Maven Health
Improving global health through personalised metabolic health predictions enabling early-stage preventative care.

In a nutshell
Metabolic health – a person's ability to transform food into energy and building blocks – is a critical factor in our overall wellbeing and is closely linked to the risk of developing chronic diseases such as diabetes, heart disease, and obesity. The WHO estimates that non-communicable diseases (which includes metabolic diseases) are the leading cause of death worldwide – responsible for 71% of all deaths. While treatment for metabolic disorders is available, there is often no cure. Prevention is key to reducing the burden on healthcare systems. The International Diabetes Federation estimates the global healthcare expenditure for diabetes was at least US$760b in 2019.

Currently, healthcare professionals have very few options when it comes to testing the metabolic health of a patient. They rely on blood tests and methods such as BMI and blood pressure – resulting in subjective and sometimes inaccurate predictions. Studies show that standard HbA1c measurements miss up to 73% of diabetes cases.

Why is our technology important?
Maven Health is developing a non-invasive diagnostic platform technology which combines precision analytics and the powerful algorithms to provide a quick and accurate prediction of a patient's metabolic health. The technology is based on the measurement of metabolites (small molecules such as amino acids) found in saliva, which are indicative for an individual's metabolic health. The metabolic information in saliva is processed through our in-house algorithms and transformed into health insights. The results are available to the healthcare professional through Maven Health's proprietary data platform, giving an accurate prediction of the patient's metabolic health. Using the Maven Health platform, the healthcare professional can develop a personalised plan of preventative measures, to ultimately improve the overall wellbeing of the patient.

The benefits of our solution
Research clearly shows the positive impact in preventative measures when it comes to lowering the risk of developing metabolic diseases [2-3]. However, current blood tests mean that the number of patients testing their metabolic health is relatively low and classical scoring methods misjudge the risk of cardiovascular diseases by up to 50% [4]. Saliva testing is non-invasive, less painful and our platform is at a competitive price point compared to traditional blood testing for metabolic health risks. For the healthcare professional, saliva tests are safer than blood tests – reducing the risk of needle-stick injury – and, there is less of a need for trained personnel to administer saliva tests.

Keywords
Metabolic health, Healthcare, Preventative healthcare, Saliva analysis, Systems biology, Artificial intelligence, Metabolomics, Precision medicine, Personalised care

Founding Team
- Dr Christopher Wall, Co-CEO: linkedin.com/in/ctjwall
- Kevin Sebastiaan Hof, Co-CEO: linkedin.com/in/kevinsebastiaanhof

École polytechnique fédérale de Lausanne

startup launchpad

Get in touch
We'd love to speak to you more about our project.
You can book some time with us here: info@mavenhealth.ch