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Title : The Diversity of Yellow Egg Colors: Exploring the Chemical Components

Did you know that the range of stunning egg colors is produced by a combination of diverse chemical elements?



The color of egg yolks can vary to pale yellow to orange and even red. Their bright hues are caused by a presence of organic pigments called carotenoids, mainly lutein and zeaxanthin.

Yellow Color:

Lutein is principally responsible for the yellow hue of egg yolks. This pigment is responsible for the yolk's distinctive yellow color. The more lutein there is in the eggs, the brighter the yellow color.

Orange-Red Color: This is the hue of most pasture-raised hens.



Different amounts of lutein and zeaxanthin result in a wide range of yellow eggs. These naturally occurring pigments contribute to the vibrant yellow, orange, and red colours found in egg yolks. Furthermore, the nutrition of the chickens defines the potency of the yellow hues, with elements of nature like a pigment called beta strengthening the hue. The intricate physics underlying egg yolk coloration adds to the beauty and one-of-a-kindness of this natural food item.

Interestingly, the spectrum of yellow egg colours can be influenced by the birds' diet.

Organic ingredients such as as beta-carotene, which is usually derived from petals of marigolds (also referred to as calendula flowers), are sometimes included in chicken feed. It is done so as to improve the stunning yellow hue on the egg yolks.



Reference :

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