



# Lacto Levure<sup>®</sup>

*PROBIO MOOD*



Clinically proven psychobiotic



# Psychobiotics

Psychobiotics are beneficial bacteria that influence gut-brain relationships.

## Gut-brain axis

A network comprising :

1

**The gastrointestinal tract**

2

**The enteric nervous system**

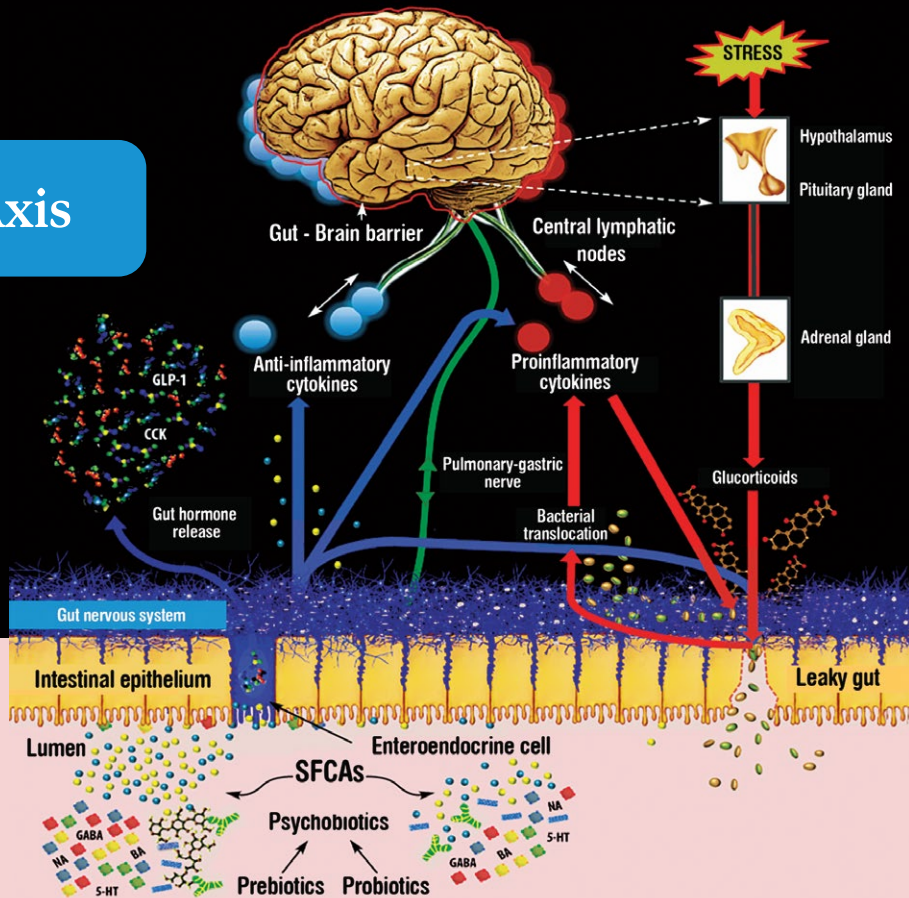
3

**The brain**

Bidirectional communications between these entities regulate several important functions, including immunity, digestion, metabolism, satiety and stress reactions.<sup>1</sup>

# Gut-Brain Axis

## Systems - Level Overview of Psychobiotic Action



Adaptation from: 1. Psychobiotics and the Manipulation of Bacteria-Gut-Brain Signals. Philip WJ. Burnet. Trends in Neurosciences, November 2016, Vol. 39, No. 11, 763-781





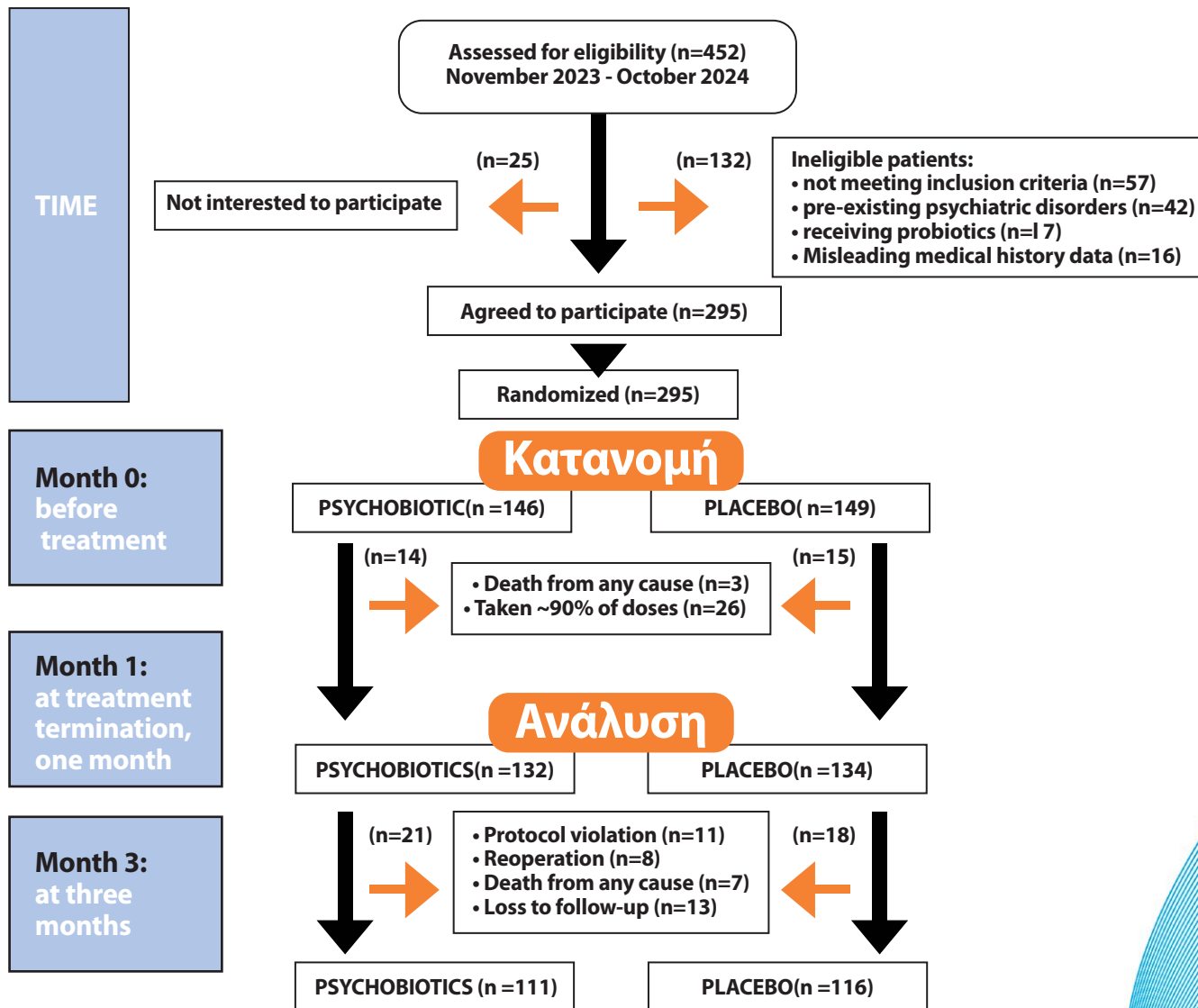
# Probiotics mechanism

- ✓ **Psychobiotics exert anxiolytic and anti-depressant effects characterized by changes in emotional, cognitive, systemic and neural indices.**
- ✓ **They may regulate the neurotransmitters and proteins, including gamma-aminobutyric acid (GABB), serotonin, glutamate and brain-derived neurotrophic factor (BDNF).**

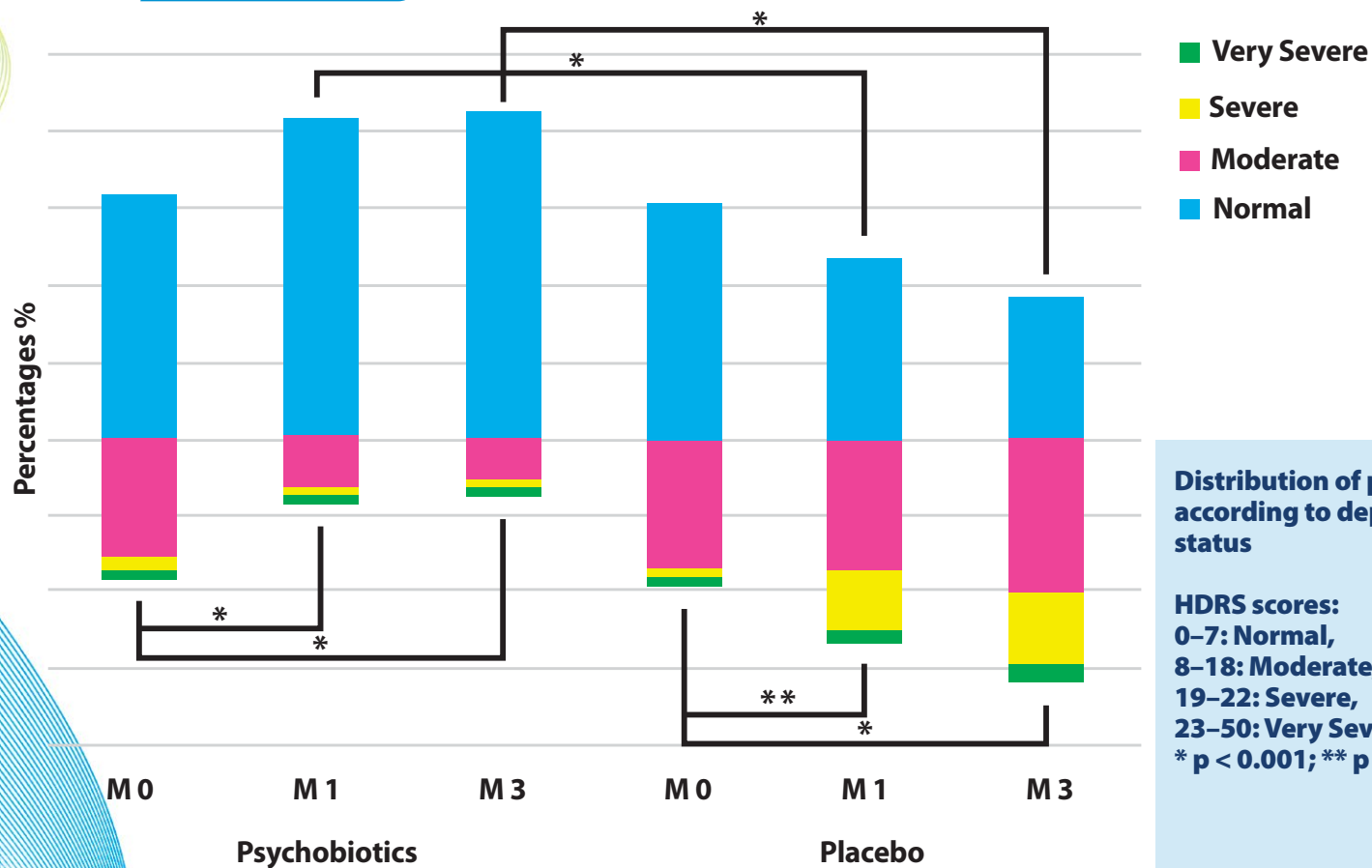
## New clinical study Prodeca

**Psychobiotics Ameliorate Depression and Anxiety Status in Surgical Oncology Patients:** Results from the ProDeCa Study<sup>2</sup>

# New clinical study Prodeca



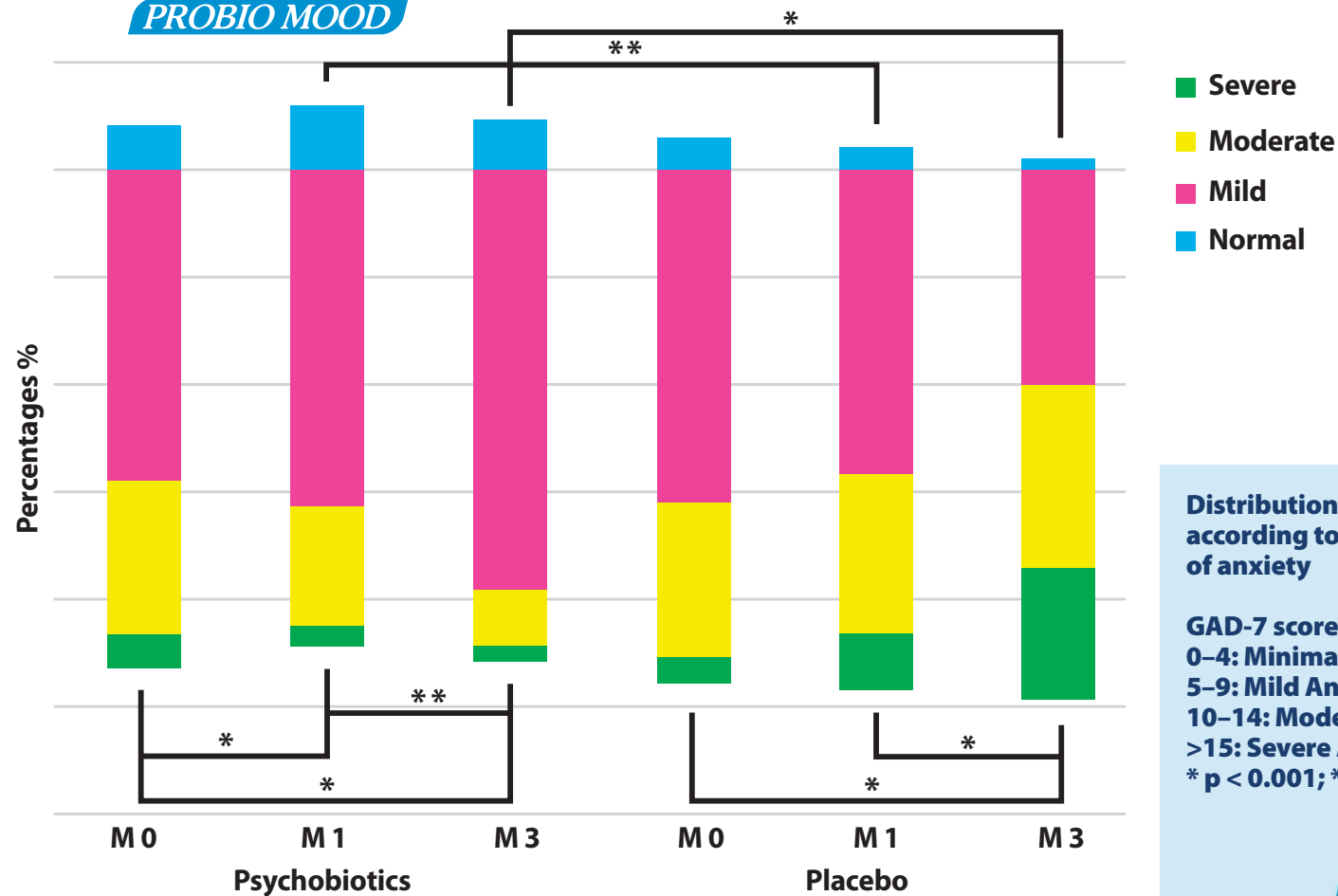
## Improves Depression



**Distribution of participants according to depression status**

**HDRS scores:**  
0–7: Normal,  
8–18: Moderate,  
19–22: Severe,  
23–50: Very Severe  
\* p < 0.001; \*\* p < 0.010.

**Improves Anxiety**

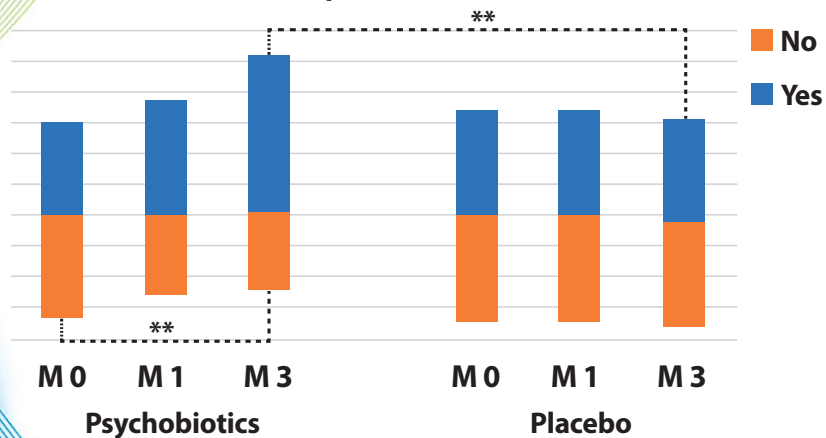


**Distribution of participants according to severity of anxiety**

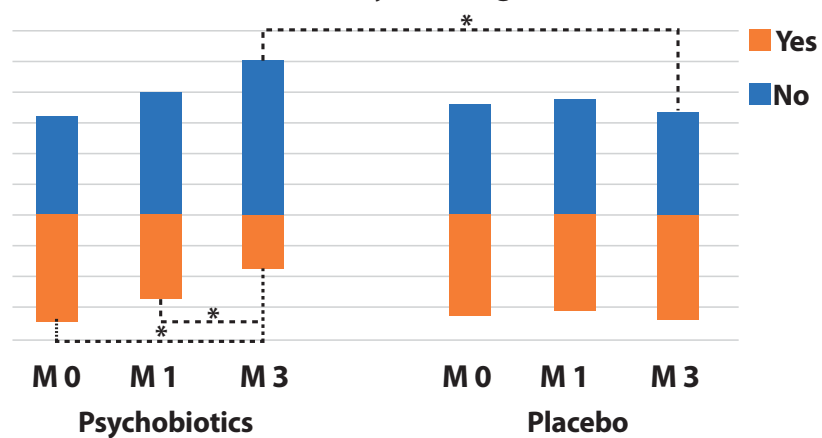
**GAD-7 scores:**  
 0–4: Minimal Anxiety,  
 5–9: Mild Anxiety,  
 10–14: Moderate Anxiety,  
 >15: Severe Anxiety  
 \* p < 0.001; \*\* p < 0.010.

## Improves sleep disorders

i can sleep as well as usual



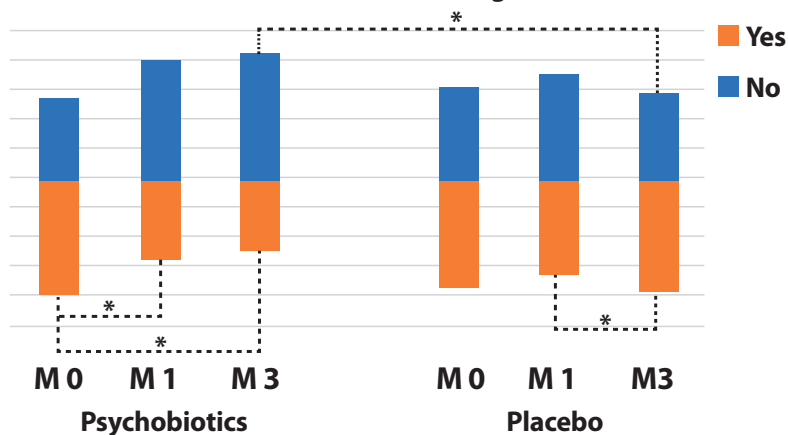
Insomnia early in the night



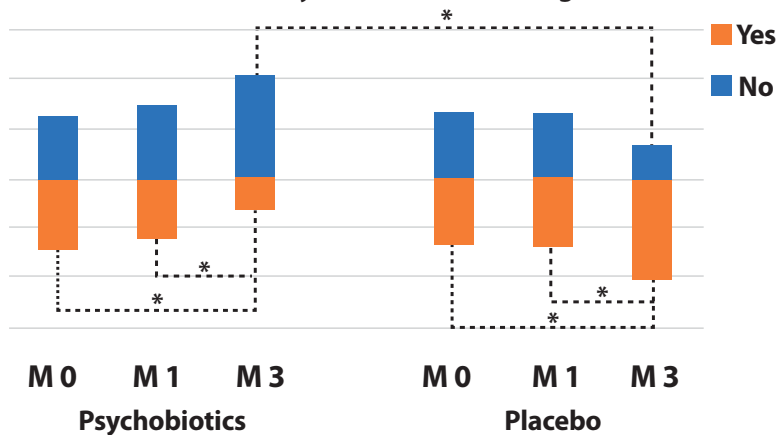


## Improves sleep disorders

Insomnia middle of the night



Insomnia early hours of the morning

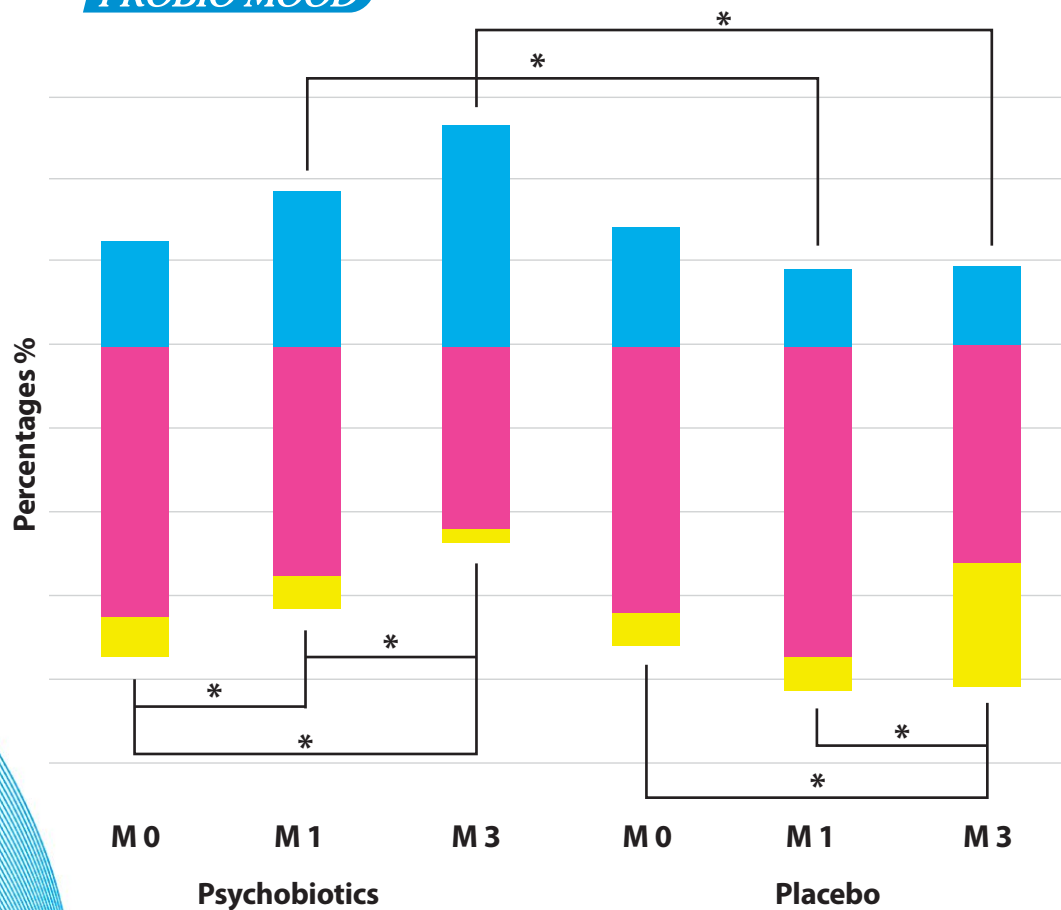


**Distribution of participants according to dichotomous classification of sleeping disorders[yes or no] in each group and at each time-point: M0: before treatment, M1: at treatment termination, one month, M3: at three months.**

**Data presented as percentages.**

**\* p < 0.001; \*\* p < 0.05.**

## Improves stress reaction



**High**  
**Moderate**  
**Low**

Distribution of participants according to stress status at each time-point and for each treatment group.

M0: before treatment;  
M1: at treatment termination, one month,  
M3 at three months.

Data are presented as percentages.

\*  $p < 0.001$ .

Stress status is based on PSS-14 scores: 0-18: Low Stress, 19-37: Moderate Stress, 38-56: High Stress.



- ✓ Food supplement with **4 chosen probiotic** strains **Lactobacillus** and **Bifidobacterium** for better mood and stress reduction
- ✓ **Prebiotic Fructooligosaccharides**
- ✓ **Clinical studied saffron extract** with antidepressant and anxiolytic action
- ✓ **Magnesium** for reduction of tiredness and fatigue



Food supplement **4** probiotics + **1** prebiotic  
**Magnesium** & clinically studied **saffron extract**



Granules  
for oral  
suspension

**20 Sticks**



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Your Health  
Our Care!



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