

Deodorant and Cancer

Origin of the myth

The myth that deodorant causes cancer has been circulated via emails, on websites, and even in newspapers. The story varies from source to source, but contains some or all of the following elements:

- Aluminium-containing antiperspirants prevent toxins from being expelled by the body. These toxins clog up lymph nodes around the armpits and breasts and cause breast cancer.
- The aluminium in deodorants is absorbed by the skin. It affects the blood brain barrier and has been linked with the onset of Alzheimer's disease.
- The risk is higher for women who apply deodorant after shaving. This is because nicks in the skin increase absorption of aluminium and other chemicals.

Current evidence

The Journal of The National Cancer Institute published a study in 2002 exploring the relationship between breast cancers and antiperspirants or deodorants in 1606 women. The findings did not show an increased risk of cancer amongst deodorant or antiperspirant users, or amongst women who shaved before using deodorant or antiperspirant.¹

Another small case control study, in 2006 found that 82% of the controls (women without breast cancer) and 52% of cases (women with breast cancer) used antiperspirants, indicating that using the under arm product might protect against breast cancer.² While the study is too small to make such a claim, it certainly does not support the 'antiperspirants cause cancer' story.

Furthermore, antiperspirants work by aluminium salts blocking sweat glands, not lymph nodes. Although lymph nodes do remove toxins, they do not remove them by sweating. Most carcinogens are removed through the liver or kidneys and excreted out.^{3,4} It is also pertinent to note that breast cancer starts in the breast and spreads to the lymph nodes, not the other way around.

Studies show that there is no relationship between antiperspirant use and Alzheimer's disease. Humans are exposed to aluminium from food, packaging, pans, water, air and medicines. From the aluminium we are exposed to, only minute amounts are absorbed, and these are usually excreted or harmlessly stored in bone. At any one time, the average human body contains much less aluminium than an antacid tablet. The Alzheimer's Society states that the link between environmental Aluminium and Alzheimer's disease seems increasingly unlikely.⁵

Reputable organisations like the American National Cancer Institute, Cancer Research UK, the American Cancer Society and most other major authorities suggest the link between deodorant or antiperspirant use and breast cancer is unconfirmed, or simply a myth.

It is impossible to ignore when researching this question that the large majority of the research articulating the possible link between underarm cosmetics and breast cancer comes from one research group. And it seems despite the absence of evidence to support the link, their search to prove the theory persists.

Summary

There is insufficient evidence to support the myth that applying deodorant or antiperspirant after shaving will increase the risk of cancer, as demonstrated by the 2002 study mentioned above. The American Cancer Society (ACS) states that the main risk related to using these products is that they can cause skin irritation if a razor nick or cut is infected.

References

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