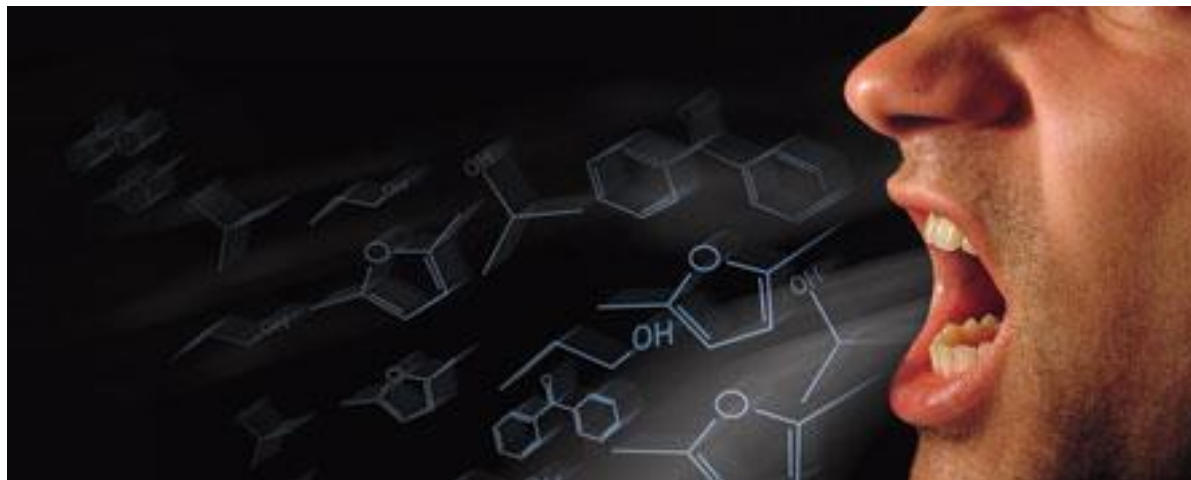


OMD – The Oxford Medical Diagnostics (OMD) hand held acetone measuring device – is it effective in helping people maintain or lose weight?



The research proposal:

The Behavioural Medicine Team are working with Oxford Medical Diagnostics Ltd (OMD) on a new study to look at how effective using a device which measures acetone in breath is for people who want to maintain or lose weight.

This new innovative technology will be used to measure acetone in a person's breath. Acetone is a ketone. Ketones are produced when the body uses fat as an energy source. Some of the acetone is breathed out through your lungs and can be measured in the air you breathe out, though it exists in tiny quantities.

If you eat as much as you need to keep your weight stable you are in energy balance. In energy balance, you burn some fat every day to power your body but you replace the same amount of fat with the food you eat. Because you burn some fat, there will be a certain level of ketones, including acetone, in your blood and a certain amount in your breath. If you go on a diet you are in negative energy balance, meaning you need to burn more fat to keep your body going. This is what leads to weight loss, but this will put your breath acetone up. You will be able to tell you are sticking to your weight loss plan because your breath acetone tells you. On the other hand, if you don't stick to your diet your breath acetone will drop. This will act as an early warning telling you that you are not sticking to the plan and perhaps you need to eat less in the future and do some extra exercise. In this way, we hope the device can help people monitor themselves. We know sticking to a diet is usually the hardest part, particularly in the long-term.

What we want to do in this research is test out whether breath acetone really works this way and how often we need to measure it to be useful.

How did our Weight Management Panel get involved?

So back in April we asked for two panel members to get involved by helping the researchers shape and design the research. The panel participants meet with researchers by telephone in April and discussed the design and research proposal in detail.

So where are we now?

The research is in its first stage of applying for funding as the Behavioural Medicine Team and members at OMD are awaiting the application outcome. There will be further meetings with the two panel members who have been involved if we are shortlisted and of course during the next few years while the study takes place if it is funded.