



Health, nutrition and product quality Carrefour Group 2022

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1. Context

The recent food and health crises have undermined consumer confidence, and consumers are now demanding greater transparency about the origin of their food. Carrefour has therefore identified a number of major trends that are shaping its approach:

- **Increased demand for transparency and traceability:** consumers are demanding more and more information about where products come from. In particular, they are more sensitive to products that can be traced from field to plate, than to products whose provenance is not disclosed.
- **A need for accessibility:** Reconciling the need for better eating with the need for purchasing power is a global challenge. Affordability is a decisive factor for a large number of consumers, but the demand for proximity is no less strong and responds to a desire for territorial dynamism, whether on the outskirts or in the metropolises;
- **Consumption patterns transformed by digital technology:** the deployment of new technologies is creating new opportunities for consumers: more time, more fluidity, more transparency and more personalisation. The rise of digital technology is also driving demand for greater transparency in the products we buy, and the deployment of *blockchain* technology offers enhanced guarantees in terms of food safety and traceability.

1.1 Our ambition

"Our mission is to offer our customers high-quality services, products and food that are accessible to all through all distribution channels. Thanks to the skills of our employees, our responsible, multicultural approach, our local roots and our ability to adapt to new production and consumption patterns, our ambition is to be a leader in the transition to food for all"¹.

It was therefore driven by the objective of satisfying consumer expectations as much as possible that in January 2018, under the impetus of Alexandre Bompard, the Group embarked on a 5-year transformation plan "Carrefour 2022". This transformation has enabled the Group to respond appropriately to its customers' expectations and support them in the food transition, while supporting the agricultural transition of producers and ensuring that the planet's resources are preserved.

In all the countries where the Group operates, a "**Better eating**" action programme has been in place since 2020. The aim of this programme is to meet customers' expectations in terms of eating better and to promote, on a global scale, well-being through food. It includes measures relating to the provision of nutritional information, communication with customers, employee training and the development of a product offering.

The Group has a number of levers at its disposal to guarantee consumer health and product quality. The Group's action plan is based on three pillars: the Group's commitment to food quality and safety, making quality available at a fair price, and becoming a collective player in the food transition.

¹ The raison d'être of the Carrefour Group.



In 2022, a new Carrefour 2026 strategic plan was announced. With a view to continuous improvement, and placing consumer health at the heart of the food transition model, the objectives relating to nutrition have been raised.

1.2 Summary of objectives and performance

Since 2020, all the Group's countries have had an action programme to "Eat better". This programme is designed to meet customers' expectations in terms of eating better, and promotes well-being through food on a global scale. It includes measures to make nutritional information available to everyone, to communicate with customers, to train employees and to develop a product offering.

1.2.1 Objectives

Themes	Objectives	Perimeters	Deadlines
Food safety	A quality audit of 100% of the supplier base	Group	Permanent
<i>Traceability/blockchain</i>	Deploying <i>blockchain</i> technology across a hundred or so FQC sectors		2023
Nutrition	Propose an optimised nutritional profile for the Carrefour product range: eliminate 2,600 tonnes of sugar and 250 tonnes of salt from Carrefour brand products	Europe	2026
	Eliminate controversial substances from our Carrefour-branded products within the Group ² : Eliminate 20 new controversial substances (120 since 2018) from Carrefour-branded products by 2026.	Europe	2026
	Provide clear and transparent nutritional information to consumers	Group	Permanent
Organic farming/Agro-ecology	15% of fresh food sales are organic or agro-ecological		2025
	8 billion in sales from certified sustainable products		2026
FQC products	Achieve 10% penetration of FQC in fresh		2025

² The list of controversial substances is the result of continuous monitoring, which means that the initial list is constantly updated with new controversial substances.



	produce		
	100% of FQCs have a differentiating agro-ecological claim		2025

1.2.2 Our performance

1.2.2.1 Performance in terms of customer safety and product quality

Carrefour implements a set of requirements and procedures to guarantee the quality and conformity of the products it distributes. 100% of Carrefour brand manufacturing sites are certified by the International Featured Standard and the British Retail Consortium (78% by 2022) or audited by Carrefour (8% by 2022).

Carrefour's control plans also include consumer panels and analyses of the freshness and origin of products in warehouses and shops.

Key performance indicators* (KPIs)	Unit		2020	2021	2022	Evolution 2022/2021
Number of suppliers - sites	Number	2 606	2 670	3 040	2 703	11%)
Number of inspections carried out - analyses	Number	45 815	44 727	49 002	49 723	147%
Number of inspections carried out - external panels	Number	3 140	3 265	4 084	4 074	29,24%)
% of sites certified IFS or BRC	%	83%	89%	89%	78%	11) pts
% of sites audited by Carrefour of which :	%	17%	11%	11%	8%	-3 pts
• % of audit grades between A and B	%	95,2%	93%	95%	96%	1) pts
• % of audit ratings between C and D	%	4,8%	6,3%	4,3%	4%	1,3) pts
% of sites audited by Bureau Veritas	%	-	-	0%	11%	11) pts
Number of withdrawals	Number	522	546	533	564	48%
% of withdrawals made for Carrefour-brand products	%	52%	58%	53%	50,2%	4,8) pts



Number of reminders	Number	183	334**	452	330	7)%
% of recalls carried out on Carrefour-brand products	%	21%	24%	18%	18,5%	5 pt

Scope: suppliers of Carrefour-branded products purchased by the European buying group

** Sesame crisis leading to 145 recalls

The Group is guaranteeing the transparency and traceability of its Quality Sectors in France using *blockchain* technology, which should cover around a hundred products by 2023, representing the majority of the Sectors' sales. The Group is also working on identifying and eliminating controversial substances in its own-brand products and on reducing the use of pesticides by supporting the development of organic farming, with a target of 15% of sales of fresh food products coming from organic farming or agro-ecology by 2025, and 3,000 French farmers supported in their conversion to organic farming. Carrefour also intends to increase the penetration rate of fresh produce in its FQC to 10% by 2025.

Key performance indicators* (KPIs)	Unit	2019	2020	2021	2022	Evolution
Number of <i>blockchain-enabled</i> products with a visible QR Code		-	-	478	1 222	
Number of sectors equipped using blockchain**.		-	34	55	69	4%
Turnover from sales of organic products (in billions of euros)*** (in billions of euros)*** (in billions of euros)*** (in billions of euros)*** (in billions of euros)		2,3	2,72	2,73	2,6	1)%
Penetration rate of chains committed to an agri-environmental approach within Carrefour Quality Lines (within fresh produce)		-	-	New	6,5%	

Scope: suppliers of Carrefour-branded products purchased by the European buying group

Scope: Carrefour-branded products (Filière Qualité Carrefour, Carrefour Bio) and national brand products

*** Sales in the food, drugstore, perfume and hygiene departments

1.2.2.2 Consumer health and nutrition performance

Key performance indicators* (KPIs)	Unit	2019	2020	2021	2022	Evolution 2021/2022
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Number of products bearing the nutri-score	Number	-	1 035	2 763	4 101	48,4%
Number of sectors equipped with blockchain** (%)	Number	-	34	55	69	25,4%
Reduction of 2,500 tonnes of sugar in Carrefour brand products	-	-	-	-	New	-
Reduction of 250 tonnes of salt in Carrefour brand products	-	-	-	-	New	-
Number of employees receiving face-to-face training in the food transition and organic food.	Number	-	8 123	8 483	10 040	24%
Number of employees trained in <i>e-learning</i> on the food transition and organic farming	Number	-	1 650	2 806	8 520	204%

1.3 Coalition and partnerships

Collaboration for healthier lives (CHL) - Let's get started: this collaborative project supported by Carrefour and Danone brings together retailers and manufacturers, scientists, associations and restaurateurs to help customers adopt healthier eating habits in the Lyon area. The project was set up as part of the Consumer Goods Forum.

IHU ICAN, CHU Nantes, Fondation pour la Recherche Médicale (FMR), AMF Téléthon

1.4 Our organisation

1.4.1 Scope

The Carrefour Group's quality, compliance and safety policies are applied in all the countries in which Carrefour operates:

- on all products inspected for product specifications ;
- in all integrated and franchised shops for in-store policies and procedures (controls, withdrawals, etc.).

The implementation of "Eat better" action plans is an objective applicable to all the Group's



integrated countries³ and valid for all our operations. These measures apply to all products, all formats and all employees.

1.4.2 Corporate governance

The **Group Quality Department** develops standards and tools (including purchasing rules), charters and quality guidelines, which it distributes to all Group countries. The **Country Quality Departments** are brought together in a network to exchange and share best practices in order to ensure consistency of approach.

The main tasks of the Group Quality Department are as follows:

- the Group's quality, health and product safety policy;
- management of safety, quality, compliance and product safety risks;
- crisis management linked to product safety risks;
- and the guarantee that products comply with Carrefour's commitments.

The Group is also rolling out a major training programme for employees and communication campaigns aimed at consumers on the subject of food safety.

2. Our action plans

2.1 Committing to food safety

2.1.1 Crisis management, alerts and product withdrawals

The quality system includes a procedure for rapidly removing non-compliant or potentially dangerous products from stocks and shelves. This procedure is evolving to provide additional, automated solutions to further increase the level of safety. To ensure that a non-compliant product is no longer accessible to the end consumer, Internet platforms for transmitting information have been developed, for example, to make it easier for the manufacturer concerned to fill in the data required for the recall, and to target and notify warehouses and shops likely to have received batches of non-compliant products, so that they can be promptly recalled. Recalled products can also be blocked at the checkout by means of EAN barcode identification.

Carrefour has an "AlertNet" alert system to inform all shops as quickly as possible that a product has been withdrawn or recalled. The system is accessible 24 hours a day via the Internet, is open to suppliers and is free of charge. In the event of an alert, Carrefour immediately withdraws the products, the effectiveness of the withdrawal is checked within 24 hours and the quantities of products concerned are reported within three working days of the withdrawal being announced. By 2022, this system had been deployed in 5 of the Group's integrated countries.

The

In order to strengthen procedures for product withdrawals and recalls, Carrefour France recently reviewed all the processes involved in shops. The Group has modified certain procedures, in particular the management of products returned to shops by its customers, the blocking of product deliveries to warehouses and shops, and the blocking at checkouts in the event of the withdrawal of all batches of a product.

³ Argentina, Belgium, Brazil, Spain, France, Italy, Poland, Romania



Focus: customer alerts

Customer comments are processed by the consumer department, then entered into the quality management tool (TBQ) and processed by the Quality Managers. When a return is requested in order to respond to the customer, the consumer service analyses the Quality Manager's feedback and drafts the response for the consumer. The consumer service has weekly discussions with the quality teams about complaints in progress and a monthly review to work on improving processes.

All customer feedback is taken into account and contributes to the continuous improvement of our products. Some customer feedback may also require urgent action (product withdrawal, for example).

2.1.1 Deployment of blockchain technology

Eating habits are changing and customers are reclaiming the act of consumption. They want clear quality standards and easy access to information throughout the value and production chain. A recent study by Bitkom highlighted the fact that 84% of consumers are prepared to pay more for a high-quality food product, but they expect detailed information on the composition of products and how they are produced to be returned⁴. Traceability provides an assurance of product safety and quality. It also guarantees reliable information on the origin of products and farming and production methods. To ensure complete traceability and transparency for consumers, Carrefour is the first European retailer to use *blockchain* technology.

Blockchain is a technology for storing and transmitting information that is transparent, unforgeable and operates without a central control body. A secure digital database, the food *blockchain* enables all players in the value chain - producers, processors and distributors - to enter traceability information for a single batch of products. It makes the entire production chain more reliable and facilitates product recalls in the event of a crisis. Carrefour's *Blockchain* programme has been designed to share traceability information of interest between the operator carrying out the action, the other partners in the chain, Carrefour and also, for the first time in Europe, the consumer. It responds to the growing need for transparency for consumers, while at the same time promoting the production and know-how of farmers and growers. In practical terms, thanks to the QR code on the product label, consumers can use their smartphone to access information about their product and its journey, from the place where it was reared or grown to the time it is put on the shelf.

Carrefour is developing *blockchain* within its supply chains and working more broadly to accelerate the deployment of this technology to all supply chains and countries around the world. To achieve this, Carrefour's policy is based on an approach specific to the Group and a collective commitment:

- On the one hand, Carrefour is deploying *blockchain* on its Carrefour Quality Lines. Carrefour France launched Europe's first food *blockchain* with Filière Qualité Carrefour farm chickens from Auvergne in 2018, and has extended it to several supply chains. By the end of 2022, the

⁴ Bitkom, Confidence in food labelling, 13 February 2020: <https://www.webermarketing.fr/blog/les-consommateurs-attendent-plus-de-transparence-dans-letiquetage-des-aliments/#:~:text=la%20confiance%20en%20l'%C3%A9tiquetage,dont%20il%20a%20%C3%A9t%C3%A9%20product.>



blockchain had been deployed on 69 Carrefour Quality Lines, 14 more than by the end of 2021. These channels represent 1,222 different products sold in shops. The latest channel announced in December 2020 is organic cotton used for bed linen and baby bodysuits, sold under Carrefour's Tex brands. In food, the last two *blockchains* developed are smoked salmon in Belgium and pork in Taiwan. By 2021, all Carrefour countries will benefit from *blockchain*: Romania has finalised its first product (FQC eggs) and Argentina has developed FQC beef.

- secondly, Carrefour is promoting food traceability on a global scale and to this end has joined the IBM Food Trust platform. The aim of this collaboration is to create a global standard for food traceability between all the links in the chain, from producer to sales channel. The IBM Food Trust platform is also helping to speed up the implementation of technology in all the countries where Carrefour operates. In 2019, for example, it helped to broaden the scope of products traced using *blockchain*, with manufacturers such as Nestlé and Unilever joining the platform. In 2021, Majid Al Futtaim, the pioneer and leader in shopping malls, communities, retail and leisure in the Middle East, Africa and Asia, called on IBM Food Trust to ensure the traceability of food in Carrefour shops using *Blockchain* technology. Carrefour has thus become the first retailer in the region to offer its customers a new level of transparency information about the provenance of their food. Thanks to end-to-end visibility of products throughout the supply chain, Carrefour is promoting greater quality, credibility and safety for its customers. Thanks to this collaborative platform between manufacturers and distributors, essential information linked to product safety is shared for the benefit of consumers (traceability on origin and quality, nutritional composition and potential presence of allergens and controversial substances, end-to-end sharing in the event of product recalls, health defects, or non-compliance with specifications or a label).

In 2022, Carrefour developed blockchain technology beyond its Quality Lines to apply it to its own-brand organic products. The aim of this approach is to meet consumers' growing expectations in terms of transparency about the origin and production methods of organic products. The Carrefour Organic dessert orange, originating in Spain, in a 4-piece tray was the first product to benefit from this technology, before blockchain is rolled out to other Carrefour-branded organic products.

2.1.2 Certifications, labels and claims

Carrefour uses third-party certifications, which provide a guarantee for complex supply chains, for which full traceability of raw materials is not always available. To apply the label to its products, the supplier must meet specific specifications which are checked and validated by a third-party organisation before certification is granted. Certified products then attest to their superior quality and inform consumers of their certified characteristics.

Certification can also be a way of reducing the environmental and social impact of sourcing risky raw materials. However, there are limits to this approach, as market transformation is not always rapid. This is why Carrefour is seeking to diversify solutions to improve the traceability of raw materials. For example, to ensure that the origin of beef distributed in Brazil does not contribute to deforestation, Carrefour uses a geo-monitoring tool that uses satellites to monitor farming plots. Whereas certification provides an after-the-fact guarantee, geo-monitoring checks compliance with the specifications defined by Carrefour in real time. The Group is studying the use of these tools for other types of agricultural production.



Certification, labels and claims are also an effective means of combating food counterfeiting. The Group has therefore relied on these various means of proof to deploy preventive measures against food counterfeiting. As part of the certification standards recognised by Carrefour, suppliers are interviewed on the existence and implementation of a plan to reduce food fraud. The process must define requirements on when, where and how to reduce fraudulent activities identified by a food fraud vulnerability assessment. The resulting plan defines the measures and controls required to effectively reduce the risks identified. The control measures to be put in place may vary depending on the nature of :

- food fraud (substitution, mislabelling, adulteration or counterfeiting),
- the detection method,
- the type of surveillance (inspection, audit, analytical, product certification),
- the source of raw materials and packaging materials.

2.1.3 Geomonitoring and territorial surveillance

To ensure that its beef supplies distributed in Brazil do not contribute to deforestation, Carrefour uses a geomonitoring tool. Satellite monitoring of livestock plots helps to mitigate the risks of destroying the Amazon rainforest or biodiversity, and also prevents the use of indigenous land. This territory-wide monitoring makes it possible to control beef supplies sold in Brazil. Carrefour is studying the use of these tools for other types of commodity. Whereas certification provides an after-the-fact guarantee, geomonitoring checks compliance with the specifications defined by Carrefour in real time.

2.1.4 Crisis management, alerts and product withdrawals

The quality system includes a procedure for rapidly removing non-compliant or potentially dangerous products from stocks and shelves. This procedure is evolving to provide additional, automated solutions to further increase the level of safety. To ensure that a non-compliant product is no longer accessible to the end consumer, Internet platforms for transmitting information have been developed, for example, to make it easier for the manufacturer concerned to fill in the data required for the recall, and to target and notify warehouses and shops likely to have received batches of non-compliant products, so that they can be promptly recalled. Recalled products can also be blocked at the checkout by means of EAN barcode identification.

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In order to strengthen procedures for product withdrawals and recalls, Carrefour France recently reviewed all the processes involved in shops. The Group has modified certain procedures, in particular the management of products returned to shops by its customers, the blocking of product deliveries to warehouses and shops, and the blocking at checkouts in the event of the withdrawal of all batches of a product.



2.1.5 Inspection plans for inspected products

Controlled products include products marketed under Carrefour Group brands as well as products imported by Carrefour from third countries which comply with specifications defined by Carrefour.

Controlled products are analysed for quality, performance and conformity. Carrefour commissions an independent laboratory to carry out analyses and, in some cases, additional checks on products to ensure their compliance.

To ensure that products meet consumer expectations, tests may also be carried out with consumer panels or by experts.

In addition to this control plan mandated by the supplier, the primary objective of the monitoring plan mandated by Carrefour is to regularly verify the compliance of MDC products with the legislation in force and with the specific provisions included in the CGFs of the controlled products. Risk analysis takes into account a number of factors, including the identification of hazards and their characteristics, exposure assessment, risk characterisation, means of control, degree of certainty, sensitivity of the population, probability of occurrence, etc.

2.2 Improving the quality of our products

2.2.1 Improving the quality of our products through quality procedures and policies

The Group's Quality Department has developed numerous standards and tools, in particular quality charters and guidelines, which are deployed in all the Group's countries. Country Quality Departments are networked through the Quality 'channel', with regular meetings and exchanges to reinforce the sharing of best practice and ensure consistency of approach. The Group is also rolling out a major training programme for its employees and regular communication campaigns on food safety aimed at consumers.

- **Quality procedures and policies**

In constant liaison with its stakeholders, Carrefour aims to ensure the quality and safety of Carrefour-branded products, in all the Group's countries, thanks to a policy based on five pillars: quality standards respected by suppliers, specifications, control plans and customer opinions, internal expertise and, lastly, traceability and data monitoring.

Axes	Processes at Carrefour
1/ Quality standards respected by Carrefour suppliers	Prior to referencing, a full assessment of the supplier's compliance with quality, health and safety standards (IFS, BRC) and Carrefour's requirements is carried out. In high-risk countries, a specific social audit is carried out. After referencing, regular control audits are carried out at the supplier's premises. If non-conformities are observed, these audits lead to corrective action plans or delisting of the supplier (depending on the type and seriousness of the non-conformity).



2/ Specific specifications for each product	Carrefour branded products are produced in accordance with the specifications of the Quality Department. Specifications are shared with suppliers, detailing the origin of the raw materials, the recipe, etc. We constantly monitor the substances contained in our products. Based on scientific evidence, a detailed risk map is drawn up by category and level of criticality. Capturing the concerns and expectations of stakeholders: informal contacts with independent scientific experts depending on the subject, agri-food watch, discussions with government departments in countries at risk, monitoring of laboratory publications, liaison with health authorities.
3/ Control plans and customer advice	Quality control plans include: • audits of manufacturing sites: 100% of Carrefour brand manufacturing sites are certified through the International Featured Standard or the British Retail Consortium (78% by 2022) or audited by Carrefour (8% by 2022); • Warehouse and in-store checks on compliance with quality procedures: good hygiene practices, quality of order preparation/transport, compliance with traceability, compliance and completeness of product labelling information, product quality/freshness, etc; • product analyses: given the number of Carrefour production sites, more than 49,000 analyses were carried out in 2022. Quality data is recorded and processed by Carrefour's technical experts; • withdrawal procedures: in the event of proven product non-compliance. In 2022, withdrawals rose by 5.8%. To take account of consumer feedback and involve customers, tools have been put in place to encourage discussion, listening and awareness-raising: • external panels: more than 4,000 external panels were carried out in 2022 to test the recipes. • consumer service: every year, the consumer service has an independent body check the quality of the response to customer requests and identify any necessary corrective action; • awareness campaigns and the provision of qualitative and nutritional information on Carrefour product packaging, in guides on responsible consumption and recycling, and on the internet.
4/ Internal skills	Steering and monitoring of the quality approach by Carrefour experts (health and nutrition, animal welfare and agriculture, packaging, etc.). Training in food safety and Carrefour quality procedures. Internal checks on the deployment and level of ownership of the quality policy in each country.
5/ Traceability and	Recording, processing and tracking all data using business tools



monitoring product data	of	(TraceOne, quality dashboard, sales tracking, logistics tracking, etc.). Implementation of innovative traceability tools such as <i>blockchain</i> .
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Carrefour takes into account information from its stakeholders and current events to constantly improve the safety and quality of its products at every stage in the product life cycle and in shops. For example:

- producers and manufacturers: Carrefour supports its suppliers in meeting production criteria in terms of quality, social practices, hygiene and safety. Working with suppliers implies a long-term relationship based on trust.
- Experts, associations, the scientific world, NGOs, consumer associations, official services: Carrefour works with civil society to take its expectations into account. Carrefour is regularly informed or questioned about the latest scientific or regulatory advances in the food industry.

2.2.2 Reformulating existing ranges

The food transition involves transforming Carrefour's offering, speeding up the development of products that meet new requirements in terms of quality and a balanced diet, and strengthening existing ranges.

All of Carrefour's own brands have been redesigned to embody the dietary transition. Since 2018, the Group has stepped up reformulation and optimisation of the nutritional profile of its products, in all the countries where it operates: in particular, it has worked on reducing the sugar content of sweetened drinks, lowering the salt content of canned vegetables and eliminating numerous substances (colouring, flavourings, disruptors). Since 2019, 373 recipes have been reformulated to improve their nutritional profile or composition.

The adoption of the Carrefour 2026 strategic plan has made it possible to define quantitative objectives linked to the nutritional value of products. The Group is therefore committed to eliminating 2,600 tonnes of sugar and 250 tonnes of salt from Carrefour brand products.

2.2.3 Providing additional nutritional information on products

Carrefour has chosen to provide its customers with clear nutritional information. The Group has therefore gradually deployed the Nutri-score on the packaging of Carrefour-branded products and on the carrefour.fr website. This logo, developed by the French public authorities, gives an indication of the nutritional quality of products. Its scale of 5 letters and colours, from A (for the most nutritionally favourable products) to E (for the least nutritionally favourable products), and from green to red, gives an at-a-glance indication of the nutritional profile of products.

The algorithm created to arrive at the nutri-score takes into account nutrients to be favoured (fibre, protein, fruit and vegetables, legumes, nuts, olive, nut and rapeseed oils) and nutrients to be eliminated: calories, salt, sugar and saturated fatty acids. By the end of 2022, the nutri-score had been deployed in Belgium, Spain, France and Poland on more than 4,000 Carrefour-branded products.



With the aim of enabling our customers to make ever more informed choices, particularly in terms of the Food Transition, Carrefour has undertaken to adopt the future environmental score to be introduced by the French public authorities on carrefour.fr.

With this in mind, in 2021, Carrefour was the first retailer in France to display the Eco-Score (environmental score from the Yuka collective, OpenFoodFacts, etc) on its e.commerce food offer as part of an experiment. More recently, the Group tested the Planet-Score internally on a sample of our Carrefour products.

In addition, since 2020, the Group has been providing consumers with clear and systematic information on the level of animal welfare and farming methods for its entire range of branded fresh chicken, via its membership of AEBEA. As a result, all chickens sold under Carrefour brands will gradually benefit from a more comfortable environment (addition of perches, pecking supports, natural light, reduced densities) and limited transport time. Independent external audits are also carried out to ensure compliance with labelling criteria.

From February 2020, the first products to be labelled were Carrefour Filière Qualité Auvergne free-range chickens, at level A (superior). At the end of 2020, Carrefour chickens reared in hen houses were labelled with a C level (fairly good). Thanks to this transformation, 10

million chickens a year benefit from living conditions that guarantee a clear improvement in animal welfare. In 2022, animal welfare labelling will be in place for the following chickens and chicken cuts:

- Carrefour free-range chickens (grade A) (in progress for Gascogne free-range chickens / delay due to avian flu);
- Filière Qualité Carrefour and Reflets de France free-range chickens (A rating);
- Carrefour chicken Yes at best (grade C / best grade of a chicken reared in confinement) / Chicken meeting BCC requirements.

2.2.4 Removing controversial food additives from Carrefour-branded products

Anticipating legislative and regulatory changes, Carrefour is committed to a global approach to eliminating controversial substances from its products. This approach is adapted locally by Carrefour teams in consultation with stakeholders.

In Belgium, Spain, France and Italy, food additives were analysed on the basis of :

- whether or not they are authorised by the European Union;
- the opinion of national and international nutrition specialists and experts;
- the Guide to Food Additives by Maria Denil and Paul Lannoye, and the Nouveau guide des additifs, by Anne-Laure Denans of the La Nutrition collective;
- scientific and media monitoring of controversial substances.

This work to identify the risks associated with authorised additives is continually updated. The result is a classification of substances into four categories:

- black: substance now absent from all Carrefour brand product categories;
- red: substance authorised only in certain product categories, such as certain colourings in alcohols;
- orange: substance authorised, but should preferably be substituted ;
- green: substance to be used without restriction.

For each additive classified as "black", Carrefour analyses its product ranges and works with its suppliers to find an alternative solution that preserves the recipe's organoleptic qualities, palatability, shelf life and shelf life. For example, titanium dioxide (E171) was re-evaluated from "orange" to "black" in 2017, and removed from all own-brand products in 2018. While the



dangerousness of this additive is debated, Carrefour anticipated the regulatory changes by banning its use in its products. Carrefour has put in place a workload plan to remove all controversial substances likely to be classified as "black" in the coming years by 2022.

When solutions for the substitution of certain substances classified as "black" are not available, Carrefour chooses in the short term to reduce their content and works to identify satisfactory alternative solutions.

When the new Carrefour 2026 strategic plan was adopted, a new objective was set. The Group aims to eliminate 20 new substances from its own brands by 2022⁵. Until then, each country defined the 100 controversial substances itself (but the list was relatively similar from one country to another). From now on, Carrefour wants this list to be common to all the countries in the Group (G6), while adding the 20 new controversial substances.

Focus: risks and use of nanotechnologies in Carrefour products

As part of its collective expertise report "Nanomaterials in food products" of May 2020, ANSES identified around thirty substances present in human foodstuffs that are concerned or potentially concerned by the presence of manufactured nanomaterials. ANSES has classified these substances into two separate lists: a first list of substances for which the presence of manufactured nanomaterials is proven, and a second list for which the presence of manufactured nanomaterials is suspected but not confirmed.

As part of its quality policy, and in application of the precautionary principle, Carrefour has for several years banned a number of so-called "controversial" additives from the composition of its branded products, including those concerned or potentially concerned by the issue of manufactured nanomaterials.

Food sector :

- 6 additives for which the presence of manufactured nanomaterials has been proven: our branded products sold in France are virtually all free of the six additives for which the presence of manufactured nanomaterials has been proven.
 - Four of them are on the list of 100 controversial substances that Carrefour announced it had already banned in September 2018 when it launched its Act For Food programme (<https://www.carrefour.fr/engagements/act-for-food/acte-2-bannir-100-substances-controversees>). They are the following food additives: E171 Titanium dioxide, E172 Iron oxides and hydroxides, E551 Silicon dioxide, and E552 Calcium silicate. It should be noted that the additive E171 titanium dioxide has subsequently been the subject of a regulatory ban in France in 2020 and then in the EU in 2022.
 - The two remaining additives (E170 calcium carbonate and E341 iii tricalcium phosphates), although still authorised in Organic Farming, have also been banned from the composition of our own-brand products. To date, in June 2023, there are only four products sold in France for which the E170 additive is still being phased out.

⁵ Scope: G6.



Within the G6 perimeter (including Belgium, Spain, Italy, Romania and Poland), five additives (for which the presence of manufactured nanomaterials has been proven) have already been banned from our branded products (including the colouring agent E171 titanium dioxide, which is subject to a regulatory ban in the EU in 2022). There remains the additive E341 iii Tricalcium phosphates, which is still authorised in the EU.

24 additives for which the presence of manufactured nanomaterials is suspected but not confirmed. These 24 additives include :

- France :
 - 10 additives are on the list of 100 controversial substances that Carrefour announced it had already banned in September 2018 when it launched its Act For Food programme;
 - 5 other additives have since been banned;
 - 10 additives are still authorised, but should be substituted if possible.
- Perimeter G6 :
 - 10 additives to be phased out by the end of 2022;
 - 1 additive to be phased out by 2026;
 - 13 other additives still authorised, but to be substituted if possible.

Non-food sector :

- MDC Textiles: The use of nanotechnology is strictly prohibited in textile products sold under the Group's brands. Suppliers of these products undertake to comply with this requirement.
- Hygiene and detergency MDC: The presence of nanoparticles is prohibited in MDC products.
- MDC Cosmetics :
 - Since 2019, the Group has removed TiO₂ from all Carrefour-branded toothpaste for children and adults. From now on, any control of TiO₂ will result in its nano classification and a marketing ban. The debate on this substance for MDC products is closed.
 - Since 2019, Carrefour has removed silica from children's toothpastes, given their sensitivity and the proven risks of ingestion.
 - Several adult toothpastes (21 gencods) and one make-up product marketed under the Group's brands currently contain silica, which is found in two raw materials: TIXOSIL 43 (HYDRATED SILICA) and TIXOSIL 63 (HYDRATED SILICA).
- Biocides: no Carrefour-branded biocides contain nanomaterials.

MDC packaging: an active watch is kept on the subject of nanomaterials in packaging compositions. The food additives mentioned and others are used in the mass of packaging. To date, there has been no evidence of migration of these nanomaterials between packaging and products, which is why they continue to be used. Nevertheless, Carrefour is seeking to reduce their use, for example in Opaque PET, where the proportion of opacifiers that may contain additives classified as potentially nano has been divided by 3, and the Group is limiting its use to products requiring light barriers.



- Reducing the use of pesticides

In order to promote farming that uses fewer pesticides and thus protect the health of consumers and the environment, Carrefour is investing in the development of organic farming as well as integrated farming through the implementation of agro-ecological practices (see Biodiversity sheet).

Carrefour's objective is for 15% of fresh food sales to come from organic farming or agro-ecology by 2025. For Carrefour, helping farmers to convert to organic farming is a societal responsibility, characterised by a contractual commitment lasting 5 to 7 years. The company wants to support hundreds of producers in this profound change in production and breeding methods. More than 3,400 producers and breeders are already partners.

In France, Carrefour's objective was to support 3,000 French farmers in organic farming and in conversion to organic farming by 2022. By the end of 2022, 3,520 organic farming partners were being supported by the Group.

Carrefour has also decided to eliminate some chemical pesticides by developing agroecology for its Filières Qualité Carrefour (FQC) and Reflets de France products. Carrefour has made a commitment with its partner producers that 100% of its Filières Qualité Carrefour products will be produced using agroecology by 2025. In addition, Carrefour aims for its CQF products to account for 10% of the fresh produce on offer. In shop: all FQC fruit and vegetables are free from post-harvest treatment (except FQC bananas, which are treated naturally). You can also find strawberries free of synthetic pesticides from the moment they flower, kiwifruit free of insecticides, frozen broccoli free of insecticides, as well as pasta and lentils.

- Exclude GMOs

Since 1998, Carrefour's policy has been to exclude GMOs and their derivatives from its own-brand products and from the feed of animals destined for Carrefour Quality Lines. Since 1999, 100% of the Group's own brand products exclude genetically modified ingredients. Carrefour supports the cultivation of GMO-free soya. The Group developed its first GMO-free soya supply chain in Brazil to feed animals for Carrefour Quality Lines in 2000, and a French supply chain in 2017. In 2022, the Group still has products that guarantee GMO-free animal feed, such as FQC pork, FQC chicken, Reflets de France chicken and Carrefour Oui Au Mieux chicken.

The Carrefour France website highlights GMO-free organic products, enabling consumers to make healthier shopping choices (<https://www.carrefour.fr/engagements/act-for-food/acte-6-nourrir-nos-animaux-sans-OGM>).

2.3 Guaranteeing accessible services for all

Carrefour intends to make a range of healthier, quality products available to as many people as possible, at the right price, in all its territories and in all circumstances, thanks to the mobilisation of its teams. The food transition for all embodies Carrefour's commitment to fighting the food divide and its refusal to see part of the population or certain regions excluded from the progress made in terms of nutritional quality, whether for reasons of price or physical accessibility.

This democratisation is spearheaded by the development of Quality Lines, which offer customers high-quality, affordable products at the heart of the market. Carrefour products are at the heart of this commitment, not only in terms of quality, origin, composition and sustainability, but also in terms of affordability.



The dedicated page of the Mieux manger programme launched by Carrefour also provides tips on how to eat at a low price. Organic private labels offer organic quality at the best price. With products that are on average 20% cheaper than the sector's leading brands, private labels are helping to democratise organic products, which are still on average 60% more expensive than conventional products.

Anxious to carry out its mission of food transition in a spirit of solidarity as a whole. The Carrefour Foundation supports medical research into the causal links between diet and health (AFM Téléthon, Fondation pour la Recherche Médicale, CHU Nantes). By way of example, the Foundation supports the application of new therapeutic approaches to combat the development of insulin resistance and type 2 diabetes at the ICAN IHU in France.

Illustration : Launch of a range of balanced ready meals in Belgium

Carrefour is expanding its range and launching a brand new range of balanced ready meals, Carrefour The Market. The range comprises 10 healthy recipes sold in recyclable trays. Rich in vegetables, tasty, cooked in Belgium and served in environmentally-friendly packaging, these recipes are perfectly in line with Act For Food and Carrefour's desire to guarantee consumers access to healthy, high-quality, tasty food. These meals have a Nutri-score A and are packaged in 100% recyclable vegetable pulp.

2.4 Directing consumer choice towards healthier products

2.4.1 Communicating and involving customers in the Eat Well campaign

Carrefour is at the heart of food transformation with its Act For Food programme. In France, Carrefour offers high nutritional value recipes on its carrefour.fr website and has a dedicated section for specific diets (gluten-free, lactose-free, sugar-free, reduced salt, vegetarian and vegan). In Spain, in 2022, Carrefour became the first company to have an exclusive edition of Monopoly dedicated to food. Hasbro's most universal game has been updated with Carrefour's image, the values of food transition for all and Carrefour's image, and the "Food for All" campaign created to encourage healthy lifestyles.

In Romania, Carrefour has set up a food education programme where young people have the opportunity to learn about the basic principles of nutrition, the right food combinations, the origins of food, how vegetables are grown, etc. Alongside this theoretical training, participants in the programme will have the opportunity to take part in practical sessions to help them acquire healthy habits. Parents were also given the opportunity to learn about healthy eating practices. Currently, 220 students are enrolled in the programme.



3. Related documents

Act 2 of Act For Food - Exclude 100 controversial substances:

<https://www.carrefour.com/fr/groupe/la-transition-alimentaire/substances-controversees>

Nutriscore: <https://www.carrefour.com/fr/newsroom/carrefour-va-afficher-le-nutri-score-sur-ses-produits>

Collaboration for healthier lives: <https://www.theconsumergoodsforum.com/health-wellness/healthier-lives/>

Nutri Eschola: <https://www.carrefour.com/fr/actuality/bresilapplicationnutritionnel>

Eating well: <https://www.carrefour.com/fr/magazine/mieux-manger>