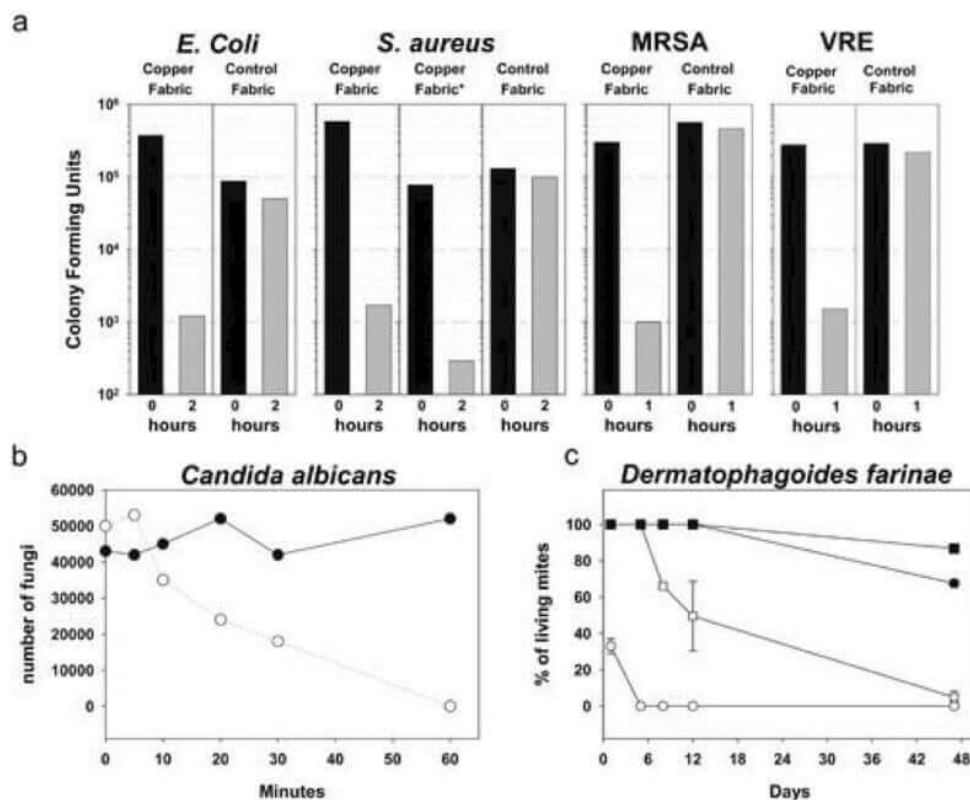


The world's smartest air purification system.



Smart Fabric Results

The efficacy of our smart fabric to decrease bacteria, viruses and mold



Anti-bacterial, anti-fungal, and acaricidal activity of copper fabrics. a) 1 ± 0.1 mL of a 24 h broth/bacteria culture were exposed to swatches of 20% copper fabrics or control fabrics for ~1 min (0 h) and 2 h (*E. coli* and *S. aureus*). Methicillin-resistant staphylococcus aureus (MRSA) and vancomycin-resistant enterococci (VRE) were exposed for ~1 min and 1 h. b) 1 ± 0.1 mL of a 24 h broth containing *C. albicans* were exposed between 0 to 60 min to swatches of control fabric (●) or 20% copper fabric (○). c) Approximately 200 dust mites (*D. farinae*) were cultured for 48 days in the presence of swatches of control fabric (■), 20% copper fabric (□), 100% copper fibers (○) or in the absence of any swatches (■). [40]

Figure 8-(a) shows that the copper fabric decreased the amount of all kinds of bacteria for more than two logs of reduction (>2) - which means a reduction of more than 99% of bacteria after 2 hr of contact between the fabric and the bacteria titer. Figure 8-(b) shows that after 1 hr of contact with the fabric, 100% of the fungus were neutralized. Figure 8-(c) showed a reduction of 100% of the mites after 48 days of culturing with the fabric.