

A tattoo to detect glucose levels

17 January 2015 | News | By BioSpectrum Bureau

A tattoo to detect glucose levels



Researchers at the University of California, San Diego the first ultra-thin, flexible device that sticks to skin like a rub-on tattoo and can detect a person's glucose levels. The sensor has the potential to eliminate finger-pricking for people with diabetes.

Mr Joseph Wang and colleagues wanted to find a better approach to develop glucose monitoring device. They made a wearable, non-irritating platform that can detect glucose in the fluid just under the skin based on integrating glucose extraction and electrochemical biosensing. Preliminary testing on seven healthy volunteers showed it was able to accurately determine glucose levels. The researchers conclude that the device could potentially be used for diabetes management and for other conditions such as kidney disease.

The proof-of-concept study is published in the ACS journal Analytical Chemistry.