

Altering Food

What part of a chicken does the nugget come from? Do chickens really have fingers? Where would I find the stick in a fish?

Turkeys didn't always have so much white meat. Tomatoes weren't always so uniform and round. Our heirloom vegetables and poultry have been altered for many reasons.

Some plants and animals have been altered to produce more or better-tasting food. Others have been altered to enhance their appearance, making them more appealing and easier to market. Foods are also altered to make them easier to manage for harvest and transport.



Wheat, corn and rice are historic examples of foods that you would have a hard time linking to their wild ancestors. Plant breeders thousands of years ago bred these plants to make them more suitable for agriculture and as a human food source.

Turkey is another example of altered food. If you look at the photo of a wild turkey you see a lean bird that really moves! Wild turkeys fly for short distances up to 55 miles per hour and can run 25 miles per hour. Look at the domesticated turkey, it is quite different, unable to fly and can barely walk. Turkey breeders have bred turkeys not for survival in the wild, but to have large breasts to produce more of the popular white meat, which radically changed the bodies of the bird.



Nuggets, sticks, and fingers aren't natural to the chicken or fish, but can be purchased in the supermarket. They result from processing the food to alter the original shape, texture, or appearance. The alterations can make the food easier to eat, prepare, or package as well as often utilizing more of the chicken, fish, or other meat source thereby generating less waste and making more money for the processor.

Altered expectations

When was the last time you rejected a food based on its appearance? What was wrong with it? It's color? Shape? Odor? If you ate it anyway, did it taste like you thought it would? Food appearance is an important factor in what we decide to eat.

Just like in the Dr. Seuss book, "Green Eggs and Ham", would you tell Sam if you were offered green scrambled eggs, "I do not like them Sam-I-am, I do not like green eggs and ham!" How would you react to blue mashed potatoes?

Do a simple experiment. Get two eggs. Scramble one as you would normally. Take the second egg and before you scramble it, whisk in green food coloring. After cooking, place each on a separate plate, and offer them to a friend, parent, or sibling. Ask them which they would prefer to eat and why. Did most choose normal eggs? **Then, try this with potatoes:** cook and mash the potatoes, but then separate into 3 bowls. Add blue food dye to one and mix well; add some red and yellow food dye to another, to create an orange (the color of sweet potatoes), and leave the third bowl white. Offer these to your family and friends: Which did they prefer? Why? Did it taste like they thought it would? Were they surprised at the taste of the orange potatoes?

We have expectations about our food. The egg industry knows that the color of the yolk is important: consumers want their egg yolk color to be a consistent yellow. Farmers will add things like marigold petals and corn to the chicken's diet to alter the color of the yolk. Potato breeders at Cornell University developed the Adirondack Blue, a blue potato, and the Adirondack Red. These have become accepted as novelty foods (red, white and blue potato salad or chips for a 4th of July celebration). A soda producer marketed a cola that was clear; it failed because partially because it "didn't look right".

And we all know carrots are orange, right? Well, carrots are also purple, red, white, and yellow. But we mostly think of orange carrots and expect our carrots to be orange so food producers give us what we want by altering our foods.

Try altering the color of a carrot!

<http://www.carrotmuseum.co.uk/experiment.html>

