THE IMPORTANCE OF THE MICROBIOTA IN MOOD

INTRODUCTION

One out of five people will suffer from a mood disorder in their lifetime
Increasing significantly in the case of people with pathologies

OBJECTIVES

To review if there is scientific evidence of the relationship between the state of a person's intestinal microbiota and his mood.
- **To determine the composition and functioning of a healthy intestinal microbiota**
- **To know how certain factors influence the microbiota**
- **To explain the functioning of the gut-brain axis**
- **To define the state of well-being and the importance of serotonin**

WHAT IS MICROBIOTE?

Ecosystem composed of: fungi, viruses, protozoa and, above all, bacteria, which maintain a permanent dialogue with the fundamental systems of the human body

Each person has a unique composition.
Healthy microbiota consists of: *Bacteroides* and *Firmicutes* in 90%,
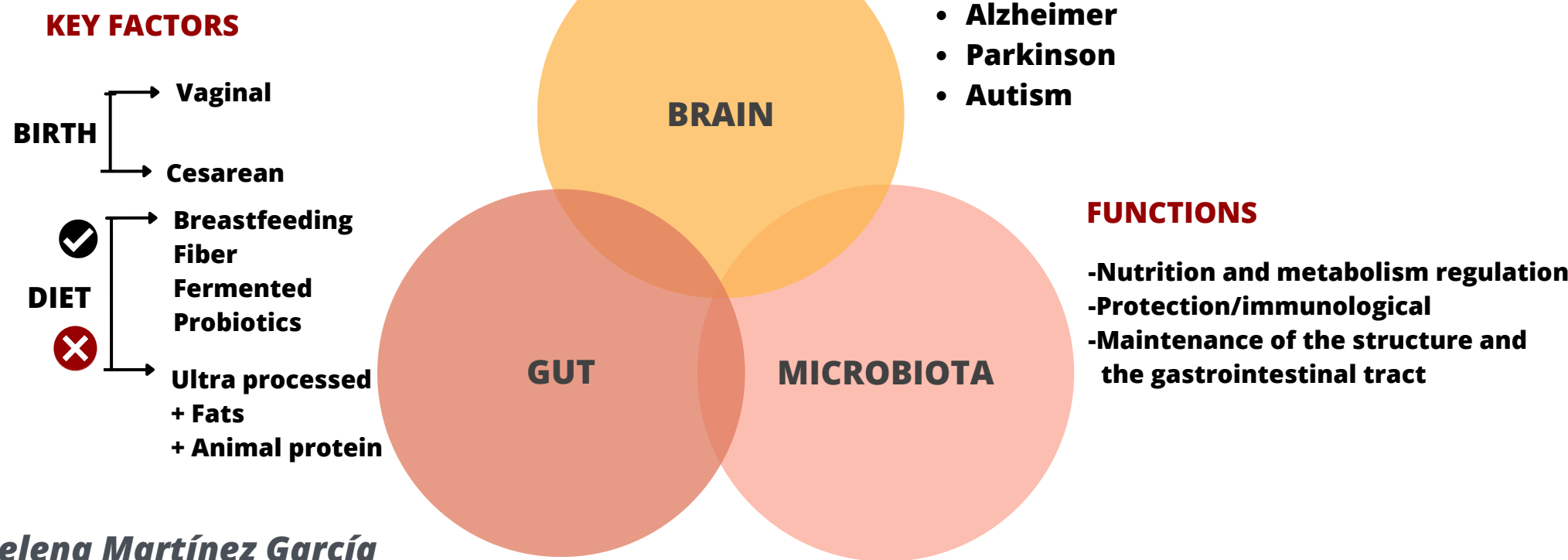and *Actinobacteria, Verrucomicrobia* and *Fusobacteria*

KEY FACTORS

BIRTH
- Vaginal
- Cesarean

DIET
✔
- Breastfeeding
- Fiber
- Fermented
- Probiotics

✘
- Ultra processed
- + Fats
- + Animal protein

BRAIN
- **Alzheimer**
- **Parkinson**
- **Autism**

GUT

MICROBIOTA

FUNCTIONS

-Nutrition and metabolism regulation
-Protection/immunological
-Maintenance of the structure and
 the gastrointestinal tract

- **Serotonin,**
- **Dopamine,**
- **Gamma-aminobutyric acid (GABA).**

Table 1. Compilation of studies that show a relationship between mood and microbiota

REFERENCES	RELATION MICROBIOTA - MOOD
Sáez & Fundació Alícia, 2022	Lactic ferments- brain regions emotions
Sánchez-Villegas et al., 2012	Food type and depression
Valles-Colomer et al., 2019	Depression and dysbiosis (*Coprococcus & Dialister*)
Dinan & Cryan, 2013; McMaster University, 2011	Depression and anxiety - microbiota composition
Mazier et al., 2021	*Christensenella minuta as a treatment for depression and anxiety*

CONCLUSIONS

✓ The intestinal microbiota plays a **fundamental role** in our lives
✓ Relationship with neurodegenerative diseases
✓ Existence of a **connection** between mood and the state of the microbiota
✓ Probiotics as a strategy for treatment and/or prevention in many pathologies

BIBLIOGRAPHY

Dinan TG & Cryan JF (2013). Neurogastroenterol Motil 25(9), 713.
Mazier W, et al. (2021). Cells (Basel, Switzerland) 10(4), 823.
McMaster University (2011). Science Daily.
Sáez C & Fundación Alícia (2022). Barcelona: Timun Mas.
Sánchez-Villegas A, et al. (2012). Public Health Nutrition, 15(3), 424.
Valles-Colomer M, et al. (2019). Nature Microbiology, 4(4), 623.

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