March 11, 2011

Re: Purported Links between Children’s Consumption of Synthetic Color Additives in Food and Adverse Effects on Behavior

To the Members of the FDA Food Advisory Committee:

The Institute of Food Technologists (IFT) appreciates the opportunity to provide comments to the FDA Food Advisory Committee on whether available relevant data demonstrate a link between children’s consumption of synthetic color additives in food and adverse behavior. IFT exists to advance the science of food. Our long-range vision is to ensure a safe and abundant food supply contributing to healthier people everywhere. Founded in 1939, IFT is a nonprofit scientific society with individual members working in food science, food technology, and related professions in industry, academia, and government. IFT champions the use of sound science across the food value chain through knowledge sharing, education, and advocacy, encouraging the exchange of information, providing educational opportunities, and furthering the advancement of the profession.

As you may be aware, the theory that synthetic food colors are linked to adverse behavior in children gained publicity in the 1970's, largely based on a 1973 presentation and 1975 book by Dr. Benjamin Feingold which introduced the Feingold elimination diet to prevent symptoms of hyperactivity. Numerous studies have been conducted to test this theory since it was realized that Feingold’s recommendations were based solely on anecdotal evidence, rather than conclusive scientific evidence. Many studies conducted subsequent to Feingold’s have also been shown to be inconclusive, inconsistent, or difficult to interpret, for a number of reasons, including inadequacies in study design and scientific flaws. For example, the more recent 2007 “Southampton study1,” a study commissioned by the UK Food Standards Agency to investigate whether certain color additives cause hyperactivity in children, was evaluated by the European Food Safety Authority (EFSA)2. EFSA concluded that the Southampton study provided limited evidence that the mixtures of food color additives tested had a small effect on hyperactivity in children. However, the effects observed were inconsistent and there was no way to identify which food color may have been responsible for the effects observed. Flaws


such as these are consistently found in studies attempting to investigate impact of synthetic color additives on adverse behavior in children, and do not provide a solid foundation on which to base claims of adverse reaction relating to consumption of these color additives.

Moreover, reports of purported associations between synthetic food color intake and adverse behavior typically fail to acknowledge the large body of pertinent research carried out and published some 30 years ago that failed to find a link. The National Advisory Committee on Hyperkinesis and Food Additives published a final report to The Nutrition Foundation in 1980. According to the committee, studies already conducted by 1980 showed sufficient evidence to disprove the claim that synthetic food colors result in hyperactivity. Upon reviewing numerous studies on the issue they found no consistent, dramatic adverse behavior in hyperactive children who underwent an elimination diet and then were challenged, under double-blind conditions, with synthetic food color additives. The committee felt that evidence that synthetic food color additives may produce adverse behavior is uncertain at best.

Food science and technology make product attributes such as various food colors possible while continuing to ensure America’s food supply is the safest available. Food companies adhere to safety standards such as the 1960 Color Additive Amendment of the Food Drug and Cosmetic Act which requires FDA premarket approval and safety determination, and for certain food color additives, certification. Today consumers insist upon not only a safe and abundant food supply, but also food products that are convenient, affordable, and have appealing appearance and flavor. Natural and synthetic food colors contribute to this capability. Synthetic colors provide critical stability and coloring power needed to sustain product quality attributes during processing and storage conditions. Color additives can also correct natural color variations or enhance natural colors of food products, or provide color to otherwise colorless foods to make them more desirable to consumers.

There is a lack of scientific evidence for a link between synthetic food color additives and adverse behavior in children. There are a number of factors potentially contributing to hyperactivity or other adverse behaviors in children. Consumers, or their caregivers, choosing to avoid food products with synthetic colors may do so by identifying the presence of the colors in food products via ingredient lists and avoid a particular product. Given the rigorous safety evaluation that color additives undergo and the lack of evidence for a link with adverse behavior, IFT’s viewpoint is that food color additives present very little or effectively no risk for the vast majority of consumers.

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Thank you for the opportunity to assist the FDA Food Advisory Committee. Please contact William Fisher, Vice President of Science and Policy Initiatives, if IFT may provide further assistance. He can be reached at 1025 Connecticut Avenue, NW, Suite 503, Washington, DC 20036; telephone number: 202-330-4977; or email address: wfisher@ift.org.

Sincerely,

Robert Gravani, Ph.D.
President