



Big Data on Chinese Consumer Nutrition: Covid-19 Trends Analysis

The Consumer Goods Forum
Healthy China, Nutrition First



Collaboration for Healthier Lives (CHL) China Working Group



Under the guidance of the Chinese Nutrition Society (CNS) on nutrition knowledge, The Consumer Goods Forum (CGF) has integrated the data and resources of relevant members (Alibaba Local Life Service, Beijing Hualian Group (BHG), COFCO Nutrition and Health Research Institute, RT-Mart, and Suning Carrefour) and Ipsos China to understand the trend of "Healthy Consumption" from the perspective of commodity data.

CHL China will use this report's outcomes to build its ambition to help people to live healthier lives, and to drive progress towards the China Nutrition 2030 goals.



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01.

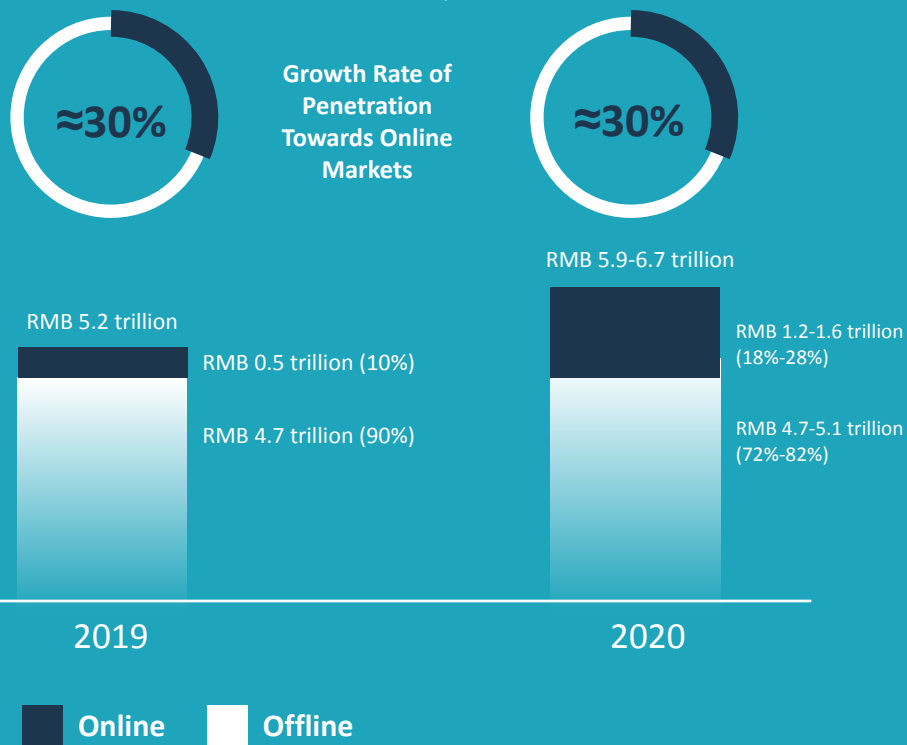
The Overall Trend



Food Consumption Trend in China

Changes in China's Food and Beverage Retail Market

In recent years, the penetration rate of online food and beverage retail has been increasing at an annual rate of nearly 30%



During the pandemic, the demand for packaged food, fast food, and snacks increased dramatically, while the demand for alcoholic and non-alcoholic beverages and dairy products rose significantly again after the pandemic situation improved.



Online food channels are developing rapidly. In recent years, the penetration rate of online food and beverage retail has been growing at an annual rate of nearly 30%.



The consumption situation is evolving, and consumers have been divided. In 2020, the fastest-growing consumer groups were those aged 30-39 (millennial parents) and those over 50 (the silver-haired generation), according to the data of the channel of food of tmall.com.



As local goods have seized the development opportunity brought by the pandemic, China has seen a surge in customers' interest in local brands and goods, marking the start of local goods renaissance. In 2020, local goods-related searches increased by 10%.

Health Analysis



Health Needs



Snacks gradually become staple food



Healthy weight-loss products which meet a variety of consumption scenarios



Plant based meat alternatives



Sugar reduction has gone from innovation to mainstream



Clean label



Opportunities & Challenges

- Ø The development of sugar-free and low-sugar food has entered a period of growth, but there is a lack of diversity in the variety of products. Low sugar but enough sweetness, pouch packs to give people the feeling of being healthy, and proper marketing communication.
- Ø The development of plant based meat is still at the beginning stage in China, so there are differences in consumers' thoughts. Consumers' concerns include food safety, flavour and taste, and price.
- Ø Eating behaviours of instant foods and fast food: Food became increasingly tasty, consumers ate them more often for dinners and prices increased. For consumers, expectations for innovation in related products involve taste, health, quantity, and convenience.
- Ø The emotional aspect of healthy drinks is yet to be developed, and consumers' thoughts about health awareness are not specific enough.

02.

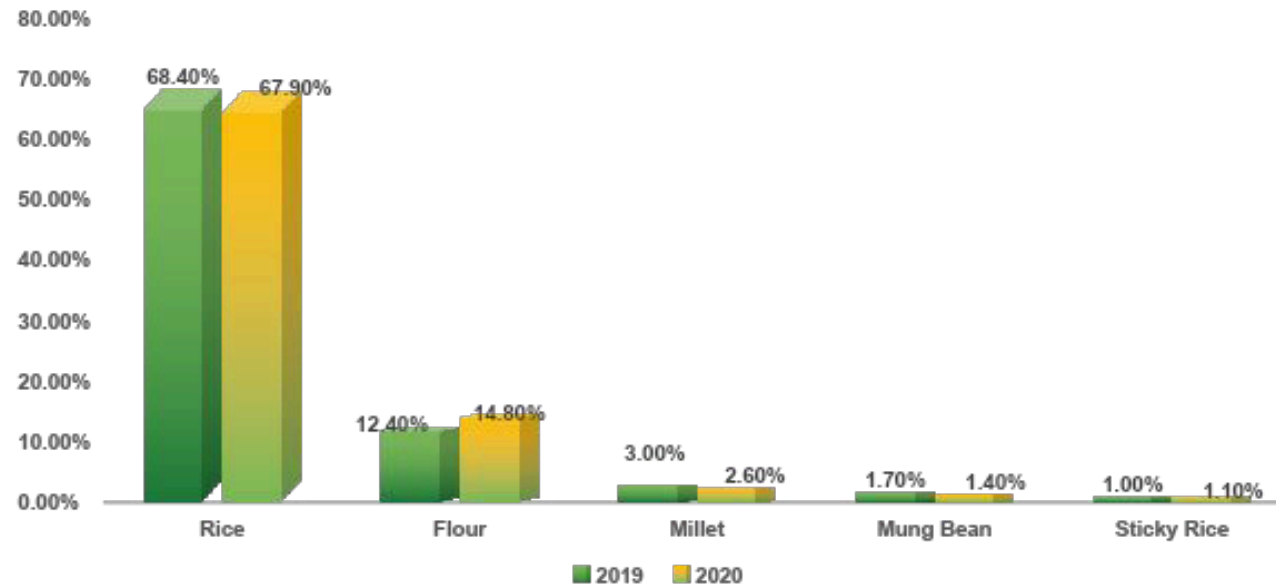
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Analysis of the Consumption Trend in Dietary Product Categories



Cereals/Beans

Top 5 Sub-Categories of Cereal/Bean Products and Their Percentages in Total Category Sales



Sub-Category	Rice	Flour	Millet	Mung Bean	Sticky Rice
Comparison with sales in 2019	-0.2%	+19.9%	-12.5%	-17.3%	+10.0%



Rice accounted for more than 60% of total category sales.



Home baking and cooking have driven the rapid growth of flour. Among the subdivided products, the sales growths of steamed bun flour, bread flour, and cake/biscuit flour were 90%, 52%, and 50% respectively.

Nutrition Tips:

Recommended Amount: 50-150 g of whole grains and mixed beans per day.

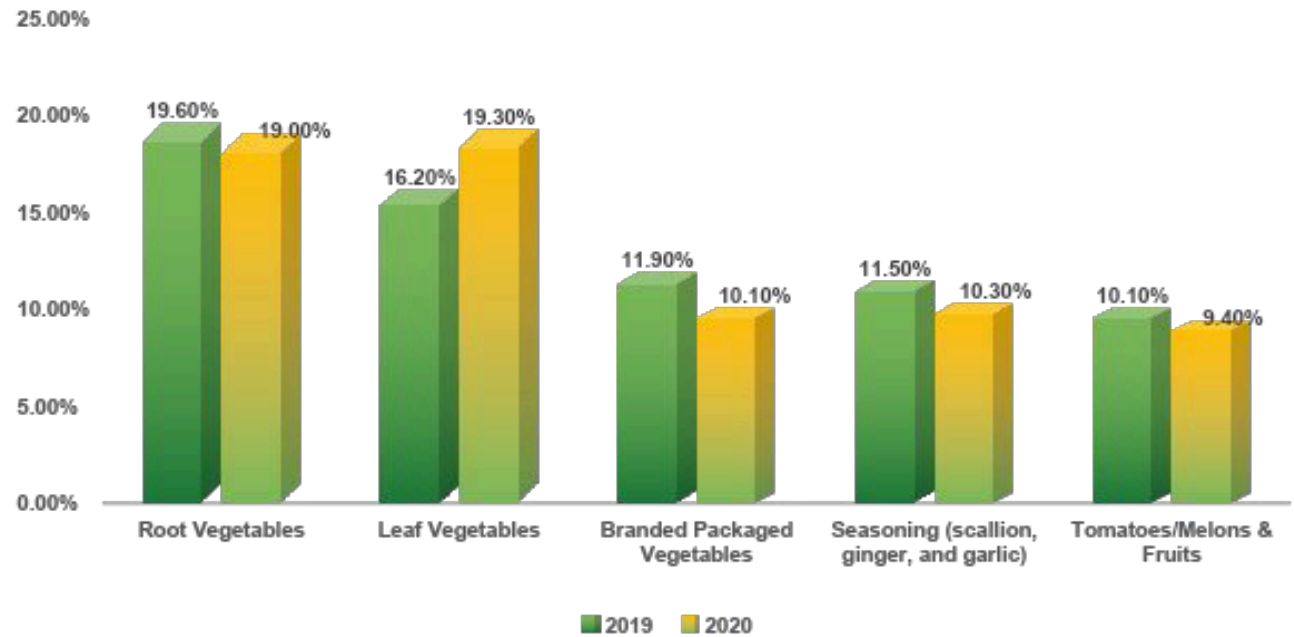
Nutritional Value: Rich in carbohydrates and also an important resource of B vitamins, minerals, protein, and dietary fiber (DF).

Consumer Tip:

- Eat multiple varieties of cereals and be mindful of reasonable nutrition value.
- Increase intake of whole grains and mixed beans to reduce the risk of chronic diseases.
- Avoid overbuying.

Vegetables

Top 5 Sub-Categories of Vegetables and Their Percentages in Total Category Sales



Sub-Category	Leaf Vegetables	Root Vegetables	Seasoning (scallion, ginger, and garlic)	Branded Packaged Vegetables	Melon and Fruit
Comparison with sales in 2019	+44.5%	+17.7%	+8.0%	+3.6%	+13.2%



All of the sub-categories showed promising growth, as consumers cooked at home more often and attached greater importance to the consumption of vegetables.



Root vegetables and leaf vegetables had the maximum consumption, accounting for more than 19% both. The sales of leaf vegetables grew by 44.5%.



Mushroom sales increased by more than 300%, and the homemade hot pot became a trend.

Nutrition Tips:

Recommended Amount: 300-500 g per day, and dark vegetables should account for half.

Nutritional Value:

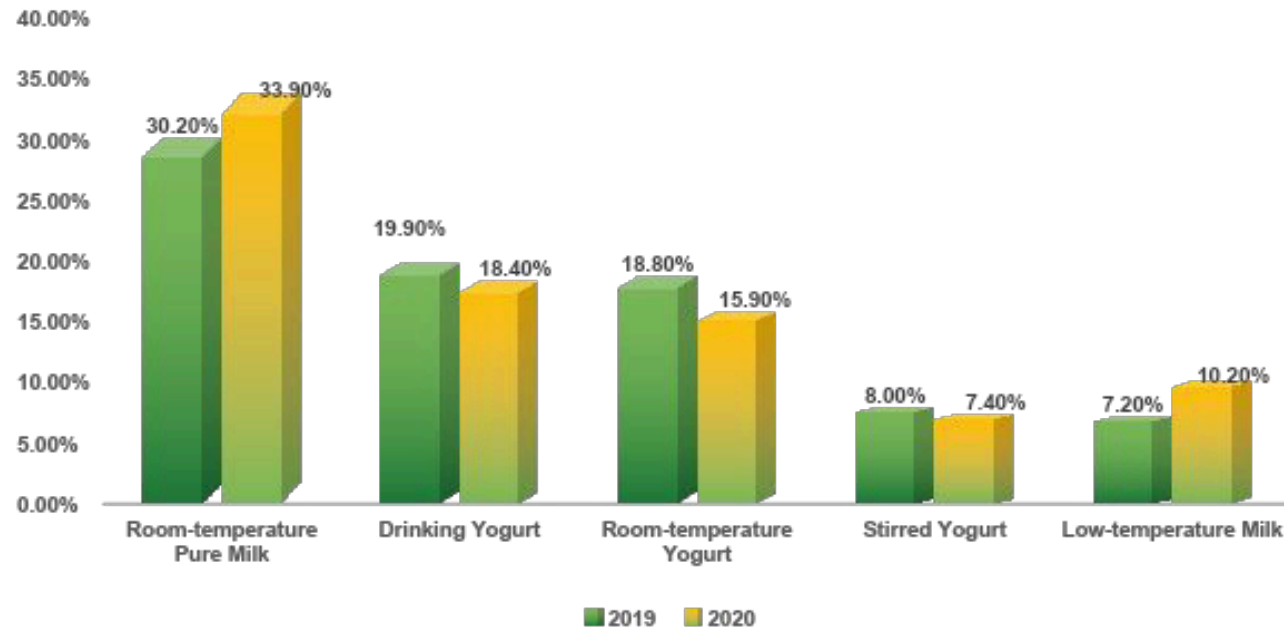
- Rich in vitamins, minerals, dietary fiber, and phytochemicals.
- The vitamin content of leaf vegetables is higher than that of root vegetables and melon vegetables.
- Thallophyta are rich in vitamin B2 and minerals.

Consumer Tip:

- Rotate intake of fresh seasonal vegetables of different varieties and different colours.
- Eat more dark vegetables and keep your diet varied.

Dairy Products

Top 5 Sub-Categories of Dairy Products and Their Percentages in Total Category Sales



Sub-Category	Room-temperature Pure Milk	Drinking Yogurt	Room-temperature Yogurt	Stirred Yogurt	Low-temperature Milk
Comparison with sales in 2019	+14.1%	-5.8%	-13.7%	-6.3%	+44.2%



Thanks to scientific guidance and consumers' attention to immunity, room-temperature milk sales were the highest, up 14%.



Due to the decrease in shopping frequency, the yogurt categories decreased slightly.



Sales of low-temperature milk grew by 44%, meeting consumers' demand for freshness and taste.



As concerns around nutrition and healthier consumption rose, the sales growth rate of vegetable milk peaked at 68% in 2020.

Nutrition Tips:

Recommended Amount: 300 g milk and milk products per day.

Nutritional Value:

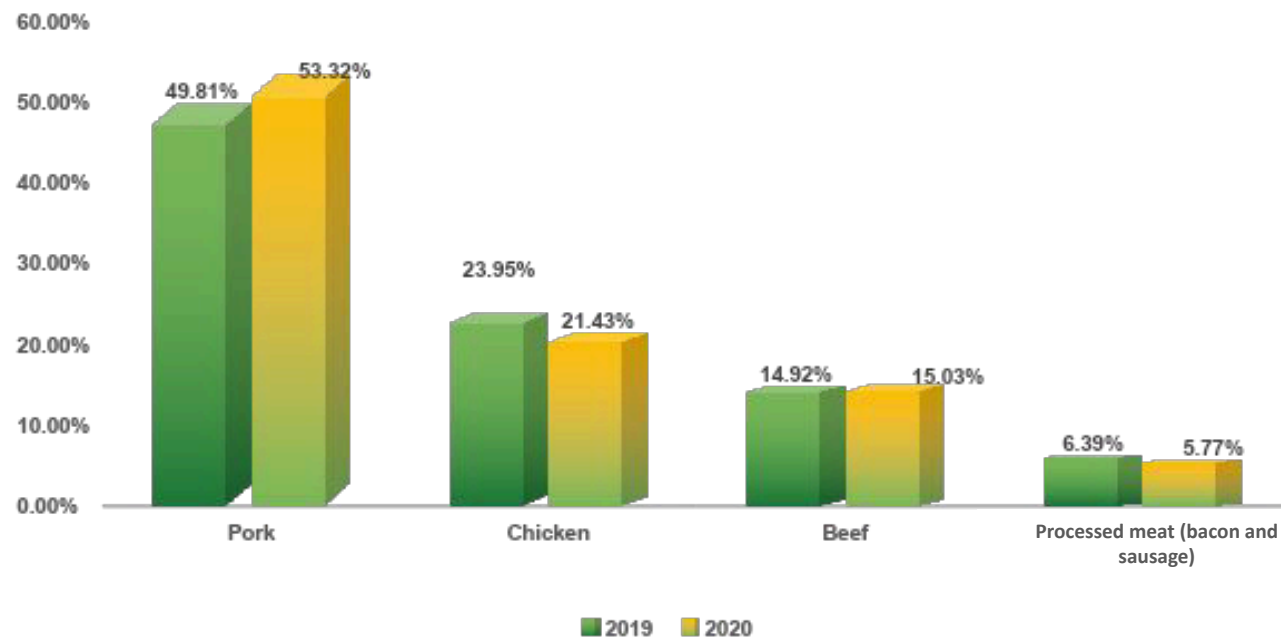
- Milk is an important source of calcium and high-quality protein.
- Chinese residents are chronically deficient in calcium, and increasing milk intake can increase calcium intake.
- Lactose in dairy products can promote the absorption of calcium, iron, and zinc.

Consumer Tip:

- People with lactose intolerance can choose yogurt, cheese, or low-lactose dairy products.
- Avoid excessive intake of sugar in dairy products, especially yogurt products.
- Dairy products are good carriers for nutrient enrichment, and dairy products fortified with multiple vitamins and minerals are preferred choices.

Meat

Top 5 Sub-Categories of Meat and Their Percentages in Total Category Sales



Sub-Category	Pork	Beef	Chicken	Mutton	Processed meat (bacon and sausage)
Comparison with sales in 2019	+48.95%	+40.1%	+24.52%	+25.66%	+47.43%



Pork, chicken and beef were still the top three products consumed. The proportion of pork reached 53%.



The main meat products showed an increasing trend, with pork sales increasing by 49%, followed by beef with a growth rate of 40%.



The sales of processed meat products have also increased slightly.

Nutrition Tips:

Recommended Amount: 40-75 g of livestock and poultry meat per day.

Nutritional Value:

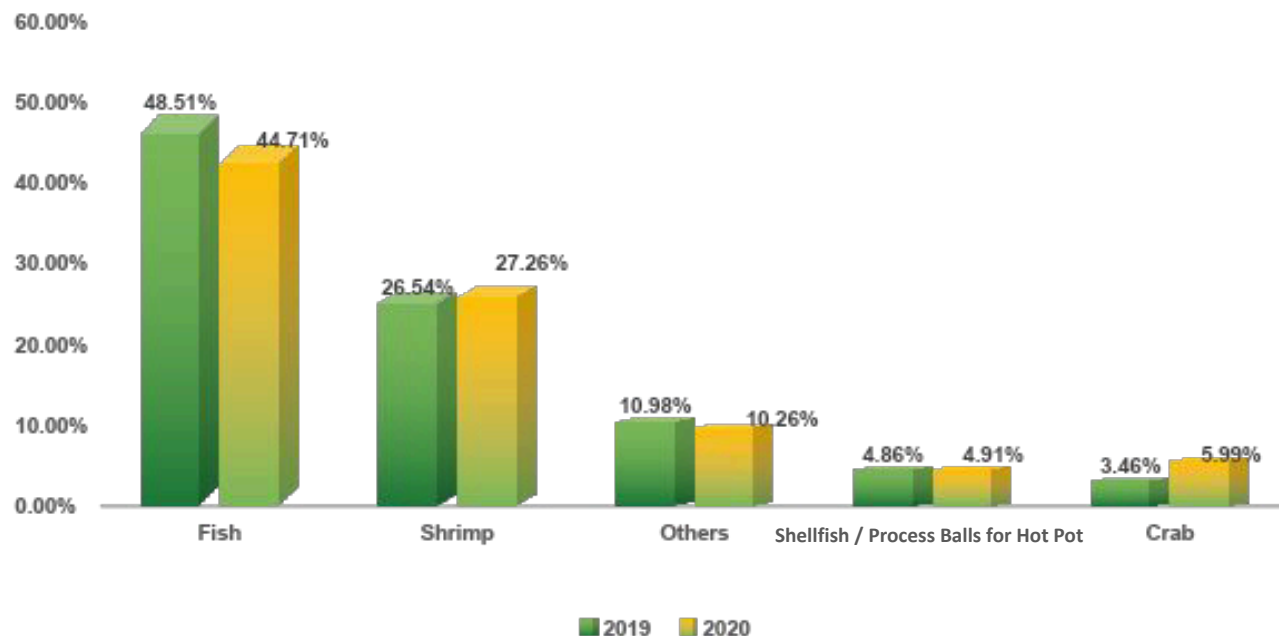
- Livestock meat is rich in high-quality protein and absorbable heme iron but high in fat and saturated fat.
- The fatty acid of poultry meat is mainly composed of monounsaturated fatty acid, and the viscera are high in saturated fatty acid and cholesterol.

Consumer Tip:

- Give priority to poultry meat and appropriate intake of livestock meat in every meal for better digestion and absorption.
- Eat less smoked and pickled meat. Appropriate intake of processed meat that is high in salt.
- Cook livestock and poultry meat more by steaming and less by frying.

Aquatic Products

Top 5 Sub-Categories of Aquatic Products and Their Percentages in Total Category Sales



Sub-Category	Fish	Shrimp	Others	Crab	Process Balls for Hot Pot
Comparison with sales in 2019	-6.77%	+3.92%	-5.47%	+75.41%	+51.09%



Fish and shrimp are the most important consumer products among seafood, accounting for 45% and 27%, respectively.



With the popularity of homemade hot pot, sales of processed balls for hot pot increased by 51%.

Nutrition Tips:

Recommended Amount: 40-75 g per day.

Nutritional Value:

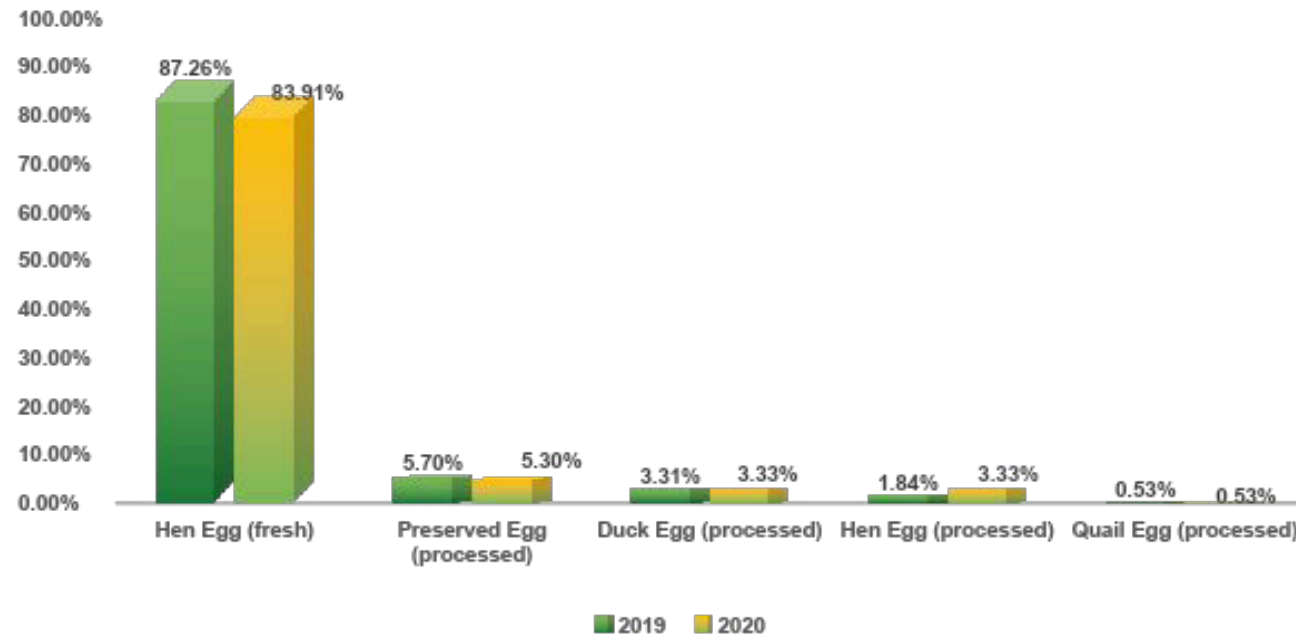
- Rich in high-quality protein, minerals, and vitamins.
- Seafood products are low in fat and mainly contain unsaturated fatty acid. Some fish are rich in eicosapentaenoic acid (EPA) and 22 docosahexaenoic acid (DHA).
- Reduce the risk for cardiovascular disease and stroke.

Consumer Tip:

- Cook properly. Boiling and steaming do less damage to nutrients.
- Due to the high content of oil, salt, and sugar in processed balls, moderate intake is recommended.

Eggs

Top 5 Sub-Categories of Eggs and Their Percentages in Total Category Sales



Sub-category	Hen Egg (fresh)	Preserved Egg (processed)	Duck Egg (processed)	Hen Egg (processed)	Quail Egg (processed)
Comparison with sales in 2019	-9.19%	-12.13%	-4.96%	+70.50%	-5.68%



Fresh hen eggs are the first choice for consumers' demand for eggs, accounting for more than 80%.



Considering the impact of the COVID-19 pandemic, consumers tended to choose processed eggs, which can be stored for a longer time. Therefore, the growth rate of processed eggs reached 70%.

Nutrition Tips:

Recommended Amount: 280-350 g, and seven eggs at most per week

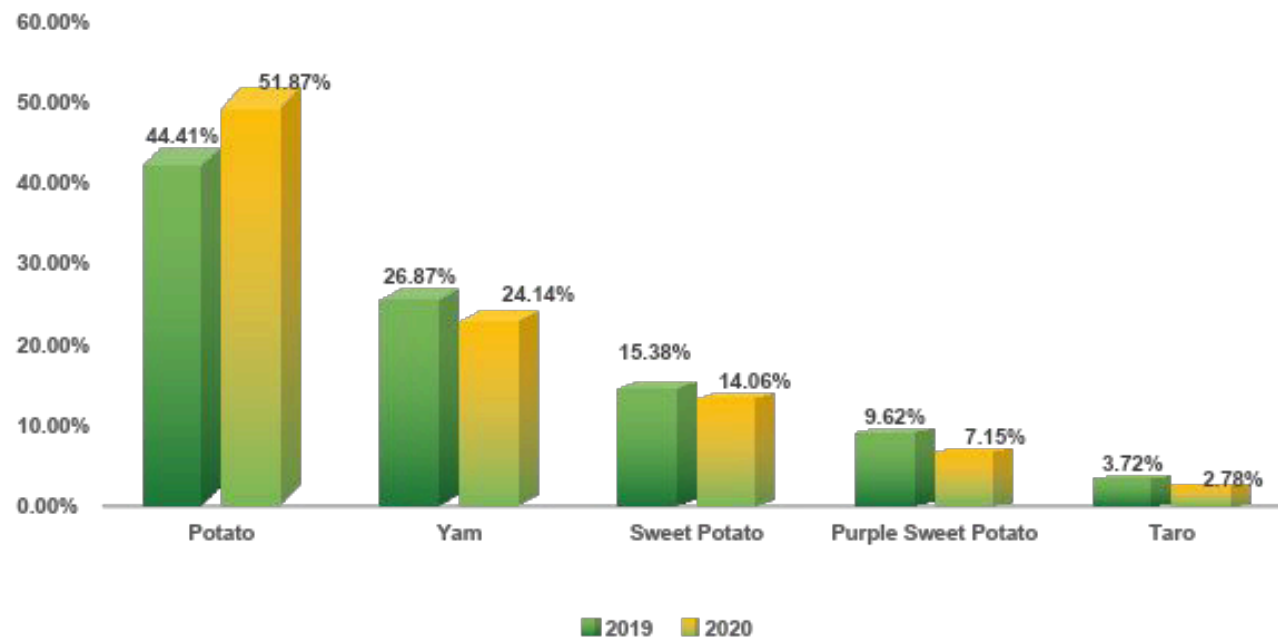
Nutritional Value: Eggs rich in micronutrients can provide good protein, of which the yolks contain most of the fat-soluble nutrients.

Consumer Tip:

If consuming eggs in line with the recommended amount, there is no need to worry about elevated cholesterol and risk of cardiovascular diseases. Processed eggs should be consumed at a moderate amount.

Tuber Crops

Top 5 Sub-Categories of Tuber Crops and Their Percentages in Total Category Sales



Sub-Category	Potato	Yam	Sweet Potato	Purple Sweet Potato	Taro
Comparison with sales in 2019	+32.34%	+1.78%	+3.62%	-15.8%	-15.51%



The potato, yam, and sweet potato were the three major consumption sub-categories of tuber crops, which accounted for more than 85% of the total consumption of tuber crops.



Because of the longer storage time, the low unit price, and abundant cooking methods, potatoes were sold more, with a sales increase of 32%.

Nutrition Tips:

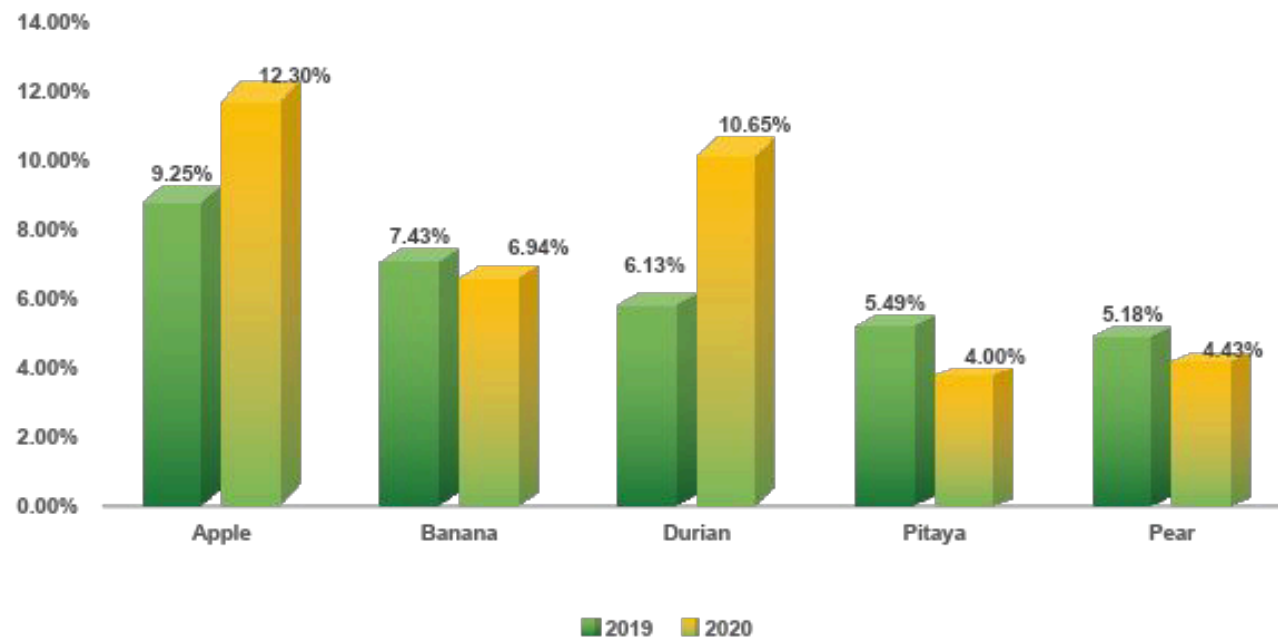
Recommended Amount: 50-100 g per day.

Nutritional Value: Tuber crops rich in dietary fiber can reduce the risk of constipation.

Consumer Tip: Tuber crops can be regarded as a supplement to staple foods except for grains. When cooking tuber crops, healthy cooking methods, excluding deep frying, should be adopted.

Fruits

Top 5 Sub-Categories of Fruits and Their Percentages in Total Category Sales



Sub-Category	Apple	Durian	Banana	Pear	Pitaya
Comparison with sales in 2019	+16.39%	+51.92%	-18.26%	-25.19%	-36.21%



Apples and bananas were still the main fruit sub-categories for consumers.



There has been a significant increase in the consumption of imported fruits, especially durian and cherries; the "durian freedom" boosted sales by 52%.



The abundance of cherries also contributed to the increase in consumption.

Nutrition Tips:

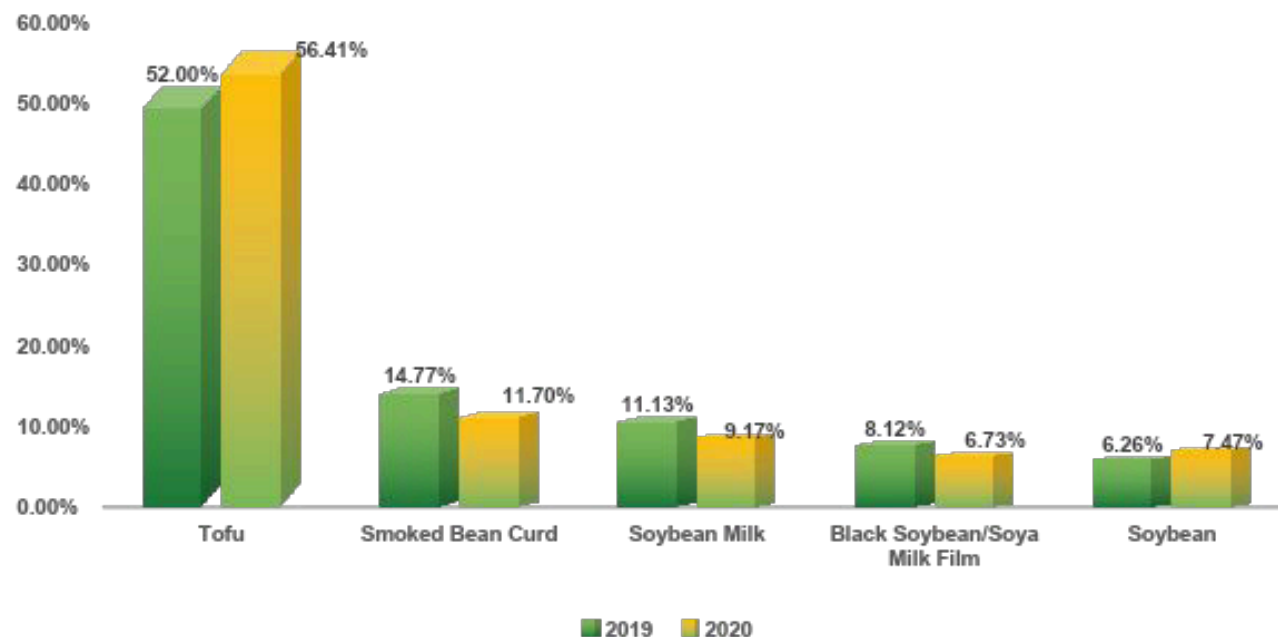
Recommended Amount: 200-350 g of fresh fruits per day.

Nutritional Value: Fruits are rich in vitamin C, potassium, magnesium, dietary fiber, and health-promoting flavonoids; red and yellow fruits are rich in beta-carotene.

Consumer Tip: Juice cannot replace fresh fruits; there is no need to remove pulp from homemade juice; it is suggested to choose fresh seasonal fruits.

Beans

Top 5 Sub-Categories of Beans and Their Percentages in Total Category Sales



Sub-Category	Tofu	Smoked Bean Curd	Soybean Milk	Soybean	Soya Milk Film
Comparison with sales in 2019	+3.07%	-24.72%	-21.77%	+13.25%	+18.05%



Accounting for more than half of the sales of beans, tofu was the most important food for consumers and has a variety of cooking methods.



Due to the popularity of local hot pot, the soya milk film saw the fastest sales growth of any sub-categories, at 18%.

Nutrition Tips:

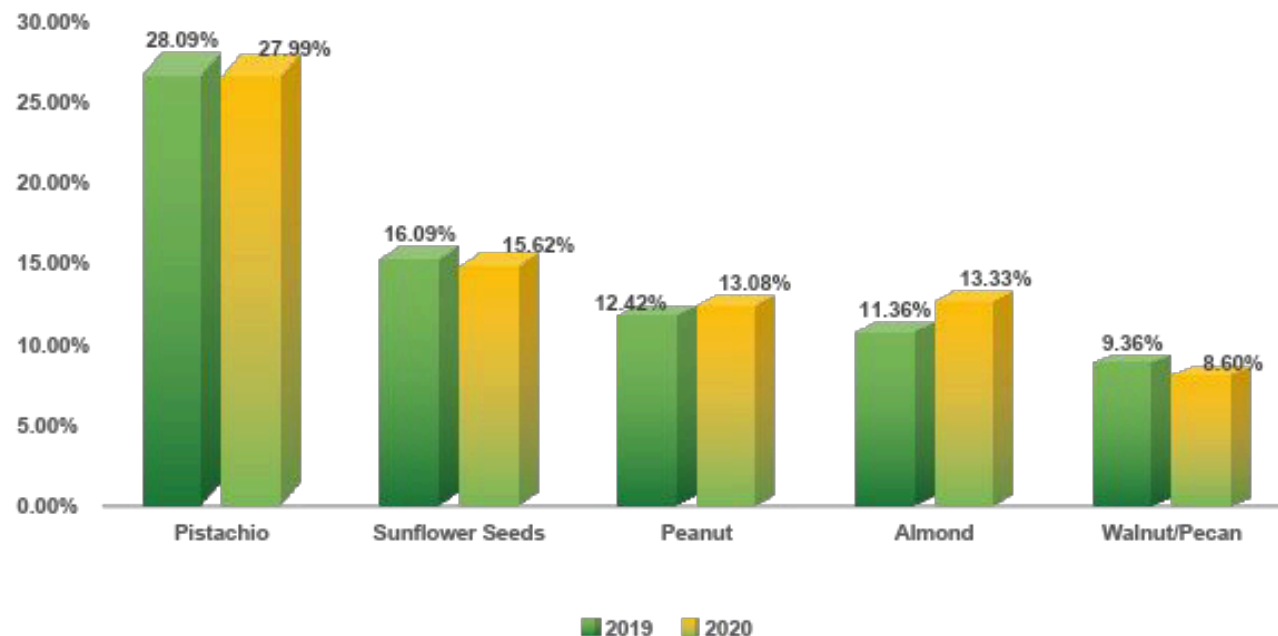
Recommended Amount: 50-150 g of whole grains and beans per day.

Nutritional Value: Beans and their products are rich in good protein, essential fatty acids, phospholipids, vitamin E, calcium, potassium, and health-promoting soy isoflavones and other components.

Consumer Tip: Beans can replace animal protein and become an important part of plant-based diets such as flexitarianism. Vegetarian meat and plant milk with soybean protein as the raw material are leading the new consumption trend; in the meantime, the daily intake of salt and sugar should be paid attention to.

Nuts

Top 5 Sub-Categories of Nuts and Their Percentages in Total Category Sales



Sub-Category	Pistachio	Sunflower Seeds	Badam	Peanut	Pecan
Comparison with sales in 2019	-14.03%	-16.27%	+1.27%	-9.17%	-9.89%



Peanuts and sunflower seeds were the most consumed nut products, while pistachios and almonds are becoming increasingly popular among consumers.



During the COVID-19 pandemic, social gatherings were reduced. Consumption of high calorie nuts, and the overall sales of nuts were down slightly compared with the sales in 2019.



As a "dark horse" of nuts, almonds saw a sales increase of 33% in 2020, which might be mainly as a result of increased home baking.

Nutrition Tips:

Recommended Amount: 50-70 g per week.

Nutritional Value: Nuts as high-calorie food contains a variety of beneficial fatty acids, nutrients, etc.; a moderate intake is good for health.

Consumer Tip: A moderate intake is recommended to avoid an excessive intake of salt and fat. Nuts with high unsaturated fatty acids, such as almonds and pistachios are recommended.

Categories of the “Diet Pagoda” - Insight into the Preference of Consumers in Jiangsu-Zhejiang-Shanghai Region



Tuber Crops

Consumers in the Jiangsu-Zhejiang-Shanghai region prefer sweet potato



Fruits

Consumers in the Jiangsu-Zhejiang-Shanghai region prefer oranges



Beans

Consumers in the Jiangsu-Zhejiang-Shanghai region prefer dried bean curd



Nuts

Consumers in the Jiangsu-Zhejiang-Shanghai region prefer walnuts



Seafood

Consumers in the Jiangsu-Zhejiang-Shanghai region prefer fish



Cereals

Consumers in the Jiangsu-Zhejiang-Shanghai region prefer polished long-grained nonglutinous rice



Meat

Consumers in the Jiangsu-Zhejiang-Shanghai region prefer duck

03.

Analysis of the Consumption Trend in the “Three Reductions” (Salt, Oil and Sugar) Range of Products



Analysis of the Consumption Trend in the “Three Reductions” (Salt, Oil and Sugar) Range of Products

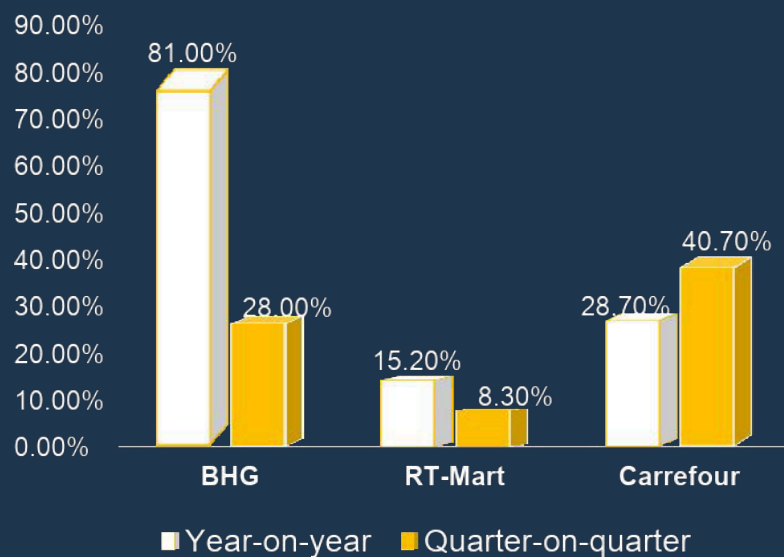


Collaboration for Healthier Lives (CHL) "One for Good" Health Guidance Shelf

In response to the call for corporate responsibility in the Chinese government's "Healthy China 2030" plan, and with the aim to help solve health challenges faced by Chinese consumers, CHL China has focused on the theme of "Healthy Diet with Low Sugar, Low Fat, and Low Salt" to implement actions. The initiative aims to promote healthy consumption, raise people's awareness of healthier diets, and drive healthier shopping baskets.

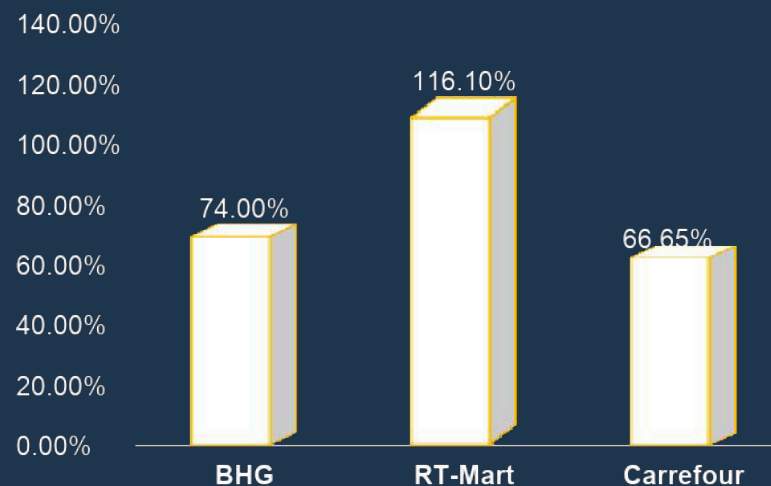
Up to May 2021, the Health Guidance Shelf was applied to 151 BHG, METRO China, RT-Mart, and Suning Carrefour stores across China.

Analysis of the Consumption Trend in the “Three Reductions” (Salt, Oil and Sugar) Range of Products



Retailers	BHG	RT-Mart	Suning Carrefour
Complete Pilot Cycle	2020Q4	2020Q4	2020Q3

Data has shown an improvement of purchase intention of products with reduced fat



- Sugar-free and low-sugar products continue to grow rapidly
- Fat-free and low-fat products are popular but their categories need to be considered
- The promotion of low-sodium and low-salt products should be further facilitated
- Customers begin to focus on nutrition facts and lists of ingredients
- It is required to guide customers to choose products with proper portion size

04.

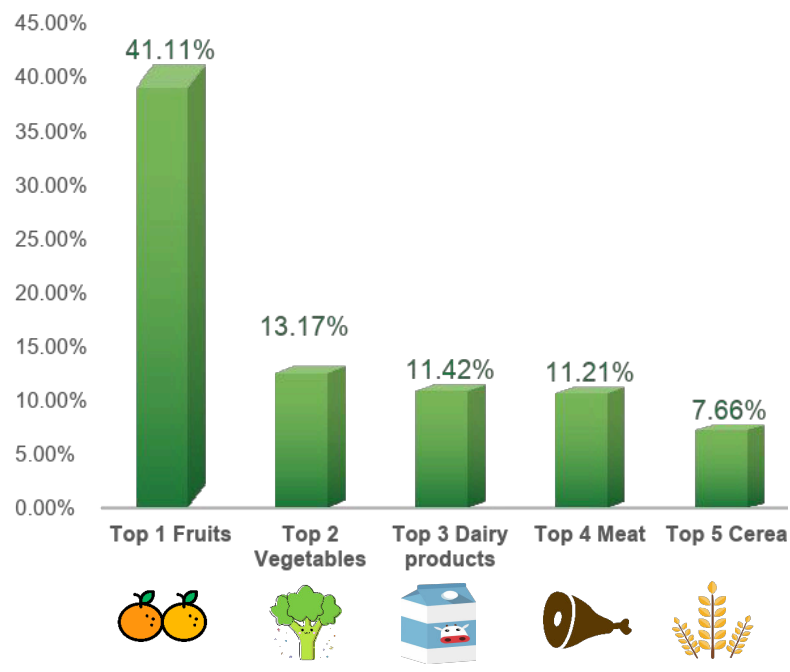
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Analysis of Consumption Trends of Food in New Retail Channels

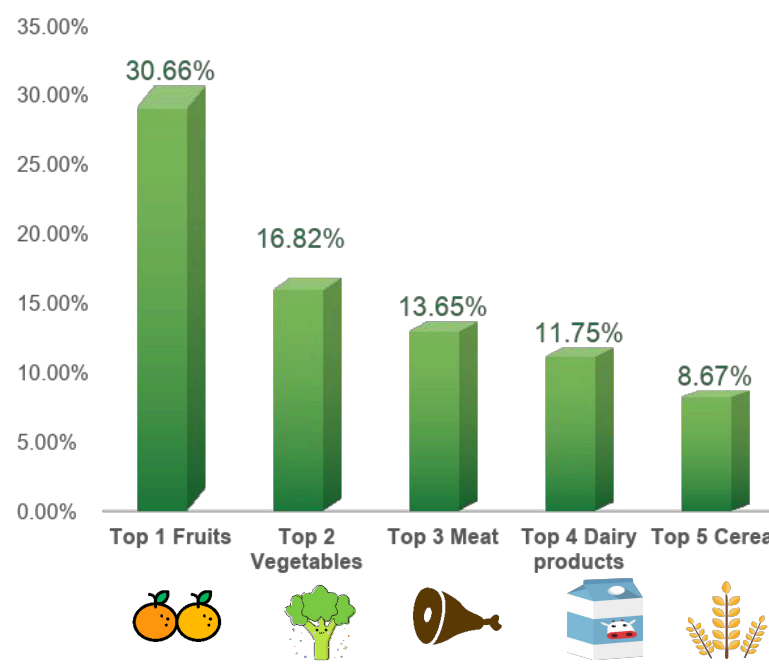


Annual Consumption in 2019 and 2020 — Overall Comparison

Consumption Data in 2019



Consumption Data in 2020



Comparison of Consumption Data Between 2019 and 2020

Overall:

The consumption data in 2020 increases by 27.00% compared to 2019.

Top 5 consumption data are for:

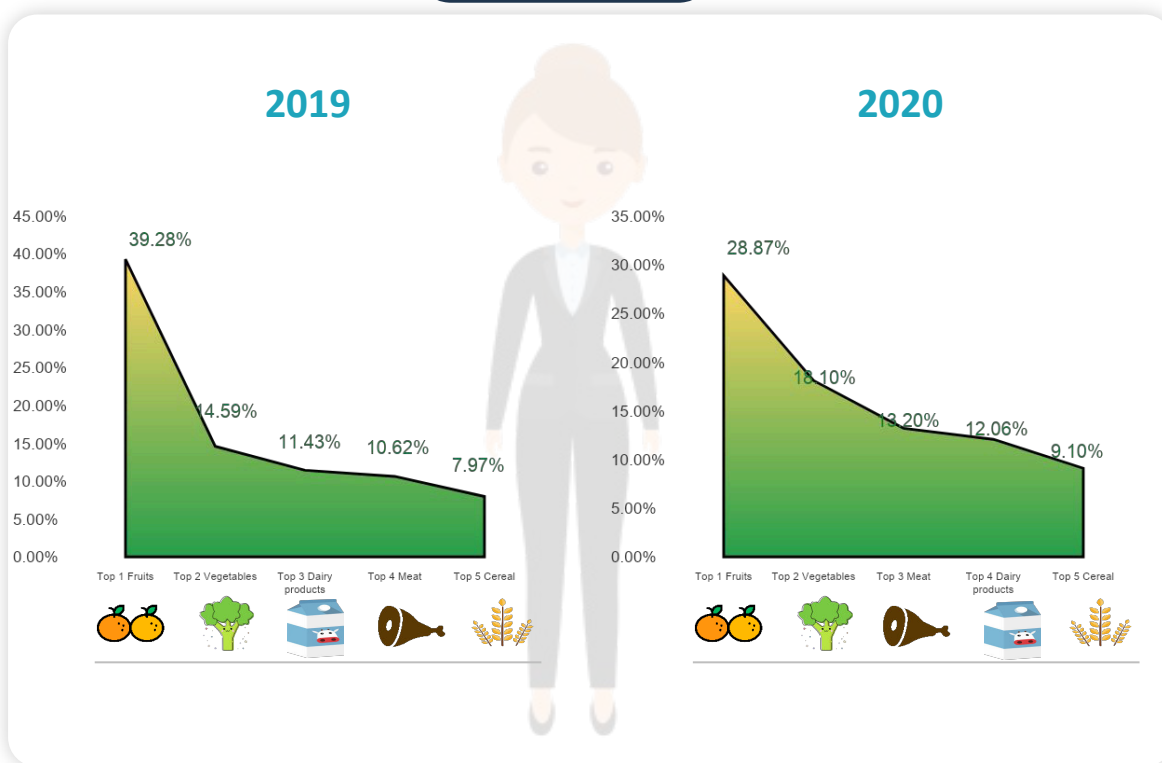
Fruits, vegetables, dairy products, meat, and cereal.

Consumption data comparison of single category:

About 10% decrease in fruits, about 3.60% increase in vegetables, about 2.40% increase in meat, and generally flat data for dairy products and cereal.

Annual Consumption in 2019 and 2020 — Gender Difference

Female



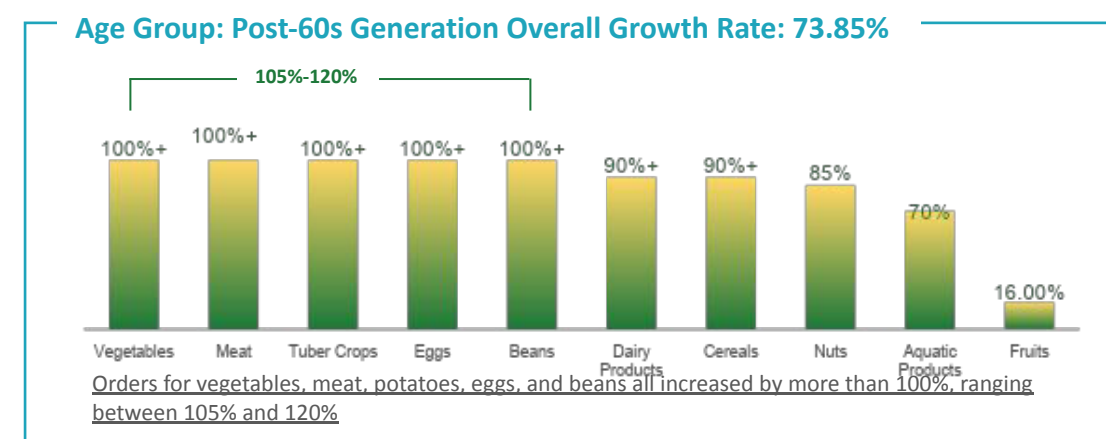
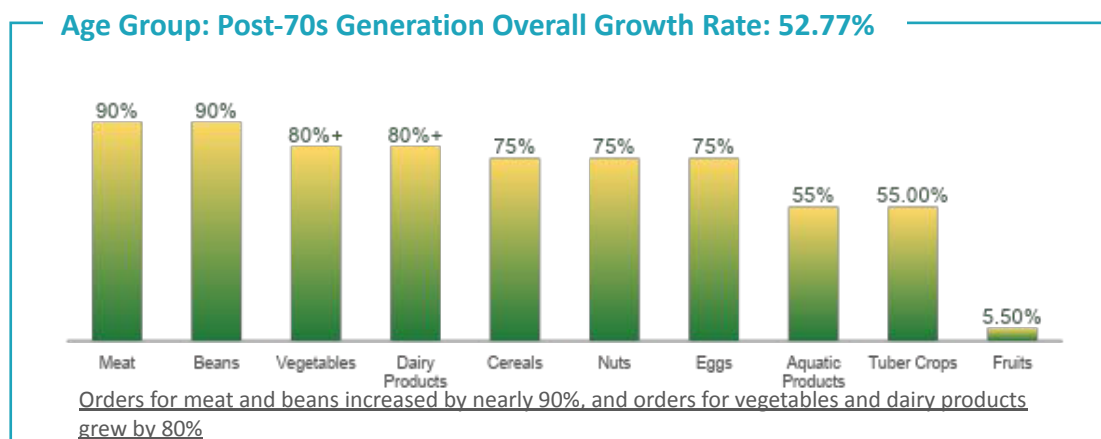
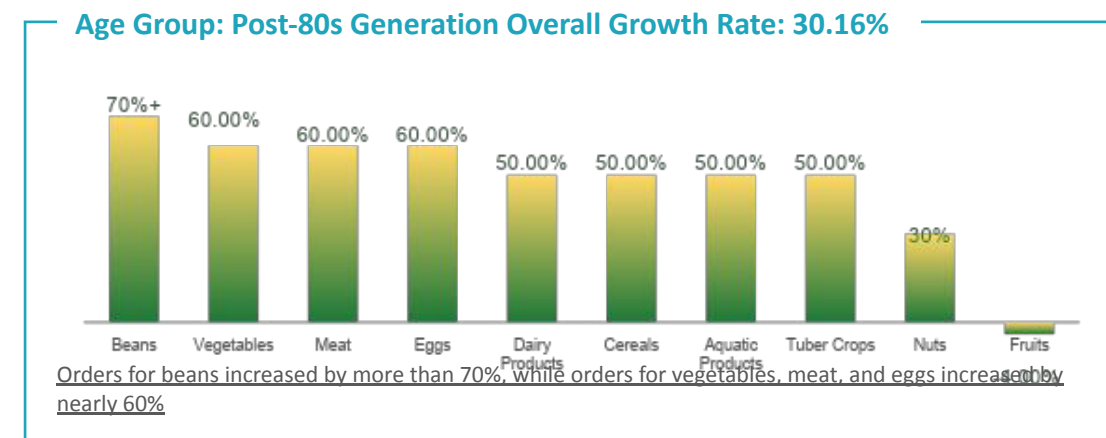
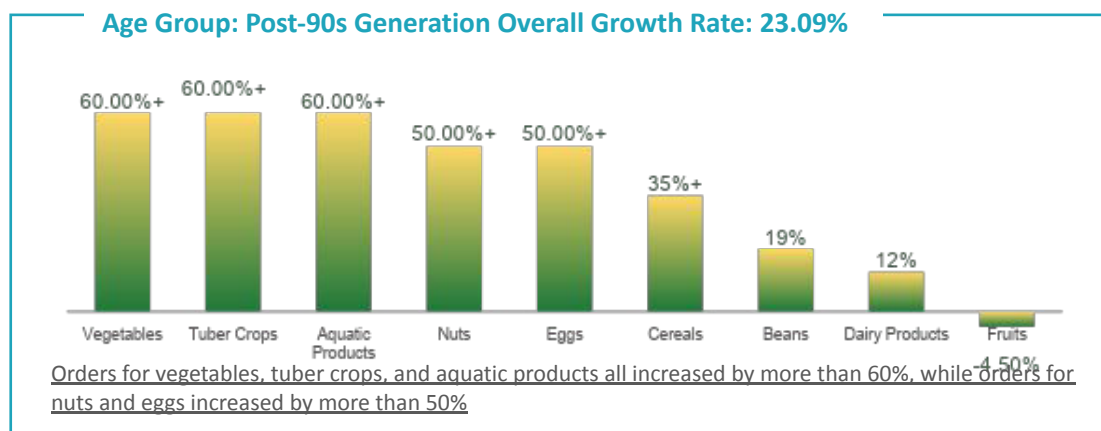
Male



The consumption of fruit and meat is higher in males than females, respectively about 5% (fruits) and about 1.5% (meat). The consumption of vegetables, dairy products, and cereal is generally the same.

Annual Consumption in 2019 and 2020 — Age Difference

- For various age groups, the number of orders for different categories of food in 2020 increases compared to 2019.
- Due to the impact of the COVID-19 pandemic, the number of online orders has significantly increased among the generations born in the 1960s and 1970s, who used to shop in physical stores.



05.

Healthy China, Nutrition First

Summary



Summary

- The COVID-19 pandemic has significantly changed consumers' needs and behaviours, bringing new opportunities and challenges to the food and nutrition industry.
- Price and taste are still the primary factors in consumers' food choices, while nutrition and health are getting more and more attention.
- Consumers can effectively choose more nutritious products and develop a healthier dietary habits with the help of industry efforts to promote standardised nutrition and health information and making health shelves / health shopping carts available in stores and online.
- Through the in-depth analysis of consumption and nutrition data algorithms, health science can become increasingly popular and more effectively shared with consumers.
- This second report produced by CHL China and CNS will help CGF members to meet and support consumer needs to live a healthier live through collaborative actions in stores and online.



About Collaboration for Healthier Lives Coalition

The Consumer Goods Forum (CGF)'s CEO-led Coalition of Action on Collaboration for Healthier Lives (CHL) is about making it easier for people around the world to adopt healthier lives for themselves and their families. It's about making healthier decisions easier and habitual for people in every community around the world. CHL is a global movement led by manufacturers, retailers, public health authorities and local communities, delivering local movements in communities worldwide. There are currently nine CHL initiatives running across 14 countries and involving over 100 organisations. As a collective, members of the CGF, and their partners, are exploring, experimenting, innovating and evolving business models to support positive change, while sharing data and knowledge at scale, cross industry. Health is not a competitive advantage; it's a basic necessity. And, it's clear no company can solve this issue alone. Collaboration is needed at scale and across sectors if the consumer goods industry is to play the necessary role in the health and wellbeing of people. To learn more, visit www.tcgfhealthierlives.com.



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