

Lumie to participate in Controlled Multicentre Diabetes Study to identify if Light Therapy improves circadian rhythms of night shift workers.

- EuRhythdia is an EU funded project to measure the connection between circadian rhythms and the development of type 2 diabetes and obesity.
- The study will verify whether lifestyle interventions can reset the circadian clock and in turn alter risks of type 2 diabetes.

- Lifestyle interventions include; exercise, diet, melatonin intake and light exposure.
- Light therapy company, Lumie will supply the 10,000 LUX light boxes to act as the light exposure lifestyle intervention.
- Initial controlled study is made up of night shift workers with follow up study to run with relatives of diabetes sufferers.

Lumie are proud to send Brazil light boxes to centres across Europe in order to take part in a breakthrough study in the understanding of the causality between inner clock rhythm disturbances and the development of type 2 diabetes/obesity.

The study will measure the effects of 12 weeks of randomized timed light therapy with the use of 168 Lumie Brazil light boxes or timed physical exercise as a chronotherapeutic lifestyle intervention on metabolic control and on markers of central and peripheral circadian rhythms in night shift workers. The follow up study will involve relatives of diabetes sufferers.

The study is part of the EU-funded EuRhythdia project <http://eurhythdia.eu/projects>. EuRhythDia is a consortium of leading scientists from across Europe supported by research-intensive SMEs, the objective of the project is to achieve breakthroughs in the understanding of the causality between inner clock rhythm disturbances and the development of type 2 diabetes/obesity, and to verify whether re-setting the circadian clock through lifestyle interventions (exercise, diet, light exposure and melatonin intake) alters cardiometabolic risk to a clinically relevant degree.



Between 2006 and 2011 the number of people diagnosed with diabetes in England increased by 25 per cent, from 1.9 million to 2.5 million. It's estimated that up to 850,000 people have diabetes but don't know it. There has also been a huge growth in complication rates during this time. Diabetes is now the biggest single cause of amputation, stroke, blindness, and end stage kidney failure. Diabetes is big, is growing out of control, and endured spending accounts for around 10 per cent of the National Health Service (NHS) budget in 2012. (<http://www.diabetes.org.uk/Documents/Reports/State-of-the-Nation-2012.pdf>)

The controlled, randomized study is made up of 216 night shift working participants and takes place across four centres: Aachen, Germany; Hamburg, Germany; Rome, Italy and Salzburg, Austria. It is made of three groups of shift workers: group A, a control group without intervention: group B, a group using intermittent intensive light therapy with Lumie Brazil lightboxes and group C, a group exercising for 50 minutes before the beginning of the night shift.

Light therapy will be applied using Lumie Brazil, a lightbox using three 36w fluorescent tubes which emits 10,000 lux at a distance of 35cms. The light source will be available during the first half of the night shift, so that a cumulative exposure time of sufficient length in comparison to published studies is ascertained.

Jonathan Cridland, CEO of Lumie says: " Light therapy can be used to advance or delay the user's sleep cycle dependant on the time of day when it is applied. Working on a night shift is disruptive to people's circadian rhythms which are controlled by light, and using timed light therapy as an intervention is expected to help align the shift workers' internal bodyclocks with the demands of their pattern of work. We are confident that the Lumie Brazil lightboxes will make a positive difference to the night shift workers and are delighted to be in the EuRhythDia consortium."

If you would like further information, access to scientific research, case studies or comments from academic experts, please do not hesitate to contact the Lumie press office on 01954 780 500 or email pr@lumie.com

About Lumie:

Since 1991 Lumie has been researching and designing bright lights to treat seasonal affective disorder (SAD) and other conditions. Our first Bodyclock dawn simulator – an alarm that wakes you up with increasing levels of light – was the world's first wake-up light. It brought light therapy into the mainstream.

Over the years Lumie has worked closely with the scientific community. All of our products – the broadest range in Europe – are based on published research and designed by us from our base in Cambridge.

Lumie products are medical devices, certified to the Medical Devices Directive (EC93/42) and supplied to the NHS. Distance and brightness levels (lux) are independently verified and Lumie is registered with the government's [Medicines and Healthcare Products Regulatory Agency](#).

The benefits of light therapy reach far beyond SAD. Our lights help you to sleep well and get up in the morning, beat the afternoon slump, conquer jetlag and look after your skin. They also optimise sports performance. As official supplier to [British Swimming](#) we are proud to provide lights to Great Britain's elite swimmers and divers. Lumie are also very proud to be official suppliers to British Rowing and official contributors to British Cycling.

In the UK our products are available through www.lumie.com as well as major retailers like John Lewis, Boots, Argos and Selfridges and we have an expanding network of distributors across Europe and in North America. For consumers buying through www.lumie.com we provide a home trial on all products.