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PRESS RELEASE

**CLINICAL STUDY INTO LSD MICRODOSING
SHOWS STRONG PAIN MANAGEMENT POTENTIAL**

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*Beckley/Maastricht research team finds pain application for 'non-psychedelic' LSD microdosing
The first study of its kind to test the potential of LSD as an analgesic since the 1960s
Further studies could lead to possible application of LSD as a non-addictive pain medication*

A new UK and European placebo-controlled clinical study completed by the **Beckley Foundation** and **Maastricht University** has shown that low doses of the psychedelic compound lysergic acid diethylamide (LSD) may provide a viable, non-addictive alternative for pain management.

The [Beckley/Maastricht Microdosing Research Programme](#) was set up to study the effects of small doses (commonly referred to as 'microdoses') of LSD on humans, with a particular focus on mood, cognitive functions, and pain management. The study, which was the first in a series of research projects, saw twenty-four healthy volunteers each receive single doses of 5, 10 and 20 micrograms of LSD, or a placebo. Among other measures collected throughout the dosing days, pain tolerance levels were assessed using a Cold Pressor Test, a valid and low-risk test for evaluating individual pain thresholds which involves the use of a tank filled with 3°C-cold water. Volunteers were asked to submerge their hands in the cold water for as long as they could manage. Dependent measures of the Cold Pressor Test include pain tolerance (i.e. the duration for which participants can hold their hand in the tank) and subjective ratings of painfulness, unpleasantness and stress. The study consistently indicated that a 20 microgram dose of LSD significantly reduced pain perception, as compared to the placebo, even though lower doses did not have the same effect.

The overall pain tolerance on 20 micrograms increased by 20%, meaning that volunteers were able to remain immersed in the cold water for substantially longer with a 20 microgram dose of LSD compared to those on a placebo. Subjects also reported a decrease in the subjective experience of painfulness and unpleasantness. Remarkably, changes in pain tolerance and subjective pain perception induced by the low dose of LSD under these circumstances were comparable in magnitude to those observed after administration of opioids, such as oxycodone and morphine to healthy volunteers.

In addition, the analgesic effects observed were equally strong at 1.5 and 5 hours after LSD administration, indicating that a dose as small as 20 micrograms of LSD may have a longer-lasting 'halo' effect on pain management.

Importantly, the data also suggests that the level of psychological and cognitive interference that is produced by a 20 microgram dose of LSD is very mild and would not be expected to interfere with normal day-to-day operations.

In response to the findings, **Amanda Feilding, Founder and Director of the Beckley Foundation and co-director of the Beckley/Maastricht Microdosing Research Programme** commented: *“The present data suggests low doses of LSD could constitute a useful pain management treatment option that is not only effective in patients but is also devoid of the problematic consequences associated with current mainstay drugs, such as opioids. Over 16 million people worldwide are currently suffering from Opioid Use Disorder and many more will become hooked as a result of oversubscription of pain medication. I am encouraged by these results as I have long believed that LSD may not only change the sensations of pain but also our subjective relationship with it. We must continue to explore this with the aim of providing safer, non-addictive alternatives to pain management, and to bring people in pain a step closer to living happier, healthier and fully expressed lives.”*

Lead researcher on the study and Professor of Psychopharmacology and Behavioral Toxicology at Maastricht University, Jan Ramaekers adds: *“This study in healthy volunteers shows that a low dose of LSD produces an analgesic effect in the absence of a psychedelic effect, as assessed with a cold pressure tests. The magnitude of the analgesic effect appears comparable to analgesic effects of opioids in the same pain model. These findings strongly encourage clinical trials in pain patients to assess the replicability and generalizability of these findings.”*

The study was the first to revisit the potential of LSD in pain relief in a clinical setting since restrictive policies of prohibition were put in place in the 1960s and 1970s. Importantly, the study measured pain responses at dose levels which are not expected to produce profound mind-altering effects – or microdose levels, as they are more commonly known.

Taking small doses to affect mood and performance is growing in popularity, especially in high-performance industries, such as technology, and is known as ‘microdosing’. However, there is very little research to back the validity of certain claims, which include improved cognition, productivity and mood. The Beckley Foundation together with its research partners at Maastricht University and a selection of academics across the globe are seeking to uncover more information. To both assist with harm reduction among those using LSD in their daily lives, but also importantly to support the evidence-base for the introduction of possible psychedelic medicines.

Our first Beckley/Maastricht microdosing study also looked at the potential for LSD to enhance mood and cognitive functions. Results on these fronts will be released soon.

NOTES FOR THE EDITOR

[About the Beckley / Maastricht Microdosing Research Programme](#)

Amanda Feilding and Professor Jan Ramaekers developed a collaborative research programme in 2017, to investigate in great detail the increasingly popular practice of microdosing, and its potential therapeutic applications. Our first LSD microdosing study aimed at identifying the optimal dose of LSD to improve mood, cognition and pain resilience, with minimal side effects and interferences to day-to-day life. Following up on this work, the *Beckley/Maastricht Research Programme* is now conducting a new study to investigate in greater details the effects of repeated small doses of LSD using neuroimaging tools that will allow looking at changes in brain function.

About Amanda Feilding and the Beckley Foundation

[The Beckley Foundation](#) is a UK-based research foundation set up by Amanda Feilding in 1998 to initiate and carry out research into the therapeutic potential of psychedelics, and to create a scientific base for global drug policy reform. The Foundation has published over 40 books, reports, and policy papers looking into the negative consequences of drug prohibition and laying out possible alternatives. Amanda has also published over 50 scientific articles published in peer-reviewed journals.

Amanda has been called the ‘hidden hand’ behind the psychedelic scientific renaissance and the drive for drug policy reform, having contributed ground-breaking pre-clinical and clinical research into the mechanisms of action and potential therapeutic benefits of psychoactive substances. She has developed [partnerships](#) with leading scientists and institutions around the world, including Imperial College, UCL, Johns Hopkins, and Maastricht, among others. In 2008 she set up the Beckley/Imperial Psychedelic Research Programme with Prof David Nutt, and together they co-directed this successful Programme which produced some ground-breaking studies.

The Beckley Foundation relies exclusively on the generosity of our supporters. Donations of any amount are greatly appreciated and help us develop and expand our science, policy and outreach programmes.



Interviews: All authors of the report, will be available to be interviewed. Contact details are provided below.

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