



Oterra™

Beyond the beige: Consumer attitudes to *colors* in traditionally uncolored foods

White Paper





Coloring the uncolored: The importance of *color* in traditionally colorless applications

Food color plays a crucial role in consumer perception, influencing expectations of taste, freshness, and quality. In processed foods, color consistency helps maintain brand identity and trust. Colors are a common ingredient across food and beverage but there are some applications where they are not traditionally seen.

Applications such as

- Burger buns
- Gyoza/dumplings
- Noodles
- Puffed snacks

...are seldom colored, and consumers are used to seeing them in their natural beige to pale golden shades.

But what if they were colored?

How would consumers react to a purple burger bun?

Would pale or bright yellow noodles appeal?

In this white paper, we will explore these questions and the benefits that can be harnessed by coloring the uncolored!

Unlocking color preferences: What do *consumers* really want?

Learn more and explore:
click and scan



Explore the
web app

In 2024, Oterra commissioned a survey into the color preferences of consumers from around the globe.

The study surveyed 10,000 consumers across 10 countries in four regions, exploring their reactions to product colors in savory foods: Asia Pacific (China, India, Indonesia), Europe (France, Germany), Morocco, the United Kingdom, Latin America (Brazil, Mexico), and the United States. These respondents represented a range of ages, genders, and influence on purchasing decisions. The questions covered all aspects of the products from overall appeal, to associated flavor expectations, and even the emotions they triggered.

This yielded thousands of data points giving fascinating insights into consumers thoughts and expectations regarding colors in food.

This data can be used to:

Optimize

Reformulate existing products to reinforce consumer loyalty and meet their expectations.

Inspire

Create new products to venture into new markets and reach new ones.





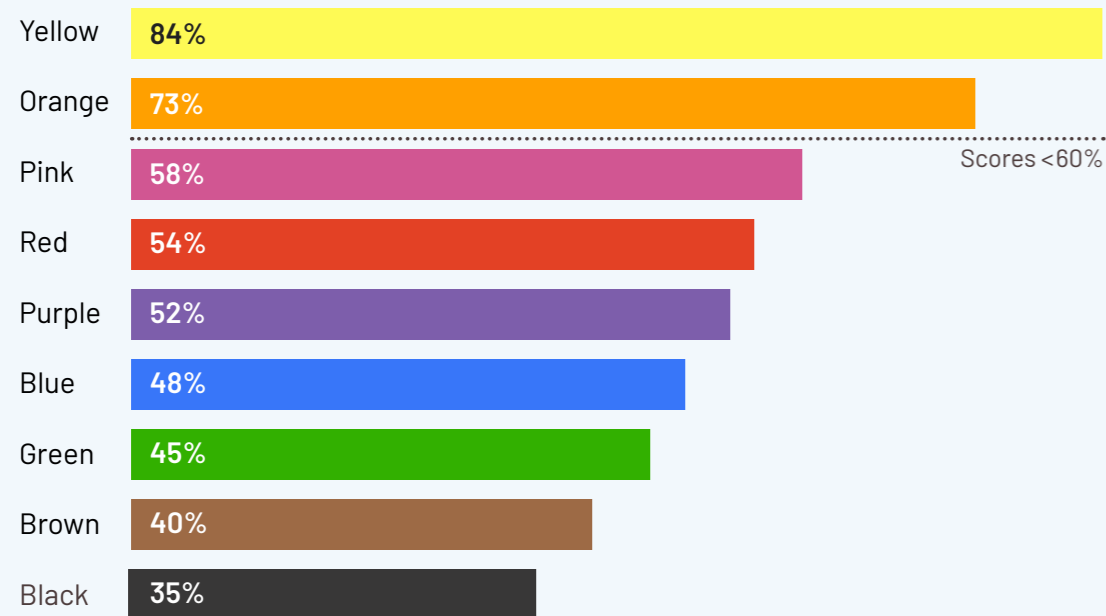
What color should they be?

Color rankings for your uncolored applications

It's a feeling:

The emotions behind the bite

Global favorites: Top-Ranked colors for uncolored applications



Key Findings

Yellow was found to be the most appealing color in traditionally uncolored applications, followed closely by orange and pink.

Purple is the 5th most attractive color globally, but in APAC, it took the 4th place spot, more popular than red.

Black was globally the least appealing shade for uncolored applications and rated particularly low in Brazil and the UK.

Color psychology in food examines how different colors influence our feelings, perception of taste, and overall dining experience. Understanding these associations helps developers and marketers create appealing products for the consumer. Stand out from the crowd by leveraging the power of colors in products that do not usually contain them.



Yellow		
#1	Energy	22%
#2	Warmth	20%
#3	Freshness	17%
#4	Joy	17%
#5	Happiness	15%
#6	Positivity	14%
#7	Pleasure	14%
#8	Fun	14%
#9	Refreshing	14%
#10	Naturality	12%



Purple		
#1	Mystery	20%
#2	Fantasy	15%
#3	Creativity	15%
#4	Curiosity	14%
#5	Imagination	14%
#6	Elegance	14%
#7	Femininity	11%
#8	Energy	11%
#9	Softness	10%
#10	Fun	10%



Black		
#1	Mystery	41%
#2	Strength	21%
#3	Power	21%
#4	Elegance	18%
#5	Curiosity	13%
#6	Adventure	12%
#7	Luxury	12%
#8	Sophistication	10%
#9	Action	9%
#10	Creativity	9%





The *warming* appeal of yellow

The *curious* appeal of purple

When consumers are presented with colored examples of products that are not usually colored, it is the yellow ones that appeal the most.

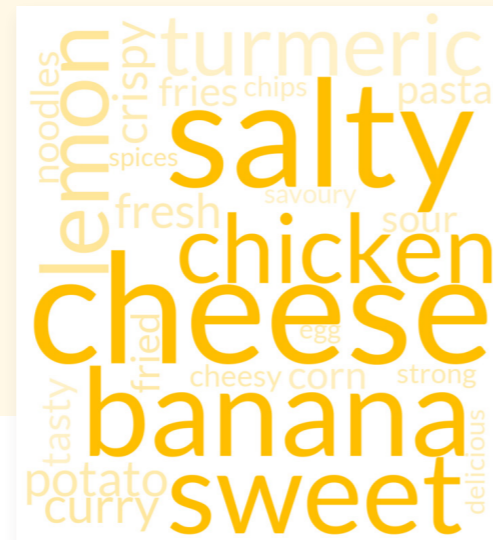
Consumers consider them:

- Looking delicious/tasty
- Being visually enticing/attractive

Yellow is the clear favorite across the globe, taking first place in every region tested. And it is bold, bright yellows that are preferred. The preference for strong yellows in these applications is the strongest of all the colors tested in the survey.

Yellow appeals to all ages with the highest acceptance in those aged 25-45. There is no difference in appeal between the genders with both males and females equally warmed by it. Yellow fans consider themselves to be health-conscious consumers, which is little surprise given yellow's emotional attachment to energy, warmth and freshness.

When asked which flavors they associate with yellow colored products, the most common answer globally is "Cheese," with this also being the top answer in the UK, France, Brazil, Mexico, and the US. "Salty" was the top answer for Indonesia and Morocco. Unusually, "Banana" was the top answer from China.



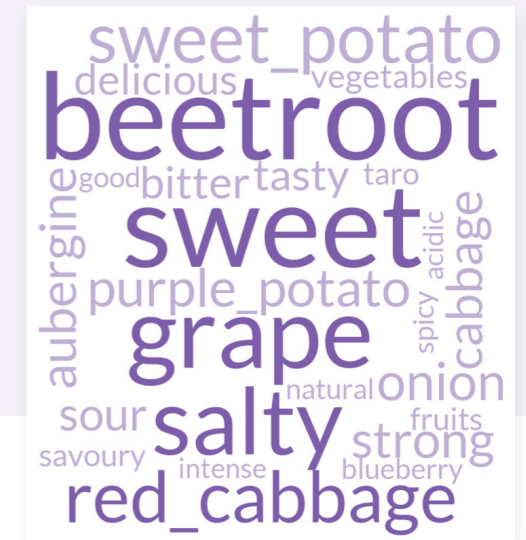
It can be argued that yellow is a small jump in shade from an uncolored application, then purple is a huge leap - and it is a leap too far for some consumers! 52% of consumers find savory purple foods appealing. These purple lovers are an adventurous group, with 33% of them considering themselves to be culinary explorers, hungry for new tastes and experiences.

The key driver for those wanting to try these purple foods is curiosity. 40% of those who want to try the purple products are curious about the flavor. This aligns perfectly with the top three emotions associated with purple which are

- Mystery
- Creativity
- Curiosity

The appeal of purple is equal across the genders, but where purple really stands out is its appeal amongst Generation Z. Purple has the highest appeal of all colors to the 16-24 age range.

When presented with a purple version of a traditionally uncolored product, the most associated flavor globally is "beetroot", with this being the number one across all of Europe and Latin America. By contrast, in the US, "Grape" is the most common response and in China, it is "Purple potato".



Consumers are ready for a vibrant shift— *contact* us to learn more

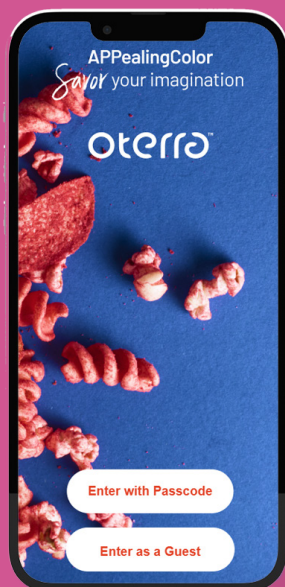


Create consumer interest with unexpected colors!

The results of our survey show that consumers are excited by colored versions of their favorites. Whether it is burger buns or dumplings, noodles or puffed snacks, colored products have appeal.

These colored versions inspire curiosity in consumers, who purchase the product to discover how it tastes. These consumers are adventurous eaters and are open to new flavor experiences. This opens the doors for exciting color and flavor combinations to push the boundaries of consumer expectations.

For limited time offers or exciting new products, adding colors where there is usually none is a great way to stand out from the crowd.



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