

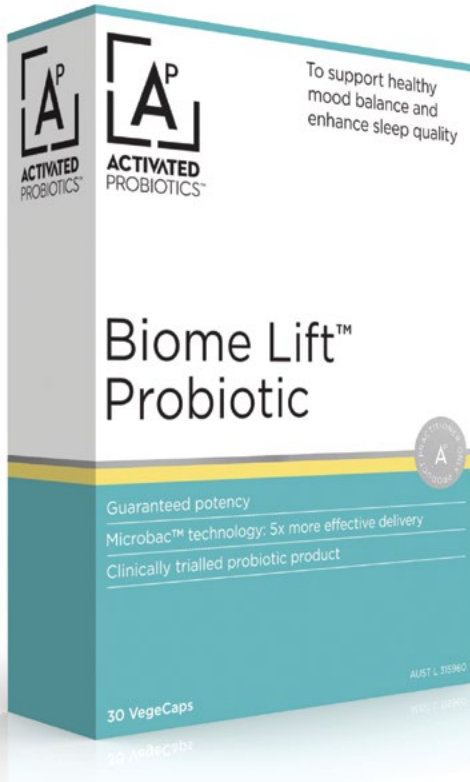


# Biome Lift™ Probiotic

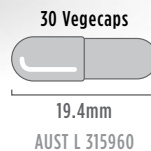
To support healthy mood  
balance and enhance sleep quality



FOR PROFESSIONAL REFERENCE ONLY



PREMIUM, PRACTITIONER-ONLY PRODUCT



Natural mood support

Clinically trialled probiotic product

Microbac™ technology: 5x more effective delivery

Guaranteed potency

## INDICATIONS

- Supports healthy mood balance
- Enhances sleep quality
- May help reduce cognitive fatigue

## FORMULATION

<i>Lactobacillus plantarum</i> LP01 (LMG P-21021)	1 BLB*
<i>Lactobacillus rhamnosus</i> LR06 (DSM 21981)	1 BLB*
<i>Bifidobacterium longum</i> 04 (DSM 23233)	1 BLB*
<i>Lactobacillus fermentum</i> LF16 (DSM 26956)	1 BLB*
<b>Total live bacteria</b>	<b>4 BLB*</b>

\*BLB = Billion Live Bacteria

## DIRECTIONS FOR USE

**Adults:** take 1 capsule daily (with or without food), or as directed by your healthcare practitioner.

## NO ADDED

GMOs, wheat, gluten, dairy, lactose, fructose, yeast, nuts, seeds, peanut, soy, egg, fish, shellfish, or animal derivatives. No artificial colours, flavours, sweeteners, or preservatives.



GMP



LIVE  
PROBIOTIC  
PROMISE



DAIRY  
FREE



ONE A DAY  
FORMULATION



FRIDGE  
FREE

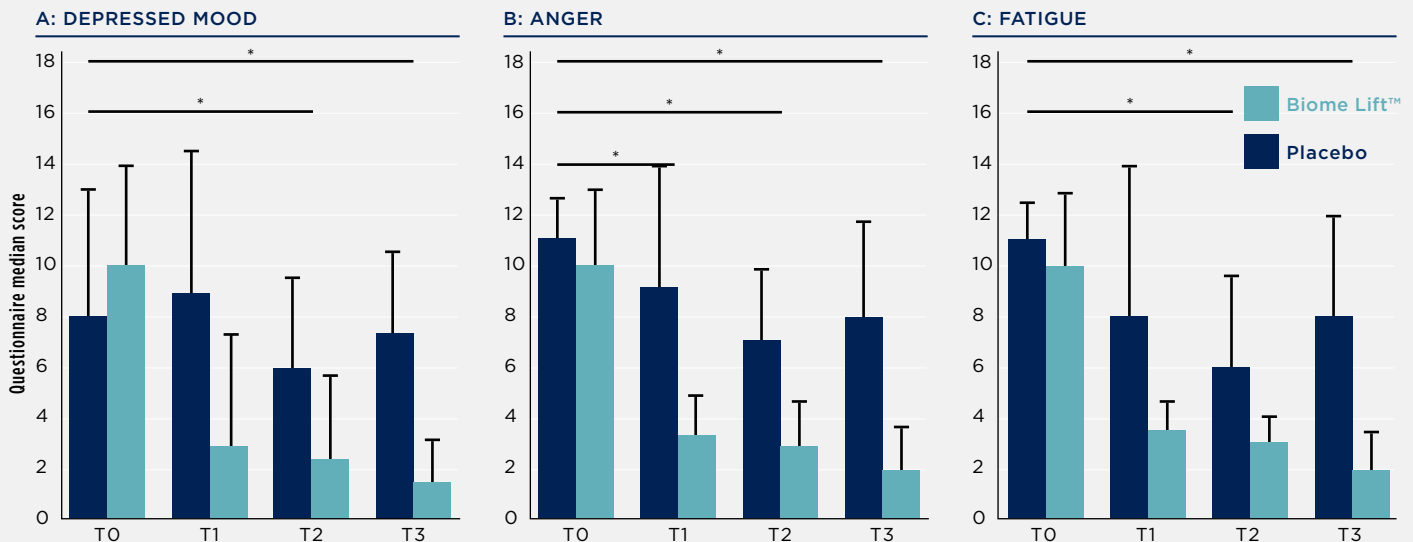


VEGAN

We use an innovative delivery technology (Microbac™), which stabilises the probiotic bacteria by coating them with a layer of plant-derived lipid. This protects the bacteria from the strong acid in the stomach, allowing 5x more bacteria to survive transit through the upper gastrointestinal tract and colonise the intestines, compared to traditional, uncoated bacteria.



## BIOME LIFT™ PROBIOTIC SIGNIFICANTLY REDUCES MEASURES OF DEPRESSED MOOD, ANGER, AND FATIGUE



**Figure 2:**

Median Profile of Mood States (POMS) subscale scores from the participants in the Biome Lift™ group and the placebo group. Error bars represent 95% confidence interval. Asterisks indicate within-group significant differences (Bonferroni corrected  $p < 0.017$ )<sup>8</sup>.

## THE MICROBIOTA-GUT-BRAIN AXIS

The gut-brain axis describes the bidirectional communication between the gut and the brain, via the autonomic nervous system, the enteric nervous system, the neuroendocrine system, and the immune system<sup>1</sup>. Recently, this concept has been extended to encompass the complex interrelationship between the gut microbiota (and their metabolites) and this axis, which collectively forms the microbiota-gut-brain axis. The gut microbiota have the capacity to affect the function of the brain, modulating cognition, behavior and emotional regulation, through the production of neurotransmitters, including serotonin and  $\gamma$ -aminobutyric acid (GABA), and other neuroactive substances, such as short-chain fatty acids (SCFAs)<sup>2</sup>.

## PRECLINICAL AND CLINICAL STUDIES

Numerous preclinical studies conducted in rodents have demonstrated that the absence of, or alterations to the gut microbiota affects the hypothalamic-pituitary-adrenal (HPA) axis response to stress<sup>3</sup>, and behavioural responses, including anxiety and depressive-like behaviors<sup>1</sup>. On the basis of these findings, a number of clinical trials have sought to investigate whether probiotics could have a beneficial effect on mood, cognition, and behaviour in humans<sup>4, 5, 6</sup>, with a recent meta-analysis finding a statistically significant improvement in psychological symptoms - including perceived stress, depressed mood, and anxious feelings - in healthy individuals who received probiotic supplements, compared to placebo<sup>7</sup>.

## BIOME LIFT™ PROBIOTIC CLINICAL TRIAL

A recently published randomised, double-blind, placebo-controlled trial conducted in Italy investigated the effect of *Biome Lift™ Probiotic* on various aspects of mood, personality dimensions, and sleep quality<sup>8</sup>. The study recruited 38 healthy adults, and was conducted over a period of 9 weeks, which included a 6 week intervention period, followed by a 3 week washout period. During the intervention period, the participants in the experimental group received a sachet of the probiotic product (*Biome Lift™ Probiotic*), while the participants in the control group received a placebo sachet, which contained maltodextrin only. A variety of psychological tests were administered at baseline (T0), 3 weeks (T1), 6 weeks (T2), and after the 3 week washout period (T3).

## RESULTS

A significant time effect for the participants in the *Biome Lift™ Probiotic* group was found for the following subscale scores:

- **Depressed mood state** ( $X^2_3$ : 12.43,  $p=0.006$ ): a statistically significant reduction in depressed mood state was found at 6 weeks compared to baseline ( $Z = -2.596$ ,  $p = 0.009$ , effect size =  $-0.433$ ). The effect was maintained after the 3 week washout period compared to baseline ( $Z = -2.452$ ,  $p=0.014$ , effect size =  $-0.409$ )
- **Anger-hostility** ( $X^2_3$ : 17.52,  $p=0.001$ ): a statistically significant reduction in anger-hostility was found at 3 weeks compared to baseline ( $Z = -2.695$ ,  $p = 0.007$ , effect size =  $-0.449$ ), and at 6 weeks compared to baseline ( $Z = -2.411$ ,  $p = 0.016$ , effect size =  $-0.402$ ). The effect was maintained after the 3 week washout period compared to baseline ( $Z = -2.921$ ,  $p = 0.003$ , effect size =  $-0.487$ )
- **Fatigue** ( $X^2_3$ : 11.75,  $p=0.008$ ): a statistically significant reduction in fatigue was found at 6 weeks compared to baseline ( $Z = -2.802$ ,  $p = 0.005$ , effect size =  $-0.467$ ). This effect persisted after the washout period, with lower scores recorded at T3, compared to baseline ( $Z = -2.556$ ,  $p = 0.011$ , effect size =  $-0.426$ )
- **Sleep quality** ( $X^2_3$ : 12.16,  $p=0.007$ ): a statistically significant improvement in sleep quality was found at 6 weeks compared to baseline ( $Z = -2.820$ ,  $p = 0.005$ , effect size =  $-0.470$ )

## CONCLUSION

On the basis of these clinical trial results, *Biome Lift™ Probiotic* appears to be an effective therapeutic tool for improving several aspects of mood, and sleep quality in healthy adults.

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