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## **Antifungal activity and mode of action of silver nanoparticles on *Candida albicans*.**

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### **Abstract**

In this study, the antifungal effects of silver nano-particles (nano-Ag) and their mode of action were investigated. Nano-Ag showed antifungal effects on fungi tested with low hemolytic effects against human erythrocytes. To elucidate the antifungal mode of action of nano-Ag, flow cytometry analysis, a glucose-release test, transmission electron microscopy (TEM) and the change in membrane dynamics using 1,6-diphenyl-1,3,5-hexatriene (DPH), as a plasma membrane probe, were performed with *Candida albicans*. The results suggest nano-Ag may exert an antifungal activity by disrupting the structure of the cell membrane and inhibiting the normal budding process due to the destruction of the membrane integrity. The present study indicates nano-Ag has considerable antifungal activity, deserving further investigation for clinical applications.

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**MeSH Terms, Substances**

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