



## Replacing carmine in beverages

**Our plant-based EXBERRY® Coloring Foods can deliver spectacular shades in soft drinks and alcoholic beverages below 9% ABV**

Carmine is used to achieve red, orange, and pink shades in a wide variety of beverages including carbonated soft drinks, protein shakes, and alcoholic drinks ranging from ciders and hard seltzers to aperitivos and bitters. However, its use can significantly limit products' appeal.

### The challenge

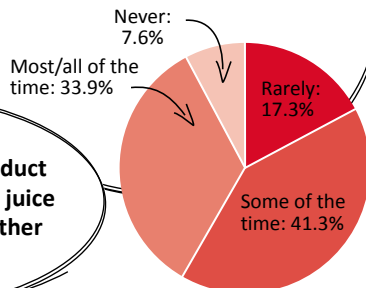
Carmine is a natural additive colorant made from the inedible cochineal insect using chemical processes. This means it is incompatible with vegetarian, halal, and kosher diets and fails to match up to modern expectations on clean ingredient lists. Carmine is also notorious for its price volatility, can be subject to supply shortages, and poses an allergy risk.<sup>1</sup>



61.8%

of APAC consumers find Product is colored with concentrated juice from fruits, vegetables or other plants to be appealing<sup>3</sup>

### How often do APAC shoppers check ingredients lists on food and drinks?<sup>2</sup>



51%

of APAC consumers say  
traceable ingredients influence  
their purchase decisions<sup>4</sup>

## Key benefits

- ✓ Strong visual appeal
- ✓ Year-round availability
- ✓ Clean and clear label declarations
- ✓ Excellent heat and light stability
- ✓ Plant-based and vegan-friendly
- ✓ Halal and kosher certified

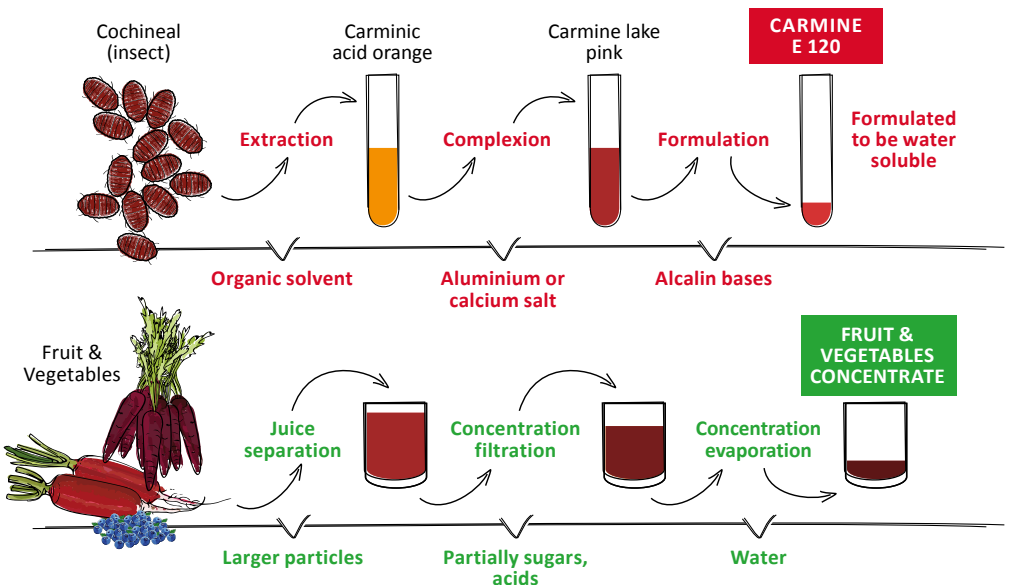
## The solution

EXBERRY® Coloring Foods are the ideal alternative to carmine for beverages. Based on the concept of coloring food with food, they are created from non-GMO fruit, vegetables, and plants using physical processing methods. Due to the way they are made, these plant-based concentrates are considered to be food ingredients rather than additives in the European Union and support completely clean and clear label declarations. For example, a red shade might be listed as 'carrot and blackcurrant concentrates.'

## Performance

EXBERRY® can be used to achieve exceptional results in almost any beverage application, from carbonated soft drinks to beverage syrups to alcoholic beverages. Our proprietary technology can deliver solutions that have the exact color shade and intensity required for the application in question. EXBERRY® colors also offer great stability, as tested in extensive heat and light evaluations.

## Coloring Foods versus additive colorants





## EXBERRY® Color match



EXBERRY®  
Shade  
Brilliant  
Pink



EXBERRY®  
Shade  
Rubescent  
Red



Red  
Carminic  
Acid

## Raw materials

We utilize a wide variety of raw materials to create the EXBERRY® range, which provides us with a comprehensive portfolio of coloring solutions to suit different project requirements. For example, our new EXBERRY® Shade Rubescent Red is made from red sweet potato and carrot. It delivers an intense yellowish-red color with minimal impact on taste, excellent thermal and light stability, optimal solubility, and low viscosity.

## Stable supplies

GNT manages all steps of the supply chain – from the selection of seeds to the cultivation and harvesting of the raw materials and all the way through to the finished products. This ensures full traceability and the year-round availability of our supplies. We also invest in long-term stockholding, keeping an average of 18 months' supply of EXBERRY® stock at all times.

## The EXBERRY® advantage

EXBERRY® colors can be used to achieve a full spectrum of shades in almost any food and drink application. They are valued globally for their ease of use, brilliance, performance, and the vertical integration of the supply chain. With vast experience working with plant-based colors, GNT's team of specialists is on hand to offer support throughout the entire product development process. Get in touch now to find out how EXBERRY® can add value to your products.

## EXBERRY.COM

<sup>1</sup> Sadowska, B. et al. 'Carmine allergy in urticaria patients' Postepy Dermatol Alergol. (2022)

<sup>2</sup> FMCG Gurus 'Custom Survey - Global and Regional - Clean Label & Naturalness' (April 2023)

<sup>3</sup> FMCG Gurus 'Custom Survey - Global and Regional - Clean Label & Naturalness' (April 2023)

<sup>4</sup> FMCG Gurus 'Custom Survey - Global and Regional - Clean Label & Naturalness' (April 2023)

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