

Assessment of sulfate contamination of botanical products and possible health effects

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Botanical products such as herbal teas are susceptible to sulfate contamination from the environment and/or during manufacturing processes, and accordingly may lead to health problems. In this research, sulfate contamination of herbal tea products was assessed using IC chromatography system. Results, demonstrated that sulfate levels in some samples exceeded 250 and 500 mg/L levels, set by international organizations. Herbal tea contamination with sulfate, in this research was shown to be originating from the herbal tea products themselves or the ingredients they are made of, and therefore could interfere with their function and lead to health problems. Results in this study propose that herbal tea production should fall under stringent regulations concerning planting, manufacturing and quality control, in order to avoid the associated health problems.

Keywords: Chemical, Sulfate, Contamination, Herbal tea, Botanical product, World Health Organization (WHO), US Environmental Protection Agency (USEPA)

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