Nanoparticles stop tooth decay

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Scientists have shown that cerium oxide nanoparticles can stop the formation of the biofilm on teeth. The presence of the nanoparticles led to a weak biofilm that washed away. However, the nanoparticles do not kill the bacteria. This means the delicate balance within the complex oral microbiome is not disturbed. The possible toxicity of these nanoparticles if ingested must first be thoroughly investigated before they can be used in products.

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1. What is the size of a nanoparticle?
2. Give another use of nanoparticles.
3. Describe the risks of using nanoparticles in consumer goods.

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Cross section of a tooth with decay caused by dental plaque