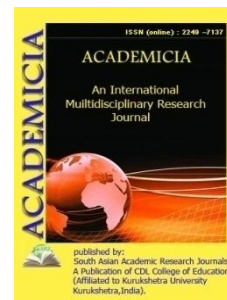


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DETERMINATION OF CADMIUM POISONING IN SKIN WHITENING CREAMS

Dr. Anil Ahuja*

*SOP, Sanskriti University,
Mathura, Uttar Pradesh, INDIA
Email id: principal.ips@sanskriti.edu.in

ABSTRACT

This article is based on an examination of different studies conducted across the globe on the topic of heavy metal impurities in skin-whitening or lightening treatments. Cadmium (Cd) was chosen as the heavy metal for this study since it is one of the most frequently detected contaminants in a variety of cosmetic products, yet studies on Cd alone are scarce. The acid-digestion procedure is utilized to prepare samples in the majority of tests. Atomic Absorption Spectrometry (AAS) is the most frequently utilized confirmatory method, with the exception of one study that employed inductively coupled plasma atomic emission spectrometry (AES). The difference between AAS and AES is that AAS measures electromagnetic radiation absorption whereas AES tests radiation output. In this study, the World Health Organization (WHO) detection cap or their own nation regulation is utilized as a reference. According to studies, the use of some cosmetic ingredients exposes consumers to tiny quantities of dangerous heavy metals, which may create health issues if they remain in biological processes over time. It was also found that, although the usage of heavy metals in some brands is below the legal limit, they nevertheless represent a considerable risk to people. Both of these tests are being performed in order to identify which brands of cosmetics sold in our sector are in violation of the regulations and to bring this to the notice of the authorities.

KEYWORDS: Cadmium, Concentrations, Cosmetics, Heavy Metals, Lightening Creams, Products, Samples, Skin, Whitening.

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