



# Food Coloring & Health

An ever increasing concern surrounds USDA approved food coloring and health. What is food coloring and how does it impact our health? What are the long term affects?

## What are the 8 most common added food colorings and how do they impact our bodies?

**1. Blue #1 {Brilliant Blue}** has been shown to cause kidney tumors in lab rats. This color is commonly found in highly sugared cereals, beverages, candy, processed canned peas, soups, ice cream and blue raspberry flavored items. It is water soluble and is poorly absorbed in the digestive track, 95% of ingested Blue #1 ends up in fecal matter.

**3. Citrus Red #2** has been shown to cause bladder tumors in organs in rodents. It is considered to be a "2B carcinogenic" which means it can possibly cause cancer to humans. Primarily used to enhance the color in early season oranges from Florida.

**5. Red #3 (Erythrosine)** this cherry-pink dye is made from coal tar it contains iodine and sodium. A 1990 study concluded erythrosine may promote thyroid tumors. It is commonly added to maraschino cherries, pistachios, popsicles, decorating gel and as a dental plaque disclosing agent.

**7. Yellow #5 (Tartrazine)** This additive was tested along with Red #40 in the Southampton Study and has been shown to cause severe hyperactivity and behavior issues in children. It is commonly used as a food coloring additive in the US. Yellow #5 is in pet food, beverages, candies, pharmaceuticals, cosmetics, chewing gum, pasta, rice, desserts, and many other foods.

**2. Blue #2 {Indigotine}** Can act as a catalyst causing reactions in persons with food allergies or sensitivities. Has been shown to cause brain tumors in male rats. It is commonly used in obstetrics surgeries to detect amniotic leaks. It is also used in urological procedures to show blood flow from the kidneys to the bladder. Blue #2 is used to color beverages, pet food, candies and RX drugs.

**4. Green #3 (Fast Green FCF)** is used to add sea green color to products. Has been shown to cause bladder and testes tumors in lab rats. Studies have demonstrated it has mutagenic effects in lab animals and humans. It is used in cosmetics, candies, beverages, jellies, ice cream, pharmaceuticals and personal care products.

**6. Red #40 (Allura Red)** The famous Southampton Study tested school age children's reaction to Allura Red and it demonstrated it can cause hyperactivity, inactivity and impulsiveness in children. It is one of the most common colorings in the US. The FDA widely disputes the evidence from the Southampton Study. Red #40 is used in beverages, baked goods, candies, food, RX drugs, personal care products and cereal (to name a few).

**8. Yellow #6 (Sunset Yellow)** Has been shown to exhibit hyperactivity reactions in humans and adrenal tumors in animals. The FDA reports this food coloring is safe if daily intakes are lower than 3.75mg. Eliminating Yellow #6 is a requirement in the ADD/ADHD Feingold diet. It is also used in cereals, beverages, candies, sausages, cosmetics and drugs.

### Household items with hidden food coloring \*

Toothpaste, pickles, green tortilla wraps, vitamins, granola bars, yogurt, Doritos, cereals, children's allergy medicine and ibuprofen.



### References:

Arnold, L., Lofthouse, N., Hurt, E. (2012, August). *Artificial Food Colorings and Attention-Deficit/Hyperactivity Symptoms: Conclusions to Dye For*. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3441937/>  
DeMaria, R. (2005). *Dr Bob's Guide to Stop ADD in 18 Days*. Elyria, OH: Drugless Healthcare Solutions.