

universcience presents

THE BAROMETER OF CRITCAL THINKING

#BaromètreEspritCritique
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HOW DO FRENCH PEOPLE VIEW AND ENGAGE WITH SCIENCE? WHICH MEDIA DO THEY USE FOR INFORMATION? HOW MUCH DO THEY TRUST THEM? WHEN FORMING THEIR OPINIONS, DO THEY TEND TO RELY ON THEIR INTUITION OR THE VIEWS OF OTHERS?

WHAT ARE FRENCH PEOPLE'S EATING HABITS? WHAT ARE THE COMMON MISCONCEPTIONS ABOUT FOOD? WITH SO MUCH FOOD ADVICE ON SOCIAL MEDIA, HOW DO WE DECIDE WHAT TO EAT?

Each year, Universcience - the public institution consisting of the Palais de la Découverte, the Cité des Sciences et de l'Industrie and leblob.fr - carried out a survey that examines the attitudes of French people towards science, information sources and critical thinking. Every year, the Barometer also explores a current theme. Past topics include vaccination in 2022, global warming in 2023 and artificial intelligence in 2024. In 2025, the focus was food. The theme of food will therefore be a central concern for many of those taking part in this year's Springtime of Critical Thinking.

SCIENTIFIC COMMITTEE

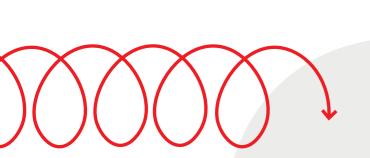
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THE FRENCH AND FOOD



HEALTHY AND ETHICAL EATING IS A RISING TREND IN FRANCE

Healthy eating is a key concern for French people: more than 7 out of 10 respondents say, 'they like to cook' (72%), in all age categories, and try to eat a balanced diet (75%). 80% say they always or almost always include fruit and vegetables in their meals. A third of respondents (35%) and half (53%) of those under 35 nevertheless admit to eating readymade meals purchased in stores or restaurants at least once

Age, place of residence, ethical standards and medical needs influence French eating habits: among those surveyed, 56% identify as 'omnivores', with no dietary restrictions, 22% as 'flexitarians', who limit meat and fish, and 8% follow vegetarian (4%) or vegan (4%) diets. The proportion of omnivores is higher in rural areas (62%), while that of flexitarians, vegetarians or vegans is higher in large cities (47%). Among people aged 18 to 24, 25% are vegetarian or vegan (compared to 4% of those over 35).

4 in 10 French people say they have specific dietary preferences. Among them, 55% cite environmental or ethical reasons (such as animal welfare or protecting the environment), 42% cite medical reasons, and 31% are trying to lose weight independently*.

Most food buying decisions are driven by cost and discounts (the biggest factors for 69% of those surveyed), taste (54%), nutrition and ethics. Almost half of those surveyed (49%) consider nutritional factors, with 24% looking at the Nutri-score or ethical criteria (47%), such as production methods or fair-trade practices. Among people under 35, 60% consider ethical criteria, compared to 44% of those 50 and over*.



*Multiple answers allowed - Multiple-choice question



BUT THE FRENCH LACK CLEAR GUIDANCE: 8 OUT OF 10 FRENCH PEOPLE SUBSCRIBE TO AT LEAST ONE FOOD MYTH

For 58% of respondents, a 'detox' is an effective way to cleanse their system after overindulging. For 37% of respondents, dietary supplements can compensate for a poor diet, and for 34%, men need more red meat than women. People aged 15 to 24 are more likely to believe these false claims, with approval rates of 65% (+7 points), 53% (+16 points) and 46% (+12 points) respectively. Overall, more than 8 in 10 of those surveyed believe in at least one of the tested false statements about food.



INFLUENCED BY THEIR SOCIAL CIRCLE, THE FRENCH SEEK RELIABLE AND SCIENTIFIC INFORMATION ON FOOD

French people's dietary habits are shaped by the food education they receive from their parents: nearly eight out of ten respondents (77%) agree with this statement. Among people aged 15 to 24, the influence of their immediate social circle on their eating habits is even greater (+4 points). People tend to look for information more during specific life stages: 71% of surveyed parents say they are more interested in food products since having children, and 70% of respondents aged 50 and over say they have increased their information intake as they age.

Half of participants (51%) say that food is a subject of discussion in their immediate social circle. 18- to 24-year-olds are more likely to discuss food with their social circle (62%), as are vegetarians/vegans (70%).

However, the majority also say they lack clear guidance in finding food information: 56% of French people 'don't really know who to believe on the subject,' an opinion shared by nearly two-thirds (65%) of 18- to 24-year-olds.

People get most of their food information from their social circle (54%), then the internet, excluding social media (50%) and then health care professionals (30%). 43% of respondents also use specialised sources* like websites, books, magazines or apps for food information.

During grocery shopping, more than half of French people (56%) regularly read food labels and packaging, while 94% do so at least occasionally. When reviewing the labels of products they intend to buy, 91% of respondents pay attention to nutritional information, particularly the ingredient list (62%) and the Nutri-score (44%). Half of respondents (52%) also pay attention to the product's origin, and 46% look for production labels like Label Rouge or Organic*.

Digital tools are preferred by those under 35: almost half (48%) use online searches when grocery shopping (vs. 21% of those aged 35 and over), and 45% scan labels with apps (vs. 20%). French people with non-omnivorous diets are more likely to look for information: 80% of vegetarians and vegans read product labels (vs. 50% of omnivores), 59% search for information online (vs. 19% of omnivores), and 56% scan labels with an app (vs. 18% of omnivores).



HEALTHCARE PROFESSIONALS AND SCIENTISTS ARE THE MOST TRUSTED INFORMATION SOURCES FOR FRENCH PEOPLE. YOUNGER GENERATIONS ALSO RELY ON APPS AND NUTRITION INFLUENCERS

The French primarily trust doctors and dietitians (79%), then their social circles (72%), public health and research organisations such as INSERM, ANSES or Santé publique France (71%), and scientists and researchers (66%). 55% of respondents also trust alternative and complementary medicine actors. Finally, 45% trust specialised nutrition apps like OpenFoodFacts or Yuka, and 42% trust coaches, trainers or sports educators. Only 28% of respondents trust those in the agri-food sector on food matters*.

Consistent with previous Barometer surveys — on Al in 2024 and the climate crisis in 2023 — French people trust scientists the most. For food, the French nevertheless place much more trust in their social circle (72% vs. 47% for Al), across all socio-demographic groups.

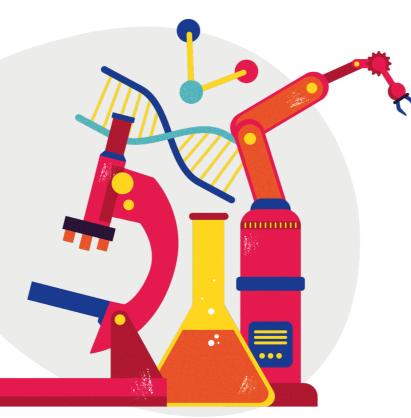
Vegetarians and vegans in France find it harder to determine trustworthy food information sources (75%) than the general population (57%). Public health and research organisations are the most trusted (84%), followed by nutrition apps (74%) and doctors and dietitians (73%).

15- to 24-year-olds follow the same trend, generally placing higher trust in public health and research organisations (78%, +7 points), followed by digital actors 63% (+18 points) compared to 45% for apps and 46% (+24 points) for YouTubers and scientific influencers.



THE FRENCH AND SCIENCE

*Multiple answers allowed - Multiple-choice question



GENERAL DISINTEREST IN NEWS IMPACTS SCIENCE

Overall, respondents expressed less interest in the range of subjects they were asked about. Although there is less interest in science than in January 2024, most people in France are still interested in the subject: 62% of respondents say they are interested in scientific topics (-7 points), behind social issues (79%, -4 points) and international news (73%, -4 points), but ahead of cultural and artistic news (55%, -4 points) and sports news (46%, -2 points). Political news is the only subject with an increase in interest and now surpasses science (63%, +2 points).

DESPITE A DECLINE IN INTEREST, SCIENCE IS STILL VIEWED VERY FAVOURABLY

Science still has a very positive image. The role of science and scientific methods is widely recognised: 78% of people surveyed place higher value on statements that have been scientifically validated. Science is still perceived as having a positive impact on society by most respondents: 82% of respondents say it leads to the development of technologies useful to everyone, 80% say it improves our understanding of the world, 79% say it enhances our living conditions, and 72% believe it fosters the development of rigorous thinking. These results are slightly down compared to last year but remain high.



AI IS INCREASINGLY USED AS A SOURCE OF INFORMATION ON SCIENTIFIC TOPICS

When searching for information on scientific subjects, people are less likely to use scientific sources and more likely to use Al: 65% of French people consult scientific sources (-3 points), including specialised reports and programmes (36%), specialised science and technology magazines (24%) and the websites of research institutions and bodies (21%). Al (artificial intelligence) tools are increasingly used for information gathering, with 8% of all respondents and 19% of people aged 18 to 24 reporting their use.

Cultural outings with a scientific focus have been increasing since 2023. 44% say they participate in this type of activity at least occasionally (+3 points since 2023): 29% visit scientific or technical exhibitions, 18% attend researcher-led events (+3 points since 2023).

People's attitudes towards science vary according to age, gender, place of residence and socio-professional category. Interest in science remains higher among men (71% vs. 55% of women) and people from higher socio-professional categories (69% vs. 56%).

The survey has identified three main groups based on their relationship with scientific practices. The 'irregulars': typically older males who rely more on online sources and television for information and have infrequent or past involvement in scientific activities. The 'detached': primarily older women living in smaller towns and villages who have little interest in scientific subjects. And finally, the 'curious': more often young, urban, graduates or males who actively seek information, showing a strong interest in scientific topics and science-related outings.



15- TO 24-YEAR-OLDS ARE MORE INTERESTED IN SCIENCE, PLACE GREATER TRUST IN IT, BUT DEFINE IT MORE BROADLY

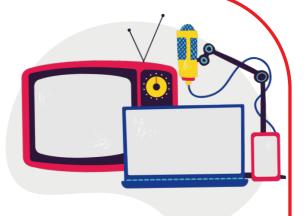
15- to 24-year-olds demonstrate a greater interest in science: 27% say science is one of their main interests, ranking it 7th out of 14 topics (compared to 11th for those aged 18 and over)*. Interest in science is even stronger among those aged 15 to 17. They also believe more strongly in science's ability to positively influence society: 72% believe that scientific advances make people better (vs. 60%).

Lastly, 15- to 24-year-olds demonstrate greater confidence in the scientific community: 71% say that scientists follow strict ethical rules (vs. 62% among those aged 18 and over), 69% say they are the best placed in their field to

know what is good for the wider community (vs. 57%), 62% say that science is the only reliable source of knowledge (vs. 53%), 66% believe that scientists are independent (vs. 53%). However, they have a greater fear of the power scientists hold, believing it could lead to danger (73% vs. 65%).

Level of scientificness: although both young and older people rank medicine, chemistry, biology, astrophysics and archaeology as the most scientific disciplines, there is a significant difference between the 15-to-17 age group, a new focus of the 2025 barometer, and the 18-to-24 age group. The former has a clearer view of the scientificness of these disciplines, including compared to those aged 18 and over. 15- to 24-year-olds attribute a higher degree of scientificness than their elders to sociology (+12 pts) and psychoanalysis (+5 pts). Opinions differ little concerning osteopathy (40%), history (34%), ecology (33%) or economics (31%). The three disciplines perceived as being the least scientific are the same for those aged 18 and over and those aged 15 to 24: meditation, horoscopes and naturopathy.

THE FRENCH AND INFORMATION SOURCES

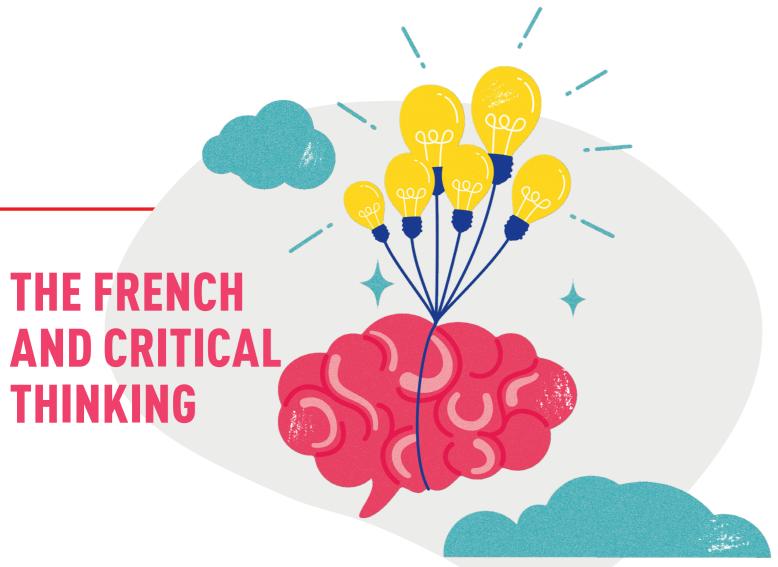


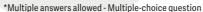
15- TO 24-YEAR-OLDS USE DIFFERENT INFORMATION SOURCES FROM THE REST OF THE POPULATION: THE INTERNET, SOCIAL NETWORKS, AI AND THEIR SOCIAL CIRCLE

The 2025 Barometer aligns with major trends observed in previous surveys: the internet (excluding social media) and television remain the main sources of information for 68% and 66% of respondents respectively. Radio continues to be the most trusted medium, followed by the internet (42%) and television (35%). To stay informed on current events, 15-to 24-year-olds rely even more heavily on the internet (78%), but also on their immediate social circle (70% vs. 41%) and social media (52% vs. 28%). In contrast, they use television (44%) and radio (23%) less. The use of artificial intelligence tools like ChatGPT for information gathering is also more common among 15-to 24-year-olds: 21% use them to follow current events (vs. 10%), 14% to source information on food (vs. 7%), and 12% to follow scientific topics (vs. 8%).

WHEN EVALUATING ONLINE INFORMATION, THE FRENCH PRIORITISE THE SOURCE LESS THAN OTHER FACTORS. FOR YOUNGER INDIVIDUALS, HOWEVER, THE SHARER'S IDENTITY HOLDS SIGNIFICANT WEIGHT

While the French still use the same criteria to assess the trustworthiness of online information, several factors have seen a decline since 2023: only 36% of respondents now check the media source of their information (-7 points), and 31% determine credibility by cross-referencing information (-6 points). The identity of the person sharing information is a criterion of trust for 23% of 18- to 24-year-olds if the information is shared by a member of their immediate social circle (vs. 15% for the overall population), for 21% if it is shared by an expert or researcher (vs. 11%), and for 20% if it is shared by an influencer (vs. 5%).







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DEFINING CRITICAL THINKING-A GENERATIONAL ISSUE?

Three quarters of French people consider themselves to be 'critical thinkers'. People who regularly engage in a variety of scientific practices are more likely to identify as critical thinkers. Respondents agree that the three attitudes that best define critical thinking are: logical and rational reasoning (43%), the ability to engage with differing viewpoints (40%), and gathering more information before forming an opinion (39%). However, these attitudes have each dropped by 8 to 10 points since 2022. The ability to question intuitive feelings - essential to detect cognitive biases - is still the least frequently cited attitude (16%), despite a slight increase. 15- to 24-year-olds are just as likely to believe they know how to demonstrate critical thinking (75%), but they associate it less with the ability to exchange ideas with people with divergent opinions (35%) or to gather information before forming an opinion (34%), and more with the ability to justify their choices (37% vs. 32%) and to question the word of authority (24% vs. 17%).

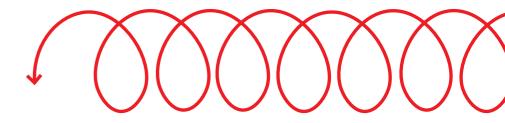


THE INFLUENCE OF AGE ON APPROACHES TO DEBATE

While nearly one in two French people admit to sticking to arguments without being sure of their soundness (nearly two out of three among 15- to 24-year-olds), 81% say they are willing to change their opinion based on convincing reasons, 78% say they compare many different points of view before forming their own opinion, and 76% find it important to question traditional beliefs using logical and rational evidence.

Nearly eight out of ten French people say they often or sometimes take part in debates on social or scientific topics (78%). However, they mostly choose to defend their viewpoints in discussions with their immediate social circle: 64% regularly debate with their friends and 61% during family meals. They are less likely to engage in these exchanges at work (42%)*.

Young people aged 15 to 24 find it harder to adjust to differing opinions, yet engage in more debates: 76% say they are willing to change their minds based on convincing reasons (-5 points), but 60% admit that they sometimes persist in their arguments even without being sure of their soundness (+14 points) and 58% prefer to exchange ideas with people who share their opinions (+9 points). However, 75% regularly debate with their friends (+11 points) and 69% with family (+8 points), 59% at work (+17 points) and 53% on social media (+27 points).





CRITICAL THINKING IS BUILT ON THREE MAIN PILLARS: SOCIAL CIRCLE, SCHOOL EDUCATION AND THE SCIENCES

French people attribute the development of their critical thinking skills primarily to their family (84%) and especially to their parents (74%). People met during schooling are also seen as very influential (81%), such as teachers (75%) and cultural, social and sport educators (42%). The teaching of humanities is seen by 68% as the biggest contributor to critical thinking development, specifically French and literature (36%), history and geography (29%), and philosophy (28%). 49% attribute the development of their critical thinking to the teaching of exact sciences, particularly biology (25%) and mathematics (23%). This figure rises to 62% among young people aged 18 to 24.

THE IMPACT OF CRITICAL THINKING ON EVERYDAY LIFE

We can identify four distinct groups based on how people engage with critical thinking:

- The 'Analysts': An older demographic who favour traditional media, lean politically left, are highly discerning in their information consumption and have a high regard for critical thinking and science.
- The 'Confident': More masculine, younger, leaning politically more to the right than average, they see themselves as very curious and scientific, placing greater trust in both the media and science, and identifying with critical thinking.
- The 'Distant': Typically from workingclass backgrounds and less well-educated and less informed, they are distanced from science and less concerned with critical thinking.
- The 'Defiant': less well educated and resistant to science, they believe they are less critical thinking than others, which they associate less with science and more with the ability to make the right decision. The 'Distant' and the 'Defiant' are more likely to live in small towns or villages.

Critical thinking influences our everyday behaviour. When it comes to food choices, 'Analysts' have higher nutritional and ethical standards: 73% check the ingredient list and 63% look at the geographical origin of food, which is 11 points higher than the total population for these two criteria. 'Confident' are more likely to seek $\textbf{information while grocery shopping:} 65\% \ of ten$ read labels (vs. 41% of 'Distant'), 49% search for information online about product quality (vs. 10% of 'Distant'), and 49% scan labels with an app (vs. 11% of 'Distant'). They cite taste (51%) almost as much as price (54%) as their top food choice criteria, while the 'Distant' primarily choose based on price (70%). The 'Confident' mostly place their trust in information sources, while only half of the 'Defiant' trust doctors and dieticians (49%) and public organisations (49%), respectively 30 and 22 points less than the population average.



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