

## Taiwan invents 'Smart tooth' to track smoking, drinking

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**Singapore:** Researchers at the National University of Taiwan have developed a new 'smart tooth' that monitors an individual's oral habits by recording gross and minute movement of the jaw.

The data is then fed to a computer, which interprets the pattern and pairs it with an oral action. The device can be used as a detachable fake tooth or inserted in a crown.

The invention will allow doctors to track chewing, drinking, eating, coughing, and even smoking and help treat a wide range of problems. Furthermore, physicians and dietitians could use the sensor to determine whether a patient is deviating from the treatment, lying about smoking, or eating a particular food.

In order to test the device, the researchers asked eight volunteers to perform one-of-the-four 30-second tasks, including chewing gum, reading out loud from a book, drinking a bottle of water, and coughing. The 'smart tooth' was able to determine what action each subject performed with 94 percent accuracy.

The scientists explained that, "The human mouth is one part of the human body that is always in constant use. We use our mouth to perform some of the most important daily functions, such as eating, drinking, speaking, coughing, breathing and smoking. Because the mouth is an opening into human health, this oral sensory system has the potential to enhance existing healthcare monitoring applications such as dietary tracking."