

Extraction, analytical and advanced methods for detection of allura red AC (E129) in food and beverages products

Abstract

Allura Red AC (E129) is an azo dye that widely used in drinks, juices, bakery, meat, and sweets products. High consumption of Allura Red has claimed an adverse effects of human health including allergies, food intolerance, cancer, multiple sclerosis, attention deficit hyperactivity disorder, brain damage, nausea, cardiac disease and asthma due to the reaction of aromatic azo compounds ($R = R' = \text{aromatic}$). Several countries have banned and strictly controlled the uses of Allura Red in food and beverage products. This review paper is critically summarized on the available analytical and advanced methods for determination of Allura Red and also concisely discussed on the acceptable daily intake, toxicology and extraction methods.