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Singapore-based startup unveils breath analyser to monitor fat burning status

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Metanoia Sensing is focusing on the development of portable breathalyser for health and fitness monitoring



Singapore-based tech startup Metanoia Sensing has announced the launch of a new breath analyser 'MetaNose' to help people monitor their fat (lipid) burning status. The device also provides insights into the users' metabolic health risk such as diabetic related conditions.

The MetaNose device has been launched on Indiegogo and has reached its funding goal within the first hour.

MetaNose is made of environmentally sustainable materials, including those for assembly and packaging. Recyclable materials are used to reduce the overall production cost while achieving high quality and producing less emission that is harmful to the planet.

MetaNose determines the metabolic condition of the user from a single breath, by utilising a state-of-the-art Micro-Electro-Mechanical System (MEMS) acetone sensor and a signal processing algorithm, which measure the volatile organic compounds (VOCs) in exhaled breath and analyze the oxidative stress of lipid metabolism.

The proprietary algorithm enables MetaNose to provide accurate information about blood glucose metabolism (burning of carbs) versus lipid metabolism (burning of fat) to personalise user experience toward different fitness goals and monitor the effectiveness of ketogenic diet and workout routines.