The probiotic formula that helps the body to reduce stress and anxiety.\*

CLINICALLY TESTED



Lactobacillus plantarum DR7 | 1x10<sup>9</sup> cfu

- Non-GMO Strain derived from Bovine milk that modulates the Gut Brain Axis\*
- Helps to improve response to everyday gut stress and anxiety\*
- Promotes the enhancement of memory and cognitive traits\*

\* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

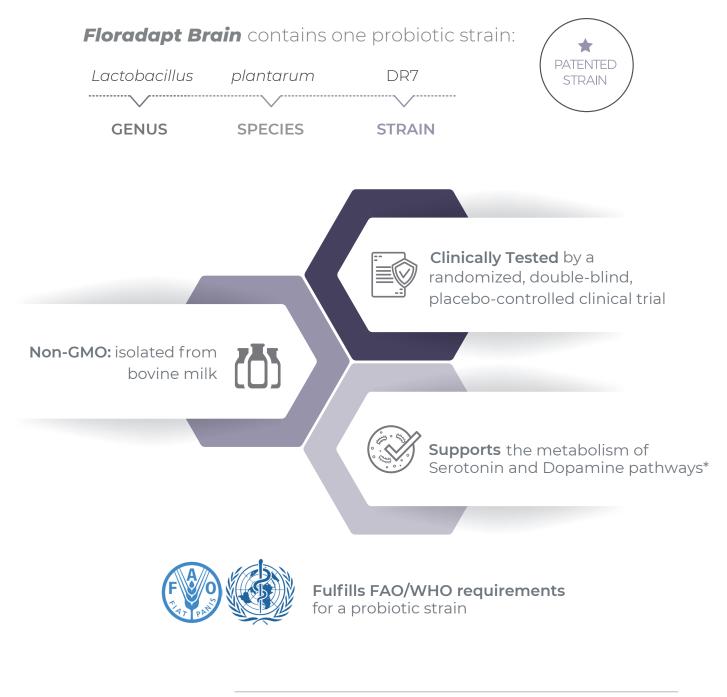
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Floradapt. Brain



### The probiotic formula that helps to improve mental wellness by enhancing mood and cognitive functions.\*<sup>1</sup>



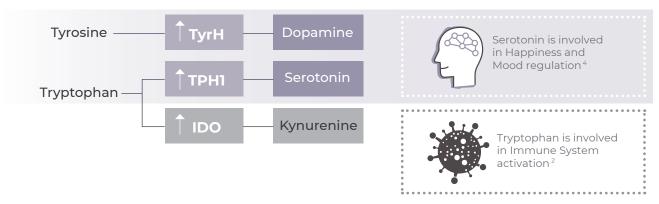
Floradapt. Brain

L.plantarum DR7 is a non-GMO probiotic strain that helps the body to reduce everyday stress, and promotes the improvement of cognitive and memory functions<sup>\*1</sup>

FAO: Food and Agriculture Organization of the United Nations; WHO: World Health Organization.

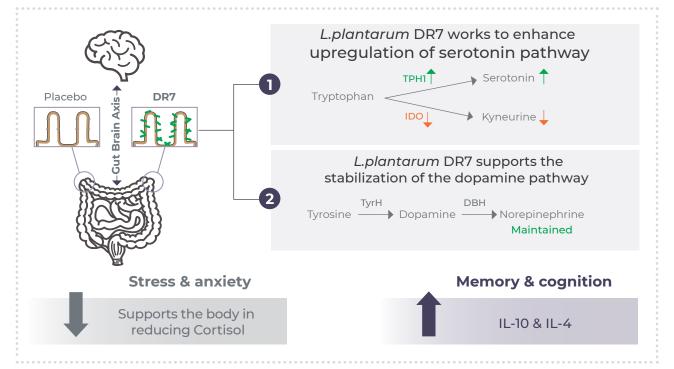
## The Dynamics of the Gut Brain Axis in the Body

Tryptophan and tyrosine are essential amino acids precursors to numerous neurologically active compounds, among them are<sup>2,3</sup>:



TyrH: tyrosine hydroxylase; TPH1: tryptophan hydroxylase; IDO: indoleamine 2,3-dioxygenase

#### Gut-Brain Axis metabolism processes impacted by *L.plantarum* DR7<sup>1</sup>



Adapted from Chong et al. 2019.<sup>1</sup> IL: interleukin; IFN: interferon; TNF: tumor necrosis factor.



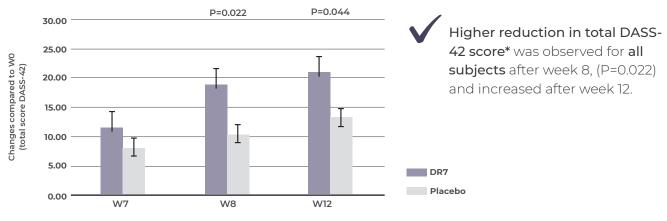
INDICATIONS

# *L.plantarum* DR7 may exert its effects along the Gut-Brain Axis through the following:

- Floradapt Brain helps to reduces stress and anxiety symptoms and promotes the enhancement of cognitive and memory functions\*
- Floradapt Brain enhances the metabolism of Serotonin and Dopamine pathways\*



#### L.plantarum DR7 helps the body to reduce symptoms of everyday stress and anxiety vs. placebo\*1



Adapted from Chong et al. 2019<sup>1</sup>

### L.plantarum DR7 helps the body to reduce cortisol and pro-inflammatory cytokines vs. placebo\*

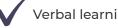
Supports the body in reducing plasma cortisol levels in all subjects after 12 weeks (P<0.05)\*

Helps the body in increasing IL-10 cytokines (P<0.01) and IL-4 (P<0.05) and decreasing (pro-inflammatory) cytokines IFN-q (P<0.001) and TNF-a (P<0.05).\*

### L.plantarum DR7 works with the body to Improve several cognitive and memory functions vs. placebo\*



Social emotional cognition (P=0.001)



Verbal learning and memory (P<0.05)



Results of a double-blind, randomised and placebo-controlled study N=111 (n=56 DR7; n=55 placebo).<sup>1</sup>

\*DASS (Depression, Anxiety and Stress scales) is a validated guestionnaire widely used to determine stress and anxiety levels, with 42 self-reporting items that reflect negative emotional symptoms.<sup>5</sup>

## An imbalance in everyday stress keeps us from achieving optimal physical and mental health <sup>6,7</sup>

Exposure to stress plays an important role in physical and mental health<sup>8</sup>



It can affect **cognitive function** in the shortterm, in decreased concentration, which leads to a **reduced ability to process information**, even over the long-term.<sup>8</sup>



In addition, continuous stress can lead to anxiety and sub-optimal mental health.<sup>9</sup>

Stress exposure

## Everyday stress is manifested in a variety of ways:

Sleepless nights, exhaustion, excessive worry, overwhelming feelings, lack of focus, reduced ability to pay attention, and irritability; even physical symptoms such as fatigue, accelerated heart rate, muscle tension, and headaches.



A reduction in everyday stress can increase overall quality of life.

#### AT WORK



To cope better with pressure and demands of the workplace<sup>10</sup>





To meet family obligations, or perform a caretaker role more effectively

IN YOUNG PEOPLE



To manage anxiety from school/university, social life, relationship with parents and their expectations, or life changes<sup>11</sup>

#### IN AGING POPULATIONS



To reduce psychological stress, an important risk factor related to a broad range of aging-related health outcomes<sup>8</sup>

Floradapt<sup>™</sup> Brain (L.plantarum DR7) is a non-GMO probiotic strain that helps to reduces everyday stress & anxiety symptoms, and promotes the enhancement of cognitive and memory functions\*<sup>1</sup>





#### References

1. Chong HX, Yusoff NAA, Hor YY, et al. Lactobacillus plantarum DR7 alleviated stress and anxiety while improving memory and cognition in stressed adults via the serotonin and dopamine pathways: A randomised, double-blind, placebo-concolled study. Beneficial Microbes. 2018. 2. Davis I, Liu A. What is the tryptophan kynurenine pathway and why is it important to neurotherapeutics? Expert Rev Neurother. 2015;17(7):79-21.3. Daubner SC, Le T, Wang S. Tyrosine hydroxylase and regulation of dopamine synthesis. Arch Biochem Biophys. 2011;508(1):1-12. 4. Baixauli E. Happiness: Role of Dopamine and Serotonin on Mood and Negative Emotions. Emerg Med (Los Angel) 2017;7(2):1-3. 5. Lovibond SH, Lovibond PF, editors. Manual for the depression anxiety stress cales. 2nd ed. Sydney: Psychology Foundation1995. 6. Anxiety and Depression Assotiation of America (ADAA). Understanding-anxiety/related-illnesses/stress. 7. McEwen BS. Neurobiological and Systemic Effects of Chronic Stress (Thousand Oaks). 2017;1. 8. Scott SB, Graham-Engeland JE, Engeland CG, et al. The Effects of Stress on Cognitive Aging, Physiology and Emotion (ESCAPE) Project. BMC Psychiatry. 2015;15:46. 9. World Health Organization. Depression and Other Common Mental Disorders. Available at https://appswho.int/firis/bitstream/handle/10665/254610/WHO-MSD-MER-2017.2. 11. American Psychological Association. Stress in America. 10. Michie S. Causes and management of stress at work. Occup Environ Med. 2002;59(1):67-72. 11. American Psychological Association. Stress in America. Identfying signs of stress in your children and teens. Available at https://www.apa.org/images/signs-stress\_tress\_trm7-87102.pdf.

Learn more about our probiotics with exclusive mechanisms of action for:







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IMMUNE HEALTH