

# Physiological bases of low FODMAP diets

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## Introduction

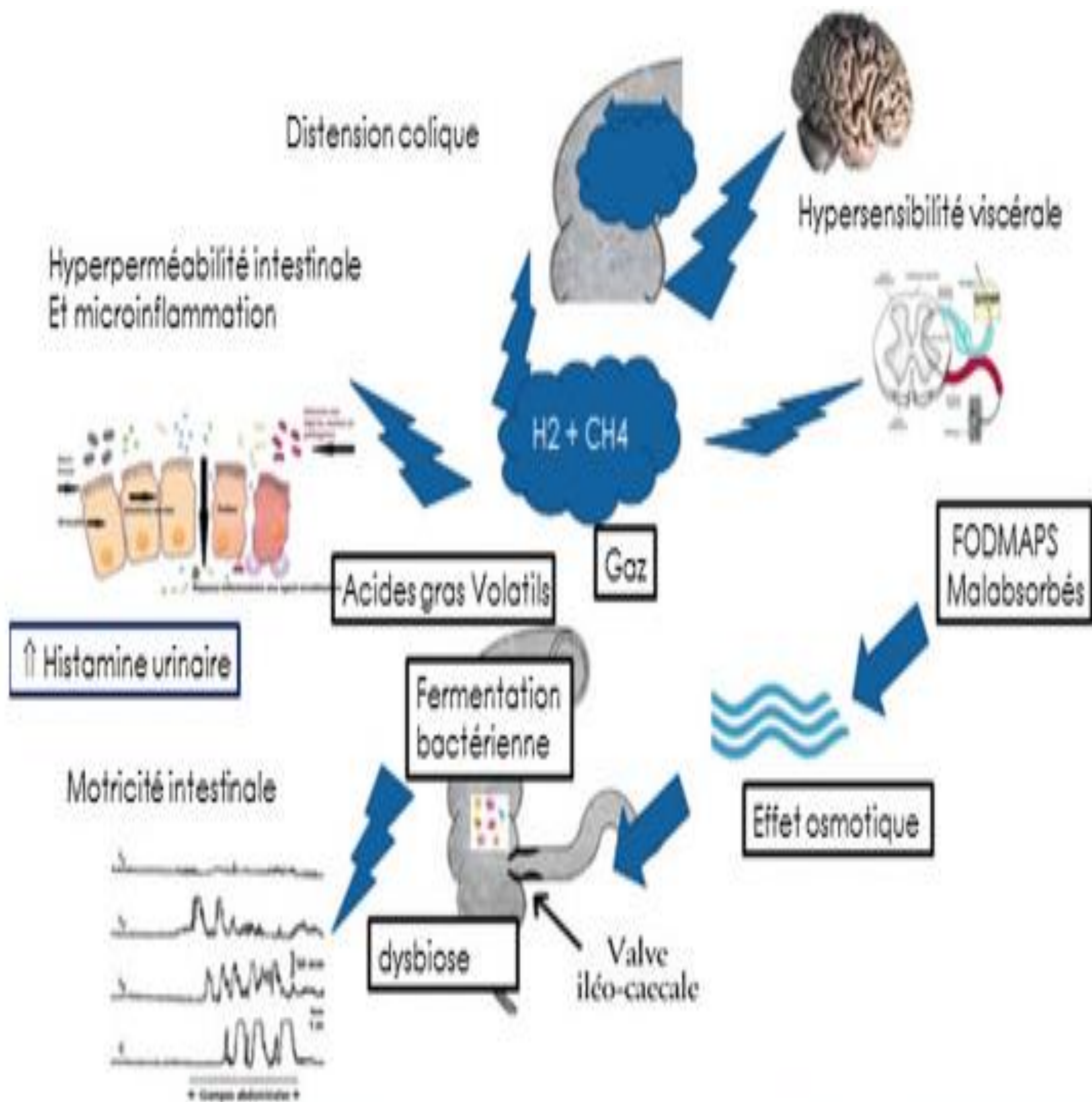
Irritable Bowel Syndrome (IBS) is considered a functional disease since its diagnosis and treatment are exclusively based on symptoms.

Many clinical studies have been published that have been able to demonstrate the efficacy of low FODMAP.

Low FODMAP refers to fermentable carbohydrates that have difficulty being digested and absorbed and, therefore, induce digestive disorders, such as diarrhea, bloating and/or abdominal pain.

## Objectives

- To identify and investigate the physiological bases of low FODMAP diets and their use as a treatment for IBS
- To make some recommendations for functional foods low in FODMAP

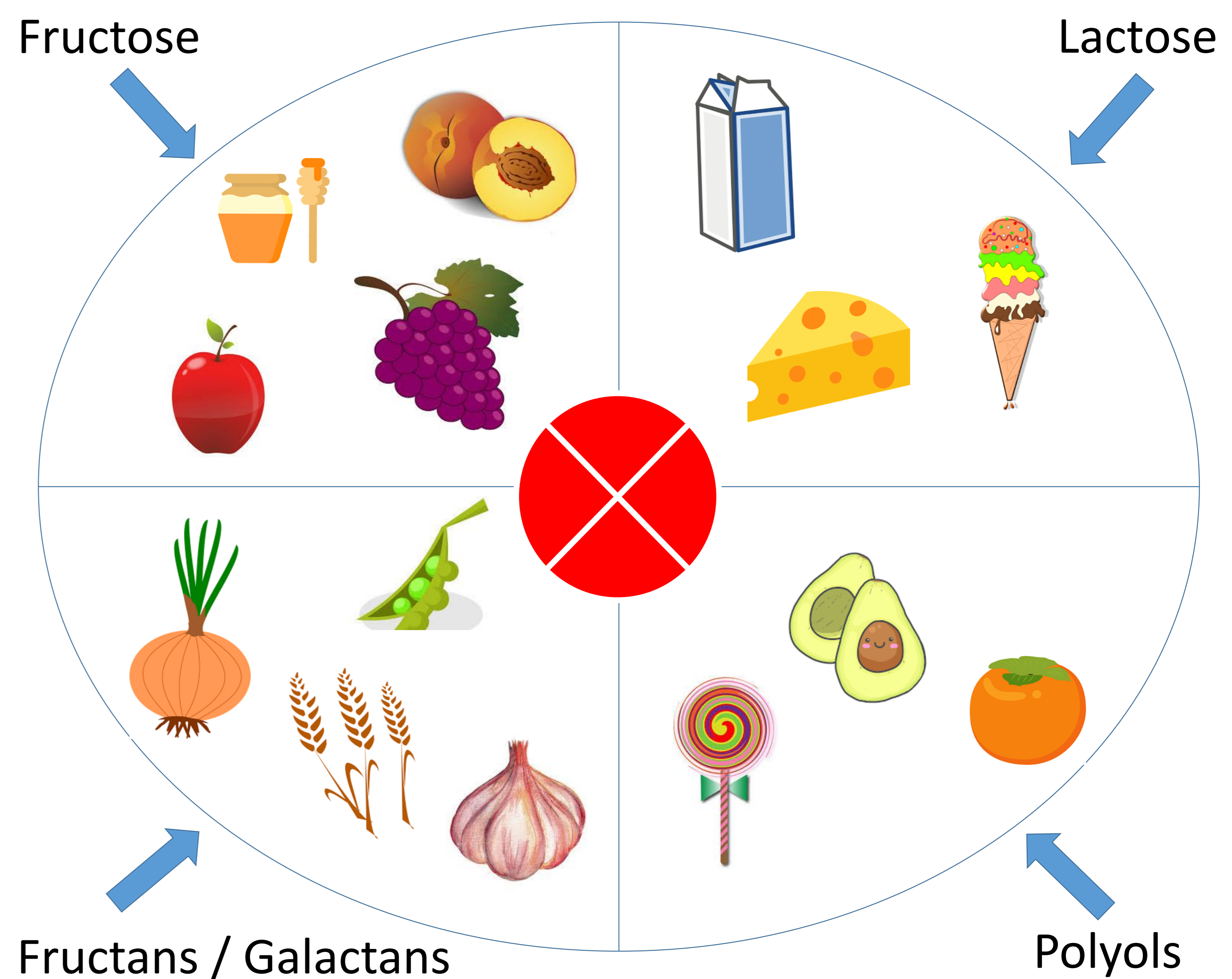


**Figure 1.** Main pathophysiological mechanisms of FODMAP malabsorption

## Conclusions

- It has been possible to demonstrate in some clinical studies the efficacy of a diet low in FODMAP in patients with IBS. But, it has not been possible to verify yet in which type or category of IBS is more effective.
- This syndrome is still a functional disease, so its diagnosis is, at the moment, difficult to verify and identify by professionals.
- Actually, there is no clear and efficient treatment to alleviate and/or cure IBS and the harmful effects of the diets are being studied. Further studies are needed for children.
- As soon as IBS can be more accurately diagnosed, a proper low FODMAP diet will be able to help patients improve their quality of life.

Type of study	Conclusion
A prospective study on low FODMAP diets (1)	→The low FODMAP diet shows efficacy for IBS patients.
Low FODMAP diets vs standard IBS diets (2)	→A diet low in FODMAP appears to be more effective than the UK National Institute of Health and Clinical Excellence (NICE) guidelines for controlling IBS symptoms.
Comparison of the effects of a low FODMAP diet with traditional dietary advice in a randomized controlled trial (3)	→Both a low FODMAP diet and traditional dietary advice have reduced IBS symptoms.
Randomized clinical trial: low FODMAP rye bread vs regular rye bread to relieve IBS symptoms (4)	→Low FODMAP rye bread helps IBS patients control their symptoms and reduce gas accumulation and increase fiber intake, however, it is important to accompany it with a more restricted die



**Figure 2.** Foods containing FODMAPs

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