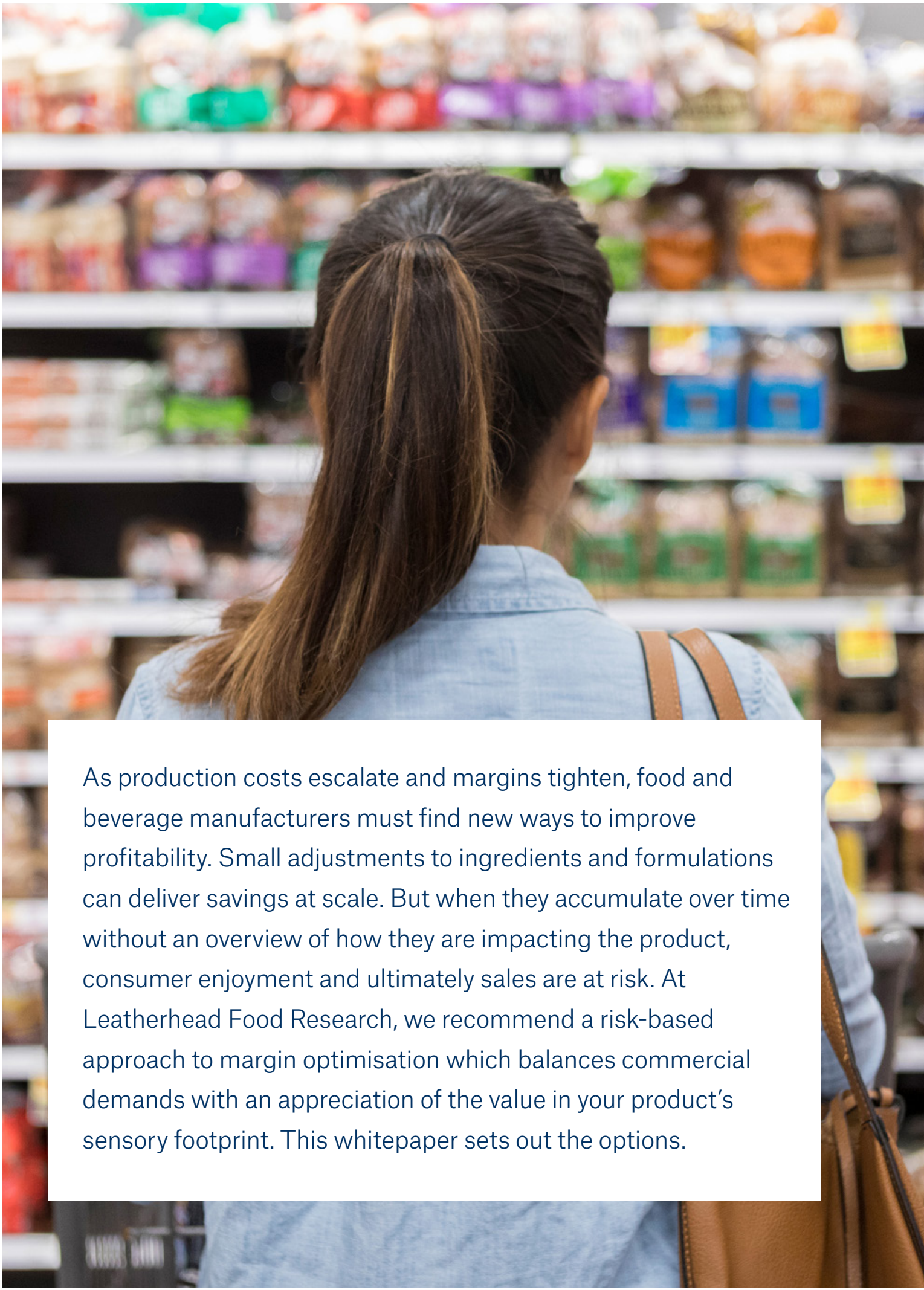


In focus

Holding on to
product identity
while boosting
margins





As production costs escalate and margins tighten, food and beverage manufacturers must find new ways to improve profitability. Small adjustments to ingredients and formulations can deliver savings at scale. But when they accumulate over time without an overview of how they are impacting the product, consumer enjoyment and ultimately sales are at risk. At Leatherhead Food Research, we recommend a risk-based approach to margin optimisation which balances commercial demands with an appreciation of the value in your product's sensory footprint. This whitepaper sets out the options.

With ingredient, packaging and employee costs all on an upward trajectory, food and beverage manufacturers are facing a perfect storm. Profit margins are narrowing, and action is needed to ensure products remain viable. One area of focus is product formulation. Technical and R&D teams are increasingly called upon to reduce, remove or switch ingredients in a bid to cut costs. But even small adjustments can have a significant impact on a product's sensory footprint, especially if they happen on an ad hoc basis without careful planning.

Protecting the sensory footprint

From aroma to flavour to texture, a product's sensory footprint is a unique and valuable part of its identity. Yet it's all too easy for it to get lost or confused over time with iterative modifications in the name of cost reduction.

This can harm customer satisfaction, brand reputation and sales, especially if the alterations spark a social media backlash. Nobody wants to see their product hauled over the coals with a derogatory hashtag as consumers call out a change in the size, taste or amount of chocolate on their favourite biscuit.

The question is, can R&D and technical teams optimise margins without compromising consumer experience? We believe it is possible to strike a happy medium with a purposeful approach blending consumer insights with deep understanding of ingredient functionality.

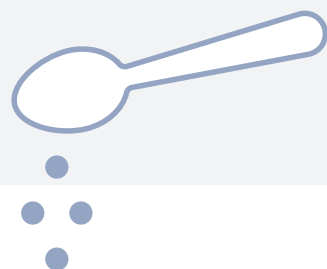
In an ideal world, this would always happen in the context of an overarching long-term strategy. However, we recognise that's not always possible and often help clients who are facing one of these scenarios:

- 1 Reactive product changes in response to business demands for cost-cutting in a specific area.
- 2 Proactive product changes which work holistically to boost profit margins across the wider portfolio.

We work with clients to find ways to reduce risk and maximise the chances of a positive outcome in each of these situations. With a considered approach, it is possible to achieve margin optimisation while protecting the sensory footprint and maintaining customer satisfaction.

Reactive product changes

Can't you just swap this ingredient for a cheaper one? Wouldn't one flavour work just as well across all our products?



If you work in the technical or R&D arm of a food or beverage manufacturer, it might be tempting to roll your eyes in response to queries like these. But they are perfectly legitimate questions when margins are tight.

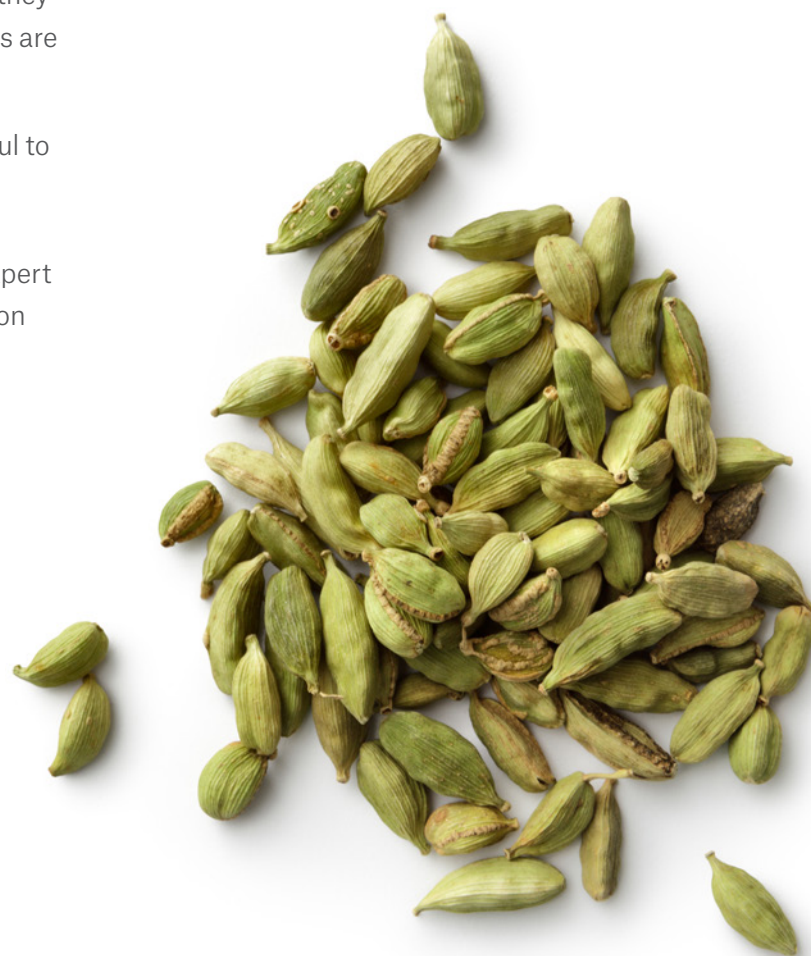
Instead of having a knee-jerk reaction, it's helpful to reframe these questions to stimulate a useful discussion with procurement and marketing colleagues. Working collaboratively and with expert guidance, it's possible to find a profitable solution that's right for the product and the consumer.

Hypothesising the commercial and consumer impact

Firstly, consider where the drive for margin optimisation is coming from. Is it led by a specific consumer insight, such as a desire to keep retail prices down? Or is it in response to a price hike from ingredient suppliers?

When margin optimisation is rooted in consumer insight, you can be fairly confident that it won't harm sales. But if it's driven by external pressure devoid of such insight, a more careful approach is needed.

Before you dive into consumer research on the matter, it's important to analyse the proposed change and identify risks.



Typical scenarios you may be facing include:

• Single ingredient swap in one product

Like-for-like ingredient changes are often driven by the need to find cost-effective suppliers. Attention must be given to the role the ingredient plays. If it's central to the sensory signature, even a small change could be detrimental.

• Ingredient swap across an entire product range

Larger scale cost savings can be achieved by focusing on multiple products, for instance switching to a new pasta supplier for all ready meals. However, you can't assume there will be a uniform impact across the range. Change may be more noticeable in some products than others.

• Reformulating to reduce or remove an ingredient

If the goal is to cut down on an expensive item, such as meat or chocolate, the sensory impact can be significant. Consider how ingredients interact with each other too. Changing a multifunctional ingredient like sugar has repercussions for bulk, flavour and preservation as well as sweetness.

• Iconic change

Sometimes margin optimisation risks a major impact on brand reputation, for instance when the flavour profile of a heritage product is altered. If the change is unavoidable, extensive collaboration between R&D, technical and marketing teams is needed to minimise negative fallout.

• Size changes

Ingredients aren't the only target for margin optimisation. Sometimes it makes business sense to reduce a product's size. This scenario requires careful consideration of associated issues such as customer perception.

Once the change has been defined, hypothesise how it might affect costs and consumer satisfaction. This enables decisions to be classified as low, medium or high value in terms of commercial impact.

For instance, in most cases, swapping a single ingredient in a single product is likely to be a lower

value decision than moving to a new supplier across an entire portfolio. However, reducing the chocolate on your best-selling biscuit is likely to be a higher value decision, with a major impact on sensory experience.

Mapping the consumer and commercial impact of product changes

Consider your product change from a commercial and consumer perspective. Changes with a high commercial impact and high impact on consumer satisfaction are a 'high value' business decision.

This might include changing an ingredient supplier across an entire product range to making an iconic change in a recipe for a heritage product. Higher value business decisions require more in depth/ extensive validation than less critical decisions.

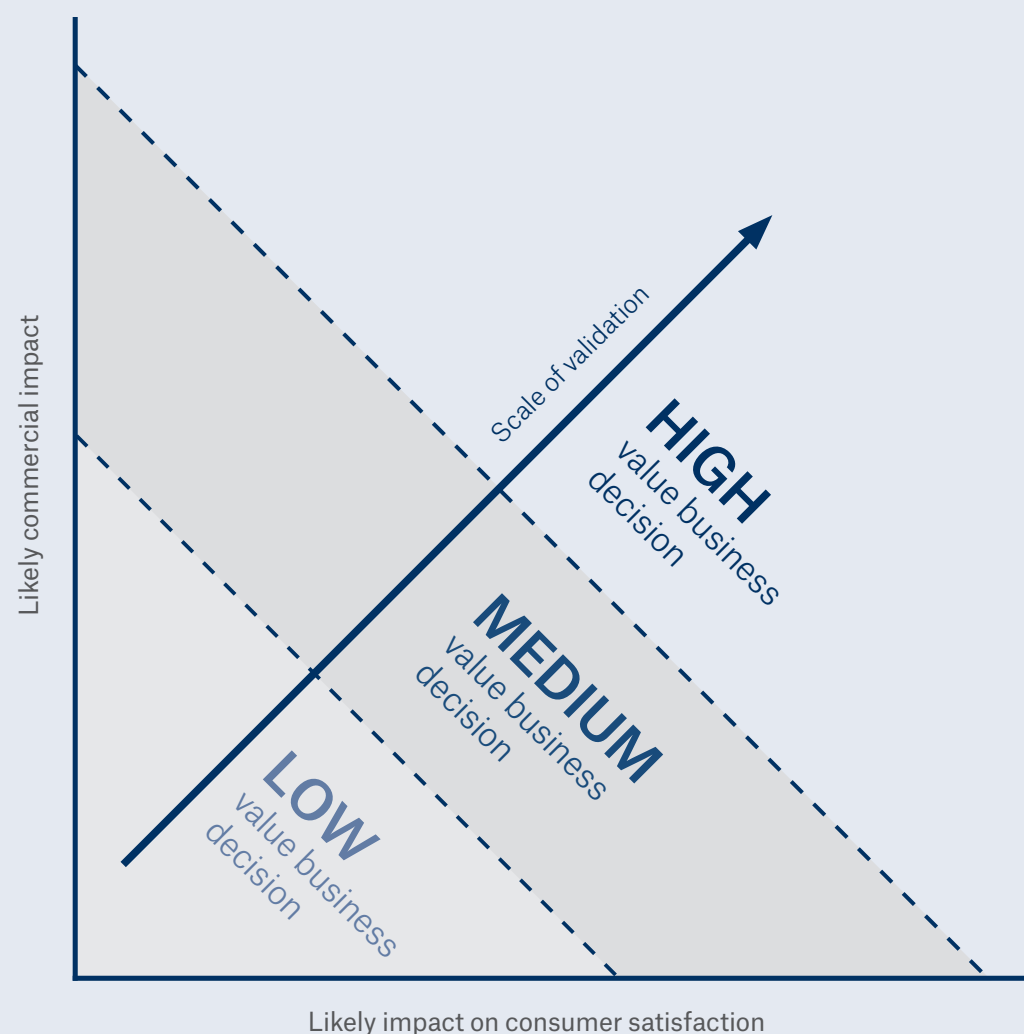


Figure 1: mapping likely outcomes onto a value matrix can help inform decision making.

Quantifying the risk of consumer alienation

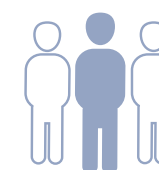
Hypothesising commercial and consumer impact facilitates more informed decision making about the need for consumer research. And if research is necessary, it helps establish how robust it should be. High value business decisions demand more in-depth and extensive validation than less critical decisions.

With business-critical decisions, it's advisable to conduct an alienation test to predict the likely risk of margin optimisation harming customer satisfaction and sales. The percentage of people who would be alienated is calculated by identifying the number of people who detect the change, prefer the original product and would not buy the new version.

Proactive product changes

While ad hoc requests for margin optimisation are inevitable, wherever possible it's better to take a more strategic approach. Proactively identifying opportunities for the greatest cost reductions with minimal consumer impact is preferable to a piecemeal approach which can result in unplanned, unstructured product evolution.

This approach allows you to identify areas which represent win-wins for your business so you can focus efforts accordingly. It protects products from impromptu demands from other parts of the business, giving you the authority and evidence to reject margin optimisation that would be detrimental.



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Five steps to strategic margin optimisation

At Leatherhead, we help clients build a framework for margin optimisation based on detailed consumer, technical and regulatory evaluation. Outputs from this five-stage exercise provide clear direction on high, medium and low value opportunities.

1 Product / category segmentation

An initial segmentation of the product portfolio identifies which products offer the biggest wins for margin optimisation. This is based on shopper data, price points and any recent consumer benchmarking programmes. Focusing on flagship products that are representative of the wider portfolio is useful at this stage, enabling inferences or hypotheses to be made. We also apply specialist knowledge to eliminate products where margin optimisation might alter regulatory status or have complex technical implications.

2 Sensory footprint

R&D and Innovation teams need to act as guardians for signature sensory profiles. This means fully understanding the sensory footprint of individual products and how they differ from others on the market. If your snack has a distinctive vinegary flavour which the competition lacks, you need to be aware of it. If there's a complex sweetness which consumers love, then it needs to be protected. Start-ups know their products inside out, and everyone in the business gets the importance of sensory differentiation. Larger multinationals need to rekindle this passion across R&D, procurement and marketing professionals alike. Leatherhead can help here, developing the sensory language to describe products and establishing their position in the sensory landscape versus competitors.

3 Consumer expectations

Conducting consumer research on flagship products helps determine key characteristics which drive 'liking' and how preference may shift if they are modified. Methods such as kano modelling are used to rank characteristics, ascertaining which are 'nice to have' and which are fundamental to the product. This delivers evidence-based insights such as 'attribute x is driving liking more than attribute y' or 'liking falls as % of ingredient x falls' and 'liking is around flavour profile x'.

Qualitative research also helps position the product within the broader context or zeitgeist. How is it viewed by consumers? Is margin optimisation feasible? Or is this a much-loved product which consumers would pay a premium price for?

Research can also indicate if and how changes should be communicated to consumers. Blending sensory trained panel analytics with a range of qualitative and quantitative methods gives a highly nuanced picture of how consumers experience your product versus the competition.



Figure 2: A full evaluation of the impact of product changes generates a strategic framework for margin optimisation.

4 Technical feasibility

Aligning sensory data with underlying food science is critical to understand the full repercussions of removing, reducing or replacing an ingredient.

A process called blueprinting can be used to understand the full technical challenges posed by margin optimisation. Broadly speaking, it involves consumer testing, sensory science, microscopy and rheology to create a product baseline.

This gives an objective benchmark that product developers can refer to when experimenting with alternative ingredients or formulations. Any changes to taste, texture, mouthfeel or other aspects of the sensory experience are given a scientific grounding which enables a more focused and strategic approach to modifications.



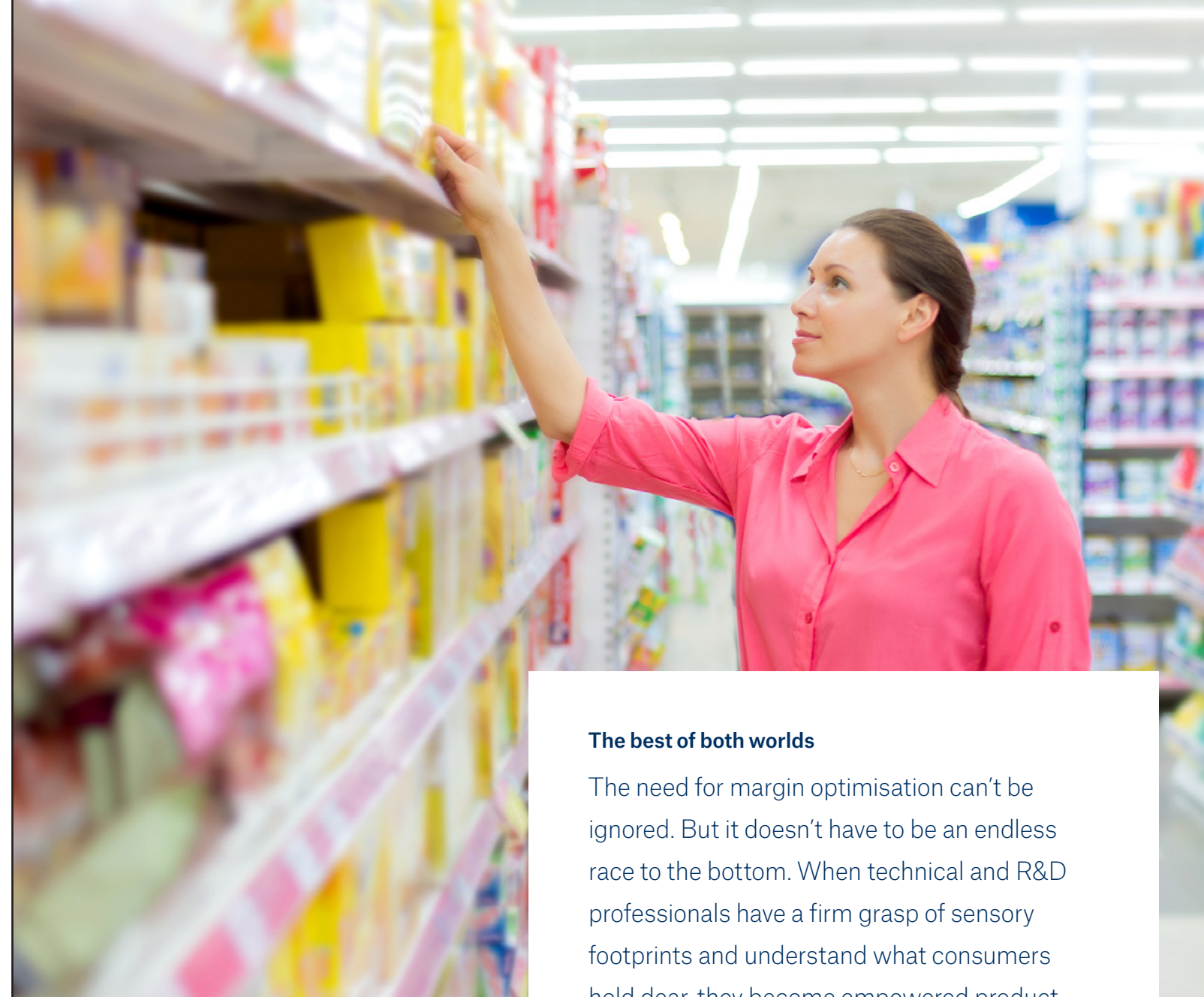
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5 Regulatory environment

International food and beverage regulation also needs to be considered, with attention given to factors such as ingredients, labelling and claims.

For instance, reducing the cocoa content in chocolate might help to cut costs, but it may also limit how the product can be classified and marketed in some regions or countries. There are also cases where an alternative ingredient can be used freely in one market, but is not permissible in other regions. And claims surrounding health benefits, organic credentials or other differentiators need to be reviewed if these characteristics are likely to be impacted by margin optimisation.

This area is highly complex, and it needs to be handled by professionals that fully understand the regulatory environment.



The best of both worlds

The need for margin optimisation can't be ignored. But it doesn't have to be an endless race to the bottom. When technical and R&D professionals have a firm grasp of sensory footprints and understand what consumers hold dear, they become empowered product guardians.

Instead of risking consumer discontent and commercial self-sabotage, they can find intelligent ways to boost profitability without compromising the sensory experience. Blending science and technical expertise with consumer insights helps generate better long-term outcomes for everyone.

About Leatherhead Food Research ▾

Leatherhead Food Research provides expertise and support to the global food and drink sector with practical solutions that cover all stages of a product's life cycle from consumer insight, ingredient innovation and sensory testing to food safety consultancy and global regulatory advice. Leatherhead operates a membership program which represents a who's who of the global food and drinks industry. Supporting all members and clients, large or small, Leatherhead provides consultancy and advice, as well as training, market news, published reports and bespoke projects. Alongside the member support and project work, our world-renowned experts deliver cutting-edge research in areas that drive long term commercial benefit for the food and drink industry. Leatherhead Food Research is a trading name of Leatherhead Research Ltd, a Science Group Company.

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Science Group plc offers independent advisory and leading-edge product development services focused on science and technology initiatives. Its specialist companies, Sagentia, Oakland Innovation, OTM Consulting, Leatherhead Food Research and TSG Consulting collaborate closely with their clients in key vertical markets to deliver clear returns on technology and R&D investments. Science Group plc is listed on the London AIM stock exchange and has more than 400 employees, comprised of scientists, nutritionists, engineers, regulatory advisors, mathematicians and market experts.

Founded in 1986, Science Group was one of the founding companies to form the globally recognised Cambridge (UK) high technology and engineering cluster. Today the Group has 12 European and North American offices.

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