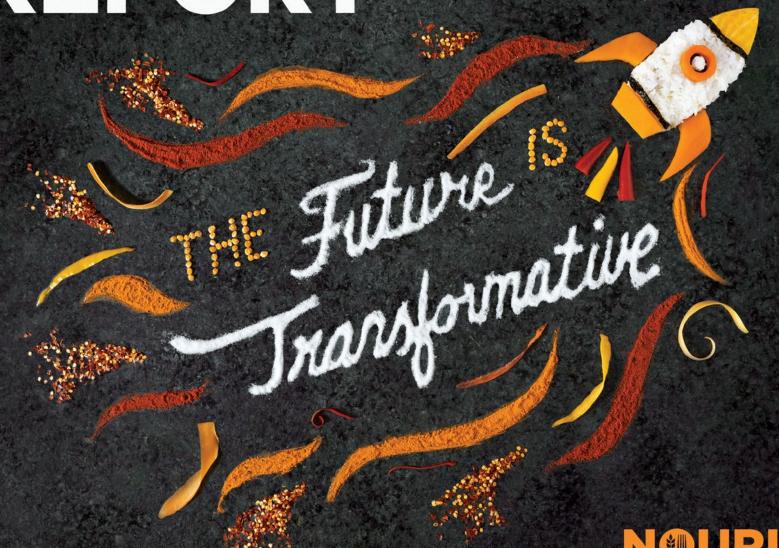
2023 TREND REPORT



N@URISH network

The Future is Transformative

A word from Jo-Ann McArthur, President, Nourish Food Marketing



In our 2022 Nourish Trend Report, I wrote that we were at an inflection point. Climate change had become an unignorable issue, with consumers demanding action from brands. Food inflation reached historic highs. And every generational cohort clamoured to be heard.

Now we're about to jump a decade forward on these issues, similar to how COVID accelerated the rate of change and adoption of online food and grocery ordering. Instead of a gradual trajectory, we will see trends leaping into the future. You might say we're on the launching pad.

We've moved beyond the point where individual actions make a real difference

It will take a coordinated systems approach to solve climate issues. The US government has passed the most significant climate legislation in history (with a Trojan Horse-type name — the Inflation Reduction Act or IRA), targeting an estimated 32-42% reduction in emissions compared to 2005 by the end of 2030¹.

At COP27 in November 2022, experts and world leaders discussed food production for the first time — surprising given food production is linked to 35% of total human-made greenhouse gas emissions². Expect a greater government and societal focus on food systems, food security, food sovereignty, and regenerative agriculture practices. For example, soil health is now recognized as being linked to human and planet health, something farmers have known all along.

Climate change now registers with all our senses — including taste

Indeed, farmers are on the frontline of climate change, but it's hard for even the average consumer not to notice or be affected by it. In one Saturday edition of the Globe & Mail newspaper, 11 articles or ads were related to climate change. In a New York Times Sunday paper, there were nine. According to a recent Leger Poll, 56% of Canadians and 45% of Americans believe they have personally experienced the effects of climate change where they live³. And the tastes of some crops, such as wine grapes and potatoes, are changing due to taint from forest fire smoke, extreme temperatures, and water conditions.

While climate change concerns have grown, there continues to be that pesky consumer "intention versus action" gap. Consumers want to do the right thing, but only if it's easy and doesn't involve too much sacrifice in terms of cost or taste or require too much change. It's up to government and industry to move the agenda ahead and nudge consumers into the future.

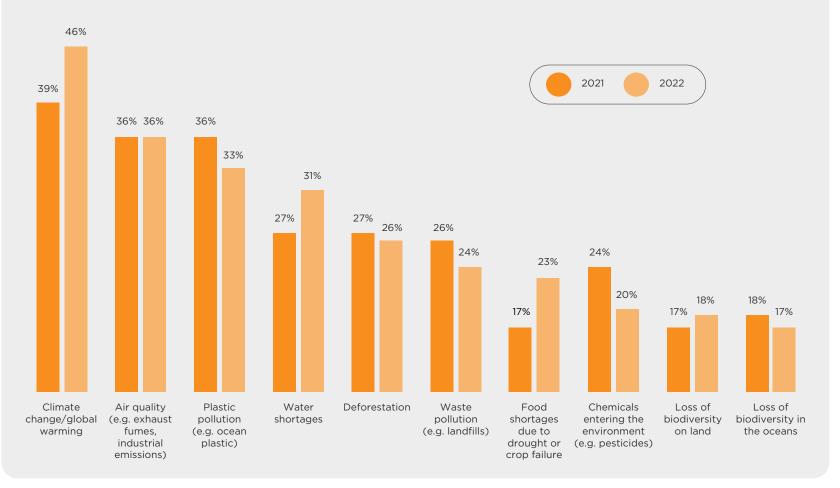
Source: Rhodium Group A Turning Point for US Climate Progress: Assessing the Climate and Clean Energy Provisions in the Inflation Reduction Act | Rhodium Group

²Source: United Nations

³Source: Climate Change and Extreme Weather Events, Leger 2022



Which of the following environmental issues are your top 3 concerns?



Source: Mintel; 8,000 global online consumers ages 16/18+ March 2021; 16,000 global online consumers aged 16/18+ April 2022



Food connects and nourishes people — let us nourish your business

This is our seventh annual Trend Report, and whether it's your first time reading or you've been along for some or all of the ride, I know you'll find the contents eye-opening and applicable to your business. As with our past Reports, many unaddressed opportunities are showcased in the 2023 edition, representing large markets from which you can profit.

I like to say that because we are a specialist Food & Beverage agency and work across the entire food ecosystem, we are in a privileged position, from where we can see how change progresses through that space.

We consult multiple databases and conduct original research, making us uniquely capable of connecting dots in ways others may not yet see. As always, past trends continue to play out, and you can access historical reports at our website, nourish.marketing.

Enjoy our 2023 Nourish Trend Report and read it with an open mind and a critical eye. When you're finished, we're happy to discuss ways to leverage this knowledge and how these trends will impact your specific category or part of the food ecosystem.

We'd love to support you in your future food journey!

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Jo-Ann McArthur President & Founder

Our critical food & beverage and agriculture industry trends for 2023

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The Rise of Reducatarianism:

Trading "either/or" for "everything, but less"

Our 2022 trend "Plant-Based 3.0" referenced the faltering faux meat category (Beyond Meat, Impossible Foods, etc.) as two ends of the plant-based spectrum emerged with a movement away from ultra-processed products to embracing what's best about a plant rather than mimicking meat.

Could the faux meat category be a transition point/ interim step to reducatarianism, pure plant protein, and cell-based agriculture as regulatory and price hurdles come down? Cell-based agriculture is growing animal protein cells in a bioreactor, using significantly reduced land and water resources and producing minimal greenhouse emissions. It's already being piloted in dairy, with Nestlé, the world's largest F&B company, partnering with food tech start-up Perfect Day to create animal-free milk products.

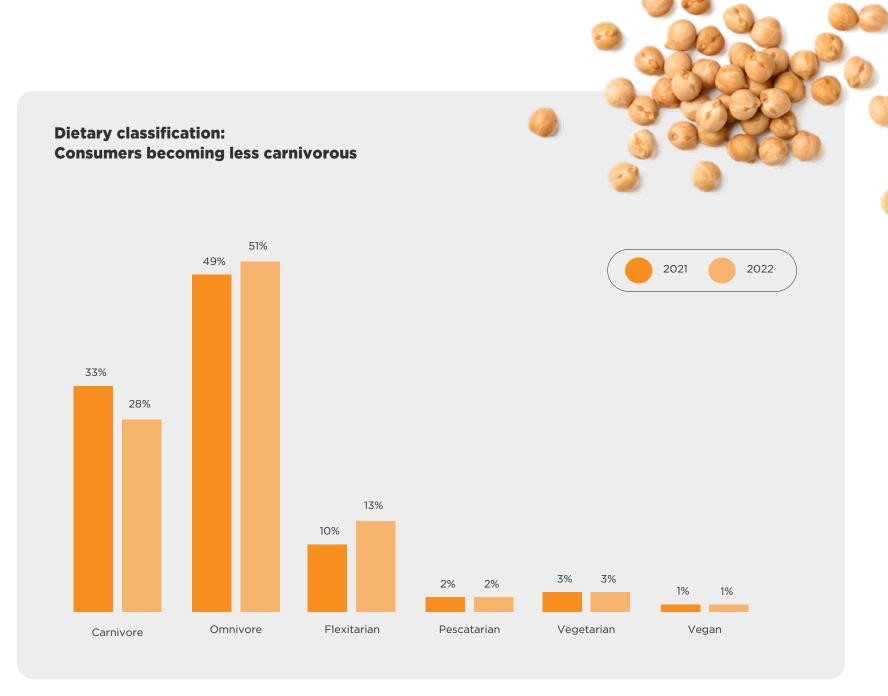
Historically, labels like "plant-based" are meaningless since we have always eaten primarily plant-based food. Indeed, the term was coined in 1980 by a Cornell

University nutritional biochemist studying plant-forward dietary practices in rural China. Most of the world's great cuisines have traditionally been plant-driven. Legumes and vegetarian whole foods also provide more affordable protein options.



Reducatarianism is about reducing meat intake rather than cutting it out

A diet blending animal and vegetable proteins results in a more affordable household food budget and planetary budget. Again, it doesn't have to be an either/or. It can be an AND. Consumers are naturally becoming less carnivorous due to climate change and animal welfare concerns, but they are not willing to compromise on taste. Instead, they will trade down on the protein cost scale to reduce climate impact, with high inflation accelerating that reduction. A study out of the UK demonstrated that eco-labels on menus could nudge consumers to more sustainable food choices¹.



Source: Mintel; 8,000 global online consumers ages 16/18+ March 2021; 16,000 global online consumers aged 16/18+ April 2022

Traditional animal agriculture will not be able to support the world's growing need for protein. In North America, most of us consume more protein than our bodies can use, anyway. So if meat reduction rather than elimination makes the most consumer sense, then the industry will have to use less resource-intensive production methods.

As University of Guelph professor Mike von Massow says, "It's not the cow; it's the how."

Sustainable ecosystems like grass-fed beef help protect one of the world's most endangered biomes — native grasslands — and store carbon while promoting a diverse habitat. Because of this, certified sustainable beef is endorsed by organizations like Ducks Unlimited, Nature Conservancy, and the Audubon Society.

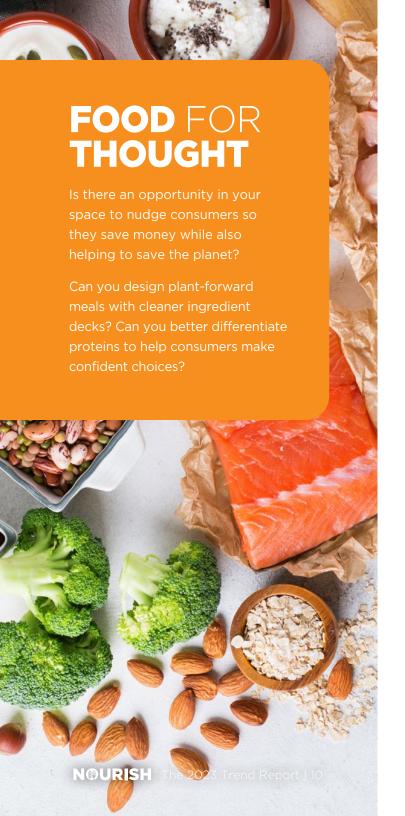
Processed food is still processed food, no matter what the protein is

Consumers will embrace whole foods again as they continue to want cleaner and simpler ingredient decks and become more intentional in their protein choices. The novelty factor of faux meats spurred trial, but now that the honeymoon period is over, consumers are demanding the same clean labels they've been demanding in other categories.

There has also been a lack of brand and product differentiation within the space — surprising considering the billions of dollars invested. Finally, these products were positioned as an either/or rather than an AND. If there's one thing no one likes, it's being told what to do. Lab-grown or cultured meat allows consumers to enjoy the taste of meat without any guilt about animal welfare or carbon emissions. To really take hold, though, it will need a great marketing strategy, starting potentially with a better name: perhaps slaughter-free!

'Source: "Do eco-labels on menus influence sustainable food choices?" Food Navigator, Oct. 2022





Calls to clean up ingredient lists in plant-based will get louder

of consumer conversations on vegan/plant-based food were about clean eating.

Plant-based liquid egg

11 INGREDIENTS

Ingredients: Water, Mung Bean, Protein Isolate, Expeller-Pressed Canola Oil, Corn Starch, Contains less than 2% of Baking Powder (sodium acid pyrophosphate, sodium bicarbonate, corn starch, monocalcium phosphate), Dehydrated Garlic, Dehydrated Onion, Carrot Extractives (colour), Turmeric Extractive (colour), Salt, Transglutaminase

Standard egg

1 INGREDIENTS

Ingredients: 100% Liquid Egg Whites

CONTAINS: Eggs

Dried whole egg powder

2 INGREDIENTS

Ingredients: Whole eggs, less than 2% sodium silicoaluminate as an anti-caking agent

CONTAINS: Eggs

As the demand for clean label grows, so will the market for clean label additives.

Source: Spoonshot



Good Eats, Better Sleeps:

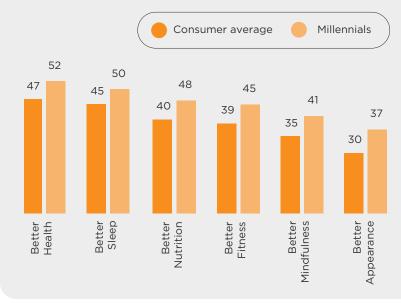
The role of food as a sleep aid to promote overall well-being

Boosting immunity was a focus during COVID and one of our 2021 trends. But it's sleep that is the true foundation of health. Pantone's 2023 Color of the Year is "Digital Lavender," which, according to research, induces sensations of tranquility and peace.

According to McKinsey US research, "better sleep is the next-highest priority for consumers after better health," with 45 per cent and 47 per cent of respondents, respectively, naming them a "very high priority." And, thanks to wearable technology, consumers have a clearer view of the quality and quantity of that sleep. As a result, there has been an investment increase in sleep technology funding of 66% in just one year.

Millennials prioritize health and wellness more than other generations and plan to prioritize them even more in the near future

High prioritization of health and wellness attributes today, millennials vs overall, % of respondents



Source: McKinsey U.S. Future of Wellness Survey, April 2022

Good nutrition can help combat an 'epidemic of insufficient sleep'

There is no question that diet and sleep are linked. Medical research now recognizes the connection between what you eat and the quantity and quality of your sleep, and how this affects your food choices and your physical and mental well-being. Gone are the days of bragging about how few hours of sleep we need.

Most consumers are not getting the recommended daily minimum amount of sleep — an uninterrupted 7 hours for adults and 9 hours for children to allow for REM.

Insufficient sleep is also linked to rising rates of being overweight or obese, with higher average metabolic syndrome scores. Scientists at the European Society of Cardiology Congress 2022 presented research suggesting that 90% of people have suboptimal sleeping patterns, which are associated with a higher likelihood of heart disease and stroke. They estimate that 70% of these cardiovascular conditions (and the top cause of death worldwide) could be prevented by a good night's sleep².

Poor sleep (quality and quantity) alters appetite hormones and is linked to food cravings and a higher intake of calories. Unfortunately, it also affects how we metabolize fat, creating a vicious circle.

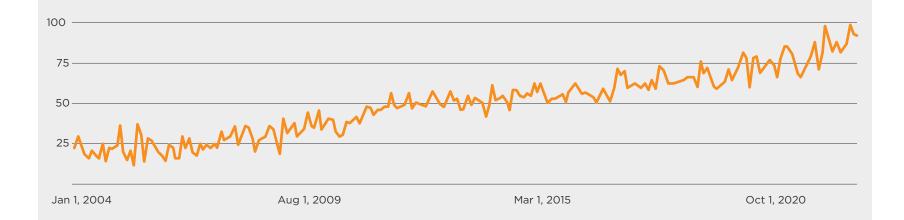
Interest in sleeping better is out there — so where are the F&B brands?

Lots has been written about eliminating caffeine in the evening and blue lights in bedrooms, and plenty of white noise machines and weighted blankets are sold in the pursuit of a good night's sleep. But, there has not been much focus on the role of food & beverage in aiding sleep.

We know that foods rich in melatonin or melatonin-producing tryptophan include some berries and milk. Magnesium-rich brazil nuts and, of course, CBD can also help sleep. And, though "better sleep" has been a growing consumer search term, they are not yet linking it to F&B, which signals an opportunity.

Google Trends

"Better Sleep" search term popularity in the US, 2004-present



While some products go beyond supplements, they mainly focus on non-alcoholic beverages in place of the traditional nightcap. For example, Four Sigmatic, referenced in our 2019 Trend Report, sells an adaptogen-based hot chocolate for bedtime use. Strangely, not much else has happened in this space in recent years!

FOOD FOR THOUGHT

This is a huge addressable market and underserved need state that could use some product positioning and innovation.

Do you have a product that is a natural sleep aid you could market to the sleep deprived?

Can you develop new products or snacks that help consumers drift off to dreamland? Win this space, and you'll see some serious brand loyalty.

Source: Crunchbase News, 2020 v. 2019

²Source: Insufficient sleep in teenagers is associated with overweight and obesity, European Society of Cardiology 2022



This One's for the Ladies:

Female food is a missed opportunity we can no longer overlook

We first wrote about the food personalization trend in 2017, and it's still growing in importance, particularly with younger generations. Consumers continue to take control of their health and well-being, with food seen as the first and easiest line of defence.

Last year's Trend Report discussed boomer-specific food needs, a large demographic that still wields considerable economic clout. But there's an even bigger market out there that's going almost totally without their needstates met. It's time for female-specific F&B innovation.

Key takeaway: women are not just smaller men

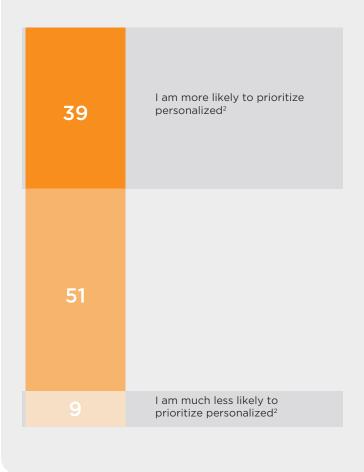
Lululemon introduced its first female sneaker on International Women's Day, recognizing that the shape of a female's foot is not just a scaled-down version of a male's. Yet, that is how most running shoes are designed. Instead, they created a better shoe fit after researching the feet of more than a million women. Similarly, most health studies are focused on male bodies. A recent focus on women's health, with a 9x increase in published research papers between 2010 and 2020, promises to unlock more opportunities for food manufacturers.

However, there remains a gap between what researchers focus on and what consumers talk about.

The shift toward personalization continues, particularly among millennials.

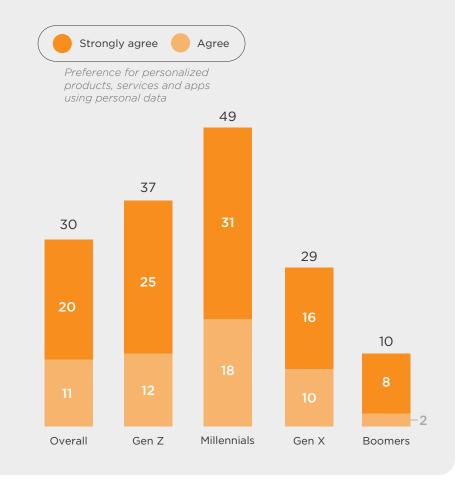
Prioritization of personalization now vs 1 year ago¹

% of respondents





% of respondents



Note: Figures may not sum, because of rounding.

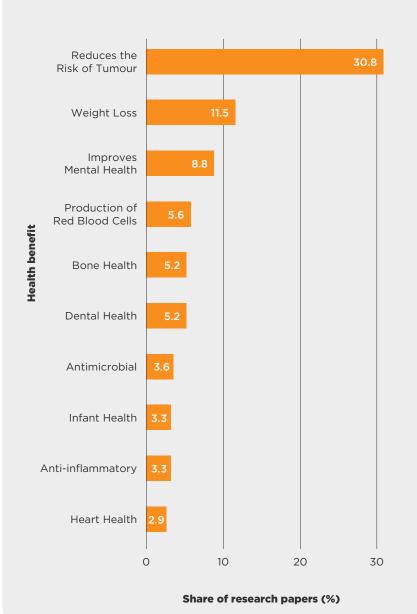
Question: In general, how much more likely are you to prioritize personalized wellness products or services now vs 1 year ago?

²Figures represent the sum of the top two and bottom two choices

³Question: Please indicate how strongly you agree or disagree with the following statement: "I prefer using brands whose products, services, and apps are personalized to me via connection with my personal data" Source: McKinsey & Company

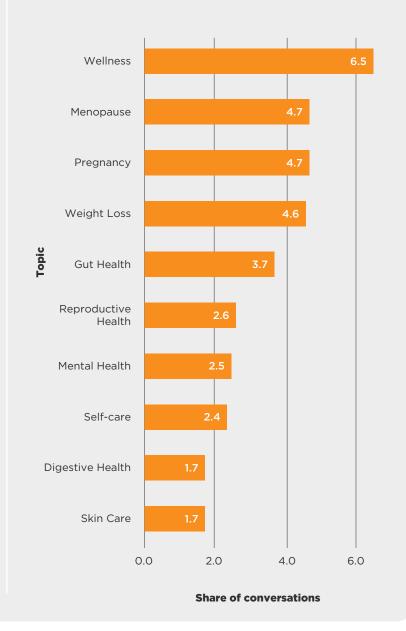
Leading women's health issues

from research papers



Leading women's health topics

in online consumer conversations



Source: Spoonshot

Of course, anywhere we see a gap, we see an opportunity. And those opportunities are available at all life stages, from cradle to grave, due to hormonal differences, pregnancy, menstruation, and menopause.

There are lots of PMS teas on the market, but only a few other F&B products to help with those biology-driven food cravings.

The <u>Lactation Cookie Company</u> based in Toronto supports breastfeeding mothers' milk supply. From the UK, MPowder claims to be "the world's first plant-based supplement powder range crafted to target the three distinct biochemical stages of the menopause."

And here's a brand that clearly "gets it": Moodygirl Chocolate offers wellness for women with a bar that supports PMS symptoms. In keeping with the openness of younger women, their marketing is all about owning and celebrating this life stage. Remember, when putting your message out there, make it loud and clear — taboos and whispering are for our grandparents' generation!



FOOD FOR THOUGHT

Do you have a product rich in nutrients that could already support females' unique needs if marketed right?

Can you offer meals and beverages tailored for women to support them as they move through these different life stages?

Considering females are more than half of the market, should retailers offer specific sections with gender-targeted products, similar to some health stores' current practices?



Food Without Borders:

Social media unites us globally so we can shop and cook together

We are wired to be social as a species. So while the tools may change (Facebook begets Instagram begets Snapchat begets TikTok begets...?), anything that allows us to be more social and participate in shared experiences will win. And though supply chains are moving away from globalization, social media encourages behaviour globalization.

TikTok and KiTTCH (see their Walmart collab below) have "glocalized" food trends. Food is a universal language, and now you can cook with people around the globe in a vast shared cultural experience. We see the merging and mixing of international food ingredients and preparation, allowing us to travel with our forks and our eyes to other kitchens worldwide. At the same time, social channels spread recipes at a pace never seen before. Automation may be the solution.



source: Youtube

glo-cal-i-za-tion:

noun

the practice of conducting business according to both local and global considerations.

Source: Oxford Languages and Google



Innovation in the food ecosystem traditionally started in fine dining, made its way down to QSRs and, finally, onto retail shelves. Now, it's following a new path.

Dalgona coffee was started by a <u>TikToker in South</u> <u>Korea</u>, resulting in a whipped coffee frenzy worldwide. Starbucks now promotes it using its <u>VIA® Instant</u>, which can be purchased at retail, and Canada's largest Grocer sells a <u>President's Choice Dalgona Coffee Cake</u>.

The entire cooking process is converging on social

Something magical happens when food, kitchens, recipes, and video come together on a social platform.

New social media network Flavrs bridges the essential gap between browsing recipes and actually cooking them with integrated ingredient shopping courtesy of Instacart. The app, with its motto "Watch Shop Eat," launched in beta in September 2022 and is backed by celebrity chefs Eric Ripert and Tom Colicchio, with VC firm Andreessen Horowitz as a lead investor. It works to bridge the marketer's challenge of nudging consumers from intention to action.

Looking ahead, the metaverse is currently overhyped, but it could become "the mall" for the next generation of consumers.

FOOD FOR THOUGHT

The "phygital" world is where physical and digital intersect. Are you leveraging the power of social and using the right channels for your target?

Are you harnessing the power of video, shared experiences, and influencers? And does all that digital interface seamlessly with your customer's physical interactions with your brand?

Shopping and ordering will soon be embedded in everything, from social to IRL experiences. Where can you participate in this trend? What will be the role of your brick-and-mortar operation? Most importantly, are you ready for this evolution in the consumer journey?





Robots, AI, and Connected Kitchens:

Food automation takes an overdue leap forward

If you know agriculture, you know robots have become ubiquitous and indispensable on most modern farms. However, robotics is no longer just on the farm but also appearing in the home, as well as retail and foodservice. Based on demographic modelling, labour shortages will be a long-term issue that needs to be solved due to an aging population and declining fertility rates. Automation may be part of the solution.

The rise of eCommerce has been a challenge for Grocery's already thin margins. Automated grocery order fulfillment — seen at Sobeys, through Kroger's Ocado, and others — is just a start to improving those margins. Sobeys also offers Smart Carts at some locations so you can bypass the checkout line, while providing valuable data on how you shop. Amazon Go stores feature unattended checkouts for frictionless "Just Walk Out" convenience. Food tech at Grocery in the future will allow for more personalization and ease throughout the shopper's omnichannel journey (see our 2022 trend "Remapping The Paths To Purchase" to learn more about this).

Is Grocery+pharma on the cusp of integrating health and food shopping?

We've already seen the blurring lines of Grocery and drugstores. Beyond having traditional drugstore services with pharmacists, most large chains also have an on-staff nutritionist or dietician. Loblaw purchased Shoppers Drug Mart in 2013, but has yet to fully leverage its potential. Walmart bought telehealth company MeMD in 2021, and Kroger's Kroger Health division offers "Telenutrition (Medical Nutrition Therapy)," connecting consumers with Registered Dieticians via one-on-one video calls.

While standalone products like Noom and Viome already exist, the barrier to Grocery providing a more integrated full suite of services, from testing to nutrition recommendations to grocery basket fulfillment, is falling fast. Is the intersection of personalized food recommendations based on your biometric data far off? Health-conscious consumers already embrace wearable tech like digital fitness watches, and we're now seeing non-diabetics using continuous glucose monitors (CGMs). Could this become the ultimate shopper loyalty program?

Technology may also help solve the packaging waste problem. While the LOOP reusable packaging system mentioned in our 2020 Trend Report has been slow to gain traction at Grocery, in-store models may have faster adoption. Refillable packaging for household cleaners is becoming commonplace, and this will expand within Grocery. Why? Because refill stations are another potential loyalty-building tool. And for suppliers, it provides an opportunity to think of packaging as an asset rather than an expense, as it can be refilled and used multiple times.

A perfect storm of socio-economic factors has primed foodservice for robots

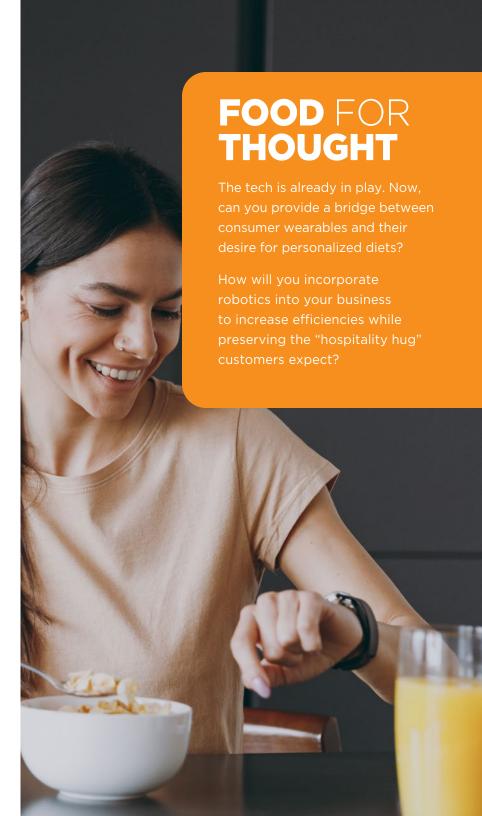
In restaurants, robotics allows for not only perfectly prepared plates but can also bridge to more personalization of orders. Critically, in a labour shortage, robotics can sub in for those repetitive motions, ensuring consistent, high-quality output.

Self-contained units like PizzaForno support pizza cravings 24/7 and in places where a standalone pizzeria wouldn't make economic sense. Several pizza chains are testing autonomous delivery vehicles, including one that can make your pizza en route, ensuring a piping hot pie is delivered to your hands at the drop-off point. Take that, 30-minutes-or-free!

Beverage machines like <u>Cana</u>, a self-contained unit capable of mixing cold beverages of any flavour, flat or sparkling, and even alcoholic, had difficulty gaining both traction and investment. Still, an autonomous industrial-

size bartending machine could make sense in the future as a way to manage labour and alcohol costs with precise pours. No more Tom Cruise Cocktail-style shows that leave your profits spilled on the floor or bigger tipples for bigger tips. Our post-COVID (and we say that with hope, but knowing we may never get to kiss COVID fully goodbye) home kitchens are increasingly connected with the adoption of Bluetooth or WiFi-enabled appliances, and accelerating with smart refrigerators, ovens, and cooktops leading the charge. As energy costs continue to rise, demand may shift to smaller, more efficient appliances in place of traditional ovens.

An example is the Amazon Smart Oven, a 4-in-1 microwave, convection oven, food warmer, and air fryer with over 30 presets that connects to Alexa. Taking home meal automation even further is Tovala, a 6-in-1 smart countertop oven that pairs with weekly meal delivery for dinners that come together in minutes. Not to be left behind, pandemic darling Instant Pot now has a "Smart Wi-Fi" model that pairs with your smartphone and lets you monitor what's happening in your slow cooker from anywhere. They say a watched pot never boils, but what about a remotely monitored one? It may be time to update our proverbs and idioms for the digital era!



Breaking the Chains:

Localized production offers an alternative to shaky global supply lines

Local food has grown in importance with consumers, who see it as a sign of quality and evidence that you're supporting your community. It's also part of food system resiliency as we enter a period of global unrest, logistic constraints, and shifting economic partners, all coupled with climate change. Pulitzer award-winner Thomas Friedman's book The World Is Flat, released in 2005 to high acclaim, posited that the competitive playing fields between industrial and emerging markets were levelling, resulting in complex global supply chains and country outsourcing. Needless to say, it hasn't aged well.

Today, the world is no longer flat, with a renewed focus on localization for shorter and more reliable supply chains. The new "glocal" shifts away from global food sourcing towards bolstered domestic supply chains to preserve food sovereignty.





It will take outside-the-box thinking to solve the food security crisis

Indoor vertical farms are one example of a year-round, locally reliable food supply. In Canada, the Weston Family Foundation launched a \$33-million Homegrown Innovation Challenge to spark innovation and future-proof food production in Canada. The staged competition supports the development of tools and technologies to enable Canadian farmers and producers to sustainably and competitively grow berries out of season.

On the other hand, the idea that all things are available at all times is only as old as refrigerated transportation. Should we eat more in-season produce like our grandparents did to help reduce our reliance on imported food?

Looking to labs for solutions, land-poor Singapore and Israel are leaders in food sovereignty due to necessity. Both lead efforts in cell-based agriculture and food-tech innovation. In fact, in December 2020, Singapore became the first country to approve the sale of cell-based chicken.

As always, the answer will likely not be a single process but rather a combination of innovative approaches as we seek to shore up national food security.



Closing the Loop:

Self-contained food systems are the future

It will take a coordinated effort across the food supply chain to meet climate emission goals, as we will need to produce more with less environmental impact. Expect more "co-opetition" as competitors work together to solve common problems.

Reducing food loss and waste will become a bigger focus, and garbage will be repurposed and upcycled into an asset. IBM Food Trust uses blockchain technology that decentralizes food supply chain data to identify food waste hot spots, allowing for ecosystem-level collaboration and optimization between companies and their suppliers.





Tapping new sources for drinking water to combat drought

In an era of water scarcity, water use will be optimized with nothing going down the drain. Agriculture already uses strategies to conserve water, with new methods coming online.

Because California produces over a third of America's vegetables and three-quarters of the country's fruits and nuts and is amidst a historic drought, many innovative solutions are emerging from there. California regulators unanimously approved a USD 140 million desalination plant to convert ocean water into drinking water¹.

California food processors and manufacturers are also developing creative new strategies. 'Tomato water' from processing tomatoes into ketchup and tomato paste that used to be discarded is being recaptured and purified for drinking.

The easiest way to divert food from the waste stream: eat it

In addition, California supermarkets and restaurants are now required to give away any produce that is unsold but still fit to eat rather than go into the bin and then landfill. Organizations like Second Harvest in Canada rescue surplus food. Best-before dates are being eliminated in many countries. And while many consumers don't want to move away from best-before dates, an <u>'intelligent' bottle</u> cap using gel technology has been developed that is more accurate than a best-before date.

Many experts say we don't have a food production issue; we have a food distribution issue. The EPA estimates that one-third of the US food supply goes uneaten². Expect to see more flexibility in retailer buying practices; if you can sell it, you can profit from it. A case in point is that Lidl is buying produce affected by drought that they would normally reject based on their specifications.

In a high-inflation environment, consumers will be even more fixated on reducing food waste. Our greatgrandparents lived in a closed-loop system, eating with the seasons helped by a cold cellar and naturally recycling everything from twine to glass milk bottles. While we don't want to go backwards in terms of our standard of living, we will need to reduce our carbon footprint.

Fine dining is elevating eco-friendly operation

For inspiration on how it can work, look to foodservice, where we already see closed-loop systems in restaurants growing their own food and finding a use for everything. In 2021, Michelin started awarding an annual Green Star to a restaurant that "combines culinary excellence with outstanding eco-friendly commitments."

Some examples:

Henry Robertson Dining Room at Palé Hall Hotel operates with a sustainable-first approach. The menu uses herbs, vegetables, and fruit grown onsite, utilizing the restaurant's compost, with other ingredients sourced from local farmers, growers, and fishers. An onsite hydroelectric plant powers the whole operation, and team uniforms are made from recycled plastic.

Closer to home is <u>Harbor House in California</u>, where most of the food on the menu comes from within a 50-mile radius and is picked up by the staff on their way to work, reducing their carbon footprint and minimizing boxes and packaging.

They also forage for seaweed, mushrooms, herbs, and edible weeds in their area. The menu is primarily seafood and vegetables. They only use whole animals raised in sustainable ways, the animals are aged onsite at the Harbor House, and they tenderize and utilize the entire animal, not just the prime cuts. Anything left over is turned into sausage or terrines for breakfast at the inn. In addition, an onsite mechanical composter receives any unusable scraps to become compost for their vegetable garden. They also reuse grey water to water the garden, and menus are printed on plantable seed paper.

For a Canadian example with a similar ethos but no Michelin visit (yet), check out Newfoundland's <u>Fogo Island Inn</u>. Operating on a remote island creates unique supply challenges and offers an equally unique opportunity to use locally foraged berries and edible plants, and, naturally, local seafood.

Source: California Agricultural Statistics, California Department of Food and Agriculture Source: ReRED.organd offers an equally unique opportunity to use locally foraged



Our Agricultural Trends

To better service our agri-business clients, Nourish Network combines the talents of Nourish Food Marketing and our Canadian ag marketing partner Kahntact, along with those of our US-based partner, Curious Plot. Both Kahntact and Curious Plot contributed trends with an agri-food slant based on their own unique perspectives on the industry. Even if you're not directly involved in agriculture, we know you'll find these trends thought-provoking, insightful, and potentially actionable.

From Science Fiction to Science Farming:

Ag innovation sees exponential growth to meet environmental and market needs

Farmers have faced pressures both to their wallets and the environment in which they raise crops. Rising input costs, labour shortages, increased regulatory pressure, water availability, and extreme weather are all pushing farmers to innovate for a sustainable future. These challenges have led farmers to adopt new farm practices such as focusing on soil health, reduced tillage, planting cover crops, and participation in carbon sequestration programs. All these farming-practice changes support positive and meaningful impacts on the environment and their bottom line.

Farmers are adopting innovative approaches for better economic and environmental outcomes

Beyond practice changes, farmers are also looking at new advancements in agricultural input products and technologies. One area of rapid innovation and adoption is biological input products. As a substitute for or complement to synthetic inputs, biological products are in development that support soil health, fight against harmful insects and diseases, and create more fertile soil. Leading crop protection company Corteva Agriscience recently estimated that biological products could represent 20–25% of the crop protection market, signalling that this category is ripe for significant growth.



New fields of technology beyond traditional "precision" or "decision" agriculture are also showing new promise for helping farmers meet the needs of growing more with less and doing so in ever more exacting circumstances.

One exciting field of technology already providing meaningful benefits to farmers and consumers alike is gene editing. Not to be confused with gene modification, or GMO, gene editing using CRISPR-Cas9 technology makes subtle changes within a plant's genome that couldoccur naturally on their own given enough time. While it is a relatively new technology, exciting developments include consumer benefit innovations such as reduced browning in produce, reduction in allergen levels, and extended shelf life. Farmer benefits being developed include stress resistance, improved yield abilities, and drought tolerance. Innovation in crop technologies, such as gene editing, will be critical as we seek to feed the growing population in a harsher environment.

Consumers are increasingly seeking insight into their food choices

As farmers continue to adopt new practices and technologies to grow our food, it translates into how shoppers evaluate their food choices. Absence claims and clean-label shopping are not new, but we are seeing further growth in product labels providing visibility into how their food is grown.

One such callout on packaging that has seen growth is labelling for food grown using regenerative farming/agriculture. Many potential practices could be deemed part of the informal definition of "regenerative agriculture"; they could include cover crops, reduced tillage, and crop rotations, among many others. Alpha Food Labs sells a line of crackers that each offer different ingredients based on crop rotations from their farm suppliers.



But it's not only smaller and niche brands looking to regenerative practices to improve their food products and market to consumer interests. For example, food industry giant General Mills has partnered with farmers and suppliers to use sustainable practices on one million acres of ingredient crops for their food products by 2030.

Clearer communication and an increasingly seamless value ecosystem between consumers, suppliers, manufacturers, and farmers will likely continue to drive the future of food.

food, or using product specs to market to a niche segment, what opportunities are there for you to better understand and market the "how" in your

collaborate with your suppliers to create a more compelling product for your consumer? What characteristics of your ingredients could be better marketed on the label to fulfill consumer desires for



Solidarity for Sustainability:

The future of eco-conscious agriculture in Canada is cooperative

Identifying trends in agriculture is challenging, if for no other reason than the fact that agriculture is a uniquely capital-intensive, weather-dependent, price-uncertain industry. The old saying goes that farmers are the only business owners who throw hundreds of thousands of dollars on the ground each spring — in seed, fertilizer, and other inputs, plus fuel, machinery, and equipment costs — and then pray for rain.

The high-risk nature of farming quite logically makes most farmers conservative by nature and slow to change their ways, especially when those ways have worked in the past. For a change to become a trend typically takes many growing seasons or production cycles; farmers will most often take a wait-and-see approach to almost any new technology, fad, or direction. Contrast this with consumers, the bulk of whom will eat anything they see on TikTok and cover their counters with the latest gizmos and gadgets.

Having said that, sustainability is now clearly entrenchedin the lexicon of Canadian agriculture, shaped by the need to feed a rapidly growing domestic and global population on an ever-shrinking land base while finding ways to reduce the environmental impacts of modern farming practices.

Caring for the land and environment is nothing new in ag

Of course, farmers have long been regarded as the original stewards of the land for both business and personal reasons. Because the vast majority of Canadian farms are family businesses, keeping the land healthy for the next generation is an imperative, not an option.

A recently released report from the US-based Association of Equipment Manufacturers summarizes the situation: farmers are challenged to "produce more with less environmental impact." A simple concept but, of course, not so simple to implement.

Out of this increased sense of urgency related to climate change and public perceptions of modern farming practices, government, NGOs, and industry are stepping up their sustainability game.





Here are some intriguing examples:

- FMC Canada is set to launch the fourth generation of its PrecisionPac® (PPAC) technology. PPAC is a herbicide system that dispenses crop protection products geared to the specific weed challenges in a particular field, calibrated precisely to the field size and sprayer capacity. This reduces overall herbicide load and reduces packaging waste.
- UKKO Agro is one of several ag-focused digital start-ups. UKKO's proprietary plug-and-play technology delivers field-specific staging and disease risk information 3-14 days in advance, suggesting where and when to take action. This allows farmers to apply only the products they need when they are needed with the potential to reduce total pesticide load in the environment, as well as save money
- The Canadian Roundtable for Sustainable Beef (CRSB) is devoted to advancing sustainability in the Canadian beef industry. CRSB seeks to encourage production practices that are environmentally sound, socially responsible, and economically viable, prioritizing the planet, people, animals and overall progress in the industry. The result: many QSR chains, including McDonald's, A&W, and Harvey's, now feature certified sustainable beef on their menus.

- Government is committed to the sustainability movement too. On the federal level, the Canadian Agri-Food Sustainability Initiative (CASI), according to its website, is "building leadership and cooperation for supply chain sustainability data, programs, tools, and collaboration opportunities." Together with its partners, CASI seeks to "enable clarity and transparency in terms of capturing and communicating best management practices to improve economic, environmental, and social outcomes across the Canadian agri-food system."
- Many provinces now require Environmental Farm
 Plans (EFPs) voluntarily prepared assessments
 by farm families to increase their environmental
 awareness. According to the Ontario government's
 website, through the EFP process, farmers "highlight
 their farm's environmental strengths, identify areas of
 environmental concern and set realistic action plans
 with timetables to improve environmental conditions.
 Environmental cost-share programs are available to
 assist in implementing projects."

The challenges are clear, as is the trend. The key to a sustainable Canadian agri-food sector lies in the combination of technology, personal responsibility, and government focus designed to help farmers meet the food requirements of a growing planet.

FOOD FOR THOUGHT

What existing partnerships can you leverage in your sustainability journey? And, thinking even broader, are there other potential partners across the wider food ecosystem with whom you should be forming alliances?

Are you effectively communicating the positive things you're already doing to all your partners along the food chain, including your end consumers?



About Nourish Food Marketing

As Canada's only full-service marketing agency specializing in the food sector from field to fork, our expertise runs the gamut. Discover what partnering with us can do for you.



RESEARCH

We continuously analyze industry trends and conduct qualitative and quantitative research, applying insight to action and increasing your chance of success



EVENTS & SAMPLING

more; no matter the event, we can guide you from planning to execution and help you make valuable connections.



BRANDING

From brand persona to mission and vision to logos and more, we'll work with you to shape your brand's identity.



DIGITAL SERVICES

Unlock the power of thumb-stopping, click-worthy websites, social media, and digital ads crafted with data-driven insights to win hearts, minds, and screen time.



TEST KITCHEN

Led by our professional chef, recipe and flavour profile development are among our unique specialties.



PR & INFLUENCER MARKETING

When it's time to get the word out, we know how, when, and where to place your message to reach your audience most effectively.



PACKAGING

Our shopper and industry knowledge, coupled with design expertise, gets your product onto shelves, into carts, and into hearts.



MULTICULTURAL

We don't see cultural barriers; we see new audiences waiting for someone to connect with them on their terms.



VIDEO & PHOTOGRAPHY

Mouth-watering images created in our spacious and versatile in-house studio will put your product's best foot forward.



INTEGRATED ADVERTISING

With consistent, impactful messaging across a variety of channels, from traditional to new media, we move consumers along the path to purchase from field to fork.



Source: 2022 Nourish Thanksgiving Recipe Book, our exclusive gift to Nourish clients.

About Nourish Network

Nourish Network and Curious Plot form the only North American marketing communications alliance offering deep knowledge, experience, and expertise in both the agricultural and food spaces. We create authentic field-to-fork communications for clients across the entire food ecosystem — including commodity groups, producers and processors, food service, retailers, associations, and not-for-profit organizations — that are strategic, insightful, and effective.

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