How does packaging material shape consumer perception?

FEVE / Mind Insights study on bottled sparkling water packaging – Key insights for brands

December 2025

FEVE
The European Container Glass Federation

Friends of Glass

choose tomorrow, today

The research was commissioned by FEVE – The European Container Glass Federation – from Mind Insights to study the role of packaging in shaping consumer reactions in the sparkling water category.

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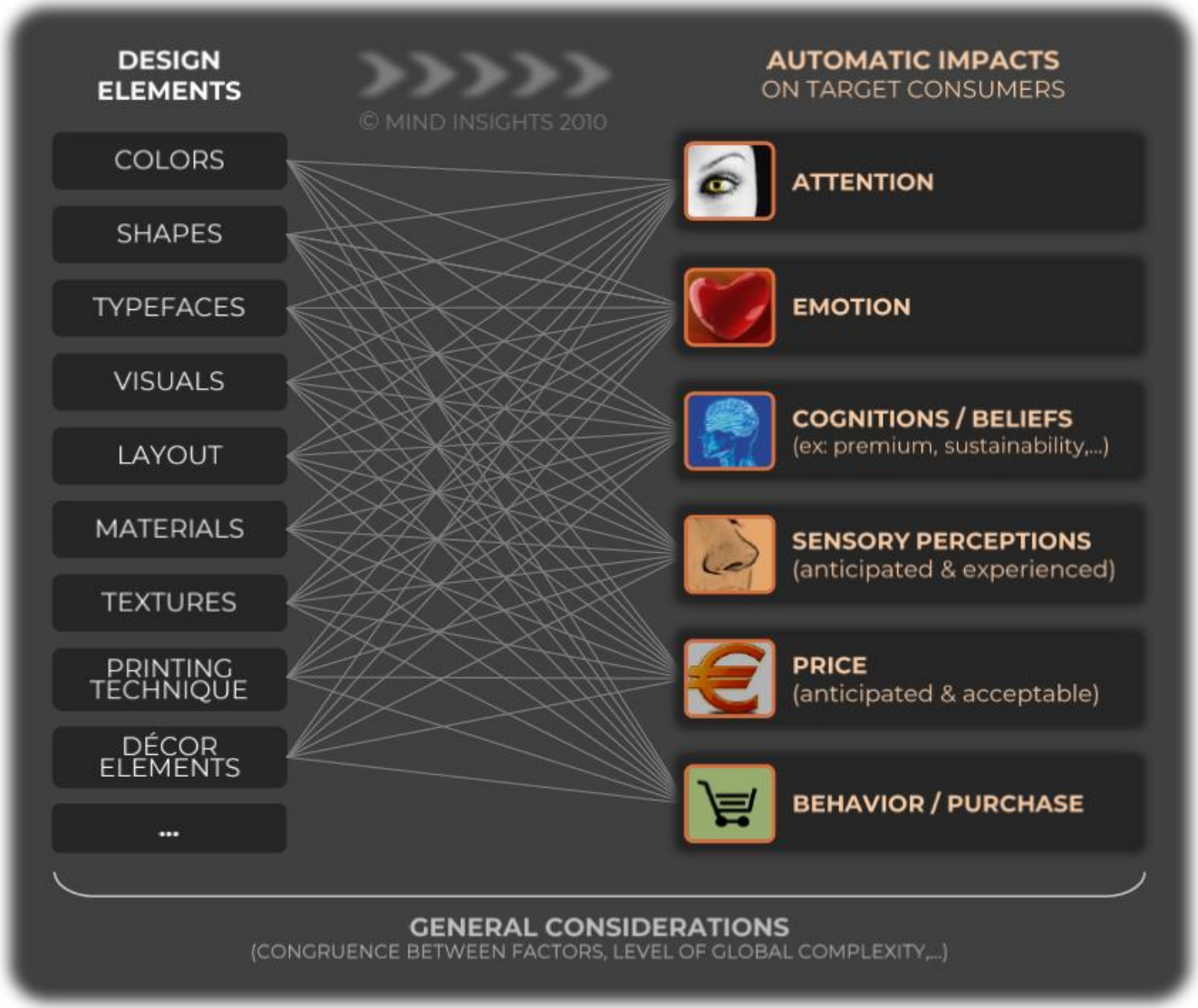
Packaging design elements can shape perception at very different levels

as shown by the numerous scientific studies conducted by the organisation ‘Mind Insights’

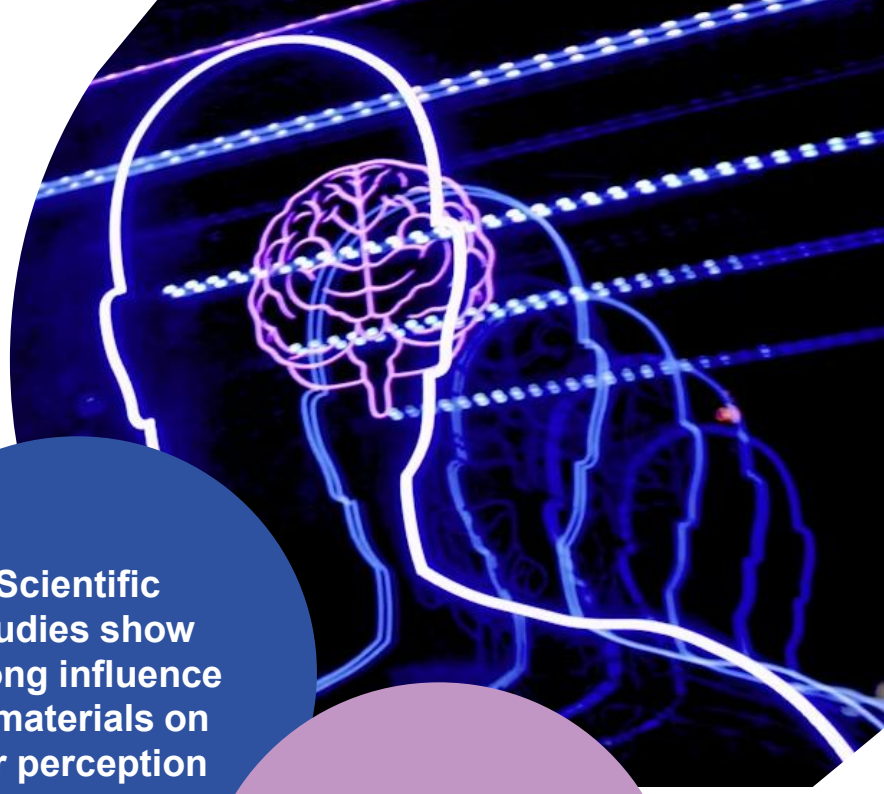


Why does packaging material matter?

Packaging materials influence more than functionality. They shape consumer expectations, emotional reactions and product value perceptions.

- Previous research has shown a decisive role for packaging design and functionalities on shaping consumer reactions.
- Better understanding material itself effects is important for brands competing in categories like **sparkling water.**
- This helps brands stand out in a crowded shelf environment and provides **critical inputs on brand differentiation strategies,** including for:

Quality
Environmental responsibility
Taste
Health



Scientific studies show strong influence of materials on our perception

Assessing glass vs. PET vs. aluminium

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Research overview:

Conducted August – September 2025

In summer 2025, FEVE collaborated on a scientific study conducted by scientific organisation **Mind Insights**, led by Professor Gordy Pleyers (University of Louvain):

Scientific lab study, isolating material effects (120 participants) - August-September 2025

How packaging materials influence consumer reactions towards sparkling water

Quantitative research via consumer panel (626 participants) - September 2025

Measuring conscious and non-conscious reactions

First-of-its-kind study in sparkling water category to capture authentic consumer reaction

Research objectives & methodology

Objectives:

- To assess **how different container materials (glass bottles, PET bottles, aluminum cans) influence consumer perceptions and beliefs** around flavoured and non-flavoured sparkling water.
- To evaluate key attributes including **perceived eco-responsibility, health, taste and quality, and product value and desirability.**

- **Method:** Laboratory and quantitative panel study
- **Audience:** Sample of 120 and 626 regular consumers of sparkling water, balanced by gender and age (20 - 75 years).
- **Timings:**
  - Laboratory study – August-September 2025
  - Online quantitative research – September 2025

Source: Mind Insights, Impacts of Container Type on French Consumers' Perceptions, 2025

Lab study

Participants: 120 French sparkling water consumers (aged 20-70)

Laboratory study within controlled neuroscience-based environment to assess the causal impact of container type on automatically activated consumer perception of products.

- Compared reactions to flavoured and non-flavoured sparkling water packaging in glass, plastic (PET), and aluminium.
- Compared consumer reactions regarding 3 non-flavoured and 3 flavoured sparkling water products, using well-controlled fictitious brands and designs.
- Identical except for container material – neutral, realistic appearance to avoid brand/label bias.
- Measured how strongly key perceptions (quality, taste pleasure, eco-responsibility, product value and product desirability) are automatically activated in consumers' minds – while avoiding biases that typically occur with traditional methods.

Quantitative survey

Participants: representative sample of 626 consumers (aged 20-75)

Quantitative panel study using rigorous scientific approach.

- Examined consumer attitudes, beliefs and behavioural intentions around environmental aspects of packaging.
- Assessed consumer environmental concern based on scientifically-validated questionnaire relating to various beliefs and behaviours around sustainable practices.
- Data integrity via randomised question order, nuanced 7-point agreement scales and response time/consistency analysis.

1

Key findings

Glass generates the greatest reactions

Across both **flavoured** and **non-flavoured** sparkling water, **glass** was consistently rated **more favourably**.

The **superiority of glass emerged consistently** across the different products and different types of measures.

GLASS CONSISTENTLY OUTPERFORMS PLASTICS/PET AND ALUMINIUM ACROSS ALL ATTRIBUTES IN LAB STUDY

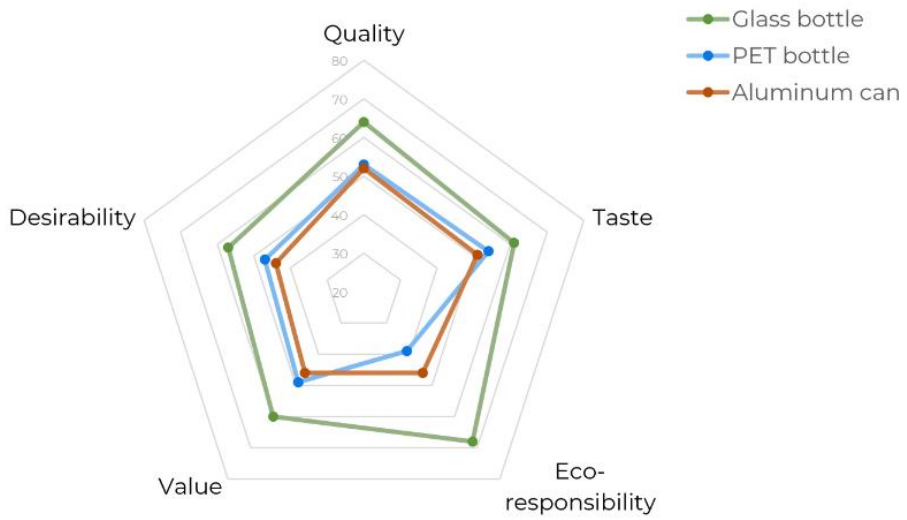
STRONGER AUTOMATIC ACTIVATION OF QUALITY, TASTE PLEASURE & PREMIUM VALUE SIGNALS

Products in glass activate non-conscious responses

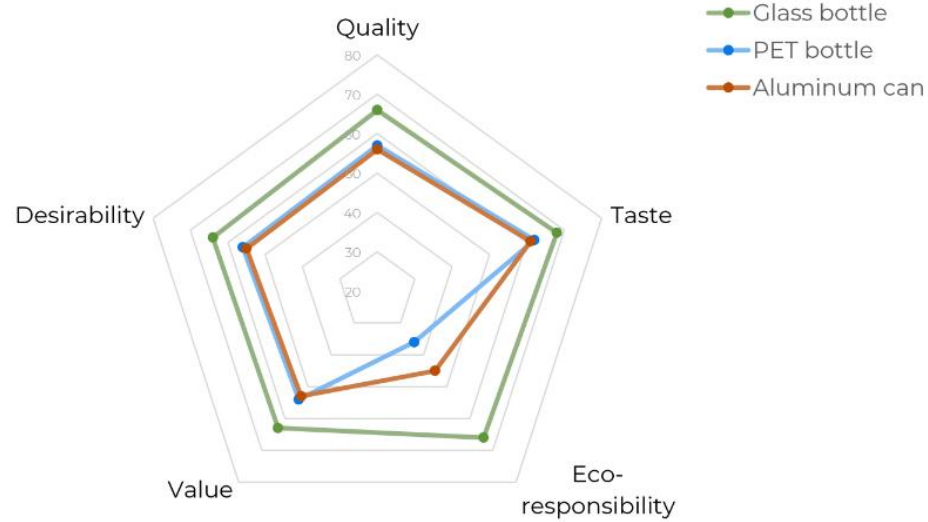
- Glass activates **strong quality cues**, **premium value** signals and positive **sensory expectations** before consumers even consciously evaluate the product.
- The **non-conscious** responses is evidence that glass creates an intuitive sense of **desirability**.
- This is critical for brands because these rapid, automatic associations can **strongly influence purchase behaviour** and willingness to pay.

Packaging design elements can shape perceptions at fundamental levels

NON-FLAVOURED SPARKLING WATER



FLAVOURED SPARKLING WATER



DATA PREVIEW:

Full industry data is confidential to FEVE members –
get in touch directly for a dedicated deep dive into what the findings mean for your brand.

Source: Mind Insights, Impacts of Container Type on French Consumers' Perceptions, 2025 **– lab study results**

Consumers show strong preference for glass

		Glass bottle	PET bottle	Aluminum can
Non-flavored	Product 1 (Solvar)	75,9	17,9	6,2
	Product 2 (Neris)	78,4	14,4	7,2
	Product 3 (Verlo)	76,0	16,5	7,5
	Mean	76,8	16,3	7,0
Flavored	Product 1 (Almira)	72,8	15,0	12,1
	Product 2 (Lorive)	71,2	16,1	12,6
	Product 3 (Elvory)	73,8	16,1	10,1
	Mean	72,6	15,7	11,6
Overall mean		**74,7**	**16,0**	**9,3**

- Quantitative study found products in glass bottles are **associated with favourable beliefs and clearly outperform** plastic/PET bottles and aluminium cans.
- This demonstrates that glass is **by far the most widely preferred option for consumers** choosing between equivalent sparkling waters in the 3 container types examined.

★ **Key insights:**

- **Glass bottle**: By far the preferred option
- **Aluminum can**: Slightly higher (though still very weak) preferences in the 'Flavored' category [≈12%, vs. 7% in the 'Non-flavored' category]

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Source: Mind Insights, Impacts of Container Type on French Consumers' Perceptions, 2025 **– quantitative survey results**

Environmental beliefs prioritise glass

A complementary section in the quantitative study, looking specifically at consumer beliefs around environmental aspects found:

- Almost unanimous belief that glass bottles are **eco-responsible & recyclable**
- Widespread belief that **glass bottles are made with recycled materials**

These beliefs are noteworthy as eco-responsibility of sparkling water containers as seen as a driver of choice between similar products in different containers.

Source: Mind Insights, Impacts of Container Type on French Consumers' Perceptions, 2025 **– quantitative survey results**

Dive into the research

Strong consumer preference indicates significant opportunity for brands to adopt or expand glass packaging.

Get in touch for **a dedicated deep dive** into the study findings with one of our companies.

WHY ARE WATERS BETTER IN GLASS?

IN A NUTSHELL, GLASS…

- is made from **ingredients found in nature.**
- is **non-toxic and inert** – preventing any transfer of chemicals and preserving quality, odour, colour and texture.
- is one of the most effective packaging materials for **protecting products** – forming a virtually complete barrier which prevents any loss of quality.
- has strong environmental credentials – it's **100% and infinitely recyclable,** making recycled glass a vital resource for new production.
- guarantees product safety, **protecting bottled drinks from oxygen and bacteria**.

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HOW CAN GLASS HELP BOTTLED WATERS STAND OUT?

What’s next?

This research confirms that material choice is a strategic factor in shaping consumer perception.

Brands and retailers can use these findings to enhance premium positioning, strengthen sustainability credentials, and improve message alignment with consumer expectations.

Glass has the power to help brands to stand out from competitors

- **Transparency:**
  Natural appearance allows **the product itself** to shine.

- **Premium products:**
  Glass' **luxurious design** helps drinks stand out on shelves.

- **Emotional connection:**
  Through **design and shape,** but also by its inherent material properties**.**
  Consumers love glass *because* it's glass.

- **Appearance and function:**
  Glass comes in all sizes and colours and can be shaped and engraved, allowing brands to **shape product identity.**

- **Sensory experience:** Drinks bottled in **glass give a full sensory experience**, from the cold feel of glass in your hand, the 'clink' of two bottles cheering together to fresh taste and smell, unaffected by the packaging material.

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Get involved

By partnering with the glass industry on additional research opportunities, we can work together to:

1. Unlock deeper consumer insights

Analyse existing data to understand the extent to which bottled water activates trust, naturalness or enjoyability among consumers, or how different consumer groups respond to packaging choices (age, gender, values).

2. Test products across new markets to inform GTM strategy

Repeat research in other countries to understand how cultural differences shape consumer attitudes toward packaging.

3. Apply findings to other product lines

Beyond water, use research methodology to explore packaging perceptions in other product categories.

Keen to know more?

Q&A: How does packaging material shape consumer perceptions?

Discover the main takeaways from our bottled sparkling water research project with Mind Insights – **catch up** with our recording.

WATCH

Study: Packaging as a Tool for Product Enhancement

Together with the University of Parma, FEVE took a deeper look into the **importance of packaging design in brand differentiation** and product enhancement.

LEARN

Pilot: In-store promotions

Our retail pilot in Spain examined how in-store promotions affect **sales of orange juice** in glass.

Read the case study

Reach local markets through our member network

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Zignago Vetro Group

BA Glass Group

Beatson Clark

Verescence

Ciner Glass

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tomorrow,
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Thank you.

For further information on how glass packaging can enhance your company's appeal, please visit: **www.glasshallmark.com**

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