Copper Hospital Beds Could Be a Solution to Antibiotic-Resistant Bacteria

A new study published in *Applied and Environmental Microbiology* found that copper hospital beds in the ICU housed 95 percent fewer bacteria than standard hospital beds. The copper beds also maintained their low levels of microbial activity for the patient's entire stay in the hospital. Dr. Michael G. Schmidt is a Professor of Microbiology and Immunology at the Medical University of South Carolina, Charleston and one of the co-authors of the study.

> *The findings indicate that antimicrobial copper beds can assist infection control practitioners in their quest to keep healthcare surfaces hygienic between regular cleanings, thereby reducing the potential risk of transmitting bacteria associated with healthcare associated infections…"*
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> *American Society of Microbiology*

Recommended: *How to Eliminate IBS, IBD, Leaky Gut*

Copper is anti-microbial, yet the idea to use the chemical to stop the spread of bacteria is even more timely considering the rise of antibiotic-resistant strains.

Stop the Spread of Bacteria

If the healthcare system changes nothing about the way it treats bacterial and microbial infections, 10 million people a year will die from antibiotic-resistant bacteria by the year 2050. As healthcare professionals prescribe increasing stronger antibiotics (including the "antibiotics of last resort"), bacteria are evolving to withstand those treatments.

Some, like the multi-drug resistant Enterococcus faecium, have also developed an alcohol tolerance, rendering traditional hospital cleaning methods ineffective.

Copper can help with that. Copper ions are negatively charged. When those particles interact with microbes, the negative charge of the ions disrupt cell membranes and allow necessary nutrients to leak out, weakening and often destroying the microbe.

A Simple Solution

Copper has the potential to be a valuable tool in the current crises to treat infections caused by antibiotic-resistant bacteria. Our current system won't be able to continue as it is, and the more common-sense solutions we can find, the better. Copper's antimicrobial properties are common knowledge, and we already have the materials. Eighty-six percent of the copper earmarked for consumer products ends up in pennies. How about we use some *sense* (terrible, I know), and put that resource towards something more meaningful?

Sources:

- *Copper Hospital Beds Kill Bacteria, Save Lives* – American Society for Microbiology
- *Copper hospital beds kill bacteria, save lives, study finds* – Atlanta Journal Constitution
- *WHO Says the World Will Run Out of Antibiotics Able to Treat Bacteria Superbugs* – Organic Lifestyle Magazine
- *Copper is great at killing superbugs – so why don't hospitals use it?* – The Conversation
- *How Much Does it Really Cost (the Planet) to Make a Penny?* – Smithsonian Magazine