

# ExcreMeter

## The Problem

the monitoring of a patient Excrement's is unpopular and rarely being done before a diagnostic had been taken place.

Regular monitoring of a persons excrement's can indicate for a proper or improper operation of the kidney and the digestive system. Eating habits and general body state can be deduced from those findings which can lead to early diagnostic.

## The Solution

Developing a smell camera module which can be attached to the underside of the toilet seat, the module would monitor the excrement in the toilet bowl, the data will be analyzed using image recognition algorithms and be compared with a database, for any anomaly a report will be sent to the users smartphone advising for a proper action (i.e "have a cup of water", "maybe see a doctor").

## Target audience

1. Population with risk for kidney or digestive system diseases, those are most likely elderly living at home or in a retirement home.
2. Small children that tend to not pay heed to proper hydration – a variant of the device can give immediate user feedback using a light or a speaker.
3. Life style enthusiasts and athletes.

## The technology

the unit will be small elegant and water proof, the unit will be glued to the underside of the toilet seat. A user will be identified by using Bluetooth technology and variety of other sensors. A small Led lamp will illuminate the bowl when a user is sensed to approach and photographing will take place, the photo will be of the bowl only. the photo will be analyzed using a dedicated chip and the extracted data will be compared with the known database.

Using the assumed to be existing WIFI network the data will be sent to the users smartphone and will be displayed using a dedicated app.

In order to preserve battery life the system will be kept in a low power mode the majority of the time and will be active only of toilet use and a daily data upload.

The nature of the product is such that there is no FDA regulation needed, therefore the development time and cost can be relatively low.

The estimated time to market of the Beta series is 24 months using a required funding of approx. 625k \$

By: Oded Yakir