

How to define functional dyspepsia?

The two subtypes of functional dyspepsia

What do we know about the pathophysiology?

How to make a confident diagnosis?

What are the warning signs to be excluded?

Which investigations are needed?

What are the general management concepts?

When to schedule follow-up care?

References

HOW TO DEFINE FUNCTIONAL DYSPEPSIA?

A chronic disorder defined by **abdominal** symptoms originating from the upper gastrointestinal (GI) region

A disorder of gut-brain interaction (DGBI) (1)







4 MAIN SYMPTOMS (2)







I feel like I have a stone in my stomach.





the absence of structural disease on routine investigations (endoscopy)



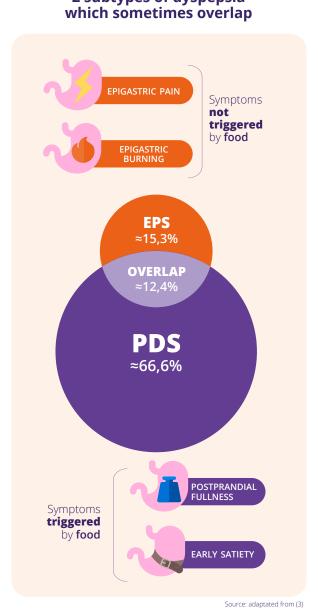
- Prevalence of 7% of adults (3) depending on the geographical region and the criteria used for assessment (4
- · Very common overlap with gastroparesis, reflux, Irritable Bowel Syndrome, and bloating symptoms

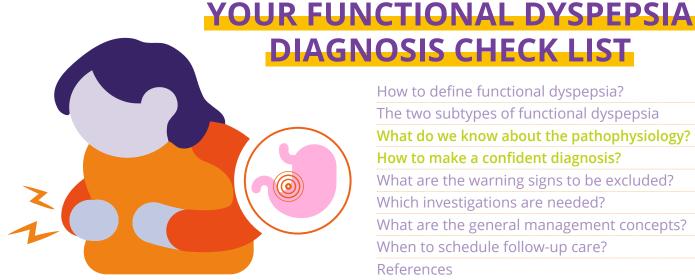
LIST OF SYNONYMOUS DISORDER NAMES: Indigestion, gastritis, non-ulcer dyspepsia

THE TWO SUBTYPES OF FUNCTIONAL DYSPEPSIA

- Epigastric Pain Syndrome (EPS),
- Postprandial Distress Syndrome (PDS) → the most common form

2 subtypes of dyspepsia





How to define functional dyspepsia?

The two subtypes of functional dyspepsia

What do we know about the pathophysiology?

How to make a confident diagnosis?

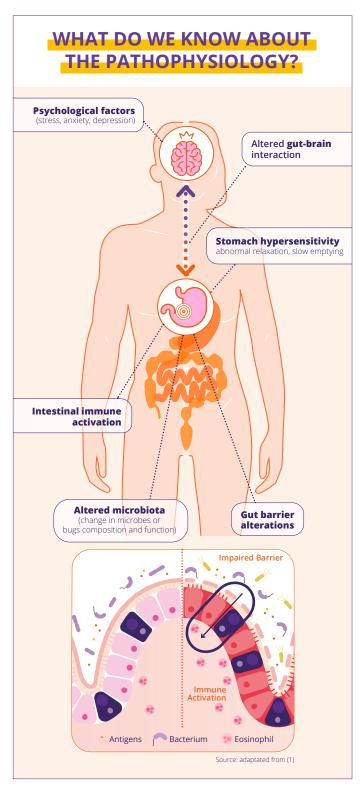
What are the warning signs to be excluded?

Which investigations are needed?

What are the general management concepts?

When to schedule follow-up care?

References



HOW TO MAKE A CONFIDENT DIAGNOSIS? The diagnosis is based on symptoms according to Rome criteria⁽²⁾: **Ouestion to ask** When do the symptoms start? ✓ Presence of at least one symptom severe enough to impact usual activities → in the last past 3 months and at least for 6 months

PDS at least 3 days at least once per week per week



EPS

Postprandial fullness

prior to diagnosis



Epigastric pain



Epigastric burning

dand no evidence of structural disease (including on upper endoscopy) that is likely to explain the symptoms.

RISK FACTORS (3)

- ☑ *Helicobacter pylori* infection
- **☑** Being female
- ☑ Using certain pain relievers such as aspirin and ibuprofen
- ✓ Smoking
- ☑ Anxiety or depression
- ☑ History of childhood physical or sexual abuse



YOUR FUNCTIONAL DYSPEPSIA DIAGNOSIS CHECK LIST



How to define functional dyspepsia?

The two subtypes of functional dyspepsia

What do we know about the pathophysiology?

How to make a confident diagnosis?

What are the warning signs to be excluded? Which investigations are needed?

What are the general management concepts? When to schedule follow-up care?

References

WHAT ARE THE WARNING SIGNS TO BE EXCLUDED?

Check list of red flags to be investigated to confirm the diagnosis

ALARM SYMPTOMS (5)

- ✓ Age > 55 years* with new-onset dyspepsia
- ✓ Evidence of overt gastrointestinal bleeding including melena or haematemesis
- Dysphagia, especially if progressive, or odynophagia
- Persistent vomiting
- Unintentional weight loss
- Family history of gastric or oesophageal cancer
- Palpable abdominal or epigastric mass or abnormal adenopathy
- ✓ Evidence of iron-deficiency anaemia after blood testing

*In regions with a high background prevalence rate of gastric cancer, such as Southeast Asia, a lower age threshold should be considered.

IN CASE OF A YES ADDITIONAL EVALUATION SHOULD BE CONSIDERED

REFER TO
GASTROENTEROLOGIST
FOR REVIEW



WHAT INVESTIGATIONS ARE NEEDED

RECOMMENDED AS ROUTINE TESTS



- *H. pylori* test is recommended as the first one to be carried out: *stool antigen, urea breath test*
- Evaluation of the lower GI symptoms as IBS frequently overlaps with FD; in that case essential to assess for celiac disease
- Assessment of the drug history (particularly about opioids and cannabis) + NSAIDs

CONSIDERIN SPECIFIC CASE

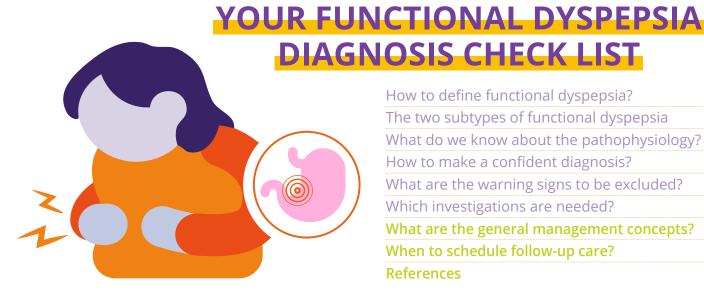


- Endoscopy for patients with recent onset symptoms and weight loss, and more than 55 years old; biopsy should be done if H. pylori status is unknown at endoscopy
- Gastric emptying (preferable scintigraphy) in case of nausea/vomiting

NOT USEFUL AS ROUTINE TEST

X

Blood testing



How to define functional dyspepsia?

The two subtypes of functional dyspepsia

What do we know about the pathophysiology?

How to make a confident diagnosis?

What are the warning signs to be excluded?

Which investigations are needed?

What are the general management concepts?

When to schedule follow-up care?

References

WHAT ARE THE GENERAL MANAGEMENT CONCEPTS





Healthy diet Limiting the intakes of potential dietary triggers (caffeine, spicy food...)

Regular physical activity



z^{ZZ} Regular sleep

Probiotics



If failure

DRUG-BASED TREATMENT

Acid suppression

PPIs or H2RA

Prokinetics

D2-antagonist, 5HT4/motilin-agonists





Consider referral for a Gastroenterologist If failure

3 NEUROMODULATORS

Tricyclic antidepressant

If failure

Cognitive behaviour therapy, hypnotherapy, stress management



Sources: (3), (6), (7)

WHEN TO SCHEDULE **FOLLOW-UP CARE?**



Follow-up approach depends on response to treatment (many non-responders)

2-3 months

is a good interval for follow-up, with increasing intervals in case of treatment response

Depending on the patient's initiative

REFERENCES

- 1. Vanuytsel T, Bercik P, Boeckxstaens G. Understanding neuroimmune interactions in disorders of gut-brain interaction: from functional to immune-mediated disorders. Gut. 2023. 72:787-798.
- 2. Rome Foundation: Rome IV Criteria. Accessed on 27/02/2024, available at: https://theromefoundation.org/rome-iv/rome-iv-criteria
- 3. Black CJ, Paine PA, Agrawal A et al. British Society of Gastroenterology guidelines on the management of functional dyspepsia. Gut. 2022 Sep;71(9):1697-1723.
- 4. Lee K, Kwong C, Yeniova AO, et al. Global prevalence of Functional Dyspepsia according to Rome criteria, 1990–2020: a systematic review and meta-analysis. Scientific Reports 2024; 14:4172.
- 5. Talley NJ, Ford AC. Functional Dyspepsia. N Engl J Med. 2015;373:1853-
- 6. Wauters L, Dickman R, Drug V, et al. United European Gastroenterology (UEG) and European Society for Neurogastroenterology and Motility (ESNM) consensus on functional dyspepsia. United European Gastroenterol J. 2021 Apr;9(3):307-331.
- 7. Corsetti M, Fox M. The management of functional dyspepsia in clinical practice: what lessons can be learnt from recent literature? F1000Research. 2017, 6(F1000 Faculty Rev):1778 Last updated

This document was created in collaboration with

Maura Corsetti, Associate-Professor of Gastroenterology at the University of Nottingham, UK

Nicholas Talley, Distinguished Laureate Professor, distinguished neurogastroenterologist, clinician and educator at the University of Newcastle, Australia

Lucas Wauters, Assistant-Professor of Gastroenterology,







What to tell the patient?

What is a DGBI?

The stomach and bowel talk to the brain, and the brain talks to the gut.

A disorder of gut-brain interaction (DGBI) means the signalling is disturbed leading to symptoms. One common example of a DGBI is functional dyspepsia (FD).

In FD the brain receives too many signals from the stomach which are normally filtered.

What to say about functional dyspepsia?

Recurrent fullness (often called bloating), epigastric pain or burning and difficulty finishing a normal meal (early satiation), characterize this symptom-based disorder named FD.

FD is a disorder of gut-brain interaction, the two organs don't communicate with each other properly

FD is a symptom-based disorder with no tissue damage.

Gastrointestinal symptoms do not come alone, FD is often accompanied by higher levels of psychological upset such as anxiety, stress and depression.

What is microbiota?

The microbial communities that live inside the gut are called microbiota.

An unbalanced duodenal microbiota or dysbiosis, is a change in the composition and functions of the microorganisms that live in the gut.

Food, bacteria, or substances found in the gut can sometimes cause the gut to malfunction and trigger symptoms.

What is the management of FD?

FD is a chronic disorder where symptoms can be managed through lifestyle changes, dietary therapy, medications and psychological therapies.

We will meet every 2-3 months to follow up the effectiveness of the treatment/strategy

Most frequently asked questions

Can I be cured? s it chronic/forever?

FD can be treated but not cured. Recovery by itself is possible

Am I likely to develop

FD is not putting the patient at risk in developing any cancers

What causes FD?

FD is multifactorial disorder caused by altered gut sensitivity, motility, microbiota and communication between the gut and the brain

Can diet help reduce symptoms?

Diet is relevant and constitutes a strong ally

Does drinking water help dyspepsia?

Water does not improve FD

Can I die from FD?

FD does not increase the risk of death







