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Silver – a toxic threat to our health and environment

- Silver is toxic to all living cells
- Silver contributes to antibiotic resistance
- Silver is deposited around nerves and in deeper skin layers and may cause permanent skin damage
- Silver is intimately associated with environmental contamination of other toxic heavy metals such as mercury and lead
- Silver sticks to fish gills, potentially choking them to death
- Silver disturbs bacterial activity when cleaning sewage
- Silver prevents the use of sludge as fertilizer, needed for nutrient recycling

New uses for silver

Our emerging problems with antibiotic resistance and fear of multiresistant bacteria have opened the door for toxic heavy metals. Silver has quickly spread from soaps to full room concepts in hospital wards in recent years. It can now be found in:

- Wound dressings, Band-Aids
- Catheters, endotracheal tubes
- Grafts, implanted heart valves, bone cement
- Sutures
- Soaps, disinfectants
- Sanitary ware, toilet seats, door handles, furniture, paints
- Textiles, carpets, clothes, shoes
- Refrigerators, washing machines, telephones, keyboards, pocket calculators
- Children's toys, pacifiers

The most toxic forms of silver are added to these products. This development coincides with a pronounced decrease (25-40%) in silver use by the photo industry due to digital cameras.



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Mediating antibiotic-resistant bacteria

With a wide and uncontrolled use of silver products, it is likely that not only silver-resistant

but also antibiotic- and biocide-resistant bacteria will emerge. These bacteria would certainly pose a threat to the public health. Furthermore, if we kill the good bacteria, the ecosystem will collapse.

Mining and largest consumers

Only one third of silver produced originates from dedicated silver mines and two thirds is received as a by-product from production of copper, gold, lead, and zinc. Most silver production results in large emissions of mercury to air, soil, and water. Where silver is extracted by small-scale miners, large quantities of mercury are used, resulting in large health and environmental damages.

Hospitals are large consumers of specific products with silver added. In five years the silver-based wound dressing market has gone from zero to 200 million Euros in Europe, and the estimated yearly growth of the ‘anti-bacterial market’ is 40% with specified areas such as wound care and foreign bodies leading the trend. Most silver is still used for electronics, jewellery, silverware, mirrors, but the risks from this usage are much smaller than the newly emerging usages due to already established recycling.



How to act?

Buy products free of silver. The silver added has generally no positive effects, and can be more detrimental for your health than the same product without silver. Consumers should be informed and demand clear and easily visible labelling when silver has been added.

To educate the general public and health care staff about the potential negative health and environmental effects is central. To confront purchasing staff with the selling strategy of commercial companies should be included in the training.

Municipalities, governments and

EU need to take appropriate actions.

Colloidal silver



Do not ingest colloidal silver sold as food supplement in health food stores, unless you want your skin to have an incurable greyish taint like the lady to the left in the picture above.

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