

# Healthier Product Reformulation In China

Research by



科信食品与健康信息交流中心  
China Food Information Center



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Consumer and company  
research on progress  
and priorities

# INTRODUCTION



**Dr Kai Zhong**  
Director of China Food  
Information Centre (CFIC)

China Food Information Centre (CFIC) is an independent non-profit organization that was formed in 2014.

CFIC's mission is to deliver scientific information to consumers, provide professional advice and technical support to the regulatory departments, and bring opportunities for the food and beverage industry to collaborate with experts and the government.

In the recent years, the booming trend of chronic disease has resulted in the "Healthy China 2030", "Healthy China Initiative" and other health policies. The concept of "Three reductions" (salt, fat/oil and sugar reduction) sits at the core of nutrition education and intervention policies, which urges the industry to accelerate its reformulation efforts.

However, the success of such policies and practices will not be guaranteed without strategic insights. Therefore, CFIC conducted a study to understand the perceptions, attitudes, behaviours and needs of consumers, industry and health and nutrition experts.

Food Industry Asia (FIA) had provided valuable technical support and insights with their experience of carrying out a similar series of studies in the Asian region.

This report summarises the dietary practices of consumers, the willingness to improve their health and the existing gaps between stakeholders.

I believe that this report will benefit the developments of future health interventions and the direction of reformulation.



# INTRODUCTION



**Matt Kovac**  
Executive Director

The food industry has been working to deliver solutions through product innovation and reformulation to nudge healthier behaviours by improving the nutritional quality of its food products. This has been accelerated in the context of rising epidemic of obesity and non-communicable diseases (NCDs) such as diabetes.

However, as innovation and reformulation efforts are carried out by companies behind closed doors, FIA with the support of the China Food Information Centre (CFIC) sought to understand the broad reformulation landscape of food and beverage categories in China. The findings of the research showcase consumer attitudes towards healthier product reformulation, industry's progress to improve the nutritional quality of products, priorities as well as the challenges companies encounter in the process. Health and nutrition experts in China were also consulted as part of the landscape study.

The first of its kind in China, this report summary is valuable for both the industry and government bodies to assess progress and recognise the areas of support businesses are seeking to further their reformulation efforts to advance the public health agenda.

Finally, I'd like to thank our in-country partner, CFIC for their support in carrying out the study in China.



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# KEY STATISTICS

## Health Challenges in China



**50.7%**

of the adult population are overweight



**11.9%**

of the population suffer from diabetes



**16.4%**

of the adult population are obese



**6.8%**

of children under five years are overweight



**27.5%**

of the population suffer from hypertension

## Consumer Views

**92%**

are trying to improve their diet



Fat is the biggest dietary concern for consumers; about

**51%**

check for fat information on pack



**89%**

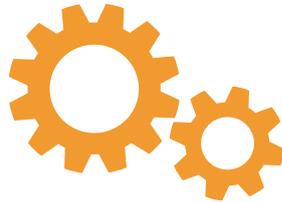
believe that the “three reductions” – fat, salt and sugar are important in driving the national health strategy

# Manufacturer Views



## Top Three Priorities

- 1 Reducing salts
- 2 Reducing fats
- 3 Reducing sugars



## Top Three Motivators

- 1 Meeting consumer needs
- 2 Improving public health
- 3 Build/protect brand reputation



## Top Three Challenges

- 1 Maintaining taste
- 2 Consumer acceptance
- 3 Lack of suitable substitutes



**97%**

would be encouraged to expand its healthier product portfolio if there were more government incentives



**89%**

have been working on reformulation



**89%**

of the respondents improved their processing techniques to support reformulation

# THE HEALTH AGENDA IN CHINA

With the country's evolving economy, the rates of obesity and NCDs in China have been on the rise.

According to China's National Health Commission (NHC), more than half the Chinese adult population are considered overweight. Obesity rates among them have also more than doubled in less than two decades, from 7.1% in 2002 to 16.4% in 2020.

In 2020, 50.7% of Chinese adults and 6.8% of children under 6-years were classed as overweight. The growing rates of overweight and obesity are aligned with the evolving dietary habits (consuming more processed foods and sugar-sweetened beverages) associated with the country's rapid economic growth.

The increasing rates of overweight and obesity also pose an additional burden to China's public health system – by increasing the risk of NCDs such as diabetes, coronary heart disease and high blood pressure. China has an estimated 116 million diabetics, by far the highest number compared with any country.

The average amount of cooking salt used daily in Chinese households is 9.3 grams, compared to 10.5 grams in 2015. However, this is still a large gap in meeting the recommended daily amount of 5 grams.

While consumers are said to be adding less salt in their cooking, the prevalence of high blood pressure among the Chinese population still remains high at 27.5%.

## Government Response

In a bid to address the issues of obesity and NCDs in China, the government launched a series of strategic plans, including the “Healthy China 2030” Planning Outline, and the “Action Plan for National Healthy Lifestyle”.

The “Action Plan for National Healthy Lifestyle” require all localities to raise awareness among its population on the relationship between a diet that focuses on the “three reductions” – fat, salt and sugar, and a healthier lifestyle. The plan also encompasses the importance of physical activity and the energy balance needed to maintain a healthy body weight.

Dietary, nutrition education and its related interventions pertaining to the “three reductions” sit at the core of local government initiatives to enable a healthier nation.

## Industry Response

In view of the growing disease burden in China, the food industry has also been working on various solutions to deliver better nutrition. Through product innovation and reformulation efforts, the industry has been focusing on the “three reductions” as well as fortifying foods with vitamins, minerals and adding in fibre, protein in its products.

With the support of Food Industry Asia, the local industry led by the China National Food Industry Association (CNFIA) is working in partnership with the NHC to develop voluntary reformulation guidelines to enhance the reformulation landscape in China.



# CONSUMER ATTITUDES TO HEALTH

CFIC conducted a survey of consumers in China (see page 19 for more detail).

Health consciousness is relatively high in China. 80% of consumers say they take responsibility for their own diets. Almost 60% of the consumers claim that they maintained a healthy diet. However, only 22% rarely or never consumed foods that are high in fat/oil, salt and sugar.

Nearly 50% of consumers indicated that healthier options while dining out were limited.

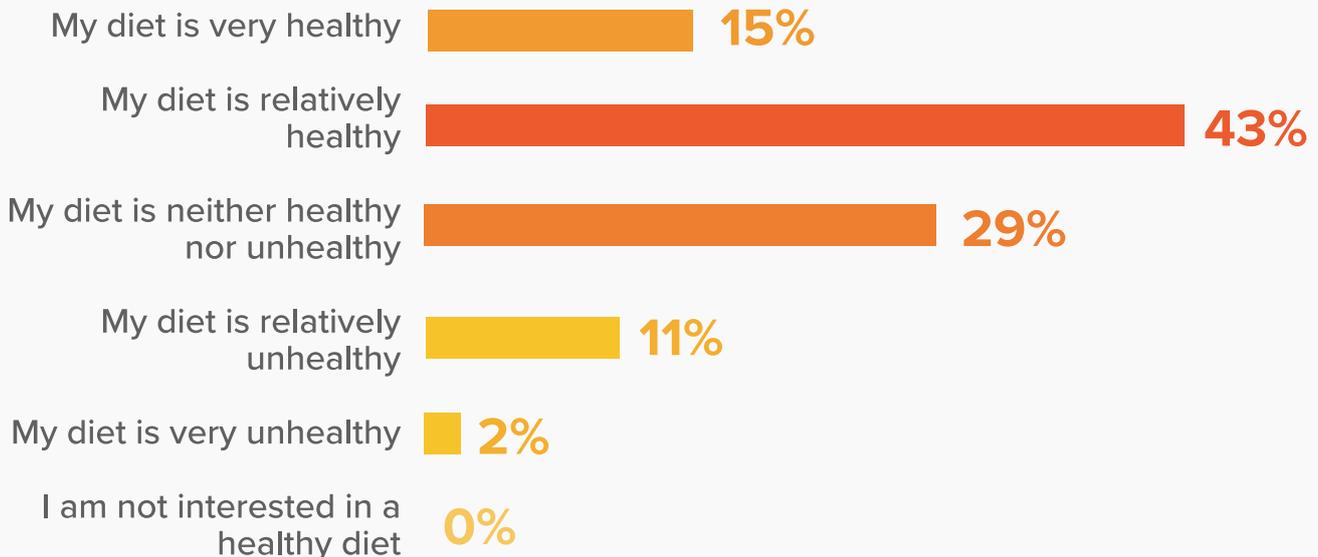
This illustrates why it's so important for the food and beverage sector to make eating healthier as convenient as possible.

While consumers feel that bulk of the responsibility to

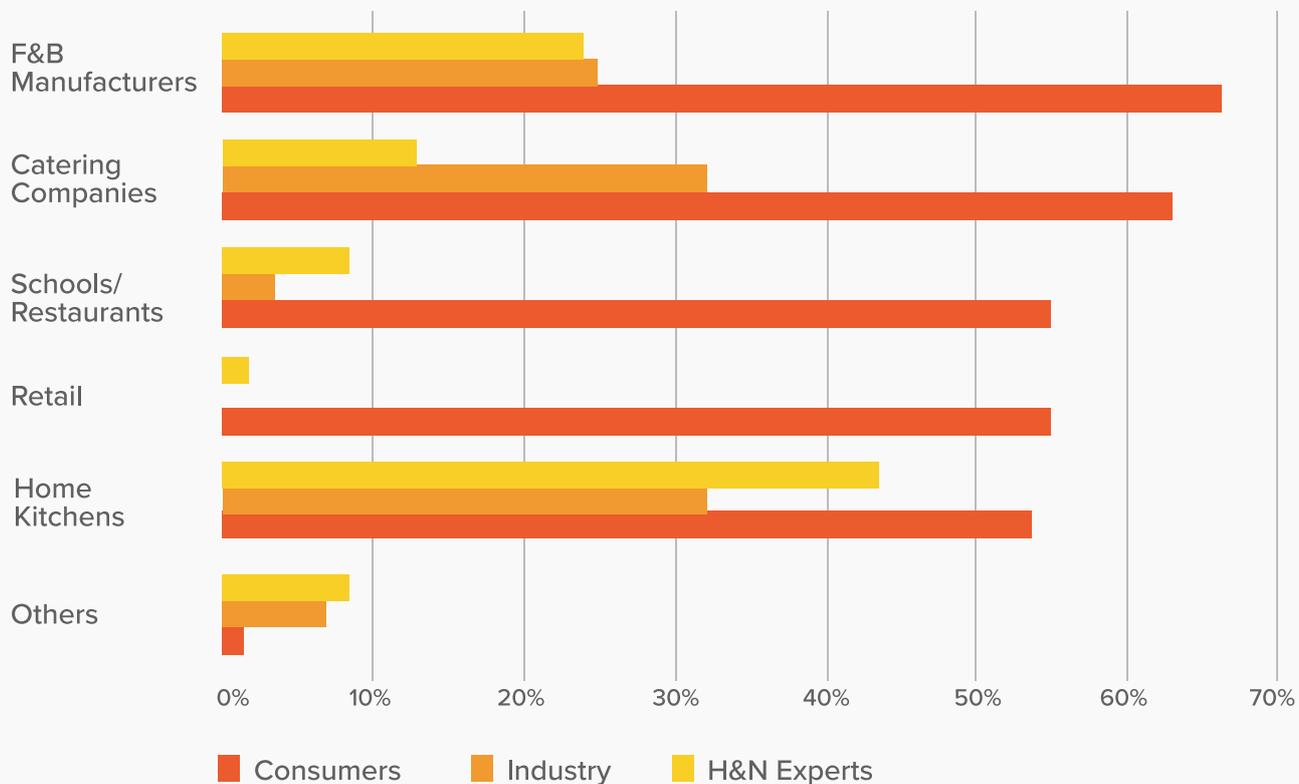
deliver healthier products is in the hands of the industry, only 53% of consumers felt that home kitchens (cooking at home) could have an impact on improving overall dietary health. Though consumers underestimated the importance of utilising home kitchens, food companies and health and nutrition experts considered them to be a key component that influence dietary health in addition to industry's onus to provide healthier alternatives.

Many see cost as a barrier. 79% believe that healthier food is more expensive than less healthy options and would only choose healthier products if they can afford it. Improving the nutrition of mainstream products would be a powerful way to overcome this perception.

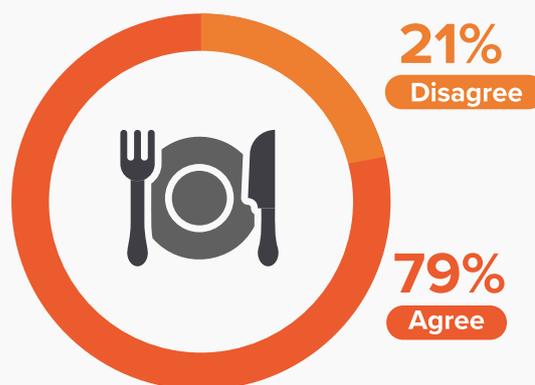
## ■ Some consumers have not reached the pinnacle of healthy eating



## Factors influencing Overall Dietary Health

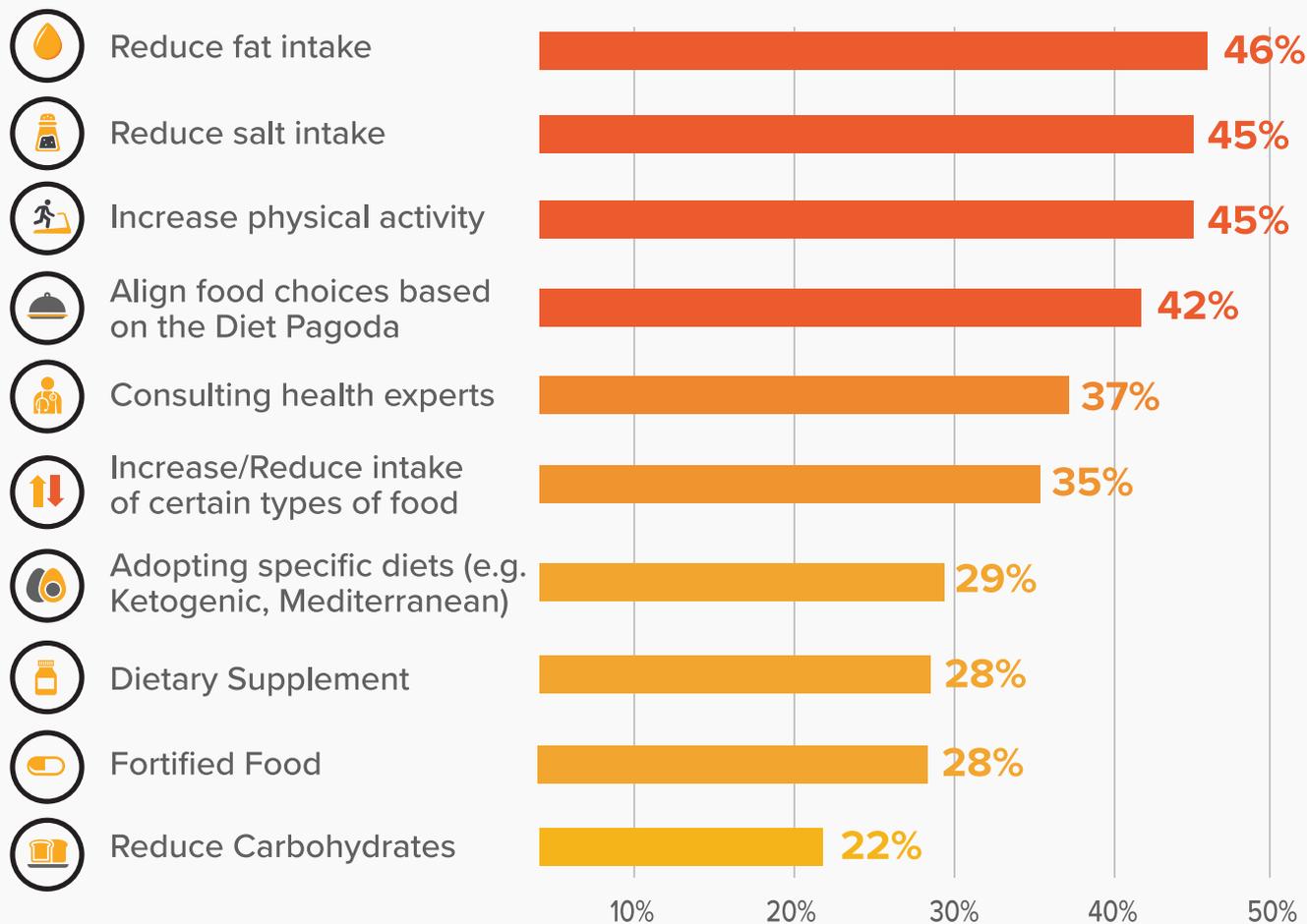


## Eating healthily is more expensive than eating unhealthily



There are many different ways in which Chinese consumers seek to improve their diets, including increasing some nutrients and reducing others. This presents a wide range of opportunities for the food and beverage sector to support consumer efforts to reduce fat, salt and sugar as well as eat more fruits, vegetables and fortified foods.

## How are you actively trying to improve in your diet?



# ATTITUDES TO NUTRITION LABELLING

Product familiarity; absence of additives; taste; nutrition information and the introduction of new, healthy products feature in the top four drivers of product choice.

Nutrition plays an important role in how Chinese consumers maintain and/or adopt healthier eating habits. As many as 92% were keen to improve their dietary habits – this was particularly observed among those who have a good understanding of nutrition concepts.

About 94% of consumers claimed to look at nutrition information on packs at least some of the time and nearly 69% claimed to look at the labels regularly.

With fat being the biggest nutritional concern among consumers, about 51% of the consumers look out for

this nutrition information on pack. 50% looked out for information on dietary fibre while 48% looked out for protein.

While salt/sodium has been identified as one of the “three reductions” in the action plan for National Healthy Lifestyle, only 32% looked out for the sodium levels in food products. This highlights the lack of knowledge among consumers on the presence of “invisible salt.”

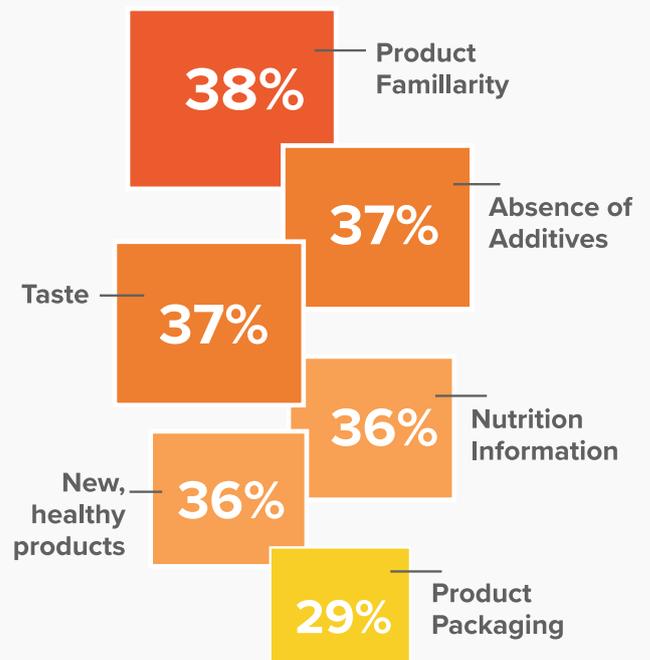
More than half (51%) sought for nutrition advice/information via social media platforms such as WeChat and Weibo. About 46% seek for such information on News platforms and websites while 40% get this information from TV and radio platforms. Only about 35% receive nutrition advice/information from professionals (doctors, nutritionists).

## How often do you look at nutrition labels?



## % stating each element is important when choosing food and groceries

(top six answers shown)



# ATTITUDES TO REFORMULATION

Healthier product reformulation is widely accepted amongst Chinese consumers.

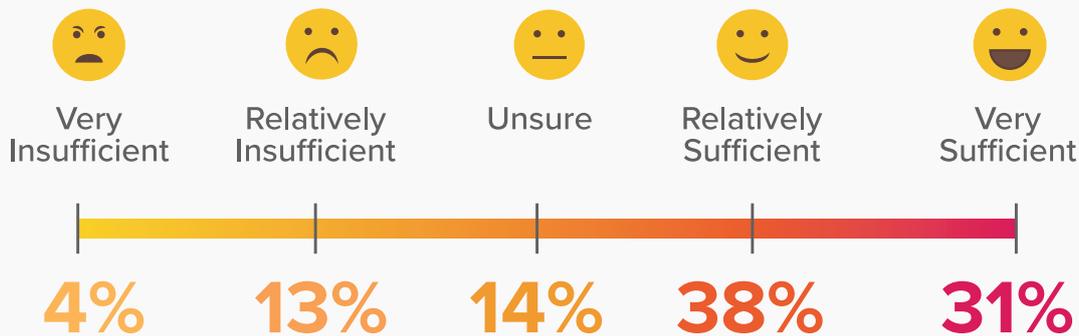
About seven in ten consumers feel that the food and beverage sector has already been delivering on healthier products.

Consumers generally believe that food and beverage products can be made healthier, without compromising

on taste. However, 60% consumers did not want food and beverage companies altering the product formula voluntarily.

With taste being one of the top considerations when buying products, the gold standard for companies is to improve the nutritional quality of their food and beverage portfolios while maintaining the existing taste and flavour profiles to not disaffect consumers.

## Are food companies providing sufficient healthy/healthier food products in the market?



## Food companies should voluntarily tweak their recipes to make products healthier



# INDUSTRY PROGRESS

A survey\* was also conducted with the food and beverage companies in China (see page 19 for more detail).

Some 60% of the companies felt that there are not enough healthy products in the market.

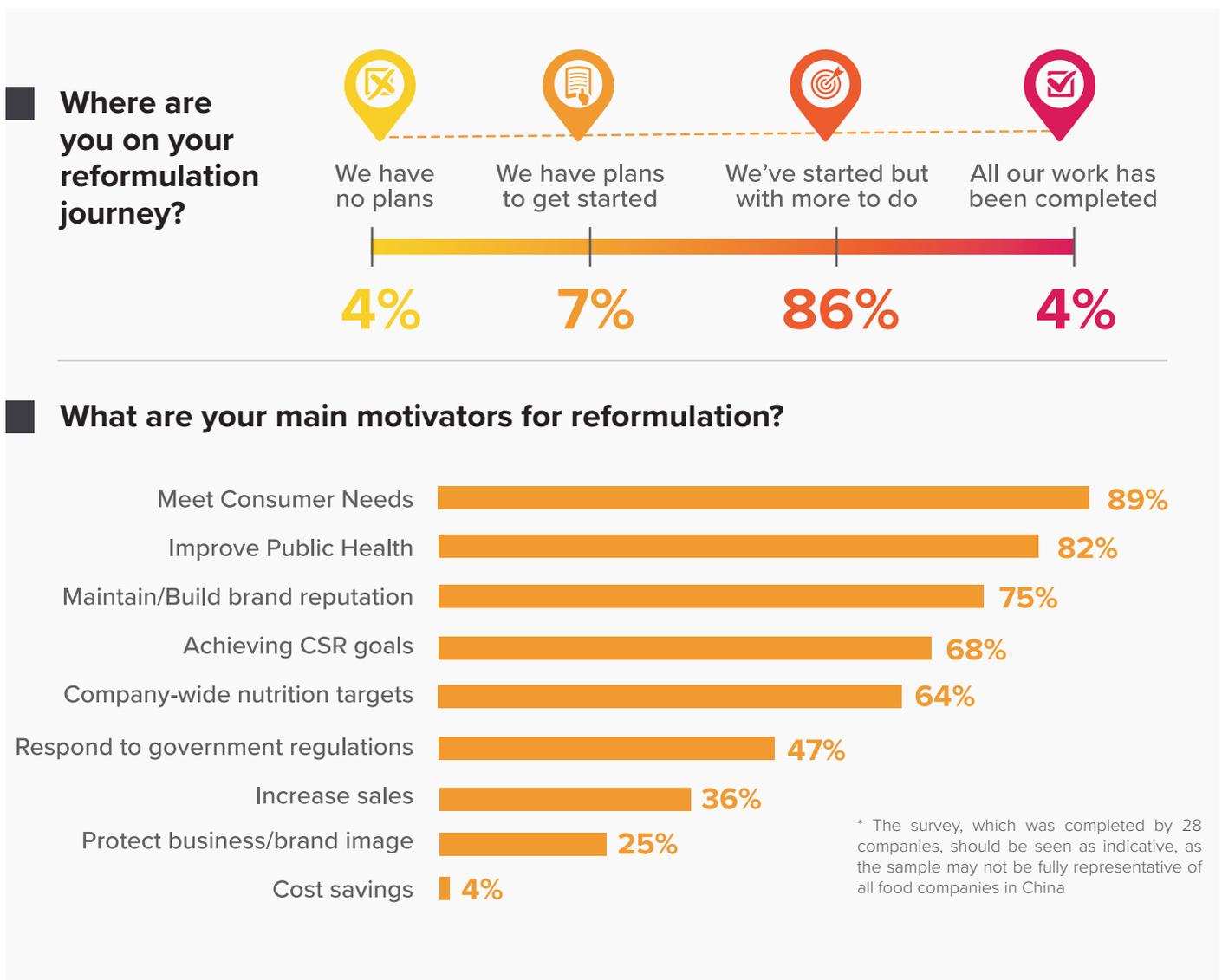
About 86% of the surveyed companies had begun to reformulate products and 4% had completed their reformulation efforts. 7% had plans to reformulate their products while almost 4% companies had no plans to do so.

Companies saw a strong commercial incentive to embark on reformulation efforts: 89% felt that such efforts enabled them to meet consumer needs.

Many different reasons for action were mentioned – with improving public health, maintaining and building brand reputation identified as the top drivers for action.

It is the combination of push factors that makes the case for reformulation so compelling. With so many companies working on this, any that don't are in danger of being left behind.

However, health and nutrition experts in China were of the view that the industry transformation to deliver healthier products were slower than anticipated.



# INDUSTRY PRIORITIES AND EXPERIENCES

Reformulation priorities periodically changes with consumer demand. While reformulation is now spread across a wide range of nutrients, encompassing the obesity, NCDs and undernutrition agenda, majority (89%) of the companies are working to improve their processing techniques to support reformulation activity.

Salt reduction across the product portfolio, along with the introduction of a new range of healthy products were also part of the top three reformulation priorities adopted by companies.

Despite the national campaign focusing on the “Three Reductions,” fewer companies reduced fat/oil across their products. 50% of them felt that their products were not suitable for fat/oil reduction and this may be

a result of fat playing a key role to maintain product texture. Many companies also felt that there was a lack of effective substitutes to support fat/oil reduction.

Larger food and beverage companies were more active in driving the reformulation agenda in China. The track record for consumer acceptability is also reassuring. While 8% of the companies reported a negative reaction to reformulated products, about 71% enjoyed positive feedback. The remainder received a lukewarm response on the reformulated product portfolios.

Small changes often go unnoticed by consumers and if this is maintained over several years, it can add up to a substantial nutritional difference.

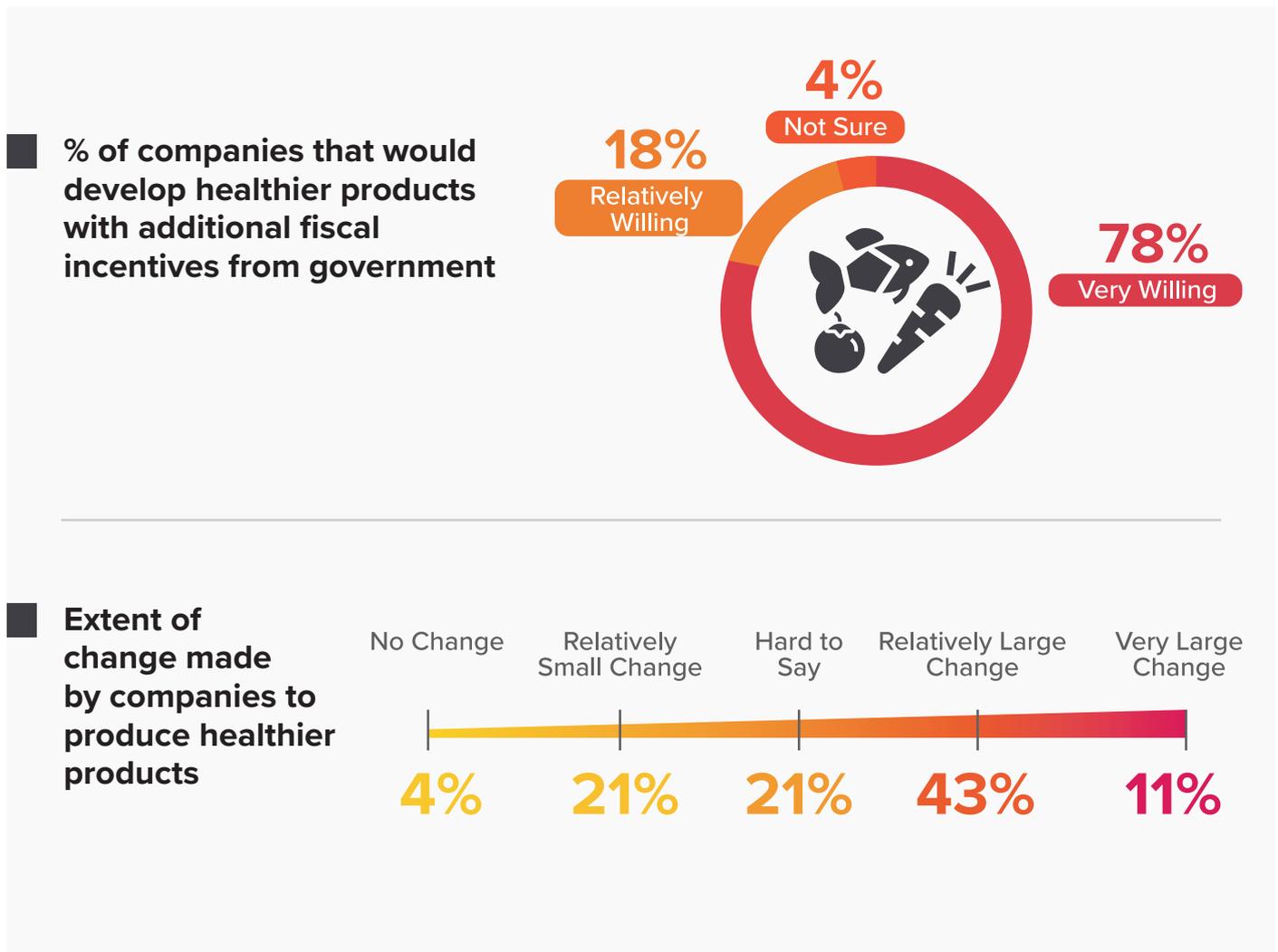


# ACCELERATING PROGRESS

While plenty of reformulation activity is already underway, the study also explored what else could accelerate change.

Almost 97% of the companies noted that greater policy support from the government through fiscal incentives would nudge companies to carry out more R&D associated with reformulation. Health and nutrition experts also recommended that governments should look into the use of incentives and clearly defined regulations and industry standards.

There were very few attitudinal barriers to change among the survey respondents. More than half of the food companies believed they had made significant changes to their product portfolios to make them healthier. However, health and nutrition experts noted that reformulation efforts undertaken by companies was lower than expected.



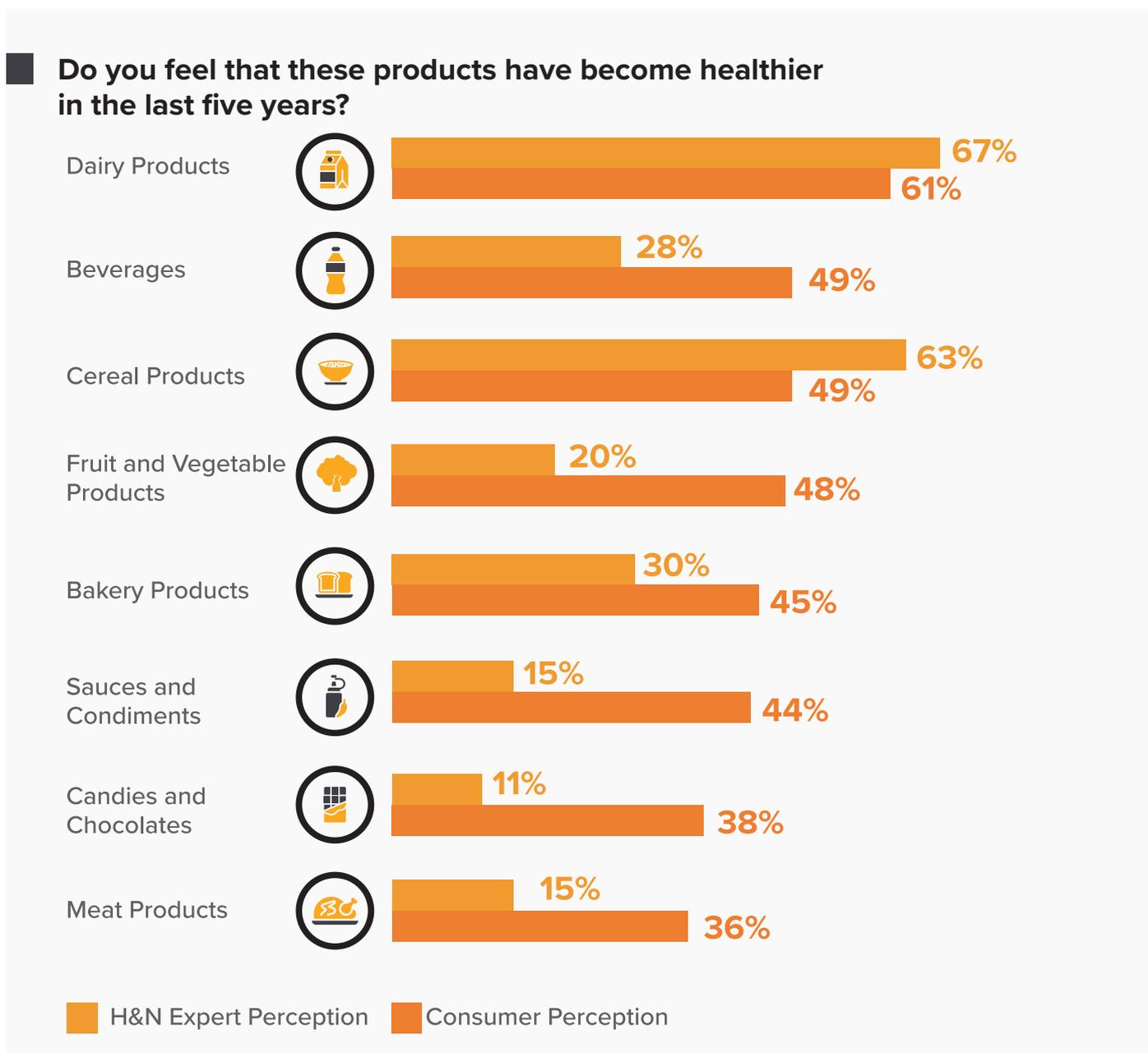
# CONSUMER PERCEPTION OF CHANGES

Going back to consumer opinions, most feel that many products are changing in either a healthier or unhealthy direction. The good news for companies is that products and categories that make a sustained effort to become healthier can get recognition. Dairy products, beverages and cereal products have demonstrated this.

At the other end of the spectrum, products that haven't changed or where changes haven't been noticeable

may be seen as becoming less healthy although they may have been improved. This may be due to the growing gap between healthy and unhealthy products.

When asked about the perception of change among academic health and nutrition experts in China, they highlighted that the dairy and cereal product categories have become healthier in the last five years.



# KEY CONCLUSIONS



01

Consumers who had a better understanding of the nutrition concepts were willing to improve their dietary habits



06

Consumers recognise the importance of reducing the consumption of fat, salt and sugar in the diets. However, the awareness has not sufficiently translated to practice



02

Majority claimed to look at nutrition information on food product, with more than two thirds looking at nutrition labels regularly



07

The lack of knowledge among consumers on the presence of “invisible salt” in food presents an opportunity for education campaigns focused on hidden salt in food



03

Home kitchens were identified as a key factor to influence healthier diets but its importance has been underestimated by consumers



08

Product familiarity, absence of additives, taste, nutrition information and the introduction of new, healthy products feature in the top four drivers of product choice



04

Poor market response to reformulated products is a key factor for food companies to employ a gradual approach to reduce fat, salt, sugar content in its products



09

Most companies noted that increased policy support from the government through fiscal incentives would nudge companies to carry out more R&D associated with reformulation



05

While companies are delivering on healthier products, H&N experts believe that companies can accelerate its efforts with improved communications and engagement

# KEY RECOMMENDATIONS

## Individual Responsibility



Increase awareness and knowledge of nutrition concepts



Understand the importance of preparing home-cooked meals

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## Accelerating R&D Efforts



Collaborate with health and nutrition experts to enhance industry development through resource-sharing, technology innovation and new product development



Improve communications on the availability of healthier products in the market

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## Strengthen Policy and Regulatory Support



Engage with consumers using new media platforms to facilitate health communications



Incentivise industry to develop healthier alternatives with fiscal support and co-developed reformation guidelines that will help accelerate industry efforts

# HOW THE RESEARCH WAS CONDUCTED

## An online survey of consumers

- 3001 responses were collected
- This was a representative sample of adults aged 18+ living in Beijing, Chengdu, Chongqing, Guangzhou, Hangzhou, Shanghai, Shenzhen, Suzhou, Wuhan, and Xi'an.

## An online survey of companies (which spanned across a broad range of products)

- Using a purposive sampling method, the survey was circulated to food and beverage companies of varied sizes (MNCs and SMEs) operating in China
- A total of 28 responses were collected

## An online survey targeted at health and nutrition experts

- A total of 46 responses were collected

## What are your company's product categories?

Product Category	Percentage
 Others ..... <b>29%</b>	
 Other beverages (excluding packaged drinking water such as mineral water and purified water) ..... <b>29%</b>	
 Sauces and Condiments ..... <b>25%</b>	
 Dairy products (such as milk, yogurt, cheese) ..... <b>22%</b>	
 Bakery products (such as bread, cakes, biscuits) ..... <b>22%</b>	
 Cereal products (such as oatmeal, instant noodles, porridge) ..... <b>18%</b>	
 Candies and Chocolates ..... <b>14%</b>	
 Packaged drinking water such as mineral water and purified water ..... <b>14%</b>	
 Cold products (such as ice cream) ..... <b>11%</b>	
 Meat products (such as bacon, braised pork, sausage, jerky) ..... <b>11%</b>	
 Restaurant or takeaway food ..... <b>11%</b>	
 Fruit and vegetable products (such as preserved fruit, jam, pickled vegetables, dried tofu) ..... <b>4%</b>	
 Street foods and beverages ..... <b>4%</b>	

Note:

Statistics highlighted in this study have been rounded off, hence there may be minor variations of 0.5 to 1%.

Survey results should be seen as indicative as the sample may not be fully representative of all food companies in China



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