INCIPIENTUS™

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THE GOTHENBURG THROAT MODEL

Mimics human swallowing in-vitro.

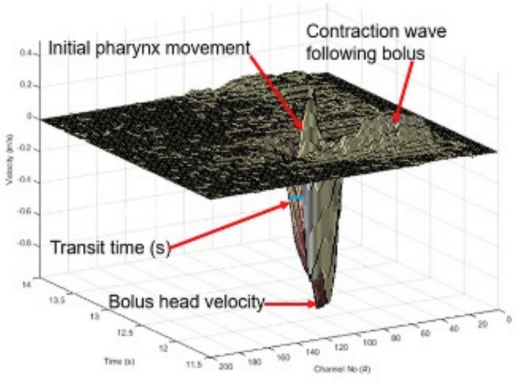
Human swallowing is an intricate process involving flow through an irregular channel (the throat) of complex fluids (the bolus). The Gothenburg Throat device is designed to mimic the upper part of the throat where airways branch off.

The device can open and close airways as well as bottom sphincter mimicking human physiology. Bolus volume and speed is set together the timing of the valves to visualize healthy or dysfunctional swallowing.

"The Gothenburg Throat model is as close to real swallowing as it gets"

VISUALIZATION OF BOLUS TRANSPORT

Result demonstrating different movement recorded during pharyngeal bolus transport using a single element transducer along a single measurement line. The movements recorded with the ultrasound transducer were in the order: initial pharynx movement, movement of the bolus head and the contraction wave following the bolus (in the form of series of small amplitude oscillations).



INCIPIENTUS IFV & TOUCH-FREE SENSORS

Incipientus Flow Visualizer (IFV) and touch-free sensors was used to measure in a range of different products for in-vitro visualization and velocity profile measurements of bolus transport during the swallowing process.

BENEFITS

- The model mimics swallowing disorders as well as healthy swallowing
- Effect of food formulation on swallowing is determined directly
- The IFV displays bolus behaviour in the most sensitive part of the throat

For more information please mail info@incipientus.com