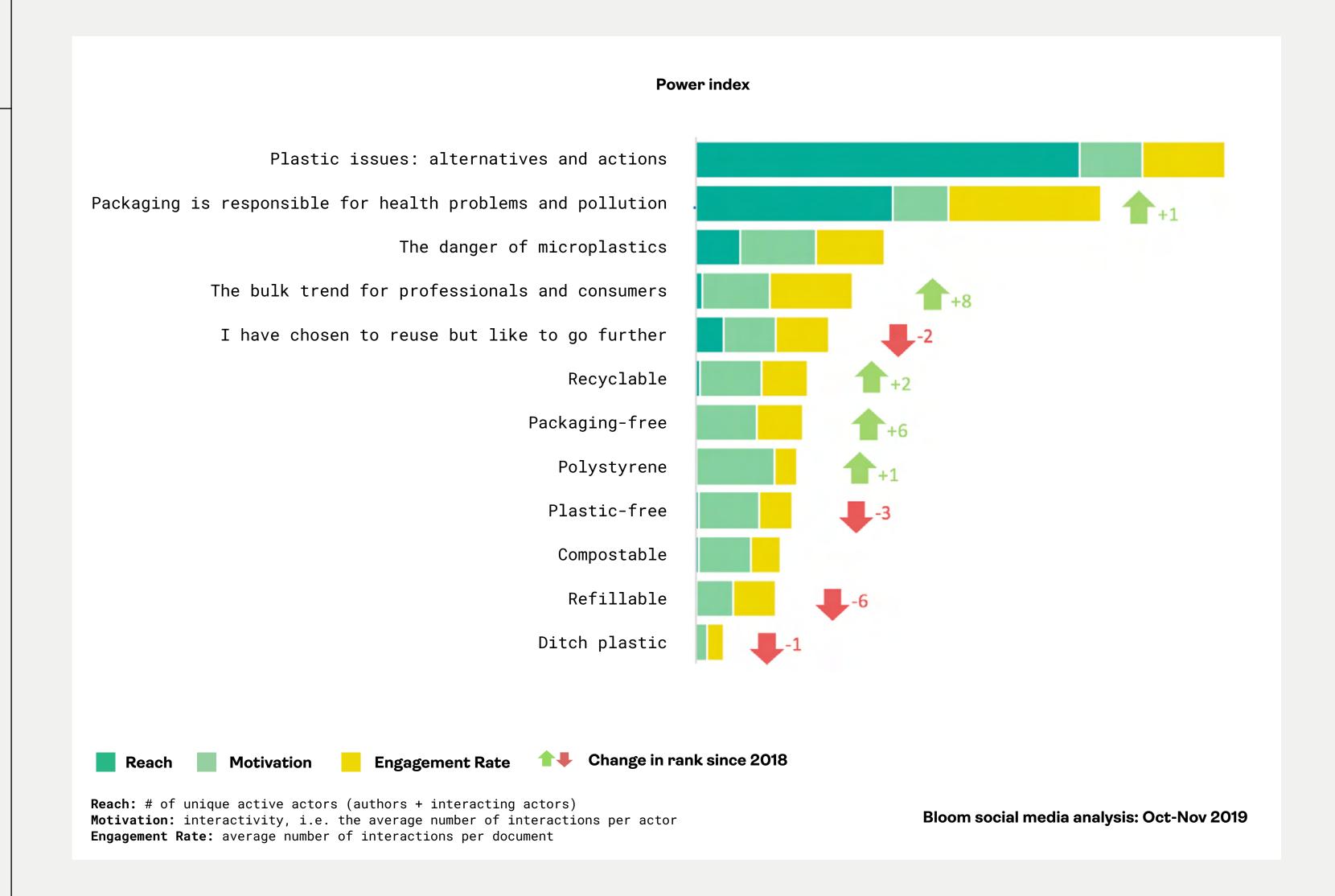
The crusade against plastics and packaging waste was shifting from activism to action, as new solutions entered the market.



THE PAST



- Packaging was considered unnecessary and too reliant on plastic. Alternatives that either avoid or replace plastic packaging were celebrated and discussed.
- Avoiding packaging altogether (e.g. bulk shopping) became a focus, over non-plastic packaging.
- Alongside existing environmental concerns, the health issues relating to packaging began to rise up the agenda.
 Microplastics entering food became a key concern, bringing a new wave of alarming activist messages to this previously solutions-oriented shift.









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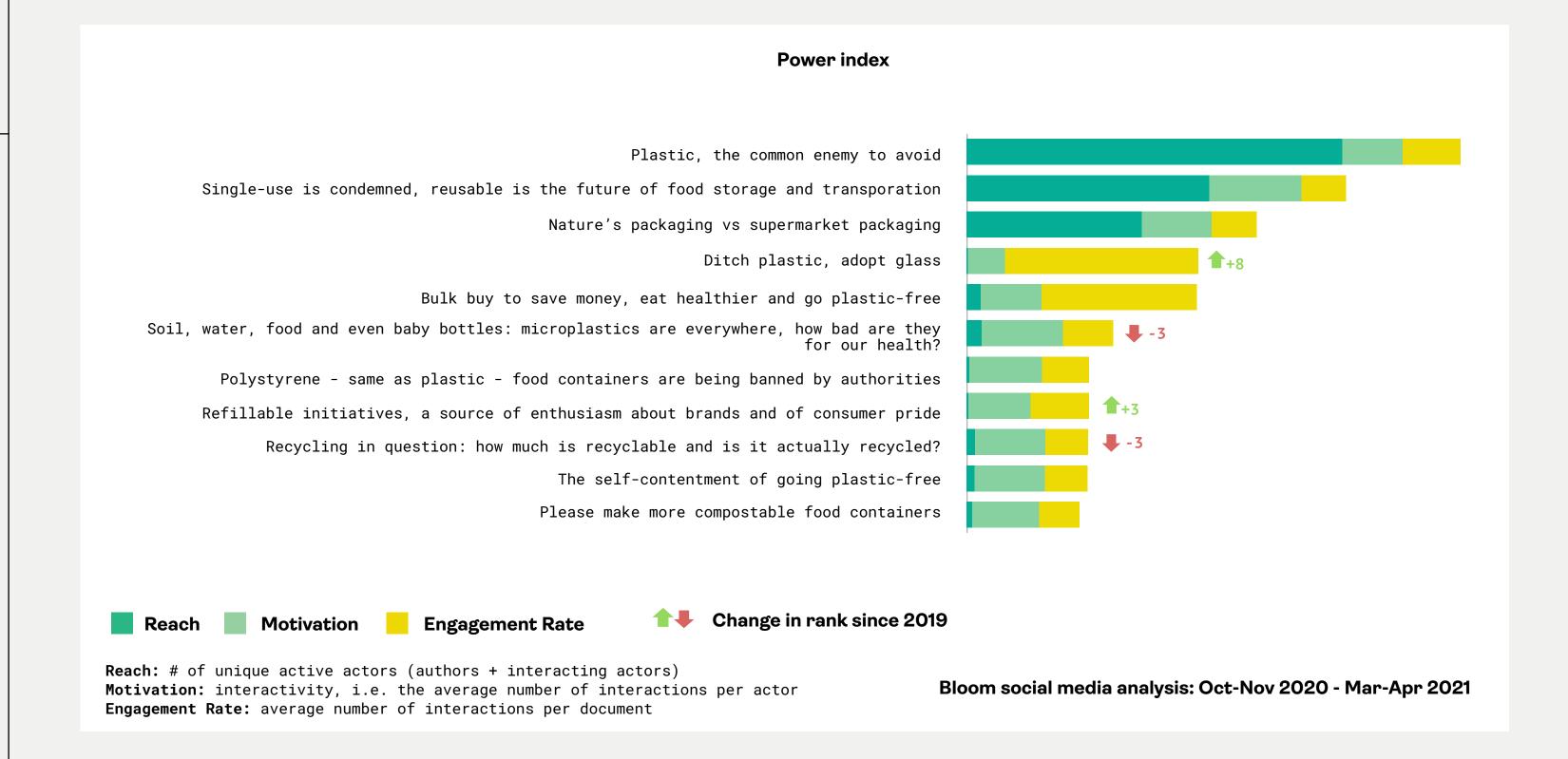


The problem of plastic continued to create anxiety, however the conversation shifted in tone as consumers looked towards better packaging solutions.





- The general tonality of the packaging conversation appears less alarming than previously observed, however concern about the impact plastic has on the environment and human health is still very high. The existence of microplastics, now known to be contaminating our soil, our water and our food, continue to cause anxiety.
- Consumers prefer to avoid eating or buying food out of plastic and welcome brands offering plastic-free, reusable or refillable options. Single-use packaging continues to fall out of favour, driving popularity in durable alternatives which people share proudly on social networks.
- Natural and compostable containers such as jute and glass have become the go-to materials for consumers.



"Despite the global health crisis 85% of consumers want to buy products that use as little packaging as possible, and almost a third (29%) [admit] that they have stopped buying particular brands altogether because their packaging was not sustainable".

DS Smith and Ipsos MORI, 2020

Early in the pandemic, Teracycle's Loop refill platform reported a 5% sales increase and a 25% increase in monthly usage in a fourmonth period ending in June.

Waste Dive, 2020

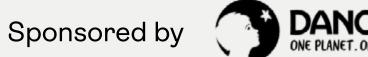
Shake Shack tests AirCarbon Carbonnegative Straws and Cutlery at 6 Locations. "The replacements for plastic decompose like leaves."

The Nation's Restaurant News, 2021

Good packaging

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BLOOM



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Imagine if packaging kept us and our food safe, and left no trace on our planet.





A FOOD SYSTEM FREE OF SINGLE-USE PLASTIC

New materials and innovative business models help the food system move away from single-use plastics for good.

"A circular economy is not possible without recycling, yet it can't happen through recycling alone. Three steps are needed to support the circular economy: support for local recycling programs with policies and capital; significant investment in domestic infrastructure and end markets; and broad stakeholder engagement."

Keefe Harrison, CEO, The Recycling Partnership, and Dylan de Thomas, VP of Industry Collaboration, The Recycling Partnership writing in a GreenBiz article

"The European Commission is particularly attentive to innovation on materials that fully biodegrade in seawater and freshwater and are harmless for the environment and ecosystems. New approaches - developing innovative business models, reverse logistics or designing for sustainability, for instance – can do much to help minimise plastic waste at source, while achieving further economic, environmental and social benefits."

A European Strategy for Plastics in a Circular Economy, 2015

THE END OF THROW-AWAY CULTURE

People embrace circular lifestyles after recognising the benefits of reusables, refillables and return schemes.

"With many of us spending considerably more time at home than in the past, now is the perfect time to test and embed new behaviours. This is even more true as people are increasingly turning to online shopping and subscription services, which offer opportunities to establish reuse models that maintain safety, enhance customer loyalty, provide convenience and, of course, reduce pollution and conserve valuable resources."

Libby Peake, Green Alliance

"Neither single-use or reusable packaging is inherently safe or unsafe – it's how you deploy these systems. Consumer perception of reuse and how reuse is framed is massively important. People are used to reuse without even thinking about it – think about the medical industry or dentists."

Tom Szaky, Head of Communications, Loop Europe

"We need to make circularity mainstream and help shift consumers to a use mindset rather than an ownership mindset. To do this, these businesses need to take the frictions in the process onto themselves. Focus on innovation to overcome the inconvenience and historical negative perceptions that surround circularity. Make circularity and the products and services offered within it desirable by changing the narrative and removing the tensions."

John Atcheson, Stuffstr CEO



Relevant SDG 12.5—By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse



Relevant SDG: 12.8— By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature











Methodology

Powered by proprietary technology from social analytics firm Bloom, the Food Revolution Barometer uses social listening to monitor 'change' semantics in the public conversation on food and beverages.

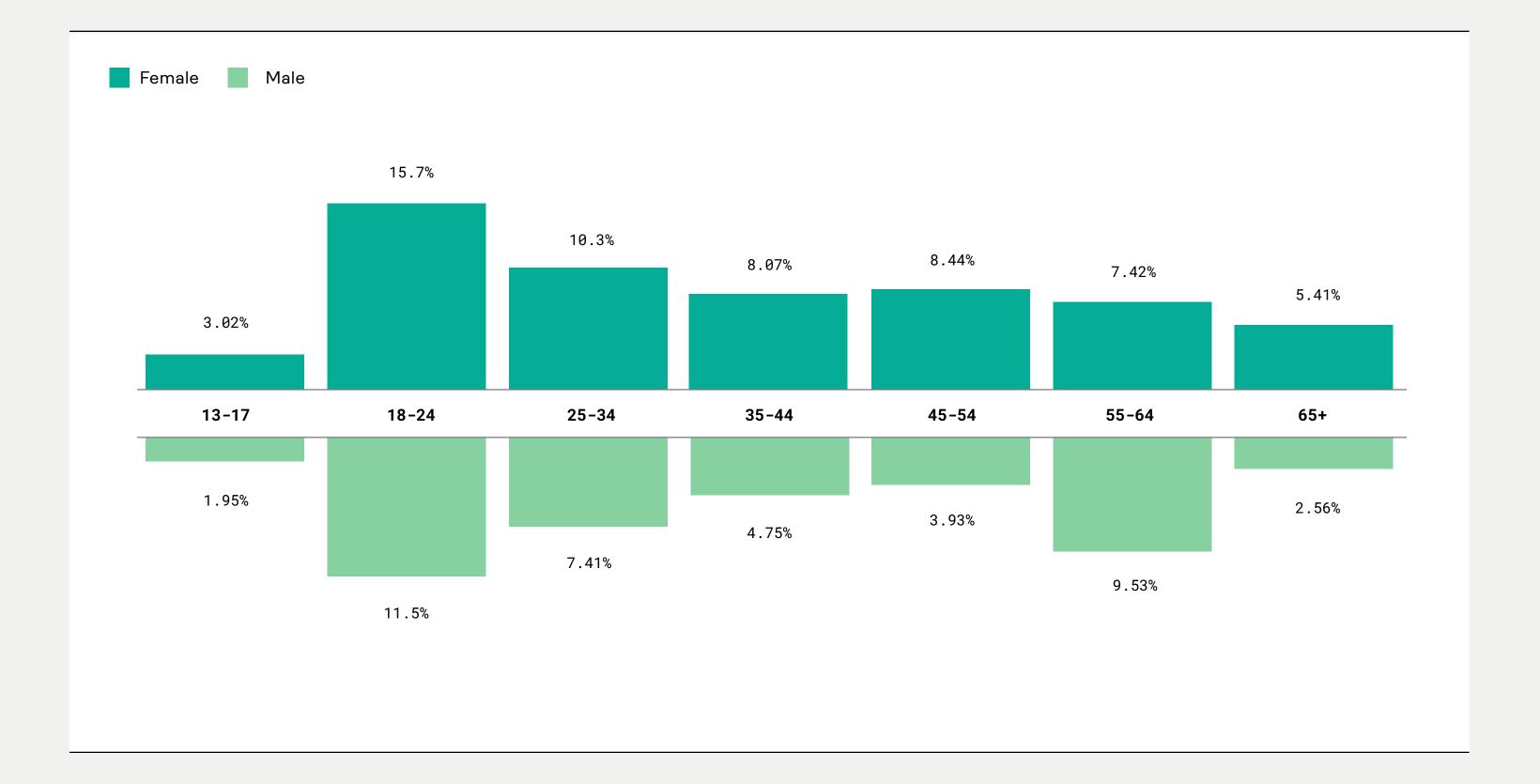
Bloom harvests social media content that includes 'change' semantics (e.g. change, try, new, boycott, ditch etc.) relating to 'food and beverage habits', 'food and beverage consumption' and 'the food and beverage industry'.

The Food Revolution Barometer shows the resulting correlations between social media content, authors and communities. The Barometer does not track percentage changes, nor level of agreement; rather it tracks topics, sub-topics, emotions, authors, and the 'power' of each debate. Bloom's algorithm allows for the creation of a 'power index' that reveals the most important and relevant topics of conversation without keyword bias.

The 14 shifts of the Food Revolution are based on a materiality assessment of the food system, comparing expert and academic assessment of the changes required to create a just and regenerative food system. This data was cross-referenced with food topics that were attracting considerable interest from the public.

The social listening data used throughout this report was sourced from publicly available user generated content published on social media, namely Twitter, Facebook and Instagram. Only English language content was gathered, representing 60-70% of conversations on these platforms worldwide. The majority of these stem from the US, the UK, Australia, New Zealand, India and South East Asia.

Social listening demographics





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ABOUT FUTERRA

(https://www.wearefuterra.com/)

Futerra is the change agency, joining the magic of creative and the logic of strategy to make sustainability happen. Since 2001, we have pursued the mission of 'making sustainable development so desirable it becomes normal'. That mission fills our team and our work with purpose, pride and passion. Today, we're a fiercely independent and global company: majority owned and led by women, and a founding B Corp. Our team is based in London, Stockholm, New York and Mexico City and serves clients including Google, IKEA, Danone, WWF, Sierra Club and the United Nations.

ABOUT BLOOM

(https://bloomsocialanalytics.com/)

Bloom is a unique AI trend forecasting platform dedicated to qualitative, predictive and strategic analysis of social media. Based on the innovative concept of social and semantic inference, Bloom can analyse 10 to 100 times more relevant information on social media than the social listening platforms on the market, in order to identify communities and quickly detect both strong and weak signals. Certified by Facebook, Instagram and Twitter, Bloom is a scalable and customisable tool that evolves at the pace of social media innovations and optimises the process of deciphering and anticipating social phenomena for brands. Bloom was created in 2017 in France and has 40 employees in France and Switzerland.

ABOUT DANONE

(www.danone.com)

Danone is a leading multi-local food and beverage company building on health-focused and fast-growing categories in three businesses: Essential Dairy & Plant-Based products, Waters and Specialized Nutrition. With its 'One Planet. One Health' frame of action, which considers the health of people and the planet as intimately interconnected, Danone aims to inspire healthier and more sustainable eating and drinking practices. To accelerate this food revolution and create superior, sustainable, profitable value for all its stakeholders, Danone has defined nine 2030 Goals, and paved the way as the first listed company to adopt the "Entreprise à Mission" status in France. With a purpose to bring health through food to as many people as possible, and corresponding social, societal and environmental objectives set out in its articles of association, Danone commits to operating in an efficient, responsible and inclusive manner, in line with the Sustainable Development Goals (SDGs) of the United Nations. By 2025, Danone aims to become one of the first multinational companies to obtain B Corp™ certification. With more than 100,000 employees, and products sold in over 120 markets, Danone generated €23.6 billion in sales in 2020. Danone's portfolio includes leading international brands (Actimel, Activia, Alpro, Aptamil, Danette, Danio, Danonino, evian, Nutricia, Nutrilon, Volvic, among others) as well as strong local and regional brands (including AQUA, Blédina, Bonafont, Cow & Gate, Horizon Organic, Mizone, Oikos, Prostokvashino, Silk, Vega). Listed on Euronext Paris and present on the OTCQX market via an ADR (American Depositary Receipt) program, Danone is a component stock of leading sustainability indexes including the ones managed by Vigeo Eiris and Sustainalytics, as well as the Ethibel Sustainability Index, the MSCI ESG Indexes, the FTSE4Good Index Series, Bloomberg Gender Equality Index, and the Access to Nutrition Index.



FOOD REVOLUTION BAROMETER

FUTERRA BLOOM

