

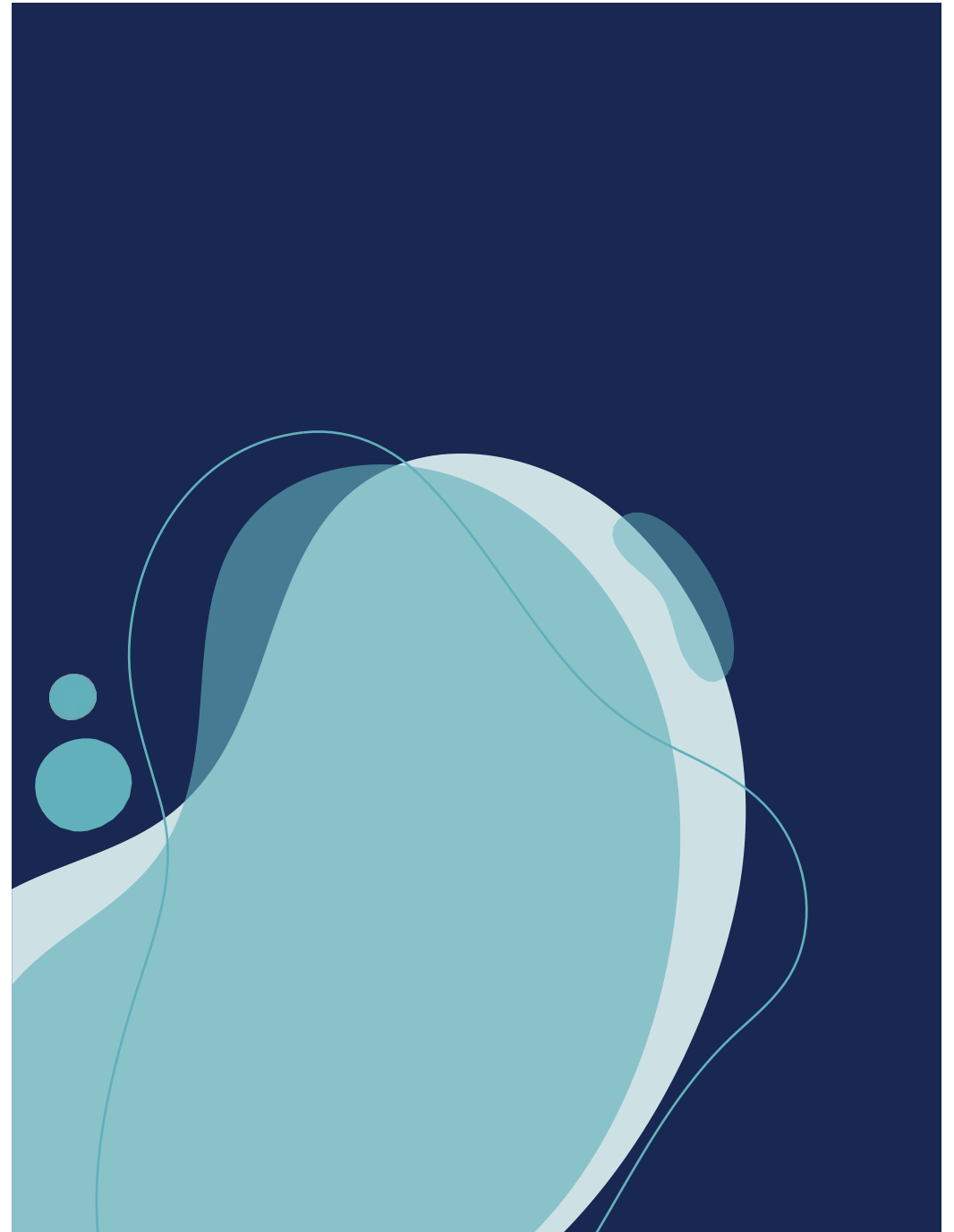


Activated Probiotics'
Clinical Update and
Training Session:

Biome Lift™ Probiotic

THURSDAY 23 JANUARY 2020

PRESENTERS: BLAIR NORFOLK & REBECCA EDWARDS



The Activated Probiotics® Difference



Key research partnerships



Microencapsulation



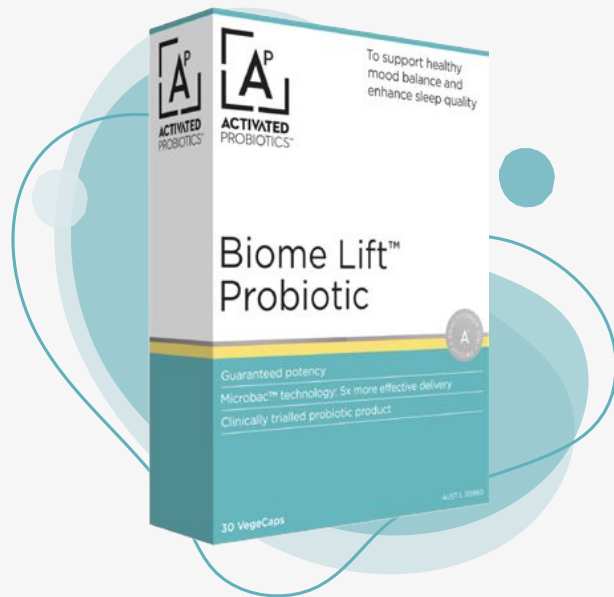
Strain selection and identification
(DSM/ATCC)



Unique packaging to
maintain product integrity

Biome Lift™ Probiotic

Supports healthy mood balance and enhances sleep quality



Mental Illness in Australia

45%

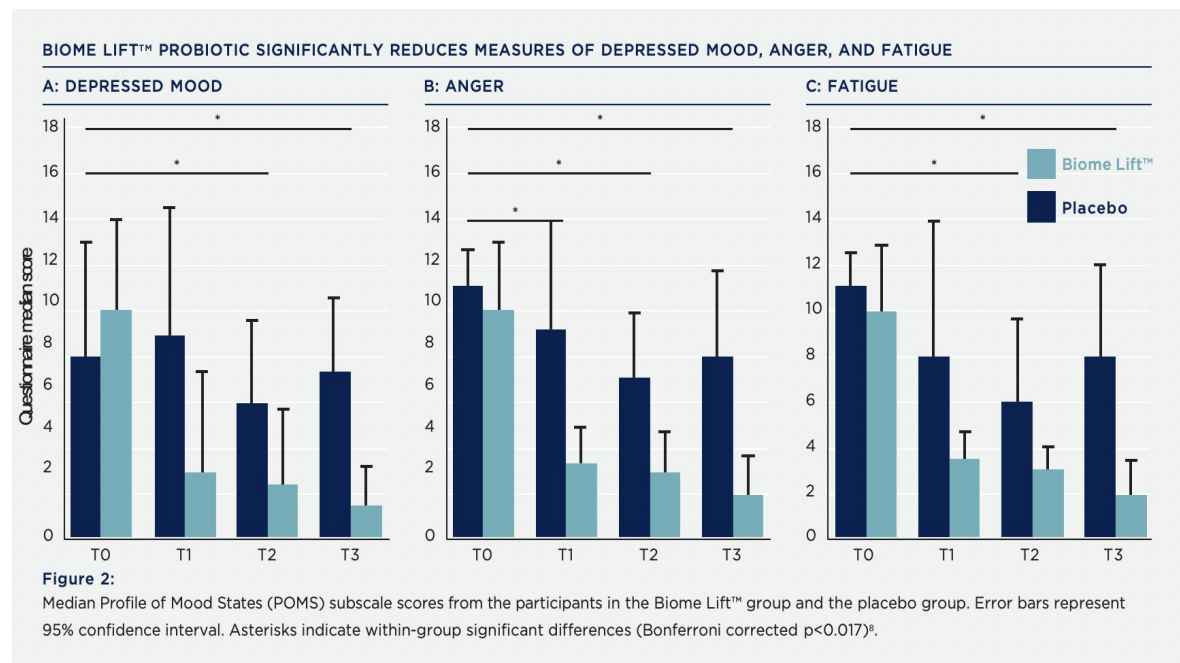
of the population will experience a mental illness in their lifetime

10%

of Australian adults are on antidepressants

38%

of patients on SSRI antidepressants experience side effects



Probiotics and the microbiota-gut-brain axis

- Microbiota-gut-brain axis: bidirectional communication → our gut microbes can affect the way we think, our emotions and our behaviour
- Faecal transfer from depressed humans to healthy rats induces features of depression (Kelly *et al*, 2016)
- Depression is associated with chronic low-grade inflammation, thought to be related to increased intestinal permeability (Kelly *et al*, 2015).
- Increased IP → bacterial endotoxin translocation → pro-inflammatory cytokine release
- Probiotics enhance the integrity of the gut barrier
- Probiotics can also modulate the function of the immune system
- Probiotic bacterial metabolites include neurotransmitters (e.g. GABA, dopamine) and neuromodulators (e.g. SCFAs)

Kelly JR, Borre Y, O' Brien C, Patterson E, El Aidy S, Deane J, et al. Transferring the blues: Depression-associated gut microbiota induces neurobehavioural changes in the rat. *J Psychiatr Res.* 2016;82:109–18.

Kelly JR, Kennedy PJ, Cryan JF, Dinan TG, Clarke G, Hyland NP. Breaking down the barriers: the gut microbiome, intestinal permeability and stress-related psychiatric disorders. *Front Cell Neurosci* [Internet]. 2015 Oct 14 [cited 2019 Nov 8];9. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4604320/>



Thank You

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