

The Power of Colour: Nudging Consumers Toward Plant-Based Meat Consumption



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INTRODUCTION

This report shows how packaging colour can influence consumers' purchasing decisions and steer their preferences toward plant-based-meat products. We'll delve into the application of choice-architecture design, particularly the use of harnessing attractive colours as a nudge, in order to promote the consumption of plant-based meat. Marketers in the food industry can use the insights to strategically design packaging and branding that appeals to consumers' preferences for certain colours, effectively encouraging the consumption of plant-based meat.

In recent years, plant-based meat has gained momentum, but it still lags behind traditional meat consumption (Bryant, 2020). While plant-based meat offers many advantages, such as sustainability and health benefits, barriers to consumption persist. Common factors influencing food choices include taste, price, and health. However, a factor that is seldom mentioned is **the visual appeal of packaging, especially in terms of colour usage.**

Consumers are consistently influenced by their shopping environment. In addition to the obvious impact of price, their purchase decisions are guided by a range of factors that are designed to influence their purchase decision. These include product design, labelling, product placement, promotions, and other persuasive marketing material.

"People make their minds about a product or people within 90 seconds. About 62% to 90% of a product or people assessment is based on colors alone. Thus, a color is not only used to differentiate your product from your competitors, but it also affects the moods and feelings of the individual buyers, thus colours make an attitude towards a certain product." (S. Singh (2006, p. 783)

Remarkably, simply using appealing colours in product packaging has the power to reshape consumer behaviour and prompt a shift toward plant-based meat.

Because we eat with our eyes as well as our mouths, the branding of food products should strive to be as visually appealing as possible for customers, and colour, especially, can evoke emotions and convey certain messages.¹ When used in packaging, colour can attract attention, create positive associations, and enhance brand recognition.² Thus, it is crucial to understand how colour influences consumers' purchase decisions in the context of plant-based-meat products, particularly given the lack of research on specific colours used in plant-based branding. As such, this report aims to look at a selection of colours and determine which colours are most appealing to customers in the context of plant-based-meat products.



EXECUTIVE SUMMARY

- **Colour matters:** The research reveals that colour significantly influences consumer behaviour and willingness to purchase plant-based meat products. A substantial 65% of respondents say that colours have an impact on their purchase decision, thus illustrating the untapped potential of the use of colour in packaging.



→ **Actionable insight:** Harness the power of colour differentiation to outshine competitors and evoke the desired consumer responses.

- **Red - the flavour enhancer:** Red was seen as the tastiest colour when it comes to the packaging of plant-based meat. A substantial 56% of UK consumers and 54% of US consumers associate the colour red with superior taste.

→ **Actionable insight:** Use red in your packaging to highlight the taste of your plant-based products, especially when targeting flexitarian and omnivores, who may not immediately gravitate towards products dominated by the colour green. By breaking away from the green tones that are so prevalent in plant-based products, you can effectively distinguish your offerings from those of your competitors.

- **Blue - the price-performance connection:** Blue signifies affordability in the minds of consumers while still promising quality. Remarkably, 48% of UK consumers and 45% of US consumers associate the colour blue with budget-friendly products. Furthermore, 37% of UK consumers and 45% of US consumers are willing to pay a premium for products packaged in blue. Interestingly, blue was the most universally favoured colour among consumers.

→ **Actionable insight:** Leverage blue to signal either budget-friendly or premium products – or both! Given its calming effect, blue can convey both cost-effectiveness and a willingness to pay more for quality.

- **Green - a beacon of health and sustainability:** In the world of plant-based meat, green symbolises health, freshness, and eco-friendliness. An impressive 75% of UK respondents link green packaging with healthiness, 78% with eco-friendliness, and 75% with safety. In the US, respondents associated green with naturalness (68%), eco-friendliness, (68%) and safety (72%).



→ **Actionable insight:** Embrace green – in moderation – in your packaging only if you want to communicate sustainability and health benefits. Incorporate visuals of fresh produce, natural elements, and trusted sustainability certifications in order to increase resonance with environmentally-conscious consumers.

- **Different dietary preferences across nations:** When examining dietary patterns, it is evident that the US has a higher meat consumption compared to the UK, with 61% of US respondents identifying as omnivores, compared to 57% in the UK. Correspondingly, the UK has a larger proportion of consumers following plant-based diets – with vegetarians and vegans comprising 10% of those surveyed, while, among US respondents, only 6% were vegan or vegetarian.

→ **Actionable insight:** Recognise cultural distinctions in dietary patterns for successful promotion of plant-based food products. In the UK, for example, capitalise on the growing demand for plant-based meat alternatives, emphasising the health and environmental benefits.

- **Consumer sentiments - navigating cultural nuances:** While respondents in both countries expressed confidence in preparing plant-based meat (48% in the UK, and 47% in the US) as well as familiarity with plant-based ingredients (UK 52%, US 51%), the US lags in terms of accessibility, with only 47% reporting well-advertised plant-based options, compared to 57% in the UK.

These distinctions are tied to cultural factors. In the US, meat-eating is deeply ingrained, with 54% considering it an important part of their identity and 59% expressing a strong love for meat. In contrast, only 48% of respondents in the UK see meat-eating as part of their identity, and 56% love meat.

→ **Actionable Insight:** In the US, tailored marketing strategies should highlight accessibility and convenience, while, in the UK, emphasising the health benefits may resonate more effectively. Understanding these nuances is vital for effective product promotion and long-term success.



METHODOLOGY

The data presented here was collected through an online survey conducted in April 2023. A total of 1,200 respondents from the US and the UK (600 respondents from each country) participated in the survey. The two countries were chosen in order to ensure a diverse perspective, encompassing distinct cultural contexts and geographical regions.

In order to investigate the impact of colours on consumer behaviour, participants were randomly divided into six groups. Each group was exposed to a different colour on plant-based meat packaging (green, blue, purple, yellow, orange, or red).

This study builds on research showing that warm colours (e.g., red, orange, and yellow) and cool colours (e.g., green, blue, and violet) evoke distinct responses in consumer behaviour due to their unique characteristics. Warm colours typically arouse and stimulate, while cool colours tend to have a calming effect (Rathee & Rajain, 2019, p. 219).



We collected data in relation to several demographic categories, including age, gender, and educational background, setting quotas for age, gender, and dietary habits in order to ensure that the sample was representative of the general population and equally distributed with respect to these variables. The sample comprised people who follow various dietary habits.

RESULTS

Dietary type

Which of the following best describes your current diet?

 **UK**  **US**





	 UK	 US
Omnivore (I eat all types of meat, poultry, fish, and animal products)	57%	61%
Flexitarian (I consciously limit my consumption of meat and animal products)	30%	30%
Pescatarian (I do not eat meat and poultry, but I eat fish)	4%	3%
Vegetarian (I do not eat meat, poultry, or fish, but I eat eggs and dairy)	6%	4%
Vegan (I do not eat any meat, poultry, fish, eggs, dairy, or other animal products)	4%	2%

Q1: Which of the following best describes your current diet?

When asked about their dietary habits, most **UK** respondents (57%) identified as omnivores, while 30% identified as flexitarians and 6% said that they followed a vegetarian diet. A pescatarian diet was followed by 4%, with another 4% identifying as vegan. The **US** showed similar dietary habits, with 61% of respondents identifying as omnivore and 30% as flexitarian. Of US consumers, 3% said that they follow a pescatarian diet, while 4% are vegetarian and 2% are vegan.

The comparison of both countries shows a higher proportion of people in the US including meat in their diet, while in the UK, there is a comparatively larger percentage of consumers who follow a plant-based diet.

Animal-based vs Plant-based consumption

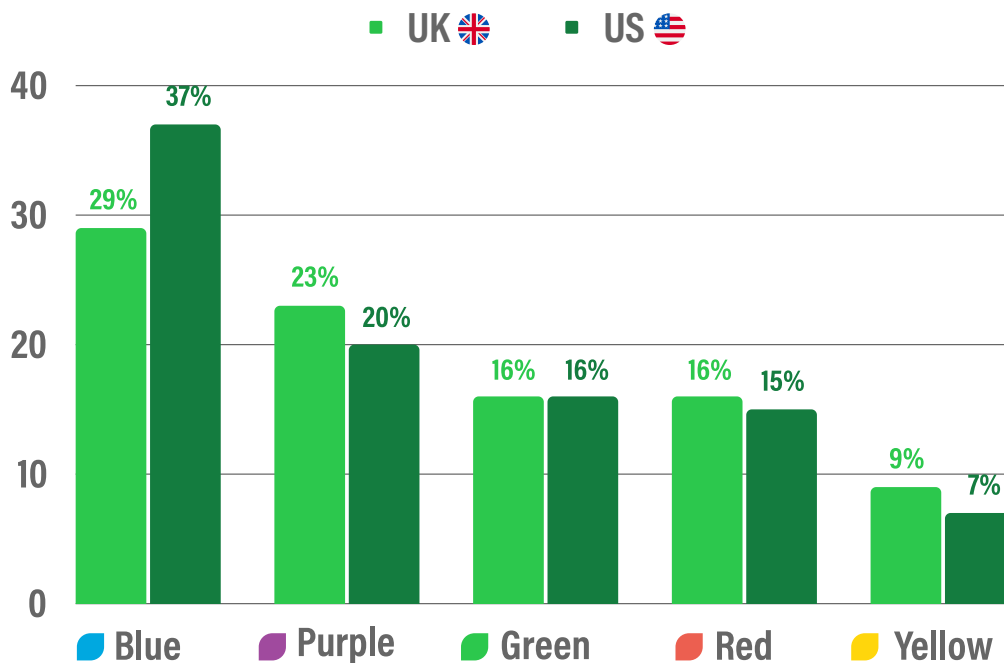
How frequently do you consume/buy each of the following foods?	Animal meat (Beef, chicken, pork, fish, lamb, etc.)		Plant-based meat alternatives (Plant-based beef, chicken, pork, fish, lamb, etc.)	
	 UK	 US	 UK	 US
Daily basis Daily + more than once a day	41%	47%	16%	0%
Weekly basis 1-2 times a week + 3-4 times a week + 5-6 times a week	27%	26%	17%	17%
Monthly basis 1-3 times a month + Less than once a month	27%	25%	33%	25%
Never	7%	3%	24%	31%

Q2: How frequently do you consume/buy each of the following foods?

In comparison to the US, more UK consumers eat plant-based meat. This is especially true when looking at daily consumption – 17% of UK consumers eat plant-based meat every day, while none of the US consumers do so. Additionally, 31% of US respondents said they never eat plant-based meat. Conversely, US consumers eat animal-based meat more frequently than UK consumers do – 47% of US consumers eat meat on a daily basis, while only 41% of UK consumers do.

Overall, the **UK and US data** show that **animal meat remains the most popular choice for participants**, with a significant percentage of respondents eating it daily, while consumption of plant-based meat is mainly on a monthly basis.

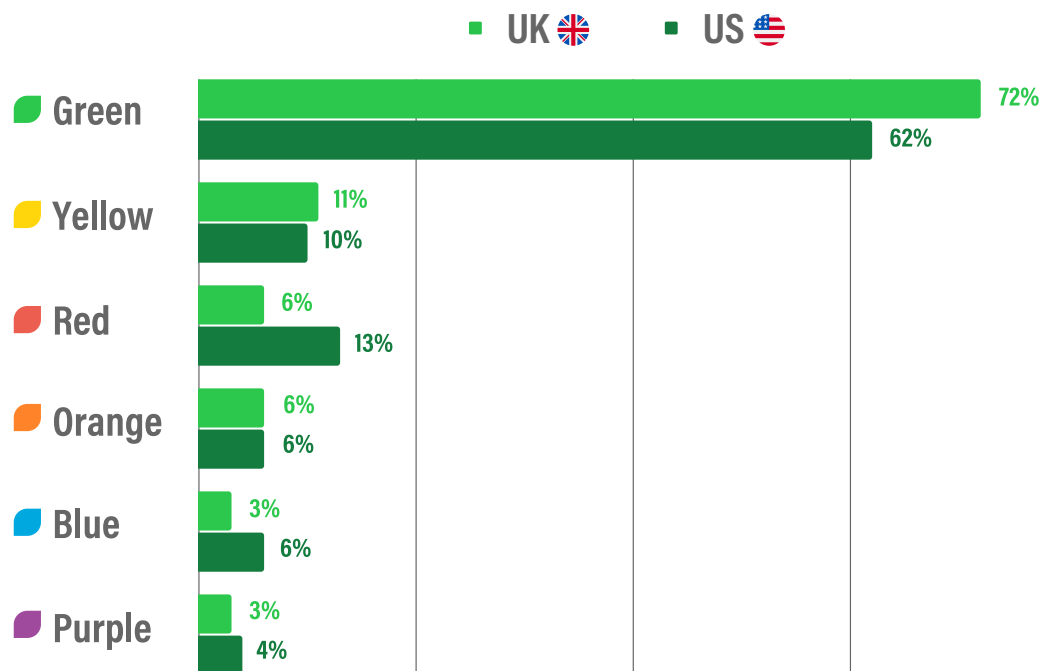
Personal colour preference



Q3: Look at the following colours.
Which colour do you most identify with/like the most?

In both countries, **blue** was the most preferred colour, followed by purple, with the least-liked colours being orange and yellow. Green and red fell in the middle when it comes to the personal favourite colours of consumers.

Colour association with plant-based meat

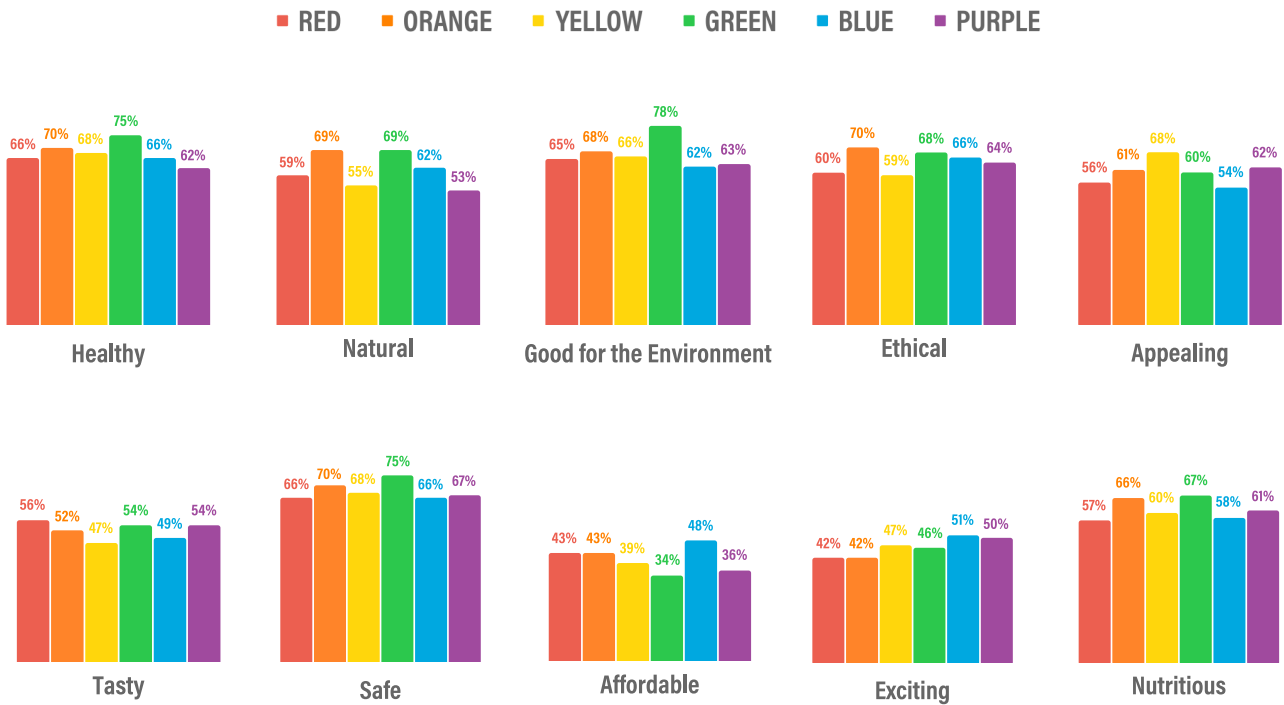


Q4: When you think about plant-based meat products, which of the following colours come to mind?

The majority of respondents in both countries (UK 72%, US 62%) **associated green most strongly with plant-based meat**. Following a distant second was yellow in the UK (11%) and red in the US (13%). Both countries least associated the colour purple with plant-based meat. When comparing the association of warm vs cool colours, both countries associated **cool colours** rather than warm colours **with plant-based meat**.



Perception of plant-based meat packaging in the UK



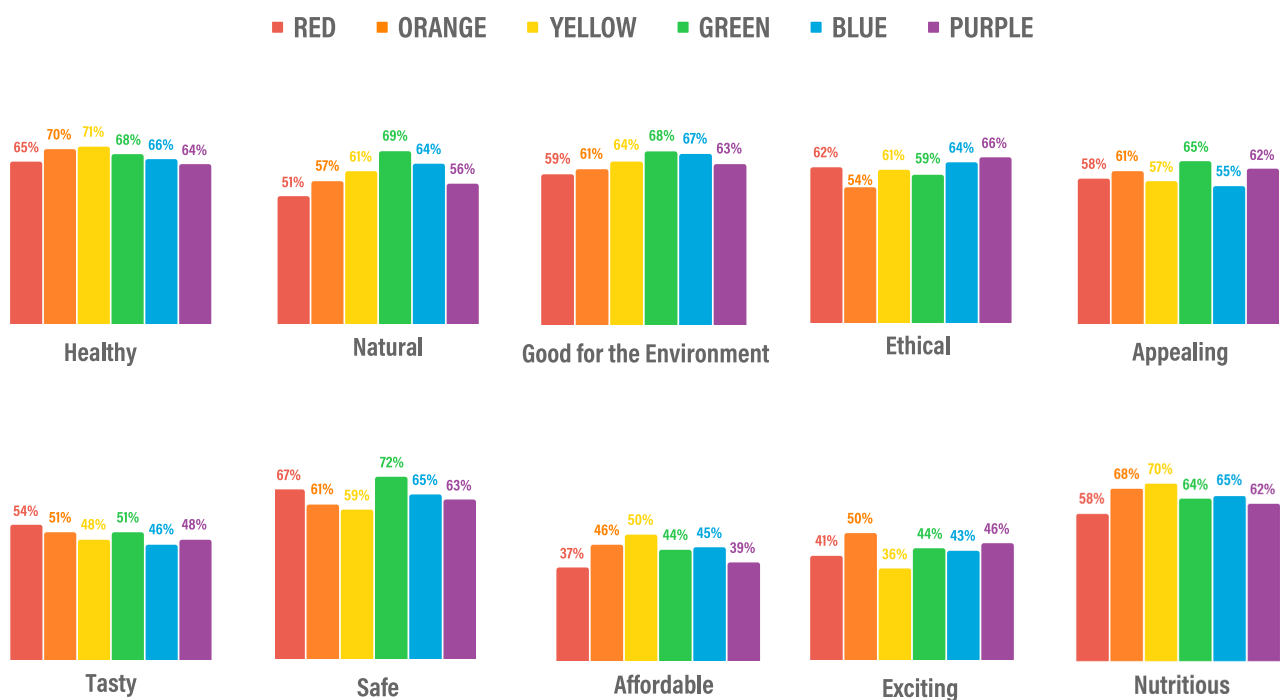
Q5: Having seen this packaging colour, to what extent do you agree or disagree that plant-based meat is...
(Sum of UK responses who 'Strongly agree' + 'Agree' to corresponding attribute)

We find clear patterns in how **UK respondents** perceive various attributes associated with different packaging colours:

- **Healthiness:** **Green** stands out with the highest rating in the UK dataset, at 75%, followed by **orange**, at 70%, and **yellow**, at 68%, when it comes to perceptions of healthiness.
- **Naturalness:** **Green** and **orange** share the top spot for the attribute 'natural,' both receiving a 69% rating for being perceived as natural.
- **Eco-friendliness:** **Green** takes the lead once again, with 78% of UK respondents considering it an environmentally friendly colour.
- **Ethical:** When it comes to ethics, **orange** and **green** dominate, with 70% and 68% of respondents, respectively, perceiving them as ethical choices.
- **Appeal:** **Yellow** emerges as the frontrunner in terms of overall appeal, with 68% of respondents finding it visually appealing. **Purple** also garners a respectable 62% in terms of appeal.
- **Taste:** The attribute 'tasty' sees fairly even ratings across most colours. However, **red** leads the pack in the UK, perceived as the tastiest colour by 56% of respondents. **Green** and **purple** also fare well, each receiving a positive rating from 54% of participants.
- **Safety:** **Green** is considered the safest choice, with a strong rating of 75%, closely followed by **orange** at 71%.

- **Affordability:** **Blue** takes the title for affordability, securing 48% of votes across the entire dataset.
- **Excitement:** **Blue** (51%) and **purple** (50%) are perceived as the most exciting colours, while yellow, green, red, and orange are seen as less thrilling.
- **Nutrition:** When it comes to nutrition, **green** (66%) and **orange** (66%) are rated the highest by UK respondents.

Perception of plant-based meat packaging in the US 🇺🇸



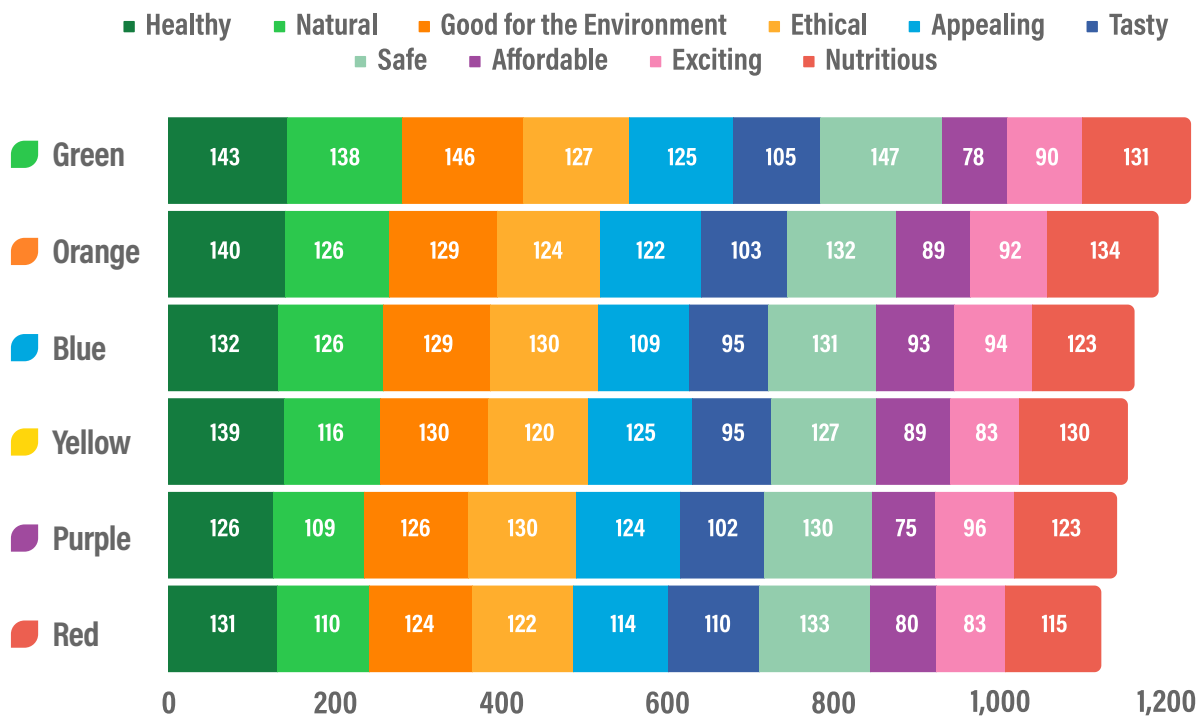
Q5: Having seen this packaging colour, to what extent do you agree or disagree that plant-based meat is...
(Sum of US responses who 'Strongly agree' + 'Agree' to corresponding attribute)

Looking at the US dataset, distinct patterns are evident in terms of how respondents associate various attributes with specific packaging colours. Here's a comprehensive breakdown of these associations:

- **Healthiness:** Surprisingly, **yellow** (71%) emerged as the colour most strongly associated with healthiness, closely followed by **orange** (70%).
- **Naturalness:** **Green** (69%) and **blue** (64%) clearly lead the pack in terms of being associated with naturalness. These two colours are the top choices for conveying a sense of nature.
- **Eco-friendliness:** For perceptions of eco-friendliness, **green** (68%) and **blue** (67%) are the top contenders, signifying sustainability and environmental consciousness.

- **Ethical:** US respondents see **purple** (66%) and **blue** (64%) as the colours that best convey ethical values in a product.
- **Appeal:** The majority of consumers find **green** (65%), **purple** (62%), and orange (61%) to be the most visually appealing packaging colours.
- **Taste:** When it comes to taste, US respondents predominantly associate **red** (54%) with a delicious flavour, followed by **orange** (51%) and **green** (51%).
- **Safety:** In terms of safety, **green** (72%) and **red** (67%) stand out as the top-rated colours, perceived as the safest choices among all colours.
- **Affordability:** **Yellow** (50%) is perceived as the most affordable colour, followed by **orange** (46%) and **blue** (45%).
- **Excitement:** US respondents rated **orange** (50%) as the most exciting colour, closely followed by **purple** (46%).
- **Nutrition:** In terms of nutritional value, **yellow** (70%) and **orange** (68%) received the highest ratings, suggesting that consumers associate these colours with high nutritional content.

Highest-rated plant-based-meat packaging colours



Q5: Having seen this packaging colour, to what extent do you agree or disagree that plant-based meat is...
(Sum of UK and US responses who 'Strongly agree' + 'Agree' to corresponding attribute)

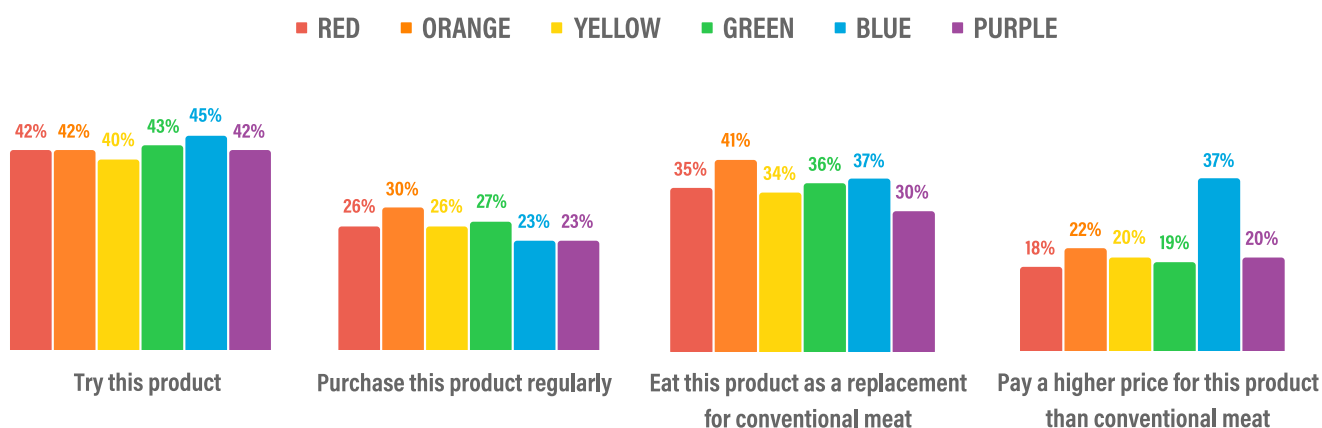
Overall, **Green** took the top spot for plant-based-meat packaging, earning the highest positive ratings across the board. Green packaging seems to suggest healthiness, naturalness, and eco-friendliness for many consumers.

Orange and **blue** came in next, showing that they're strong contenders. These colours conveyed appeal, tastiness, and affordability, making them popular choices for packaging.

On the flip side, **yellow**, **purple**, and **red** didn't fare as well. These colours didn't excite consumers as much when it came to thinking positively about plant-based meat.

Willingness to purchase plant-based meat in the UK 🇬🇧

Both the UK and US datasets offer revealing insights into consumers' willingness to embrace plant-based-meat products, depending on packaging colours. Here, we highlight the key distinctions between the two markets:

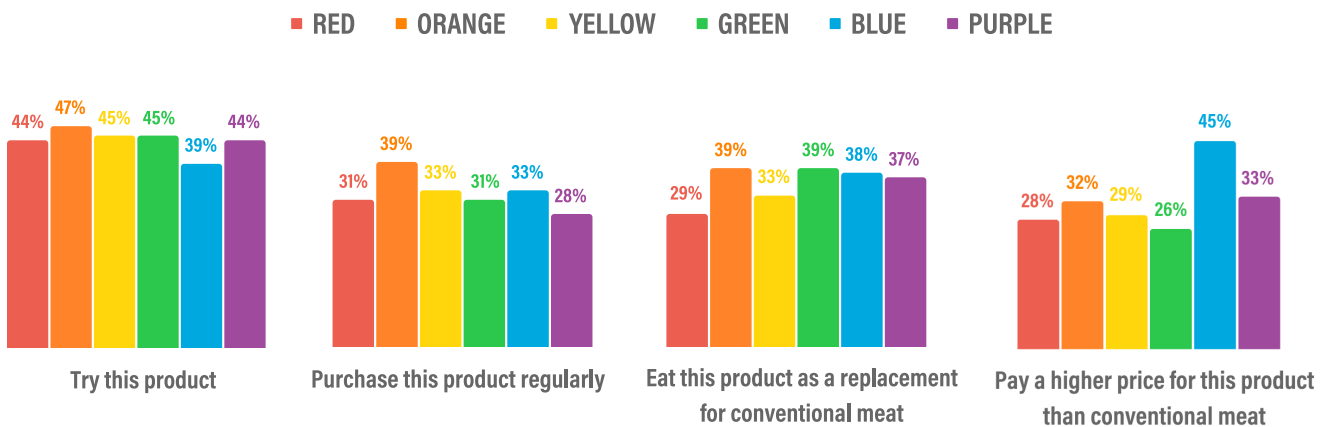


Q6: After seeing this packaging of plant-based meat, how likely are you to...
(Sum of UK respondents who chose 'Extremely likely' + 'Very likely')

- **Try this product:** While, for all colours, there is a strong eagerness to try plant-based meat products (40% to 45%), **blue** packaging stands out as being slightly more enticing.
- **Purchase this product regularly:** Willingness to purchase regularly ranges from 23% to 30%, with **orange** leading the way.
- **Eat this product as a replacement for conventional meat:** The response varies from 30% to 41% across the six colours, with **orange** packaging inducing the highest willingness.
- **Pay a higher price:** Willingness to pay more than conventional meat spans from 18% to 37%, with **blue** packaging having the highest impact.

→ In the UK, **blue** emerged as the most enticing packaging colour, driving **high willingness to try** plant-based meat products and **pay a premium**, while **orange** packaging induced the strongest **willingness to purchase regularly** and increased the likelihood of a product being perceived as a **replacement for conventional meat**.

Willingness to purchase plant-based meat in the US 🇺🇸



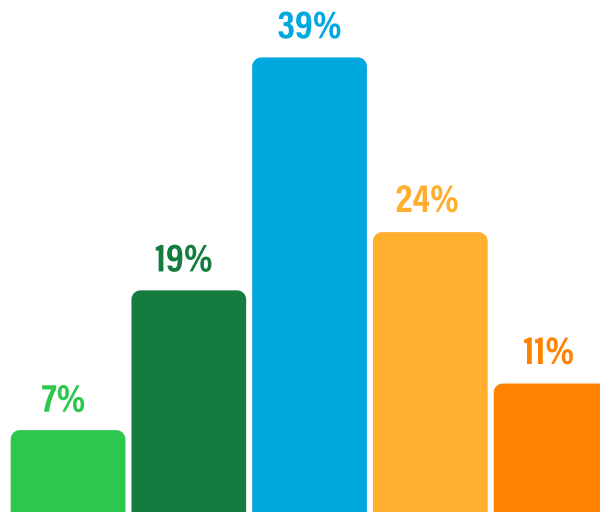
Q6: After seeing this packaging of plant-based meat, how likely are you to...
(Sum of US respondents who chose 'Extremely likely' + 'Very likely')

- **Try this product:** Willingness to try plant-based meat products is generally strong (39% to 47%), with **orange** packaging receiving the highest rating, although by just a few percentage points.
- **Purchase this product regularly:** This ranges from 28% to 39%, with **orange** leading the way.
- **Eat this product as a replacement for conventional meat:** Percentages vary from 29% to 39%, with **orange** and **green** packaging having the highest appeal.
- **Pay a higher price:** Willingness to pay more than for conventional meat ranges from 26% to 45%, with **blue** packaging having the most appeal.

→ In the US, **orange** packaging stood out as a frontrunner, and is the colour that is most likely to induce a **willingness to try** plant-based meat products as well as to make them a regular purchase. **Blue** packaging was particularly effective in inducing a **willingness to pay a premium** for these products.

Overall influence of packaging colour on willingness to buy

■ Always ■ Often ■ Sometimes ■ Rarely ■ Never



Q7: How often, if at all, does packaging colour influence what food you are going to buy? (UK and US)

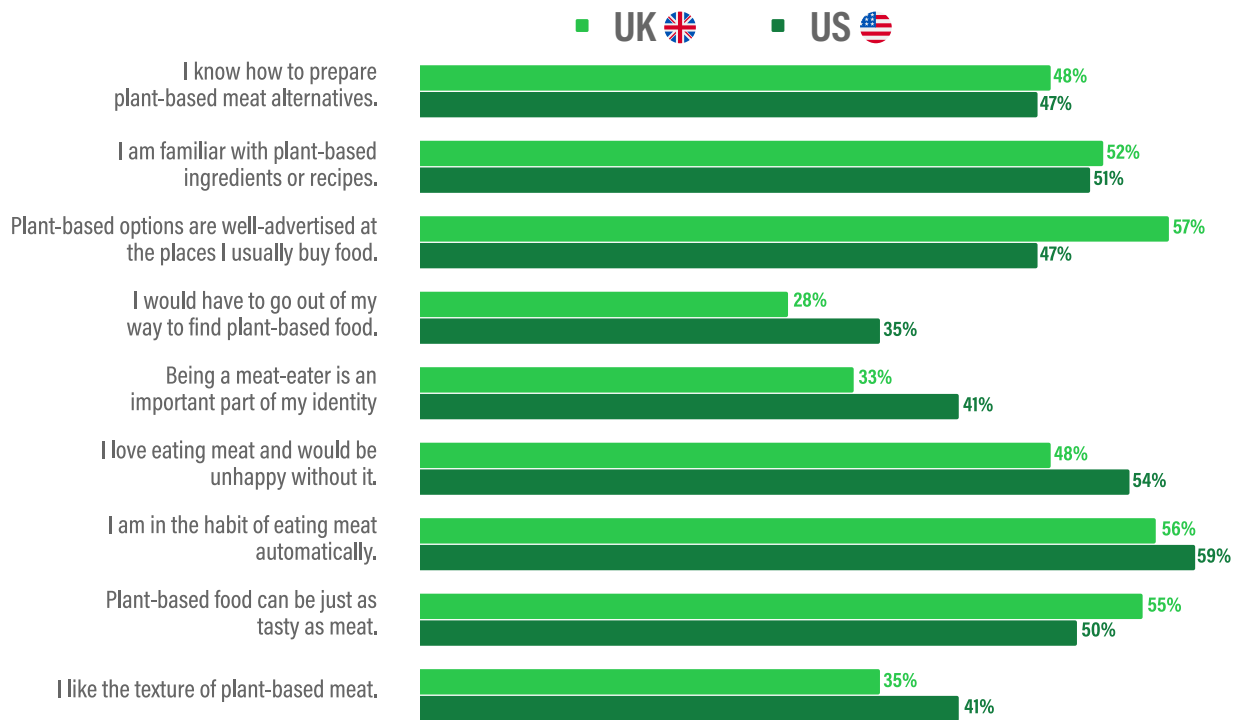
In terms of the overall impact of colour on purchasing decisions, 35% of respondents in the UK and the US said that packaging colours have no impact on their food purchases. However, more than one in four respondents (26%) indicated that packaging colours always or often impact their food choices, while 39% of consumers acknowledged that colours sometimes play a role when buying food products.



These findings suggest that while packaging colour does not consistently drive purchasing decisions for all consumers, it remains a relevant factor, as colours convey subconscious information regarding quality, taste, pleasure, and even price to the consumer.³



Statements about plant-based meat



Q8: Please indicate your agreement with each of the following statements.
(Sum of US responses who 'Strongly agree' + 'Agree' to corresponding attribute)

- **Ability to prepare:** In both the UK (48%) and the US (47%), a substantial percentage of respondents express confidence in their ability to prepare plant-based meat alternatives.
- **Familiarity:** A majority of participants in both countries, 52% in the UK and 51% in the US, are familiar with plant-based ingredients or recipes.
- **Accessibility:** More participants in the UK (57%) than in the US (47%) report that plant-based options are well-advertised at their usual food-purchase locations.
- **Convenience:** A significant difference is observed in convenience, with a higher percentage (35%) of US respondents stating they would have to make an extra effort to find plant-based food, compared to 28% in the UK.
- **Identity and meat eating:** In the US, a larger proportion of respondents (54%) consider being a meat-eater an important part of their identity, while, in the UK, this sentiment is expressed by 48% of respondents. Similarly, more Americans (59%) love eating meat and would be unhappy without it, compared to 56% in the UK.
- **Habitual meat consumption:** A higher percentage (59%) of US respondents admit to eating meat habitually, compared to 56% in the UK.
- **Perceptions of taste and texture:** In the UK, 55% of respondents think that plant-based food can be just as tasty as meat, while in the US, it's 50%. However, 41% of US consumers showed a stronger preference for the texture of plant-based meat, compared to 35% in the UK.

EFFECTIVE USE OF COLOURS ON PLANT-BASED MEAT PACKAGING

In this comprehensive report, we've delved into the profound influence of packaging colours on consumers' purchasing choices and their inclination towards plant-based meat products. Harnessing the principles of choice-architecture design, especially the strategic use of captivating colours as nudges, can be a game-changer for promoting the consumption of plant-based meat.

In order to make effective use of colour on your plant-based-meat packaging, consider the following steps inspired by our research. These actionable strategies will not only increase resonance with consumer preferences but will also add an new dimension to your brand's identity:

1 Healthiness

Colour: Green

Messaging: Elevate health benefits, underline nutritional value, and reinforce sustainability.

Visuals: Incorporate imagery of fresh produce, natural elements, or health symbols.

2 Naturalness

Colour: Green or blue

Messaging: Signify naturalness while emphasising natural ingredients, freshness, and minimal processing.

Visuals: Include images of plants, farm scenes, or natural landscapes.

3 Eco-friendliness

Colour: Green or blue

Messaging: Convey eco-friendliness and showcase sustainability efforts, as well as environmental impact and ethical sourcing.

Visuals: Feature eco-friendly logos, recycling symbols, or images of natural environments.

4 Ethical

Colour: Orange or green

Messaging: Represent ethical choices while communicating ethical farming practices, animal welfare, and fair trade.

Visuals: Include images of happy animals, responsible farming, or ethical certification logos.

5 Appeal

Colour: Yellow or purple

Messaging: Create visual appeal with an eye-catching design.

Visuals: Incorporate bold graphics, appetising food imagery, or engaging patterns.

6 Taste

Colour: Red, green, or purple

Messaging: Convey delicious flavours and culinary satisfaction.

Visuals: Showcase mouthwatering dishes, flavourful ingredients, or chefs' endorsements.

7 Safety

Colour: Green or orange

Messaging: Ensure safety assurance, quality, and trustworthy sourcing.

Visuals: Include safety certifications, quality assurance logos, or images of safe food handling.

8 Affordability

Colour: Blue or yellow

Messaging: Suggest affordability and cost-effective alternatives.

Visuals: Feature price tags, discount labels, or value-related imagery.



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