

The danger of the use of minerals in cosmetics and traditional medicine

Dahbia Labchri^{*}, Samia Bencheikh

*Department of Earth and Universe Sciences, Faculty of Natural Sciences, University Mouloud
Mammeri, Tizi-Ouzou, Algeria*

*E-mail: labchridahbia@yahoo.fr

The purpose of this note is to point out a problem that can have serious health implications. Colored minerals are used as feedstock for the development of khôl in different colors. The most common is the black khôl, used by most women in our society, all age groups combined, as the product of beautification, and as therapy for small eye problems, as well as traditional medicine.

This product is featured on displays of street markets throughout the national territory, as finished product or raw, which will end-up in the kitchens of our household, produced in association with other materials.

The products which are sold, powder packaged in small vials or rock debris, are sulfides of heavy metals with a high toxicity (lead, copper, iron), which may have irreversible impact on health in the long term. These metal sulfides which come from a metallogeny of northern Algeria, present other characteristics: they parade a chemical trace of hazardous elements among cadmium, arsenic, cobalt, nickel, and copper. Several analyses performed on a number of samples, recovered from retail outlets "shops" in many cities such as Tlemcen, El Abed, Maghnia, Setif, Algiers, Blida, Tizi-Ouzou, helped to establish the exact origin of these substances, and fields where they were extracted. Exposure to these metals in the long term causes their accumulation, and leads to a high percentage of toxicity in the body. In fact, a very small quantity is enough to present a potential danger to the body. In addition, many investigations presented a long-term disease a serious and irreversible health trouble, which is alarming.

Keywords : Galena, stibine, malachite, azurite, sulfurs. toxicity, pollution, speciation of elements, saturnism, autisme, genetic mutation.