WHAT IS THE IRRITABLE **BOWEL SYNDROME (IBS)?**



and how is it related to my microbiota?

Refer to chronic digestive symptoms which cannot be explained

Irritable bowel syndrome (IBS) is a **functional bowel disorder**

by any organic, morphological or biological malformation.

At least 1 day per week

Frequency and/or shape of stools.

characterized by recurrent abdominal pain and transit disorders. It is often accompanied by psychiatric **comorbidities** and could be related to an **unbalanced gut microbiota**.

Like stress and/or anxiety. A change in the composition and functions of the microorganisms that live in the gut.

in the last 3 months.



1 A very common, chronic & unpredictable

gastrointestinal disorder...



IBS is one of the main cause of consultation



of the average worldwide population is affected by IBS



patients are women Different causes can lead to the onset of IBS...



gastroenteritis, food poisoning, traveler's diarrhea...







3 What are the mechanics of this dysfunction, linked to the microbiota?

Fact #1 Microbiota is involved in the bidirectional communication between the gut and the brain

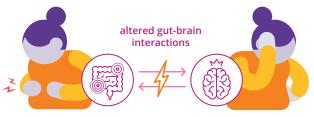


visceral sensitivity

intestinal permeablity



abnormal immune response



gut physiological alteration including abdominal pain and transit disorders

psychological effects

including stress, anxiety or depression... (via neural, hormonal and immunological signalling)

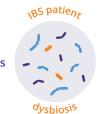
Fact #2 IBS symptoms occur in around 1 in 10 subjects after an acute infective gastroenteritis



Fact #3 Gut microbiota composition is altered in at least a subset of patients with IBS



eubiosis



Fact #4 Laboratory studies have proven that an altered gut microbiota can lead to several dysfunction:

- **☑** innate immune activation
- ✓ anxiety-like behavior



Fact #5 Symptoms could be improved through microbiota management (diet, probiotics, antibiotics...)



4 How to improve quality of life and relieve symptoms?



specific medication



prebiotics



probiotics



healthy lifestyle good hydratation, regular physical activity



healthy diet limiting the intakes of potential dietary triggers (FODMAP, lactose, gluten...)



psychotherapeutic interventions Cognitive Behavior Therapy (CBT), hypnosis, psychodynamic, relaxation... for long term psychological support



To date, no medication relieves all recurrent symptoms. Your doctor will advise you the right combination of specific medication and alternative solutions.

