Lead poisoning from crystal? [1]

Dear Alice,

Many people are buying Swarovski crystal beads to make crafts. I understand that they have 32 percent lead. People are making jewelry and figurines with the crystal beads. Is this a danger to our health?

Answer

Dear Reader,

Do glitz and glam have to come with a cost to your health? Sounds like you could use some crystal clear info on the topic. In the case of decorative crystals, perhaps you'll find it comforting to know that as of 2012, Swarovski has reformulated their crystals so that the lead content is well below Federal regulations (read on for more on that). As for older crystal products or ones from countries where regulations aren't quite as strict, the risk depends on how the crystal is used. Fortunately, you would not likely be exposed to the lead in decorative crystal products simply by wearing them. You'd have to ingest them directly or use them for preparing or storing food (such as a crystal pitcher) for lead exposure to be a concern. However, it's still wise to be aware of other potential sources of lead exposure in accessories or decorative items, especially if you have children (as they are particularly vulnerable and sensitive to the effects of lead).

Lead was traditionally found in crystals because it was the magic ingredient that gave them their signature sparkle. However, lead can be quite toxic?especially for children. In fact, the Centers for Disease Control and Prevention [2] (CDC) cautions that there is no known level of lead that is safe for children. Lead paint is the most common form of exposure, as kids sometimes will eat paint chips found on the ground. However, another potential route of exposure is when children put older or foreign decorative crystals in their mouths (although simply touching or wearing these items wouldn't result in exposure).

Lead poisoning typically results after a period of months or years of exposure, but even being exposed to lower levels can negatively impact your health. Symptoms aren't usually noticeable until enough lead has accumulated in the body, but can include:

In children:

- Delays in development and learning difficulties
- Weight loss and decreased appetite
Irritability and fatigue
Abdominal pain, constipation, and vomiting
Hearing loss

In adults:
High blood pressure
Abdominal pain and constipation
Pain or numbness in joints, muscles, and extremities
Headache
Memory loss and cognitive decline
Changes in sperm count and quality
Miscarriage or premature birth

Lists adapted from Mayo Clinic [3].

Because of these risks, scientists developed a new way to formulate crystals that would keep any toxic elements like lead below 0.1 percent, while still maintaining that classic shimmer. Swarovski calls these “advanced crystals.” While this reformulation will likely decrease the number of lead products floating around out there in the world, keep in mind that lead isn’t the only potentially hazardous materials that you or a child could be exposed to in accessories or décor. Researchers have started to look into the effects of other toxic elements, like cadmium [4] (also found in some costume jewelry) and arsenic [5] (which is in some crystal products). With that said, when it comes to crafting with crystals, here are a couple of tips for you to consider for reducing exposure to toxic elements:

- Only purchase reformulated crystals made after 2012.
- Ask companies about the lead content in their crystal or metal accessories (companies may have this information on their websites).
- Avoid products from countries that do not have regulations on the content of heavy metals in their products.
- Limit children’s access to crystal objects that could fit in their mouths.

Though crystals may pose a risk for lead exposure, there are a number of other household sources of lead [6] that you may be interested in learning more about. You can also speak with your health care provider about any additional health concerns you might have when it comes to lead exposure. And, while it may seem overwhelming to figure out which products are safe and which aren’t, remember that researchers are learning more and more about these sorts of exposures all the time. Hopefully, this means that more and more policies improving the safety of products like jewelry and décor will continue to spring up!

Alice!
Category:
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