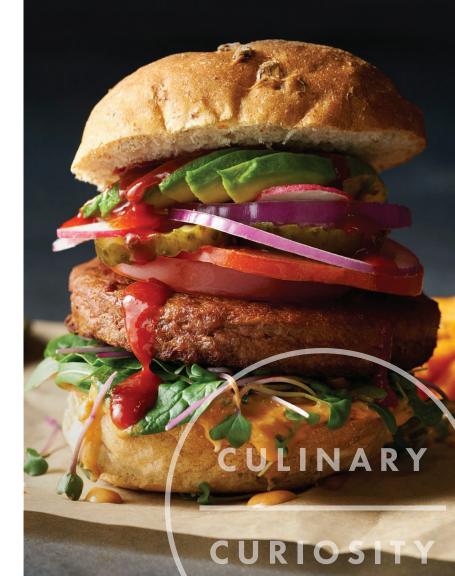


2021 FOOD+ BEVERAGE TRENDS

VOL. 12





INTRODUCTION

This marks the 12th year that we have been predicting the food & beverage trends that are changing our industry. Our team spends hundreds of hours engaged in primary and secondary research, reading as many studies and articles as we can and talking to many of our industry contacts.

For the record, we've done well for ourselves: We've been talking about ideas, such as corporate sustainability and alternative proteins, since 2009 and have been recognized by Fast Company and Forbes, among others.

Our trends consist of four macrotrends and two to three supporting microtrends. Each microtrend ladders up to a macrotrend: the "big ideas" shaping the future of food & beverage. We're excited to share what we believe will be taking place, and eating, drinking and enjoying for the next few years.

Michael Payone

TABLE OF CONTENTS

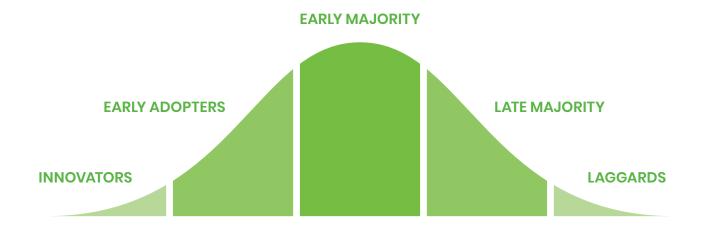
ADOPTION CURVE___3

- 1.0 ESTABLISHING EQUITY ____4
- 2.0 CLIMATE DIETS___15
- 3.0 DIGITIZING SUPPLY___26
- **4.0** PROTEIN-PACKED PHYTONUTRIENTS **34**



ADOPTION CURVE

We grade our trends against the adoption curve. In order to ensure that we stay on the cutting edge of all things food & beverage, we look for trends that fall within the first two stages; however, within the next three to five years, we expect them to shift into the next two to three segments as they are adopted by mainstream consumers and businesses.



MACROTRENDS

1.0 ESTABLISHING EQUITY

1.1 INCLUSIVE NUTRITION1.2 BENEVOLENT BENEFACTORS1.3 SERVING THE UNDERSERVED

2.0 CLIMATE DIETS

3.0 DIGITIZING SUPPLY

4.0 PROTEIN-PACKED PHYTONUTRIENTS







Establishing Equity

Generation Z and Millennials are calling for change: increase diversity and establish equity.

Outcry — ranging from #MeToo to #BlackLivesMatter — is pushing for greater representation in the food & beverage industry by the most diverse generations to date.



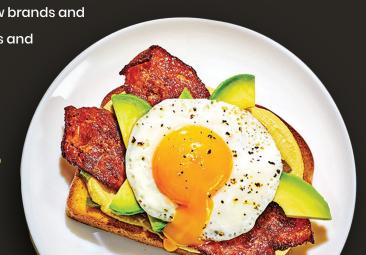


Everything from public spaces to interior design to transportation now incorporates some aspect of well-being; according to research from the Global Wellness Institute (GWI), the global wellness industry is growing nearly twice as fast as the global economy.

Wellness is no longer an exclusive, top-shelf luxury reserved for those who can afford it.

As the wellness industry continues to expand, new brands and platforms are eliminating prohibitive cost barriers and developing luxury offerings for the mass market.

AFFORDABLE, HIGH-QUALITY INGREDIENTS





1.1 INCLUSIVE NUTRITION

Evolution_18

Inclusive nutrition now extends to high-quality nutritional supplements at approachable prices,

thanks to Evolution_18, a collagen supplements line from Bobbi Brown, global cosmetics

entrepreneur. The wellness supplements, launched in over 1,500 of Walmart's U.S. stores and online in April 2019, include gummies, teas, pills and powders.





1.1 INCLUSIVE NUTRITION

Happy Family Organics

Functional food company Happy Family Organics

develops organic baby and toddler snacks — along with nutritional supplements for mothers — and aims to empower parents to make educated decisions around feeding their children through distribution of educational materials, ongoing nutrition-education partnerships and a free, online expert chat service with registered dietitians.





1.1 INCLUSIVE NUTRITION

Good & Gather

Target launched its own grocery brand, Good & Gather, dedicated to foods made without artificial flavors and sweeteners, synthetic colors, and high-fructose corn syrup. The line contains 2,000

total items, and Target expects Good & Gather to become a multibilliondollar brand.



1.2 Benevolent Benefactors

Big changes are coming for the food & beverage industry: According to experts, close to one-third of self-described small independent farmers could go bankrupt this year, and one in every four U.S. restaurants will go out of business. Big brands and incubators are stepping in and offering funding to support fragile businesses.



SUPPORTING FOOD PROVIDERS



1.2 BENEVOLENT BENEFACTORS

Mercato Partners & Savory

Mercato Partners' new investment fund — Savory — provides emerging restaurateurs with a host of services — everything from financial support to supply chain technologies.





1.2 BENEVOLENT BENEFACTORS

Walmart Marketplace & Shopify

Walmart partnered with Shopify to launch Walmart
Marketplace, where it provides complimentary product
offerings to small and





1.3 Serving the Underserved

The past few years – 2020 in particular – forced the food & beverage industry to take a long, hard look at its ingrained attitude of exclusivity and tolerance; the #MeToo movement emerged

against high-profile restaurateurs, as has the #BlackLivesMatter movement, pushing back against brands' empty social media sentiment and actions.

in the culinary world with accusations

RAISE your VOICE

ADVOCATION AND INCLUSIVITY



1.3 SERVING THE UNDERSERVED

Costco & Black Economic Development Fund

Costco's new commitment to the Black Economic

Development Fund — from New York-based nonprofit

Local Initiatives Support Corp. (LISC) — aims to close the

racial wealth gap by encouraging corporations to

make investments designed to improve economic



MACROTRENDS

1.0 ESTABLISHING EQUITY

2.0 CLIMATE DIETS

2.1 CRAVING CARBON NEUTRAL

2.2 CITIES REIMAGINED

2.3 MAN-MADE NATURE

3.0 DIGITIZING SUPPLY

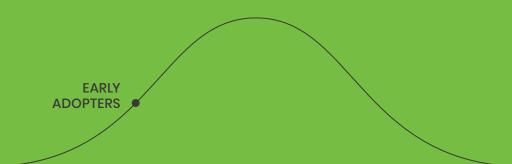
4.0 PROTEIN-PACKED PHYTONUTRIENTS





Climate Diets

Urbantech exploded over the past five years; investment averaged \$65 billion a year in 2018 and 2019, and continues to grow year over year at a similar pace as planners look to develop and integrate sustainable alternatives to our current urban spaces.

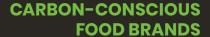


2.1 Craving Carbon Neutral

As industries struggle to contend with new calls for environmentally sustainable practices, projects from across industries prove our future is rooted in conscious contributions to a carbon-positive future. These carbon-positive practices are becoming more than just a trust-building exercise to earn consumer loyalty — they are evolving into a modern business imperative. Almost two-thirds (64 percent) of all

consumers state that they want to reduce

their carbon footprint.





2.1 CRAVING CARBON NEUTRAL

Quorn Foods

Quorn Foods announced carbon labeling on their food products by 2021; the new labels position carbon emissions as a health consideration, listing carbon footprint calculations alongside nutritional information to communicate the environmental impact associated with different food items.





2.1 CRAVING CARBON NEUTRAL

Horizon Organic

Horizon Organic aims to be the first national dairy

positive across its full supply chain, and will work with more than 600 direct farmer partners to reach its goal.

This includes launching the Horizon Farmer Investment Fund and certification through the Forest Stewardship Council.



2.2 Cities Reimagined

According to the U.N. Department of Economic and Social Affairs, by 2050, two-thirds of the global population (67 percent) will live in cities. As these spaces grow, companies and consumers need to rethink how they build — and use — their space.

CREATING SUSTAINABLE FOOD SOURCES





2.2 CITIES REIMAGINED

Goldsmith & Floating Poultry Farm

Designed by Dutch architectural firm Goldsmith, the Floating Poultry Farm can house up to 7,000

hens on a top floor above the water's surface, and fulfills a number of other essential functions, including egg processing and feed production.





2.2 CITIES REIMAGINED

Sunset Park Farm

Sunset Park Farm represents the third rooftop farm built and operated by Brooklyn Grange, which runs three rooftop soil farms in New York City, growing more than 36 metric tons of organic produce a year.



2.3 Man-Made Nature

In 2019, beekeepers in the U.S. lost 50 billion bees, or nearly 38% of their colonies — a higher rate of loss than any year to date. A long list of problems plagues bees, from increased use of pesticides and loss of natural habitat to viruses. To curb further population loss, companies are looking at new technologies as a potential solution.





2.3 MAN-MADE NATURE

Edete

Israeli start-up Edete harvests flowers and pollinates almond trees using tree-shaking machines to mimic the function of bees. Edete sees its future in California, where it can assist farmers in doubling current pollination efforts.





2.3 MAN-MADE NATURE

GIANT

The GIANT Company announced completion of a seven-acre pollinator-friendly solar field at its corporate headquarters in Carlisle — the first of its kind undertaken by a grocery retailer. The space contributes to both clean energy and support for bees and other pollinators that are essential to the agriculture industry.

MACROTRENDS

1.0 ESTABLISHING EQUITY

2.0 CLIMATE DIETS

3.0 DIGITIZING SUPPLY

3.1 MICROFULFILLMENT GOES MACRO
3.2 FULFILLMENT ECOSYSTEMS

4.0 PROTEIN-PACKED PHYTONUTRIENTS







The transformation of e-commerce and curbside pickup from auxiliary to essential activity remains one of the standout stories of 2020. The shifts have led struggling big-box stores to reconsider the use of their real estate and transform underperforming retail properties into fulfillment centers.

3.1 Microfulfillment Goes Macro

Automation technology represents a central component in the explosion of e-commerce, leaving supermarkets to explore alternative fulfillment options. Microfulfillment represents a standout solution: This technology offers grocers the ability to pick orders 10 times faster and more efficiently than human workers while maintaining stores' ability to serve customers close to their homes.

SHOPPING CONVENIENCE





3.1 MICROFULFILLMENT GOES MACRO

H-E-B & Swisslog

H-E-B partnered with Swisslog to develop smaller, modular microfulfillment centers in or near its supermarkets. The AutoStore system groups and stacks product bins, learning as it goes; the system identifies products with the highest demand and places the bins that hold them in the most

accessible spots to accelerate picking times.





3.1 MICROFULFILLMENT GOES MACRO

Takeoff Technologies, Inc.

Microfulfillment solutions company Takeoff
Technologies assists major retailers like Albertsons

Companies, Wakefern and Ahold

with developing microfulfillment

solutions and centers.

Recognized as a technology pioneer by the World Economic Forum, the company's last valuation hit \$500 million.



3.2 Fulfillment Ecosystems

The shipping and fulfillment industry represents an industry resistant to change and reticent to adopt new technologies that disrupt long-entrenched relationships. While microfulfillment centers provide specific services, the true impact of these services is the range of capabilities to retailers: everything from unified management of diverse fulfillment models — including on-demand delivery, fulfillment centers and dark kitchens — to the behind-the-scenes technological support as a broader ecosystem.

CUTTING-EDGE FOOD FULFILLMENT SERVICES



3.2 FULFILLMENT ECOSYSTEMS

Bringg

Bringg, a leading Software as a Service (SaaS) platform, announced the industry's **first unified delivery and fulfillment solution**, a centralized platform with the flexibility to both launch and scale new fulfillment services while continually optimizing logistics, operations and customer experience.





3.2 FULFILLMENT ECOSYSTEMS

Flowspace

Fulfillment application Flowspace maintains one of the country's largest warehousing and fulfillment platforms; this platform facilitates the rental of unused warehouse space and offers software to manage and move inventory from warehouse to customer. The company raised \$20 million in funding in 2019, and doubled its workforce in 2020 to address exploding interest in their company.

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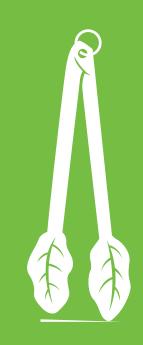
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4.0 PROTEIN-PACKED PHYTONUTRIENTS

4.1 RECYCLING RAPESEED

4.2 ALGAE ADDITIVES

4.3 PATENTING PHYTONUTRIENTS





Protein-Packed Phytonutrients

Phytonutrients represent a newer addition to health and wellness in consumers' diets: plant-based compounds that assist with the prevention of chronic disease and play a positive role by maintaining and modulating immune function to prevent specific diseases. A new usage of these products comes from their capabilities as enhanced protein supplements; popular options such as lupin are expected to grow exponentially over the next five years.

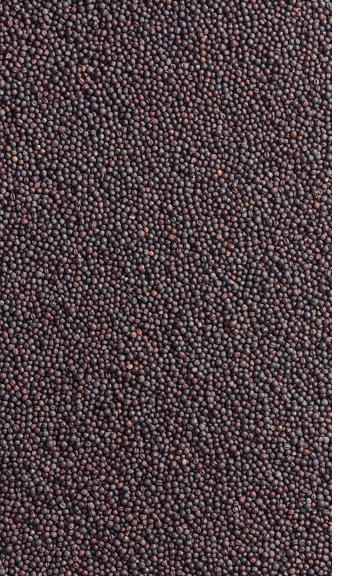


4.1 Recycling Rapeseed

Ninety-five percent of all plant-based proteins, with the exception of wheat, come from soy protein.

Nutrition scientists see upcycled rapeseed as an alternative to soy, thanks to its comparable — or better — nutritional benefits stemming from the seeds' phytonutrients.

THE VALUE OF RAPESEED



4.1 RECYCLING RAPESEED

YellowFields & BlackGrain

BlackGrain represents **one of the first rapeseed-based plant protein and fiber powders**.

BlackGrain offers a number of nutritional benefits, in addition to its status as a high-protein and fiber source: It contains the full spectrum of amino acids, omega-3 fatty acids, calcium and magnesium.





4.1 RECYCLING RAPESEED

DSM & CanolaPRO

DSM represents **one of the first brands to produce a commercially viable production process and product**

from canola. The product offers an attractive amino acid profile and bioavailability — better than soy — with functionality close to whey and egg protein. Canola, a derivative of the rapeseed plant, represents the third largest oilseed crop after soybeans and cottonseed, and one of the best sources of protein from a nutritional and functional perspective.

4.2 Algae Additives

Algae is on the rise as a food ingredient, given its success as a sustainable, plant-based protein alternative. The plant is nearly two-thirds (65 percent) protein, and provides impressive amounts

of vitamin A, vitamin B-12, B complex, iron, and other essential trace minerals, thanks to its role as a phytonutrient. Market researchers estimate that the algae food & beverage market may exceed \$5 billion in the next five years.



ALGAE-BASED PROTEIN ALTERNATIVES



4.2 ALGAE ADDITIVES

Unilever & Algenuity

Microalgae — a viable, climate-friendly protein alternative — struggles with the mainstream due to poor aftertaste; Algenuity's Chlorella Colours remove the unpalatable taste without reducing the nutritional content. Algenuity's partnership with Unilever Foods allows the company access to Unilever's research and development facilities and will help Unilever in its commitment to accessible,





4.2 ALGAE ADDITIVES

Nestlé & Corbion

Algal ingredient supplier Corbion partnered with
Nestlé in the production of their algal proteins for
Nestlé's plant-based alternatives, such as coffee
mixes and non-dairy ice cream, as well
as plant-based meat

alternatives and prepared dishes.



4.3 Patenting Phytonutrients

The World Economic Forum (WEF) predicts a shift to a diet-based approach to health care in the next

few years, in which artificial intelligence (AI) will play a key role in expanding our knowledge

and usage of the benefits of dietary phytonutrients.

The classification of specific phytonutrients will allow companies to facilitate the production of these products to support the explosion of consumer interest.





4.3 PATENTING PHYTONUTRIENTS

Brightseed & Forager

Forager, from Brightseed, identifies and classifies specific phytonutrients available from plants using their machine learning algorithm. The company raised \$27 million in its last round of seed funding for their first product, and already

in place with Danone North America.

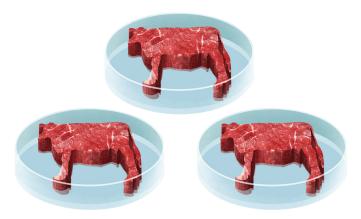
has one major partnership



4.3 PATENTING PHYTONUTRIENTS

Tufts University

Researchers at Tufts University developed genetically engineered cow muscle cells; the use of phytonutrients in their experiments allows the team to add nutritional benefits and reduce meat's unhealthy effects, such as carcinogenicity.



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