BEEF COLOR

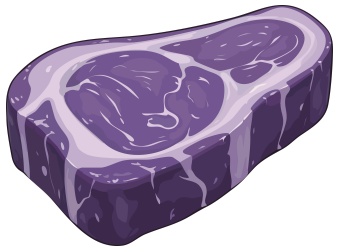
Determined by the state of **myoglobin** which is affected by oxygen

my·o·glo·bin (n)

a red protein containing heme, which carries and stores oxygen in muscle cells. It is structurally similar to a subunit of hemoglobin.

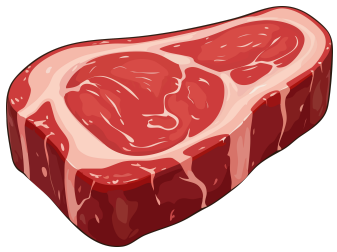
When myoglobin is exposed to oxygen, it goes through the reaction of "blooming". This is why when you open a vacuum packaged beef product, you will see the color change from purple to red. Cool, right? Additionally, products you see in overwrapped packages are exposed to oxygen their entire shelf life. This is why when the product is nearing the end of it's time, it starts to turn brown.

Deoxymyoglobin



+ Oxygen

Oxymyoglobin



+ Time

Metmyoglobin

Metmyoglobin, although unattractive to the eye, is completely safe to consume!

Meat Science