



TRACEGAINS



# THE OFFICIAL 2024 NPD REPORT

An R&D Outlook for the  
Food & Beverage Industry



Each year, TraceGains conducts several industry surveys examining key parts of the global food and beverage industry. Kicking off 2024, we've taken a close look at product development and R&D, asking industry professionals to weigh in on the overall investment they expect their companies to make in new product development (NPD), as well as on the key drivers and complicating factors impacting their decisions.

Throughout their responses, one theme shines through: **Now is the time for brands to elevate their innovation game.**

We led off with the most basic question of all—whether or not organizations were planning on increasing their investment in new product development this year. The response was an unambiguous “yes,” with **nearly three quarters of respondents indicating that they would be putting more resources toward product innovation in 2024**. This builds on similar data we collected in 2023, suggesting that as the COVID-19 pandemic and accompanying supply chain disruptions recede, the industry continues to move forward with product changes and innovation.

## A BOOST IN NEW PRODUCT DEVELOPMENT

**76%** of brands plan to invest more in NPD this year.  
(That's a 12% increase from 2023.)

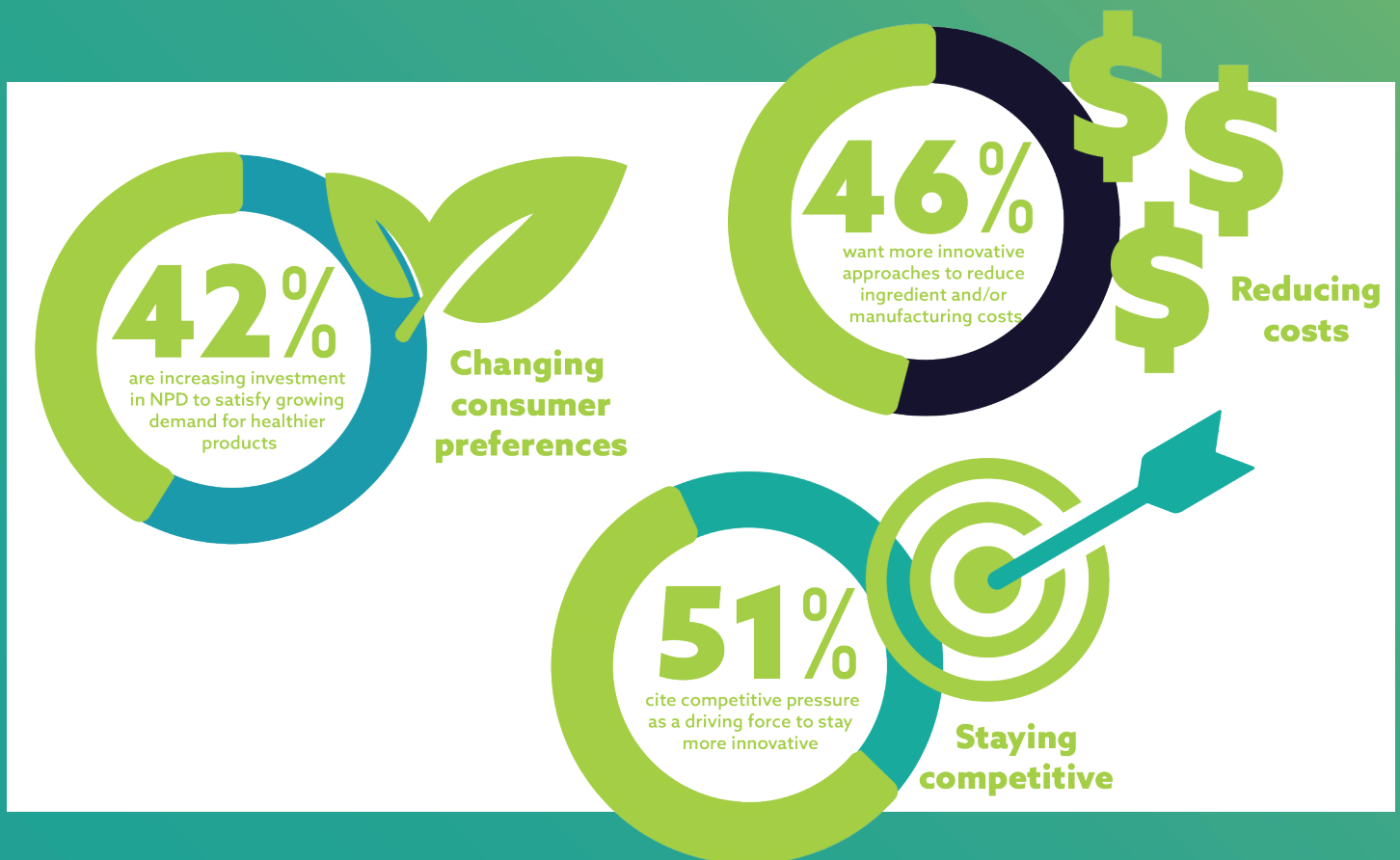
**60%** of brands think healthy, “better for you” formulations have the most potential to drive industry change this year.

**36%** of brands are testing the waters with AI in their NPD efforts.

The interesting question now, of course, is what lies behind the continuing upswing in innovation, and what challenges are teams expecting to confront as they move forward? A full summary of survey results can be found at the end of this report. However, the data yielded a few interesting takeaways, especially in light of broader industry events and trends, and in this report, we'll take a look at **five of those themes**.

# A CONVERGENCE OF FACTORS ARE DRIVING NPD

The movement toward increased product development among food and beverage brands doesn't have appear to have a single, unified cause. Multiple factors are at play, and brands identified a range of drivers informing their innovation strategies. In the lead, but only just, is competitive pressure, with 52% of respondents listing competitors as a key driver of innovation. In a growing and dynamic industry with increasing routes to market for new brands, this probably isn't a particularly surprising finding, and it aligns well with responses identifying evolving consumer preferences as an important impetus for innovation. Social media and other channels have given consumers greater access to information than ever before, allowing preferences to develop (and shift) rapidly. With **one study** suggesting that **over 90% of CPG brands released new products in 2023**, competition for an increasingly fickle consumer's attention is clearly in high gear.



As we look at the food and beverage industry as a whole, however, it's important to note that there is more to the consumer side of the equation than simply creating satisfying new offerings, especially as it pertains to R&D. Consumers and regulators alike continue to show a strong focus on accuracy in claims and labeling, and brands seeking an edge with consumers are going to need to stay on top of both front and back of packaging labeling. A misstep in labeling and claims can jeopardize consumer trust, and in a market this competitive, there will be no shortage of alternatives for disgruntled shoppers. Nor is this simply a question of consumer sentiment. **FDA product recalls were up almost 20% in 2023**, with incorrect allergen declarations and labeling topping the list of causes.

Though not cited as often in the survey as competition and consumer factors, the combination of global regulatory pressures and the demands of international expansion also made significant showings. Increasingly, brands everywhere face a complex patchwork, of regulations. In the US, **state and local regulations are increasingly moving faster than FDA regulations** in terms of food safety and additive restrictions. Meanwhile, a host of European Union regulations and directives, both current and pending, pose potential compliance challenges for international brands, particularly as many UK and EU-based brands continue to grapple with the long legacy of Brexit.



# THE GROWING COST OF SUCCESS

The other extremely notable driver for innovation, based on survey responses, was clearly cost. In the first quarter of 2024, the Consumer Price Index, a key gauge of inflation in the US, **continued to top forecasts**. With manufacturing unit labor costs climbing **every quarter in 2023** alongside continued cost pressures on food ingredients, transportation, energy and more, it's not surprising that cost increases are finding their way through to consumers. The survey clearly echoed the industry-wide focus on cost factors, with **58% of respondents citing rising production and labor costs as key concerns looking into 2024**.



# TOP HURDLES TO INNOVATION

Despite their enthusiasm for NPD, brands are troubled by macroeconomic forces beyond their control.

46%

Availability of  
ingredients &  
materials

53%

Fluctuating demand  
& commodity pricing

58%

Rising production  
& labor costs

For R&D teams, continued cost pressures are a continuing driver for new product development initiatives, with **nearly half of survey respondents identifying efforts to reduce ingredient or production costs as a top driver for product development**, and as a significant challenge for new product development. These efforts can take many forms, from reformulation to leverage lower cost ingredients to changes necessary to adapt to more efficient production methods. R&D teams in 2024 can expect to play an increasingly important role in both top-line revenue and bottom-line profitability.



# ESG LAGS... FOR NOW

Despite years of overt industry and regulatory attention, ESG seems to have fallen in importance as a major driver of innovation, with relatively few brands citing sustainability-related themes as significant drivers of product development.

On one hand, this aligns with themes from financial markets in 2023, in which **ESG-oriented investments receded markedly under pressure from regulators**, and amid growing skepticism about the legitimacy of “green” initiatives.

However, it’s worth noting that sustainability regulations continue to move forward in many jurisdictions, with particular emphasis in the EU. With current or emerging regulations covering topics such as deforestation, forced labor, carbon and water impact, a common theme in European regulation is an increasingly clear expectation that companies will execute due diligence in the selection of individual suppliers, as well as in the creation of end-to-end supply chains.

In the near term, the impacts of due diligence regulation on R&D teams is likely somewhat indirect. However, as diligence requirements force longer term changes in supply chains and supplier relationships, it’s likely that teams will continue to see product changes resulting from shifts in material availability and cost.

For brands who are continuing to embrace ESG projects in 2024, the survey results echo responses from the **TraceGains ESG survey** carried out in 2023. Namely, teams are responding to a wide variety of ESG-related priorities, without a single, clear winner in terms of compelling industry focus. Unsurprisingly, **44% of teams cited traceability as an ongoing priority**, a logical area of focus in that some degree of traceability is involved in many sustainability initiatives. However, responses on topics like sustainable ingredients, packaging, labor practices and carbon consumption were fairly distributed. All of those themes were important to a substantial subset of respondents, with none of them commanding the focus of a clear majority.

**44%**

of brands are placing  
greater emphasis on  
supply chain traceability

**42%**

are using sustainable  
ingredients & creating  
more sustainable  
packaging

**37%**

are working to better  
understand their partner  
operations

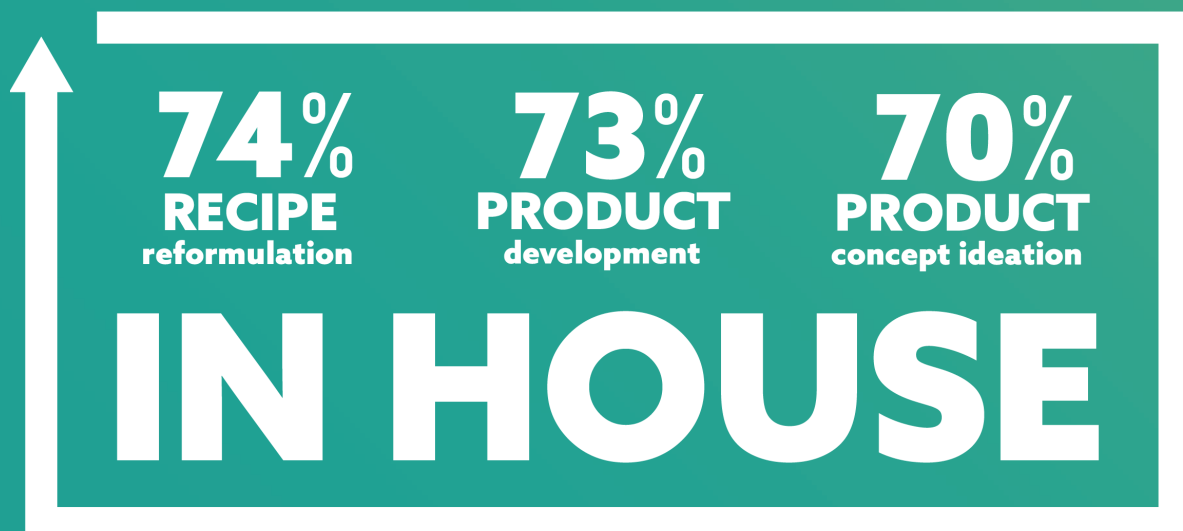
# THE TROUBLE WITH TRANSPARENCY

Traceability remains both an important topic and a vexing issue for the food and beverage industry as a whole. As mentioned in the ESG discussion above, multiple regulatory themes are starting to converge around requirements for supply chain traceability. In addition to environmental sustainability issues, emerging regulations like the Corporate Sustainability Due Diligence Directive (CSDDD) in the EU illustrate a continued emphasis on forced and child labor in the global food supply chain, and an expectation that brands will be able to document their efforts to eliminate those practices from their supply chains. However, food safety initiatives such as FDA FSMA 204 Order for Traceability in the US are creating additional urgency.

It seems reasonable to predict that brands will continue to feel pressure to create more transparent supply chains for all these reasons, a trend which could easily have knock-on effects on R&D teams. Some ingredients will have more complex, and hence more opaque supply chains given the parts of the world where they originate, or the number of logistical handoffs between the point of cultivation and the manufacturer's receiving dock. The need for increased traceability will have the potential to drive shifts in ingredients, ingredient suppliers, and the geographic makeup of supply chains as a whole.

An interesting wrinkle in the search for greater traceability may be that while multiple forces are driving brands (and by extension, suppliers) toward increased transparency, those forces may well be on a longer-term collision course with continued industry concerns around intellectual property. In the survey, **nearly three quarters of respondents indicate that while other parts of the business may be outsourced to partners, product formulation is staying in-house** and being held close to the vest. The data point highlights the fact that formulas, ingredients, and supply chains remain important elements of IP for many organizations. Looking into 2024, we can likely expect continued tension between industry and regulatory demands for traceability and transparency and the desire of brands and suppliers to keep important competitive data under wraps.

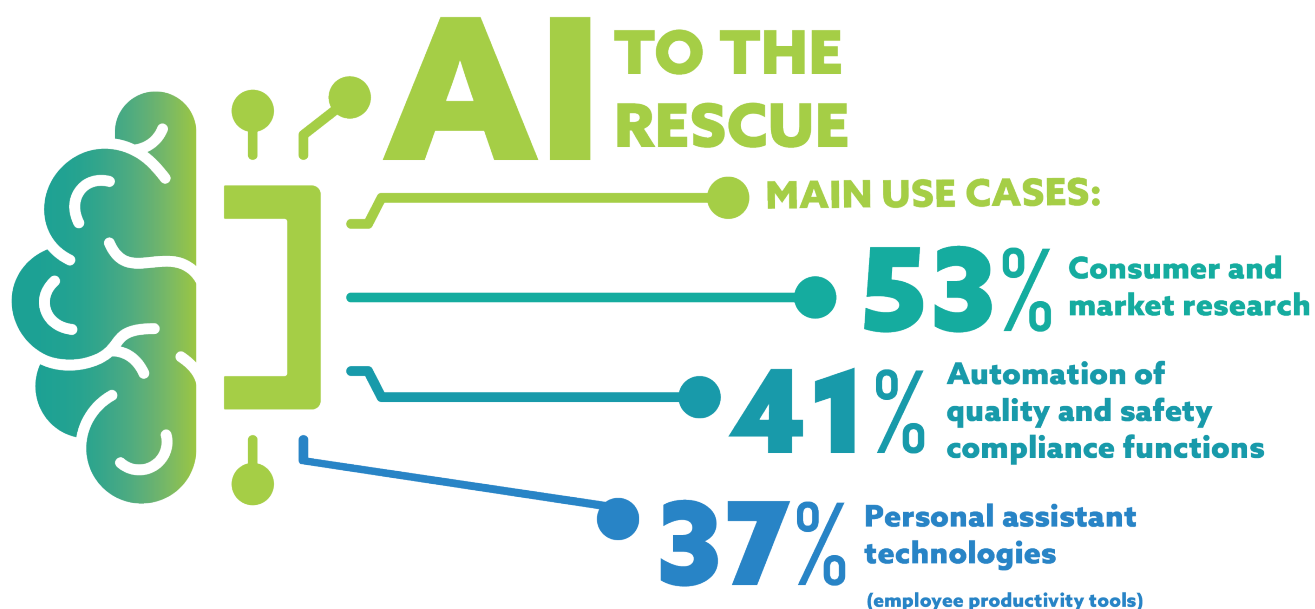
## KEEPING INNOVATION





# QUESTIONS LINGER ON ARTIFICIAL INTELLIGENCE

As the initial flush of excitement surrounding generative AI has begun to give way to a more measured assessment, food and beverage brands seem to be proceeding with caution. While survey respondents are **considering a range of potential use cases for AI**, only a minority fully invested in the technology, with **just over 10% of respondents indicating a definite commitment to AI**.



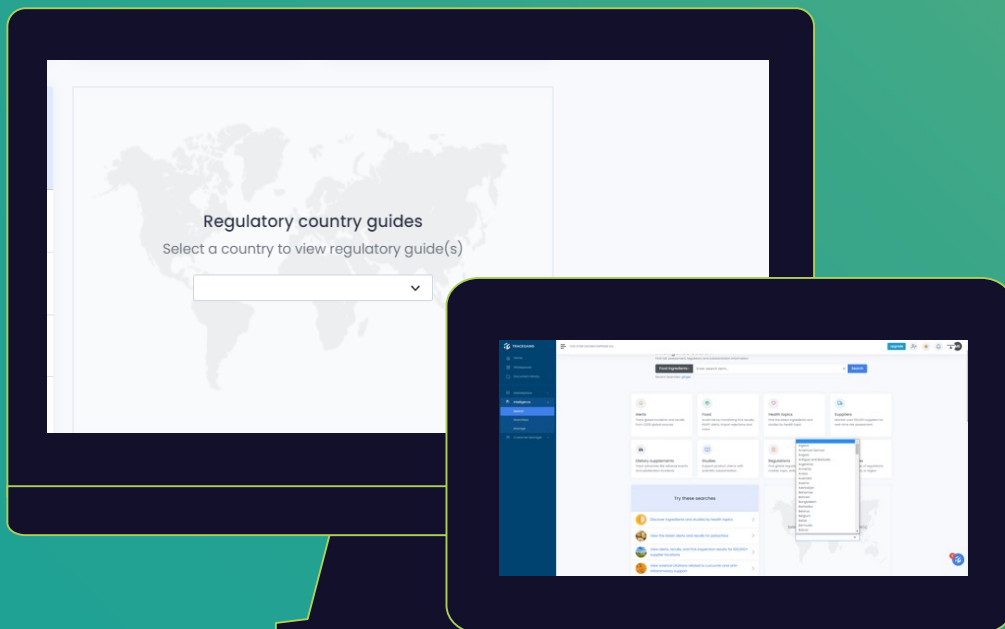
A substantial percentage of respondents—about 37%—indicated that they were **testing the waters with AI**, but hadn't yet made any substantial investments. Heading into 2024, a number of AI-related technologies are already in place within the food and beverage technology landscape, such as machine learning, pattern recognition techniques and the use of AI-assisted character recognition tools to automatically read and analyze documents. The questions seem to be hovering around the potential of generative AI technologies to impact areas such as product formulation, supply chain optimization and sourcing, and consumer research. It appears that food and beverage may play an active role in proving out generative AI over the year to come.

# TRACEGAINS AND NEW PRODUCT DEVELOPMENT

TraceGains kicked off 2024 by announcing the acquisition and integration of NutriCalc, a leading nutritional calculation and reporting tool with support for global labeling standards. This is only the latest in a series of investments we've made in our **New Product Development capabilities** over the last year, from layering advanced calculation and simulation capabilities into our **Formula Management** module, to creating the industry's first **purpose-built solution** for collaboration and digital data exchange (including formulas and specs) with co-mans and other third party service providers.

With the continued, industry-wide surge in product innovation, teams still standing on the sidelines of digitization for formulas, specifications and NPD workflows could be facing a meaningful competitive deficit. There's never been a better time to learn what digitization can do for your product innovation priorities in 2024, and TraceGains is here to help.

To learn more visit **tracegains.com** or **contact the TG team** directly. You can also continue to the next page for the full survey results associated with the Official 2024 NPD Report.



# EXPLORE THE FULL SURVEY RESULTS

See what the food and beverage industry had to say when TraceGains conducted an online survey of 261 food and beverage leaders at small and large food brands across the world From February 5, 2024 through February 22, 2024.

## 1 By what percentage will your overall investment in product innovation increase in 2024?

0%, we are decreasing our investment in NPD



0%, we will hold steady at 2023 investment levels



Less than 10%



11-20%



21-30%



31-40%



More than 40%



## 2 If you are investing more in a new product development in 2024, which of the following factors are your top three drivers?

1 Competitive pressure to remain more innovative

2 Reducing cost of ingredients/manufacturing processes

**3** Consumers' evolving demands for healthier products

**4** Supply chain disruptions & availability

**5** International or market expansion

**6** Regulatory pressures

**7** Internal ESG initiatives

**3** When it comes to managing product formulas/recipes, considering things like version control, collaboration, approval workflows, etc., which of the following statements best describes your organization?



**4** If you have challenges with your current formula management system, why? Please select all that apply.



There are too many manual processes.

37%

It's an outdated technology platform.

23%

We are understaffed.

24%

Our supplier relationships are not strong enough.

11%

We're not optimizing costs.

13%

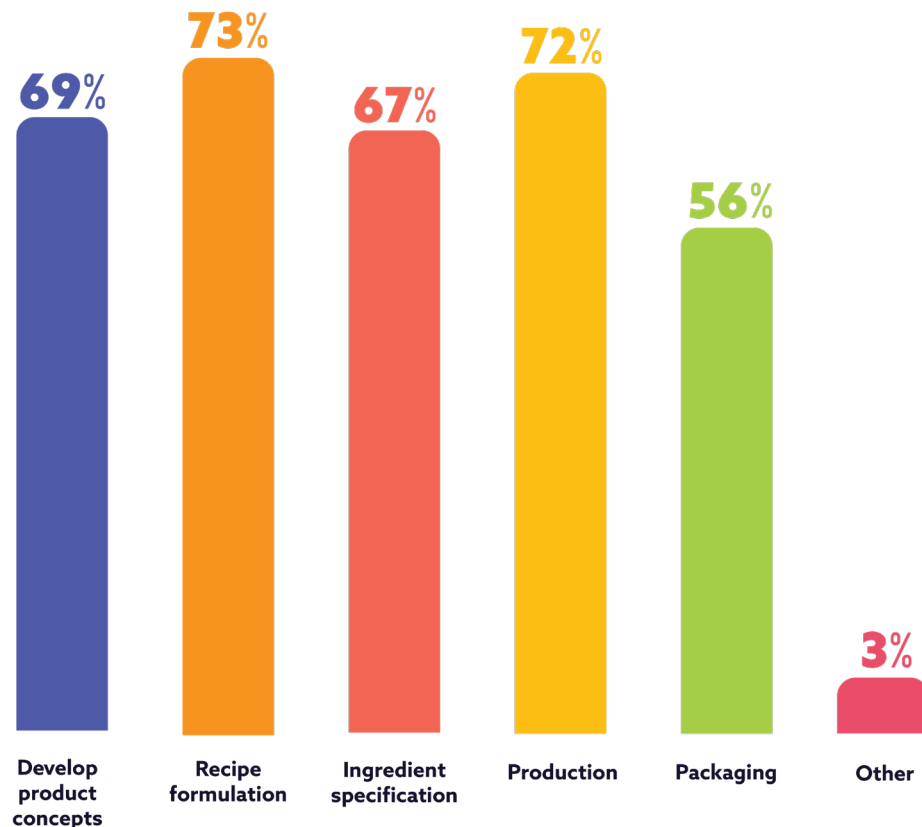
We have no challenges with our current system.

32%

Other.

11%

## 5 What components in the R&D process do you perform in-house (vs. outsourcing)? Please select all that apply.



## 6 Which of the statements below best articulates your philosophy on the role of AI in new product development?



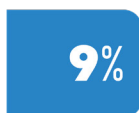
We're skeptical and waiting for more evidence that AI can be valuable.



We're testing the waters but haven't made any major investments yet.



We're all in.  
AI is a big part of the industry's future.



Other.

## 7 If you're using or considering AI technologies, which of the following uses of AI do you believe have the potential to be meaningful? Please select all that apply.

AI-driven formulation



AI-assisted sourcing for ingredients and materials



Consumer and market research



Automation of quality and safety compliance functions



Intelligent lab technologies (robotics, data analysis, etc.)



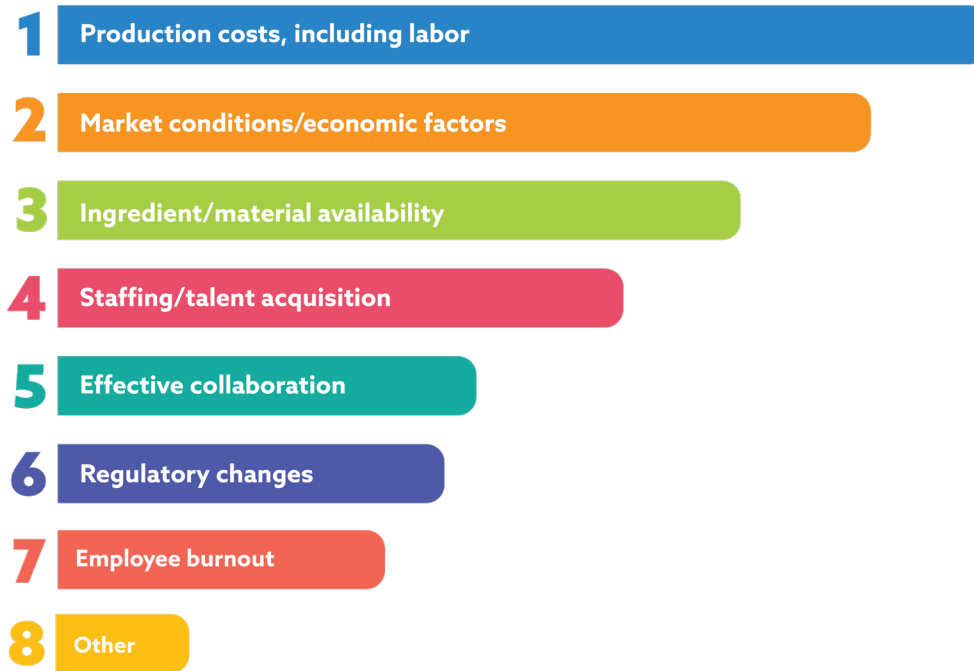
Personal assistant technologies (employee productivity tools)



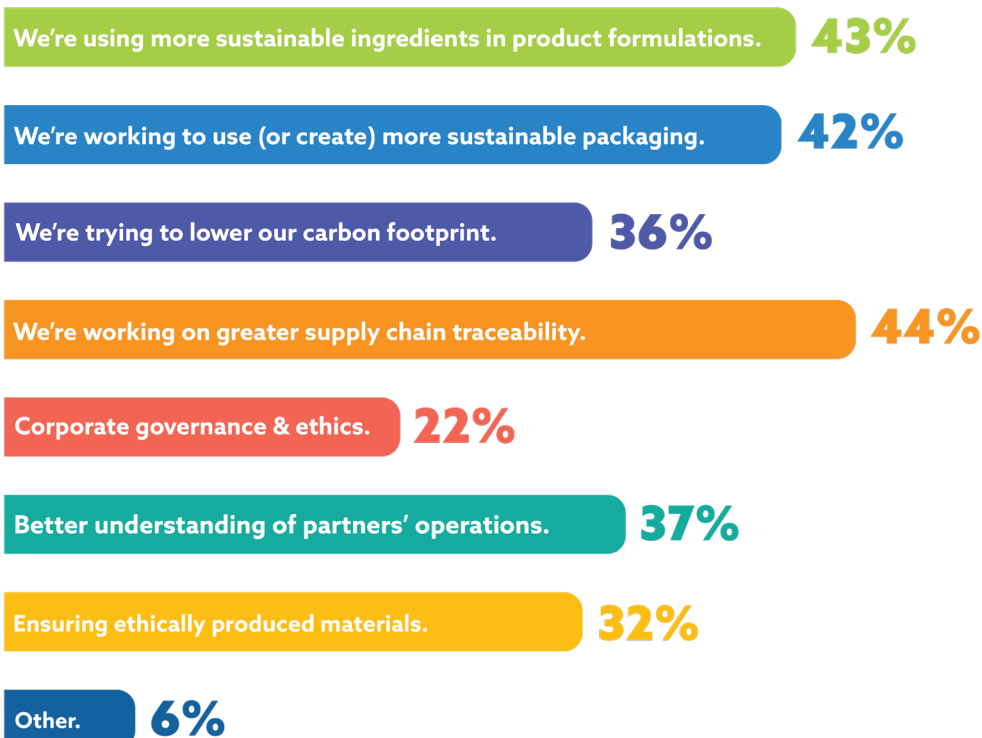
Other



## 8 What are the top challenges impacting product development efforts going into 2024?



## 9 How is the emerging global focus on ESG impacting NPD in your organization? Select all that apply.



**10** Of the following themes in food innovation, which do you think have the most potential to drive significant industry change in 2024? Please select all that apply.

- 1** Healthy, "better for you" formulations
- 2** Sustainable packaging
- 3** Plant-based alternatives
- 4** Water/carbon-neutral efforts
- 5** Cultivated proteins
- 6** Personalized nutrition
- 7** AI-driven NPD
- 8** Other