Clasado and University of Oxford demonstrate effect of advanced prebiotics on anxiety in clinical study

Oxford and Jersey, UK, December 3rd, 2014 – Clasado Biosciences Limited, the producers and suppliers of the second generation prebiotic Bimuno® (B-GOS), a unique trans-galactooligosaccharide, and the Department of Psychiatry, University of Oxford, today announce the results of clinical research demonstrating for the first time that an advanced prebiotic (Bimuno) has the ability to reduce anxiety.

The clinical trial results, published in the journal Psychopharmacology in a paper entitled ‘Prebiotic intake reduces the waking cortisol response and alters emotional bias in healthy volunteers’, showed that the consumption of B-GOS produced a decrease in both waking cortisol levels and attentional vigilance towards negative versus positive information. The trial compared B-GOS with fructooligosaccharide (FOS) and a placebo.

The results of the study suggest that B-GOS may have an anxiolytic effect and reduce stress reactivity in healthy subjects. The study also demonstrates that manipulation of the gut microbiota with B-GOS may alter HPA (hypothalamic-pituitary-adrenal) axis reactivity and processing. The HPA axis is often dysregulated in individuals suffering from depression and anxiety impacting affective and memory processing as well as having strong directional links with the gut microbiome.

The study revealed decreased attentional vigilance to negative versus positive information after Bimuno GOS treatment, compared to placebo and FOS treatment. Increased processing of negative material is seen as a core functional marker of anxiety and depression and can be modulated by antidepressant/anxiolytic medication. No effects were found after administration of a FOS prebiotic.

Further trials are planned by Clasado and the University of Oxford studying the effects of B-GOS on individuals suffering from anxiety, stress or depression, where further positive results are expected.

The clinical study is the latest in an ongoing research programme of pre-clinical and clinical trials being undertaken by Clasado in collaboration with Oxford University and other internationally recognised research institutes. This study followed a recent pre-clinical trial, published in the journal Neurochemistry International, which showed for the first time that the modulation of gut microbiota by prebiotics can lead to changes in brain biochemistry.
Mental health problems affect a significant proportion of people in the western world. Indeed, depression and anxiety account for 40% of reported disabilities worldwide¹. This latest study by Clasado and the Department of Psychiatry, University of Oxford is a valuable addition to our knowledge of brain-gut interactions and may pave the way for alternatives to existing drug therapies with their associated side effects,” said Graham Waters, CEO of Clasado. “This trial is part of a wider program of clinical research in which we are currently engaged, investigating the central role of the gut in improved health and wellness.”

25% of people in the western world will experience a mental health problem at some point during a 12 month period and anxiety is the most common mental illness, affecting approximately one in six people in the US and UK².

“The results of these trials add to the expanding body of knowledge on microbiome-behaviour and microbiome-endocrine interactions,” said Dr Phil Burnet, Head Researcher, Department of Psychiatry, University of Oxford. “The study makes an important contribution to the existing clinical evidence linking the gut and its microbiota to brain function.”

About the Clinical Study
http://link.springer.com/article/10.1007/s00213-014-3810-0
In the study, forty-five subjects received either one of two prebiotics (fructooligosaccharides [FOS] or Bimuno-galactooligosaccharides [B-GOS]) or a placebo for 3 weeks. The salivary cortisol awakening response (CAR) was sampled before and after prebiotic / placebo administration to assess HPA axis activity. On the final day of treatment participants completed a computerised task battery assessing the processing of emotionally salient information. The salivary CAR did not differ significantly between groups at baseline but was significantly lower after B-GOS compared with placebo.

About Clasado Biosciences
Clasado are manufacturers and suppliers of a unique patent protected trans-galactooligosaccharide called Bimuno which exhibits a range of clinically proven health benefits in the areas of digestive and immune health. Clasado is committed to discovering, developing and harnessing the latest ground breaking prebiotic technology, providing clinically proven solutions which improve and enrich the quality of people’s lives.

Bimuno is the result of intensive research & development dating back to 2000 and conducted in collaboration with the University of Reading’s Food Microbial Sciences Unit and other globally recognized research institutes.


² Mental Health Foundation