



# Looking for *natural*, vegetarian alternatives to red carmine?

From red to pink, there's plenty of natural options.  
Explore with us!

**Recommended for:** Food and beverage applications where carmine is used.

# Looking for *natural*, vegetarian alternatives to red carmine?

From red to pink, there's plenty of natural options. Explore with us!

Carmine derived from cochineal has historically been a widely used source for natural red color because of its versatility and excellent stability to heat and light. However, the increased consumer interest in plant-based, vegan and vegetarian diets drives demand for alternative natural red color solutions for food and beverage. According to Innova Market Insights, launches of colored F&B products with vegetarian positioning has increased 13.5% since 2021.

Why food manufacturers look for alternatives to carmine:



To meet vegetarian, kosher and halal requirements



No dosage restrictions from aluminum lakes



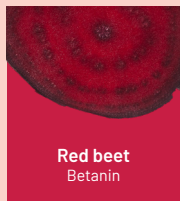
Supply stability and cost-efficiency from alternatives



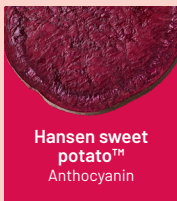
Costs and supply fluctuations

	Fermented sausage	Emulsified sausage	UHT milk	Milkshake	Sponge cake	Jelly gum/gummies	Panned candy
Colored with carmine							
Colored with alternative raw materials							
Benefits of alternative raw material	<b>Red beet:</b> <ul style="list-style-type: none"> <li>Cost-efficient</li> <li>No dosage restriction from aluminium-lake</li> </ul>	<b>Hansen sweet potato™:</b> <ul style="list-style-type: none"> <li>Good heat stability</li> <li>The reddest of anthocyanins at higher pH</li> </ul>	<b>Lycopene:</b> <ul style="list-style-type: none"> <li>Heat stable</li> <li>Reddish also in neutral pH bases</li> </ul>	<b>Hansen sweet potato™:</b> <ul style="list-style-type: none"> <li>Good heat stability</li> <li>No off-flavor</li> <li>The reddest of anthocyanins at higher pH</li> </ul>	<b>Hansen sweet potato™:</b> <ul style="list-style-type: none"> <li>Good heat stability</li> <li>No off-flavor</li> <li>The reddest of anthocyanins at higher pH</li> </ul>	<b>Hansen sweet potato™ &amp; Black carrot:</b> <ul style="list-style-type: none"> <li>Bright red shades at low pH</li> <li>Good heat and light stability</li> <li>No off-flavor</li> </ul>	<b>Red beet &amp; Fungus carotene:</b> <ul style="list-style-type: none"> <li>Red blend that does not require low pH</li> <li>No off-flavor</li> </ul>

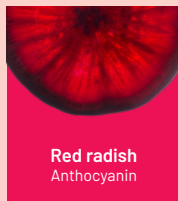
Several natural raw materials can replace carmine. It depends on your application



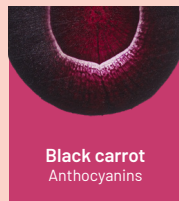
Red beet  
Betanin



Hansen sweet potato™  
Anthocyanin



Red radish  
Anthocyanin



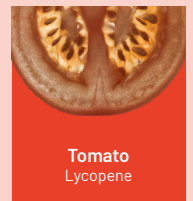
Black carrot  
Anthocyanins



Elderberry  
Anthocyanin



Fungus carotene  
Beta-carotene



Tomato  
Lycopene

## Interested?

Or need more alternatives? Contact us.