# WHAT'S ON THE MENU

IN 2019

GLOBAL FOOD & BEVERAGE TRENDS



# A Taste of Food & Beverage Trends in 2019

There are over 500 Edelman team members working for clients globally in the food and beverage sector–building corporate reputation and brand narratives; communicating product innovations; and creating content to educate consumers, policymakers and other stakeholders.

Immersed in the food and beverage sector, the Edelman network—in countries from China and South Africa to Argentina and Canada—is at the forefront of the issues that shape the industry. Our direct access and deep knowledge inform the insights in this report.

As we compiled our 2019 Food & Beverage Trends, we were struck by both their diversity and interconnectivity.

Though each trend can stand on its own, taken together they reveal a sector in the midst of unprecedented change – and one that impacts our lives beyond the table.

Whether these trends are disruptive or an evolution of past movements, the overall story is clear: the future of the sector revolves around being healthier, more sustainable and more concerned about the impact of what we eat on the environment and society.

In 2018, the war on plastic straws reached critical mass and has had a lasting impact on sourcing and packaging innovation across the sector. For a long time, people have demanded better products and purposeful brands. Today, these demands have evolved: we care about issues that include how our foods impact water usage, the way restaurants treat their employees and how gender equality, diversity and inclusion are shaping the industry.

This year's trends fall into four major categories, outlined in the next slide and throughout the report.

EDELMAN + EDIBLE 2 WHAT'S ON THE MENU IN 2019

#### INTRODUCTION

CATEGORY 1



Nutrition and Wellbeing Reinvented While paleo, keto and other new diets continue to emerge, there is a clear evolution toward a more natural and holistic approach to nutrition and its role in overall wellbeing, beyond weight management. Some better-for-you trends include powders that transform the nutritional qualities of foods, alternative fats that replace traditional oils and the FODMAP diet. And personalized nutrition is starting to change the way the industry innovates.

CATEGORY 2



The Quest for New Flavors and Ingredients

The search for new experiences drives chefs and marketers to create unexpected food pairings and inspires consumers to explore innovative flavor combinations and textures. The tea category continues to expand, and items like the Chinese classic salted egg yolk is reinvented, finding its way into ice cream and even martinis.

C A T E G O R Y 3



Sustainability Takes Center Stage Plastic straws have been declared public enemy number 1, but is plastic really dead? And would a tax on meat help reduce consumption and lower carbon emissions? Governments and companies alike are grappling with these sustainability-related questions. As water shortages and precision agriculture shift the way we produce food, we're also changing the way we think about food waste, with byproducts now generating profits.

CATEGORY 4



**Food Shapes Society** 

People's demand for purposeful brands has ushered in a new wave of consumer claims. Companies are expected to revive their voices and take action on societal issues such as migration and diversity. Innovation is also driving changes in society. "Ghost restaurants" have the potential to recreate neighborhoods and stimulate entrepreneurship. Meanwhile, the concern about gender equality is shining a light on women in the kitchen.

#### OVERVIEW

Your DNA, Alternative TRENDS Superpowders Fodmap Your Diet **Butters & Oils** Unconventional Disappearing Salted Egg Yolk Tea Time Kokumi Pairings Plastic Precision Women Take Waste Into Water, The **Meat Tax** Agriculture **Ultimate Currency** Wealth the Lead Patriotic Ghost African Swine Autonomous Moral Food **Purchases** Delivery Restaurants Fever

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# Your DNA, Your Diet

### Personalized Nutrition takes center stage

What if our genetics could help us understand the optimal diet for our unique make-up? The fact is, they can. From trackers to DNA and microbiome tests, companies are developing more and more tools to create highly individualized nutrition programs that cater to personal tastes and dietary needs, based on DNA.

Consumers are showing interest, and the industry is responding with new categories of products that use the latest technology and data analytics to meet the demand for optimal health.

Some startups already offer personalized nutrition through DNA testing. Habit is a company that uses at-home testing of genetics, lifestyle, metabolism and individual goals to design personalized eating recommendations for consumers—and they've already received investments from Campbell's Soup Company.

In Japan, Nestlé is piloting a program that uses artificial intelligence, DNA testing and meal analytics to collect consumer data on diet and health.

The company then tailors food products to meet specific profiles -- a trend that has significant implications for the future of food-related R&D efforts. Brands like PepsiCo and Barilla are currently testing 3D food printing, another way personalized nutrition could become a reality.

While genetic-based diets are not free from criticism (several researchers believe DNA plays a minor role and tells only half the story when it comes to our nutrition habits), personalized nutrition is clearly catalyzing an evolution in the food industry.

What to Watch: It might take a while to reach the masses, but consumer demand for customization has steadily increased over the past decade. Personalized nutrition is a natural extension of customization—and one that will change the way food and beverage manufacturers not only make, but also market, their products. To succeed, companies will need to build trust by focusing on safety and security protocols that protect the private consumer data they need to develop these new products.



Some startups already offer personalized nutrition through DNA testing.

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# Superpowders



If you are what you eat, you're also what you add to what you eat.

#### Ancient remedies inspire food innovation

Nutritional supplementation and functional beverages are an established trend, but we're seeing the emergence of powders made from ancient herbs, roots and plants commonly used to promote healthier brain function, aging, better sleep, physical health and mental wellbeing.

From collagen to moon milk and adaptogenic plants, superfoods in powdered form are easy to incorporate into virtually any product, which explains their growing popularity and availability on store shelves and through subscription services.

The protein in collagen is thought to benefit skin, hair and muscles. In Japan, collagen-infused products range from noodles and candies to entire restaurants focused on collagen-enriched dining. And the U.S. is catching on. Collagen powders are popping up in smoothies, bottled water, coffee creamers—and even gin. In fact, in 2018, Google Trends tracked record high numbers for consumer interest in products containing collagen.

As consumers become more mindful of the mindbody connection, Ayurveda is also experiencing a revival. Powders used in traditional alternative medicine—typically ones made from adaptogenic roots like turmeric—are increasingly being infused into beverages to promote relaxation and alleviate stress.

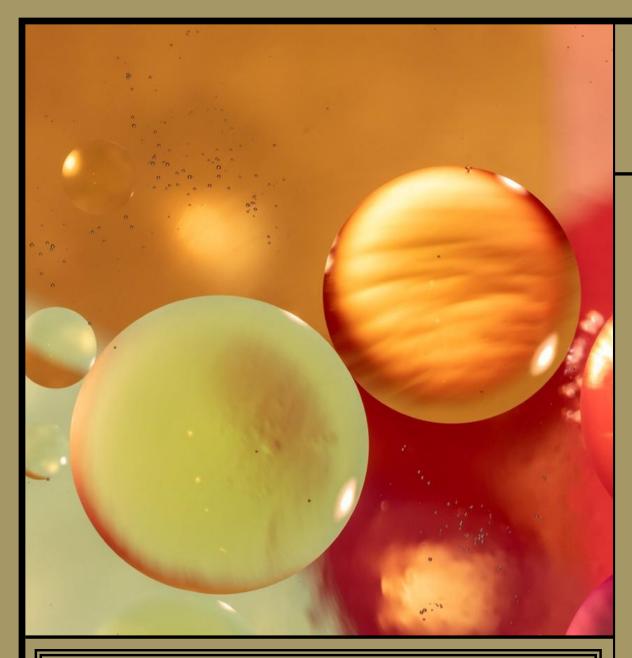
For sleep support, moon milk—a combination of warm milk and calming spices such as ashwagandha powder—has taken off and has even been featured on the Kellogg's NYC\* menu.

After all, if you are what you eat, you're also what you add to what you eat.

<u>What to Watch</u>: Food and drink manufacturers can embrace consumers' desire for healthier lifestyles and more natural ingredients by incorporating superfood powders into new products or by fortifying established products.

This trend is a convenient way for companies to deliver desired health benefits and peace of mind to consumers—and step into a new segment that only appears to be growing.

\*Edelman client



We also anticipate an increase in the debate around the regulatory definition of butter, following the discussion about what milk is. ÷ 3

# Alternative Butters & Oils

#### New fats fit most diets

No matter your diet or lifestyle, there are more choices in fats and oils than ever before.

There are now butters made from avocado, aquafaba, pumpkin seed and coconut. Flaxseed, chia and medium-chain triglycerides (MCT) oils are also readily available. And don't forget ghee.

Each of these fats offers its own benefits to consumers. Ghee, which originated in India, is highly clarified butter from which the milk solids have been removed, making it nearly lactose-free. Ghee is also non-perishable, and it's popular in recipes because of its high smoke point, which makes it ideal for cooking foods at high temperatures.

Flaxseeds have been a dietary staple for centuries and are packed with magnesium, thiamine, omega-3 fatty acids and lignans - nutrients linked with better sleep, brain health, mood regulation, and hormonal balance, respectively. Flaxseed oil can aid constipation and reduce inflammatory markers.

Newer to the scene is aquafaba, the leftover liquid found in canned chickpeas, which can be whipped into a creamy spread that's lower in fat than traditional butter.

What to Watch: With the popularity of keto, paleo and vegan diets, along with an overall shift in consumer mindsets about animal- and plant-based foods, we see no slowdown in the growth of alternative fats.

Companies selling traditional fats will have to ramp up efforts to educate consumers about the advantages of traditional kinds of butter and oils.

We also anticipate an increase in the debate around the regulatory definition of butter, following the discussion about what milk is. o Z

### **FODMAP**

### The non-diet for the gut

It's estimated that as many as 15% of the global population experiences symptoms associated with irritable bowel syndrome (IBS). Diet can often be the culprit of IBS, and a new set of foods are being said to blame: FODMAP.

FODMAP stands for Fermentable, Oligosaccharides, Disaccharides, Monosaccharides and Polyols—which are all types of sugars and short-chain carbohydrates found naturally in foods that can be poorly absorbed by the gut and may cause problems for people with IBS.

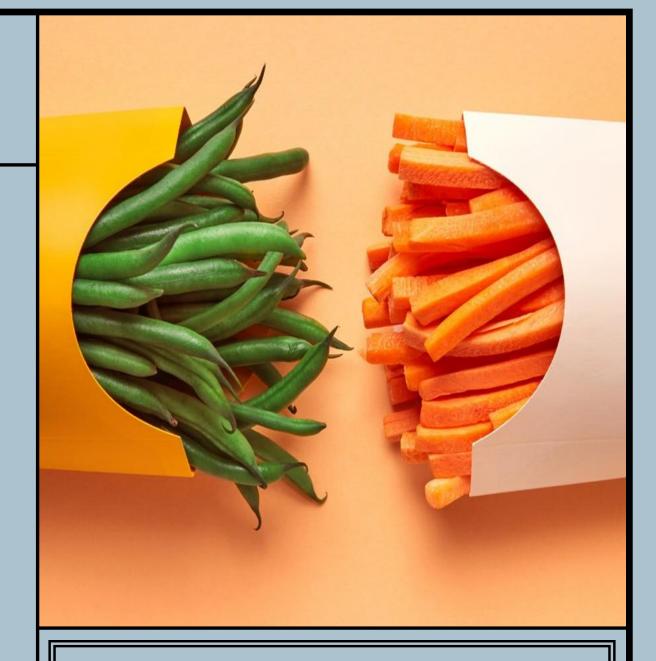
A wide range of foods have been defined as high in FODMAP, including wheat, rye, barley, chickpeas, kidney beans, mushrooms, nuts, apples, onions and cauliflower. Avoiding them can help digestion and reduce adverse symptoms associated with IBS, as well as longer-term irritable bowel disease (IBD) and non-celiac gluten intolerance.

More than a diet, this treatment plan consists of

an elimination and a reintroduction phase, to identify which categories of FODMAP can and cannot be tolerated -- and to what degree. With the help of a health professional, people can systematically reintroduce certain foods into their diet to learn about trigger symptoms and work toward a personalized eating plan.

Companies are getting on board to cater to the needs of an estimated 700 million consumers worldwide. In Australia, Kellogg has reformulated Special K and Corn Flakes to offer FODMAP-friendly versions. A number of other brands, including Green Valley Creamery and Prego Sauces, also offer certified products.

What to Watch: Expect even more food companies to pay attention to consumers' need for FODMAP-friendly products.



Companies are getting on board to cater to the needs of an estimated 700 million consumers worldwide.

The Quest for New Flavors and Ingredients



# Unconventional Pairings

### Contrasting flavors yield new food experiences

From familiar flavor combinations like salted caramel to bizarre newcomers like hot chicken wing Oreos, it sometimes seems like products are launched simply to out-weird each other and create buzz. But behavioral and physical science helps explain why these wacky mash-ups work and will continue to be on-trend.

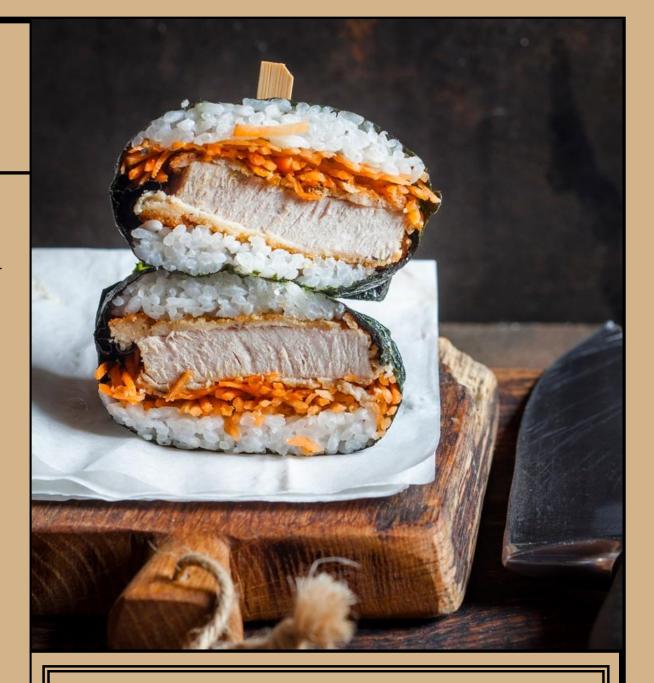
Flavor is based on stimulus from three different senses: taste, aroma and touch. About 70% of our perception is considered a retronasal smell, and only 25% - salty, bitter and sweet - comes through the tongue. Using contrasting flavors (e.g., sweet and salty/savory, fatty and acidic) is a way to heighten taste. This explains why vinegary desserts, olive oil gelatos, thyme panna cotta or taco filling-topped pizza can make our taste buds sing.

As scientists explain it, the obsession for food pairings also relies heavily on the power of anticipation.

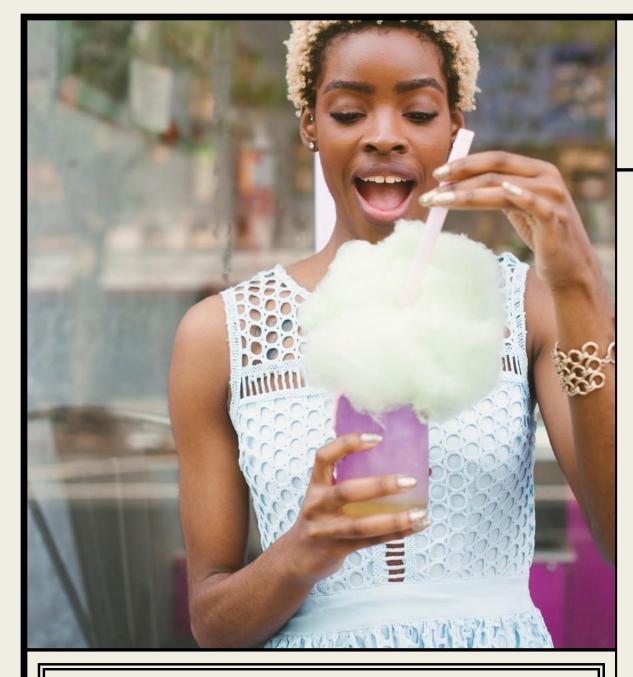
Our expectation determines our enjoyment, and our familiarity or affinity with a food spurs interest in completely new food combinations.

The rise of Taco Bell's "Dorito's Loco Taco" and Pringles' Thanksgiving-inspired chips are just a few ways brands have leaned into consumers' cravings.

What to Watch: Food brands and chefs should continue to develop new products and dishes based on consumers' inherent love and familiarity with a flavor or food—and match those with contrasting tastes. Brand partnerships and limited-time food offerings will further fuel consumer interest and news coverage.



Behavioral and physical science helps explain why these wacky mash-ups work.



Tea flavors now go beyond the original taste of the tea leaves.

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### Tea Time

### New global flavors win consumers' preference

The widely recognized health benefits of tea have long driven consumer experimentation with this ancient and beloved beverage, but we've identified several additional characteristics that contribute to the growing popularity of the tea category around the world.

Global tea consumption is predicted to keep rising over the next decade, bringing with it new flavors, textures and ways to sip. This upward trajectory can be attributed to robust demand in China, India and other emerging economies, where tea is both delighting drinkers and creating new rural income opportunities and improving food security in teaproducing countries.

Tea's health halo is projected to be the key driver of future global growth. With growth comes creativity, so we can expect to see new iterations of traditional teas, such as unique herbal, fruit and even vegetable flavors.

Tea flavors now go beyond the original taste of the tea leaves. From the markets of Taiwan come two of

the largest global trends—the ubiquitous bubble tea, along with cheese tea—a beverage topped with a thick cream cheese/whipped cream—like mixture.

Yerba mate, a tea derived from holly, is consumed in a six-to-one ratio over coffee in South America, and its popularity is rapidly spreading across the globe. In Taiwan, teas are made with pink cactus leaves and apple cider vinegar. And we're seeing countless applications of tea-infused cocktails.

What to Watch: Tea's healthy reputation gives it every right to compete in the functional beverage category. To keep the momentum, brands will need to reinforce tea's strengths as part of a variety of drinks. Taste is top priority in tea consumption, so there's a lot of room for more indulgent innovations of the beverage.

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# Salted Egg Yolk

### New uses hatching worldwide

Asia's influence on global food and beverage trends has increased steadily over the past decade, and 2019 belongs to a Chinese classic–the salted egg yolk.

Salted egg yolks, typically made by brining duck eggs in salt or encrusting them in salted charcoal, were originally developed to prolong the shelf life of eggs before refrigeration became mainstream. The process solidifies the liquid yolk, resulting in a uniquely salty, umami-rich ingredient that can be grated and used as a seasoning for almost any dish or recipe.

Although it's deeply rooted in Chinese cuisine, salted egg yolks have become a pan-Asian phenomenon, with chefs and home cooks alike using them to add a salty garnish to steamed pork cakes, rich depth to veggie stir-fries or unique savory flavors to traditional mooncakes (a popular dessert).

Salted egg yolk applications are also increasingly visible in industrial foodservice and packaged foods like potato chips, crispy fish skins, ice creams and even martinis. In Singapore just last year, Knorr launched Golden Salted Egg Powder to cater to home cooks. The salt-cured egg yolk practice is also becoming more common in the U.S. and Europe.

What to watch: As uses for salted egg yolk are reinvented across Asia, expect popular food brands to take notice and formulate ways to bring this unique flavor-building ingredient to a wider global audience.



Although it's deeply rooted in Chinese cuisine, salted egg yolks have become a pan-Asian phenomenon.



Food scientists have been studying kokumi in hopes of exploiting their enhancement qualities to create healthier, lower-salt or lower-sugar versions of foods that still taste good.

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### Kokumi

### A fascinating flavor profile emerges

Fast on the heels of the global recognition of umami (or savoriness) as the fifth basic taste (the first four are sweet, salty, bitter and sour), a sixth taste concept that food scientists are calling "kokumi" is new to the scene.

Japanese flavor scientists describe kokumi as the perfect balance of all five basic tastes on the tongue. Still somewhat of a mystery, kokumi are compounds that supplement, enhance or modify the original taste of a food without having a characteristic taste or aroma of their own. A food attribute rather than a taste, kokumi describes a certain type of mouthfeel or heartiness.

Food scientists have been studying kokumi in hopes of exploiting their enhancement qualities to create healthier, lower-salt or lower-sugar versions of foods that still taste good.

What to watch: Though consumers report wanting healthier food options, flavor will always be the number one purchase driverand let's face it, the common perception is that healthy foods aren't always the tastiest.

Kokumi could enable food product developers to make great-tasting, healthy food options that consumers will actually enjoy. Sustainability Takes
Center Stage



Pressure is mounting on the food industry to seriously curtail its use of plastic.

# Disappearing Plastic

#### The last straw

With the UN's declaration of war on ocean plastic — and social media buzzing with heartbreaking photos of turtles tortured by drinking straws – pressure is mounting on the food industry to seriously curtail its use of plastic.

In 2018, bans on plastic straws generated a lot of conversation—and a fair share of controversy, as many people with disabilities rely on straws.

Starbucks vowed to get its plastic sippers out of stores by 2020, and many others have followed suit-including not only restaurants but also entire cities like Seattle and states like California.

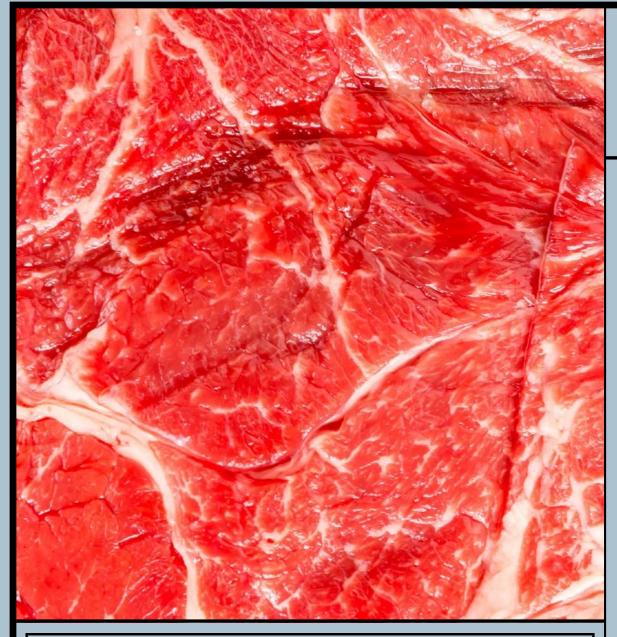
Proposals in the UK and throughout Europe are more comprehensive and could eliminate nearly every kind of plastic in restaurants and businesses, from straws to cutlery, cups and carry-out containers.

In 2015, each of the world's 7.6 billion people used an average of 88 pounds (40 kilograms) of plastic. Most of that turns to trash after a single use, and 91% isn't biodegradable and winds up sitting in a landfill for hundreds of years.

Danone, Nestlé, Suntory and other beverage companies have partnered to form the Future of Plastic Packaging Group and set a vision to eliminate plastic packaging in landfills. Unilever recently launched its first bottle made from plastic waste collected from beaches along the Brazilian coast.

The industry has an unprecedented opportunity to take the lead in addressing the challenge of plastic waste. For this to happen, a number of issues need to be addressed—including whether bio-based materials can be used at scale for beverages, how biodegradable materials would fit into existing recycling systems and whether it's feasible for bottled water and soft drinks to be delivered in any way other than single-use containers.

<u>What to Watch</u>: Consumers will pressure companies to take ownership of their impact on the environment. Expect to see an increase in products sold in bulk or packaged in biodegradable, compostable and sustainable options, such as containers made from crab and shrimp peels, seaweed, algae, kombucha and agricultural waste.



Advocates believe a meat tax could reduce consumption of animal-based foods.

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### Meat Tax

### Tax activists have a beef with meat's carbon footprint

Scientists and public health experts are increasingly linking planetary health to human health. Sitting in the crosshairs of attention: meat production and consumption.

The World Resources Institute projects an 82% increase in global meat consumption between 2006 and 2050. As the middle class grows in developing nations and meat consumption consequently rises, some policymakers are considering a tax intended to slow the trend, defray rising healthcare costs and offset environmental impacts.

The Animal Investment Risk and Return initiative, an investor network that raises awareness of the material risks and opportunities caused by intensive livestock production, predicts it's "highly probable" that governments will star taxing meat in the medium- to long-term future.

Governments are caught between having the responsibility to act on climate change and fearing the repercussions of being perceived as a "nanny state" if they interfere in people's diets. But in places like the Netherlands, there's already a recommendation to reduce the proportion of animal protein in people's diets from 60% to no more than 40% by 2030. Similar pressure is mounting in Denmark and Germany.

What to watch: Expect sustainable nutrition and public policy to be a hot topic among key players who shape the way we eat, including foodservice providers, retailers, government and producers. With the rapid rise in meat demand, it will be necessary to think about how traditional livestock, plant-based alternatives and cell-cultured meats can each play a role in filling demand—while also balancing consumer preferences, economic opportunity and the environment.

# Precision Agriculture

### Silicon Valley's next frontier? The farm.

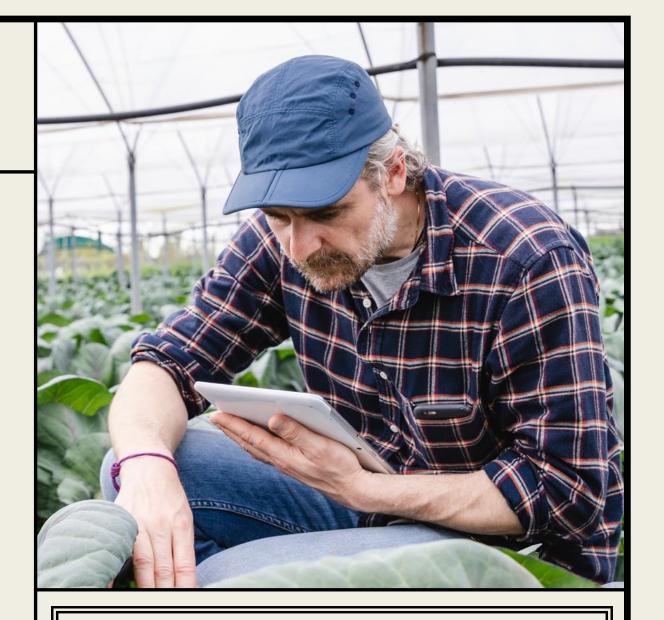
The need to feed nearly 10 billion people by 2050 while maximizing finite land and water resources has created a seismic shift in food production investment and innovation from all ideological camps. The result is exciting progress and unexpected bedfellows.

As the Agriculture Technology (AgTech) sector continues to explode, people will become more familiar with a modern method of food production that combines data analytics, GPS-GIS technology, soil sciences and sensor technology with the traditional tenets of agronomy. And as people become more interested in the inputs (water, feed and energy) involved in producing the foods they buy, consumers may turn to producers and companies who are embracing AgTech to increase productivity and raise the ceiling for environmentally friendly practices.

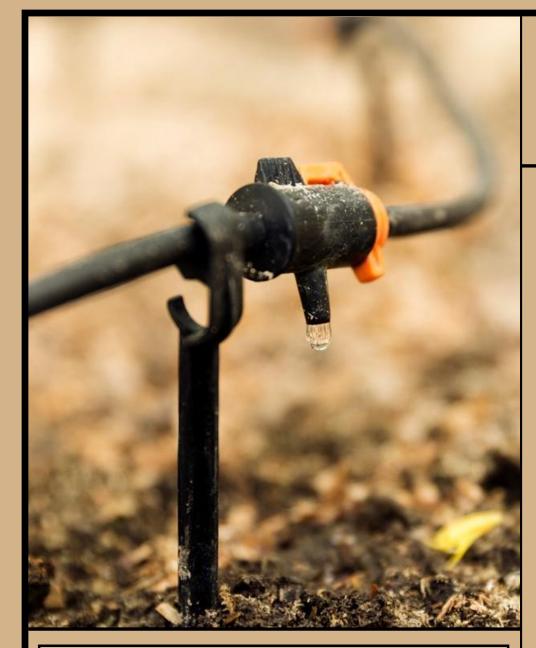
While helping people understand the benefits of biotechnology in food has been a decades-long challenge, the learning curve for conveying the benefits of technology that goes beyond the farm –like drones, GPS and robotics–may be much lower.

AgTech investment clusters are emerging in Silicon Valley and throughout the Midwest-and the South Dakota State University is the first school in the U.S. to offer a degree in precision agriculture. Imagine a produce section in the grocery store that touts not only the farmer who grew your food but also the way he used satellite imagery to reduce its carbon footprint.

What to Watch: Look for massive investment in AgTech and expect to see divergent ideologies come together as food producers see lasting proof of concept and share information.



Consumers may turn to producers and companies who are embracing AgTech to increase productivity and raise the ceiling for environmentally friendly practices.



As water supplies dwindle, we could see certain foods become more expensive and less available.

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# Water, the Ultimate Currency

#### When water becomes less accessible, so does food

As the notion of sustainability grows beyond food miles and greenhouse gas emissions, look for water usage to become a key indicator of which foods are better for the planet.

Critical food supply regions have already experienced record-breaking droughts. South Africa has seen its fruit production decrease by 6% per year. The drought in California, which harvests about 25% of the U.S. food supply, could affect the country's access to fruits, vegetables and nuts. In Australia, beef is becoming more expensive, farms struggle to fill demand from cereal companies and winemakers are adapting growing methods and experimenting with blends whose taste isn't affected by the drought.

A product's water footprint is not easy to understand. The meat industry is widely criticized for using too much water, but chocolate actually requires more water to make. Almonds are now also on the radar, as production for export has encouraged farmers to replace annual crops like tomatoes and melons for higher-revenue nut orchards.

But once a field is planted with almonds or other trees, it requires year-round water to maintain—unlike annual crops, where fields can lie fallow in a drought year. In arid climates like California's Central Valley, nut and fruit ranchers rely on groundwater, which is being pumped at unsustainable rates. Shrinking groundwater reserves are also affecting important agricultural regions such as India, China and Northern Africa.

What to watch: Expect consumers to pay more attention to water usage. Simultaneously, as water supplies dwindle, we could see certain foods become more expensive and less available. On the solution spectrum, we anticipate investments in efficient practices like drip irrigation on crops including rice and almonds, which historically use flood irrigation.

We also expect to see the blending of recycled wastewater for irrigation and other non-potable uses, along with drones with infrared cameras and soil sensors that help farmers use water efficiently to attain optimal soil moisture and temperatures for irrigation.

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### Waste Into Wealth

### **New Ways to Repurpose Food**

The concern around food trends and waste has been a topic in the food and beverage sector for years. And there's a sharpening focus on raising awareness for all stakeholders and on developing ways to fight what seems to be an intrinsic problem for the industry.

The most recent trends point to solutions savvy entrepreneurs have created to help people, the planet and, unapologetically, their own wallets.

These solutions are present in every stage of the supply chain and include: turning avocado pits into compostable cutlery, using fermentable sugars for bioplastic packaging, making mushroom waste a taste enhancer and using almond waste to produce sugar or beer.

A Danish app called Too Good to Go connects restaurants with consumers interested in buying excess food for less. Karma, a similar Swedish service, has created a smart refrigerator, in partnership with Electrolux. Integrating the fridge with Karma's app allows supermarkets to sell food that's not purchased before the end of the working day to consumers at drastically reduced prices.

Positioned as "Beauty in the Forgotten," Tyson Foods debuted Yappa! protein crisps made with chicken breast trim, spent grain from beer brewers and vegetable pulp rescued from juice stores. In the UK, Toast Ale makes beer with surplus bread, and Tesco sells juices made from fruit and vegetables that fall outside of their fresh produce specifications. In Spain, so-called "trash cooking" is a top trend. The concept of 'throwing nothing away' proposes to make our palates accept what we'd normally consider garbage.

Apeel Sciences developed an edible "peel" made from farmplant waste that can be sprayed on fresh produce to naturally slow water loss and oxidation, the factors that cause spoilage. That has led to avocados, strawberries and other produce with a far longer shelf life.

<u>What to Watch</u>: Expect even more innovative ways to use waste -- either as an ingredient, packaging (to replace plastic, for example) or energy generator. We also anticipate the continued surge of startups focused on original solutions, along with increased investment from current food and beverage industry players, mostly focused on moves that pay off financially.



"The most recent trends point to solutions savvy entrepreneurs have created to help people, the planet and, unapologetically, their own wallets.





An overdue spotlight was placed on gender inequity issues in the food industry in 2018.



### Women Take the Lead

#### From the kitchen to the boardroom, women fight for equality

Women make the majority of food-purchasing decisions In the U.S. (and much of the world), and they also represent 49% of the entry-level workforce in the food and culinary industry. Yet only 23% hold C-suite positions—and there are only 24 female CEOs on the list of Fortune 500 companies, just 5% of the total. Of that 5%, only a few are in the food and beverage sector—including Michele Buck at Hershey and Joey Wat at Yum China.

According to the U.S. National Restaurant Association, women represent only 19% of chefs and 7% of head chefs—and female chefs earn 28% less than their male counterparts.

Statistics like these are comparable, if not a bit higher, than in many other countries across the globe.

An overdue spotlight was placed on gender inequity issues in the food industry in 2018–including sexual harassment, equal pay, paid parental leave and career advancement. Though small positive advancements have been made,

there's still room for improvement. In 2018, Land O' Lakes named Beth Ford as its first female CEO in 2018. She's the first openly gay woman to run a Fortune 500 company. Another first: the San Pellegrino Young Chef competition included four female chefs in its judging panel of seven. And the World's 50 Best List announced its voting academy will be gender-balanced in 2019. And the iconic James Beard Foundation announced a Women's Culinary Leadership program.

While only 33% of restaurants in the U.S. are majority-owned by women, the number has grown 40% in the last five years.

What to Watch: Expect even more attention on gender equality. Any business taking the lead to create and support a more equitable workplace will see benefits in meeting the socially responsible "triple bottom line" -- good for business, good for individuals, and good for the world at large.

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### Patriotic Purchases

#### When the 'made in' label influences choice

Buying local isn't new, but we continue to see increased interest in products that are grown and manufactured close to home, as consumers' appetite for fresher, seasonal food endures—demonstrating their interest in supporting local economies and helping to reduce environmental impact.

We also see an increase in the appreciation of traditional and authentic cuisines, recipes or cooking techniques. From Indonesia to Colombia, consumers are becoming more interested in traditional, old-school foods—sometimes elevated with modern flavors and packaging. In Singapore, more restaurants and fast food chains are creating international dishes infused with locally inspired flavors. The result? Foods like nasi lemak burgers and durian-flavored ice creams.

National pride has been amplified as political and economic tensions rise across the globe: U.S. tariffs on industrial goods have prompted the EU, Mexico, Canada and China to retaliate with their own tariffs on U.S. food and beverages.

The results are immediate: in just six months, tariffs have wiped out years of steady sales growth for U.S. Bourbon in Western Europe.

In Canada, consumers are proactively showing their love of country by purchasing domestic products, and food conglomerates are highlighting their country of production, from French's ketchup to Hellmann's mayonnaise.

In China sales of Apple's iPhones have dipped, as consumers focus on buying Chinese goods. If trade tensions continue, food and beverage products may face changing consumer sentiment as well.

What to Watch: Brands have an opportunity to incorporate national flavors into international products and menus, bringing their products closer to local preferences. At the same time, while official boycotts are unlikely, food and beverage manufacturers should expect consumers to pay more attention to the source of their products—particularly if those products are iconic American brands.

The key question is whether consumers are reacting to increased tariffs when they buy local or if nationalist sentiment plays the bigger role. Either way, the longer trade tensions last, the longer it may take to reclaim hearts, minds and market share.



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## Autonomous Delivery

### Is flying food the next frontier?

Once a popular theme that existed only in sci-fi scenarios, robots, drones and self-driving vehicles are becoming a reality in countries around the world. And, once again, technology is rapidly outpacing society's ability to regulate it.

In Australia, the company Wing will launch commercial drone delivery service in 2019 to carry small packages—including cups of coffee—to homes within 5 kilometers of the company's base.

In the U.S., 10 companies have been granted permission to begin drone flights. Uber will start testing in San Diego and plans to launch commercial operations by 2021. On the ground, Kroger announced a partnership with self-driving vehicle creator Nuro for trials in Arizona. And in Dallas, delivery robots are being used in limited tests.

Iceland launched its first drone delivery service in 2017 – reaching half the capital city of Reykjavik – in a joint venture between the country's top online marketplace, AHA, and the Israeli tech firm Flytrex.

In China, Alibaba's online meal service Ele.me has been authorized to use drones to deliver orders in Shanghai's Jinshan Industrial Park. In Japan, there are plans to allow flights as early as 2020.

In addition to offering convenience and potential cost savings for operators, drones and automated trucks could help solve delivery issues in less populated rural areas. They could also offer a way for governments to reach people during a natural disaster, getting to areas inaccessible to humans.

What to watch: Expect to see more companies investing in these solutions. If autonomous delivery takes off and proves scalable, look for a shift not only in the foodservice and retail industry, but also for municipalities that will have to restructure laws and regulations.



Robots, drones and self-driving vehicles are becoming a reality in countries around the world.



Given the popularity of food delivery in major cities, this concept of "dark kitchens" is expanding rapidly.

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### Ghost Restaurants

### Reviving a dying industry

A new restaurant concept is taking the foodservice industry by storm, but it's unlikely you'll ever see one. Virtual restaurants—or "ghost restaurants"—are delivery-only operations that allow eateries to diversify, expand and experiment with little overhead and potentially big rewards.

Using more affordable real estate and a lower cost of operation, ghost restaurants often share kitchen space with multiple concepts or brands and cook for customers whose experiences exist entirely online—that is, until the food arrives at their door.

Given the popularity of food delivery in major cities, this concept of "dark kitchens" is expanding rapidly. Key players like UK-based Deliveroo Editions and Foodpanda in Berlin are leading this strategy to reduce capital expenditures and provide great food for a good value. In India, Faasos, Box8, FreshMenu and Biryani By Kilo have more than 10-20 outlets each.

UberEats takes a different but related approach, sharing data instead of kitchen space. When its virtual restaurant team notices supply gaps in any given neighborhood—large or small—it contacts existing brick and mortars in the area and encourages them to join the at-home ordering bandwagon to capture incremental revenue.

What to watch: While it's already a reality in some countries, the "ghost restaurant" business model provides tremendous opportunity in regions like Latin America and Asia. It has the potential to turn the traditionally thin-margined restaurant business on its head, as restaurants might consider the potential of kitchen-only stores, along with menu revisions based on data and transportability - insights that could eventually transform the industry.

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### African Swine Fever

### The impact of global outbreaks threatening the food supply

African Swine Fever (ASF), a disease that's deadly to pigs but not harmful to people, has been creeping across Europe for the past several years and is now spreading swiftly through China.

In Europe, the outbreak started in 2014, most likely transmitted by wild pigs moving into Eastern Europe from Russia. Hundreds of thousands of animals have already been culled.

China, with its \$128 billion pork industry, is home to half the world's population of pigs. Pork represents two-thirds of the nation's meat consumption and is such an important staple that the government keeps a strategic reserve of frozen meat. The current spread of ASF is difficult to control, as it can be transported in fresh or frozen meat and can even hitch a ride on clothing and soil.

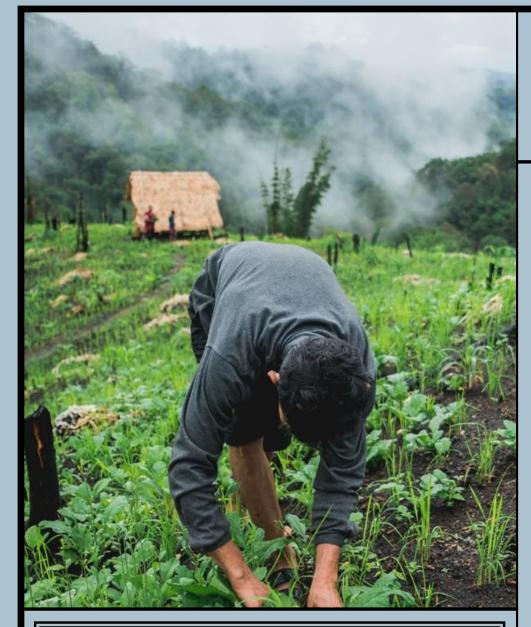
As China struggles to contain the disease and tariffs on U.S. pork disrupt the import market, China faces difficult questions about how to ensure a sufficient supply and affordable prices for Chinese consumers. China will likely turn to the EU, Brazil and Canada to fill demand, but outbreaks in other regions could deepen the crisis.

ASF is just the latest example of an animal disease disrupting global food supplies. Multiple outbreaks of avian flu have impacted poultry supplies over the last decade, and the global beef trade has still not fully recovered from the discovery of BSE (more commonly known as "mad cow disease") in 2003.

What to Watch: The rapid spread of animal diseases highlights both the vulnerability and opportunity created by increasing global food trade. On one hand, look for countries to tighten border protocols to protect farmers and consumers; on the other hand, expect countries to diversify their sources of animal products to ensure they have adequate food supplies even when disease strikes in a particular region.



ASF is just the latest example of an animal disease disrupting global food supplies.



Consumers are paying more attention to labor practices, diversity in the workplace and sexual harassment accusations.

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### Moral Food

### Belief-driven buyers impact business

More than ever, food choices are made through the lens of ethics. Issues abound throughout the food chain -- from labor, immigration, access, obesity and malnutrition to water use, biodiversity and soil health.

Did you feel guilty the last time you used a plastic straw? Did you consider honeybees when you bought sweetened Cheerios? How did you feel about throwing away the neglected, rotting produce from your fridge?

According to the Edelman 2018 Earned Brand study, 54% of global consumers believe that it's easier to get brands than the government to address social problems. These expectations can translate to real purchasing power, as consumer demands become catalysts for change.

Priorities vary from country to country, but consumers in all age groups, income levels and races are looking to brands to be ethical. In urban China, consumers look to brands to reduce waste and ensure animal welfare. In the U.S., wages have become a hot-button issue, as six of the eight worst-paying jobs involve food.

Thoughtful purchasing decisions have started to become more human-centric. Consumers are paying more attention to labor practices, diversity in the workplace and sexual harassment accusations.

The boldest companies have taken a high-profile stand to fight racism, support refugees and oppose immigration bans.

What to Watch: It can be tempting to ignore food ethics, and it seems that many people prefer to put their head in the sand. Case in point: restaurants helmed by alleged sexual harassers are still packed.

But a growing focus on integrity will force companies to undergo a transformation on an unprecedented scale, as there is evidence that this will affect returns over the long term. APPENDIX ......

#### PAST TRENDS

2018

- 1. Tribal Eating
- 2. Innovate or Evaporate
- 3. Endangered Foods
- 4. Going Beyond Taste
- 5. Follow Your Gut
- 6. Plant-Based Palates
- 7. Healthy C(M)ocktails
- 8. Demand for Data
- 9. Whole Food Feasting
- 10. Functional Mushrooms
- 11. Malls to Halls
- 12. Going Solo
- 13. Flower Power
- 14. Purposeful Packaging
- 15. Traceability Transparency & Trust

2 0 1 7

- 1. H20 2.0
- 2. Under the Sea
- 3. All Hail Halal
- 4. E-Commerce Revolution
- 5. Cheers to Our Wellness
- 6. War Against Waste
- 7. Sipping on Artisanal
- 8. Culinary Cannabis
- 9. Wipe the Label Clean
- 10. Aspirational Agriculture
- 11. Everything's Edible
- 12. Coffee Culture Unfiltered
- 13. Automation à la Carte
- 14. Here Come Hero Foods
- 15. VR: Taste the Rainbow

2016

- 1. Authenticity: The New Essential Ingredient
- 2. Insect Interest
- 3. Climate Chang[ing] Behavior
- 4. Tech Talk
- 5. Waste Not, Want Not
- 6. It's Not Just The Planet That's Heating Up
- 7. Gourmet For All
- 8. Big Food: Big Expectations
- 9. Age of the Recipe Hack
- 10. Demand for Delivery
- 1. Food Safety: Tough to Trust
- 2. Restaurants Take Control
- 13. Veggies Front & Center
- 14. Hunger for Heritage
- 15. Multisensory is Multipurpose
- 16. Gen Z Rising

2 0 1 5

- 1. Progressive Proteins
- 2. Food Writers on the Rise
- Putting Fresh Food Back on the Menu
- 4. Soda in the Center of the Storm
- 5. Craving Customization
- 6. The Food-Tech Intersection
- 7. Policy on the Plate
- 8. Striving for Wholeness
- 9. Fermentation Fever
- 10. Multicultural goes Mainstream
- 11. Purposeful Snacking
- 12. Craft Continues
- 13. Frozen Food Moves Beyond the TV Tray
- 14. Three Little Claims
- 15. Private Label: A Strategic Weapon

