

The full report is titled: "The dilemma of allergy to food additives." It is in the January–February 2018 issue of *Allergy Asthma Proceedings* (volume 39, pages 3 to 8). The authors are Sami L. Bahna and Joshua G. Burkhardt.

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### **The dilemma of allergy to food additives**

Food additives are substances added to foods to maintain or improve safety and freshness (e.g., sulfites that prevent browning), nutritional value and taste (e.g., vitamins and minerals), or texture and appearance (e.g., spices, sweeteners, and food colors). All food additives are carefully regulated by federal authorities and various international organizations to ensure that foods are safe to eat and are accurately labeled. Currently, in the United States, >3000 substances are approved by the U.S. Food and Drug Administration for use as food additives. Despite their widespread use, relatively little scientific information is available about adverse reactions that may be caused by food additives. This poses a difficulty for both clinicians and patients. In a recent report, Bahna and Burkhardt, from the Allergy and Immunology Section, Louisiana State University Health Sciences Center, Shreveport, Louisiana, summarized the topic of allergy to food additives and provided a practical approach for suspecting, evaluating, diagnosing, and managing these conditions.

### **Who or What Was Proposed to Be Studied?**

Information was derived from a literature review of original articles published in peer-reviewed journals supplemented by the authors' clinical experience. Priority was given to studies that employed the best scientific methodology (double-blind, placebo controlled oral challenges) to confirm adverse reactions.

### **How Was the Study Done?**

A wide variety of symptoms attributed to exposure of additives have been reported. These can be mediated by pharmacologic, irritant, toxic, or immunologic mechanisms, and that can affect almost every bodily system. These can vary from localized oral mucosal and skin reactions after contact to more generalized systemic reactions when the offending additive is absorbed.

### **What Are the Limitations of the Proposed Study?**

The report is subject to limitations inherent to the adequacy of the survey methodology. Moreover, the data available for each adverse event were limited by the level of detail recorded in the literature citation.

### **What Are the Implications of the Study?**

Reactions to food additives should be suspected when there is a history of an adverse reaction to numerous foods or only to foods commercially prepared but not to foods prepared at home. Routine allergy tests are of very limited value. Institution of a trial of an additive-free diet may be helpful. The U.S. Food and Drug Administration maintains a continuously updated Web site that contains information on additives and can be accessed at <https://www.accessdata.fda.gov/scripts/fcn/fcnNavigation.cfm?rpt=eafuslisting>. □