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## Nanocosmeceuticals: A New ERA in Cosmetics

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Nanotechnology is the engineering of functional systems at the molecular scale, deals with particles sizes between 1 and 100 nanometre. Nanoparticles and other nanostructure materials have unique properties which cannot be achieved when working with the bulk form of the material. As today's consumers are much concerned about appearance, the use of nanotechnology in cosmetics has increased significantly. The applications of nanotechnology and nanomaterials can be found in many cosmetic products including moisturisers, hair care products, make up and sunscreen. The two main uses for nanoparticles in cosmetic products are UV filtering and delivery of active ingredients. Titanium dioxide and zinc oxide are both used extensively in sunscreens to prevent UV damage to the skin. The second use is nanotechnology for delivery. Liposomes and niosomes are used in the cosmetic industry as delivery vehicles. The primary advantage of using nanoparticle formulations in cosmetic ingredients are to improve the stability of various cosmetics ingredients like unsaturated fatty acids and antioxidants encapsulated with nanoparticles, enhance penetration of ingredients like vitamins, increase the efficacy and tolerance of UV filters on the skin surface. It is critical for dermatologists involved with the health of the skin to be aware of this new technology, and to play an active role in evaluating this technology. The efficacy and safety of new nanomaterials has to be deeply studied by laboratory techniques. In this review, emphasis is made on the types of nanomaterials available in market for use in cosmetics by the various cosmetic brands.