



GÖTEBORGS
UNIVERSITET

Fullkorn och funktionella magtarmbesvär

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Innehåll

- Är intag av fullkorn besvärligt, och varför?
- Vad säger rekommendationerna?
- Vad förmedlar vi till patienterna?

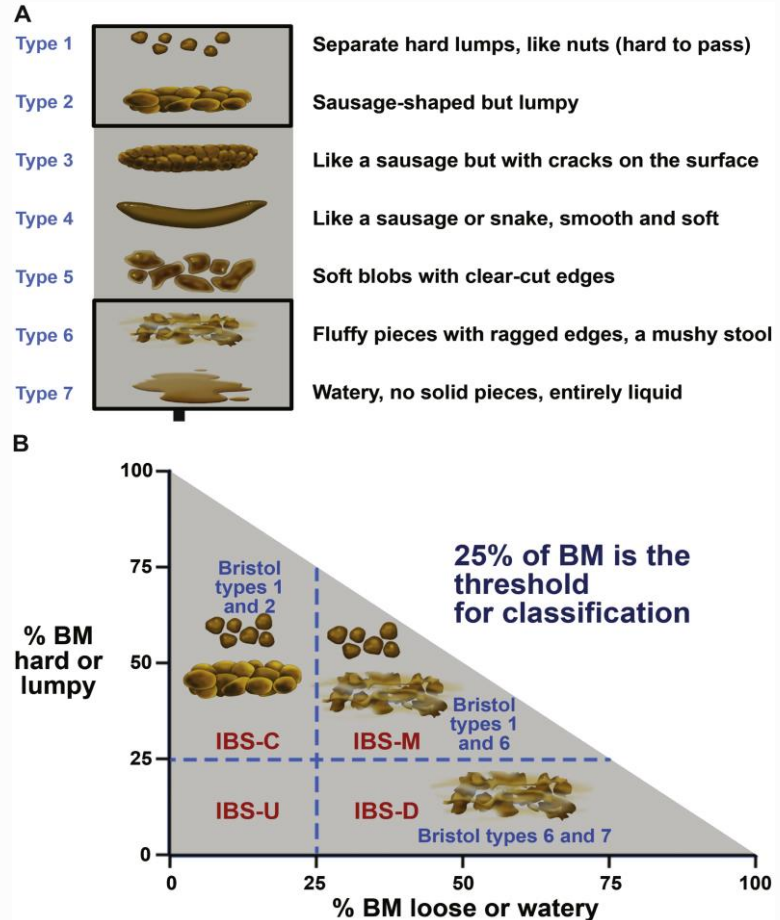


Först, lite perspektiv

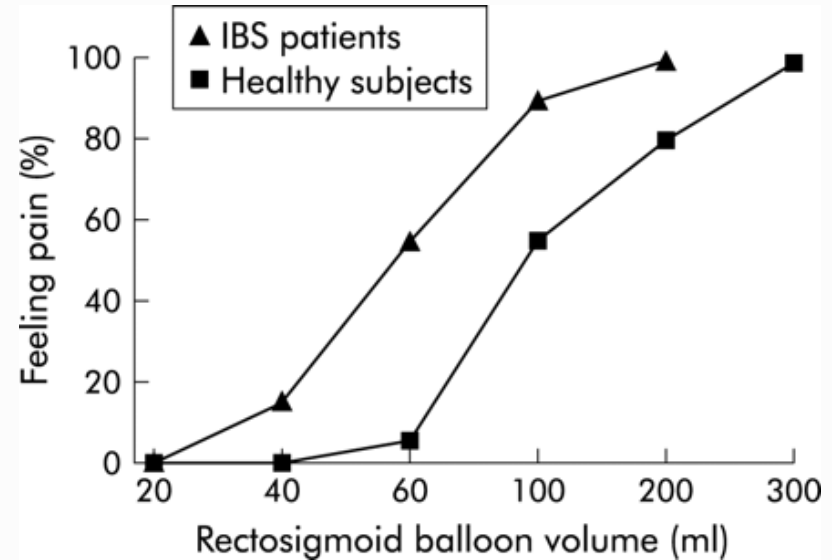
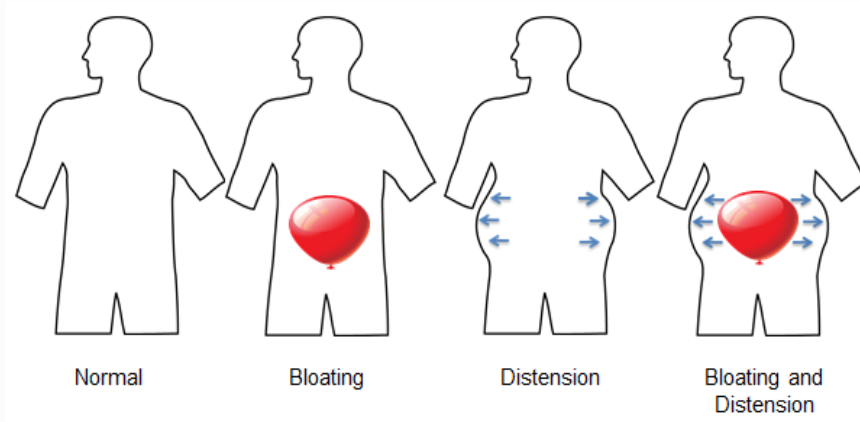
- 10 350 000 invånare
- 4.1% prevalens ger 424 350 individer med IBS

Först, lite perspektiv

- 10 350 000 invånare
- 4.1% prevalens ger 424 350 individer med IBS
- Subtyp: IBS med förstoppning, diarré, en blandning av förstoppning och diarré eller ospecifik IBS

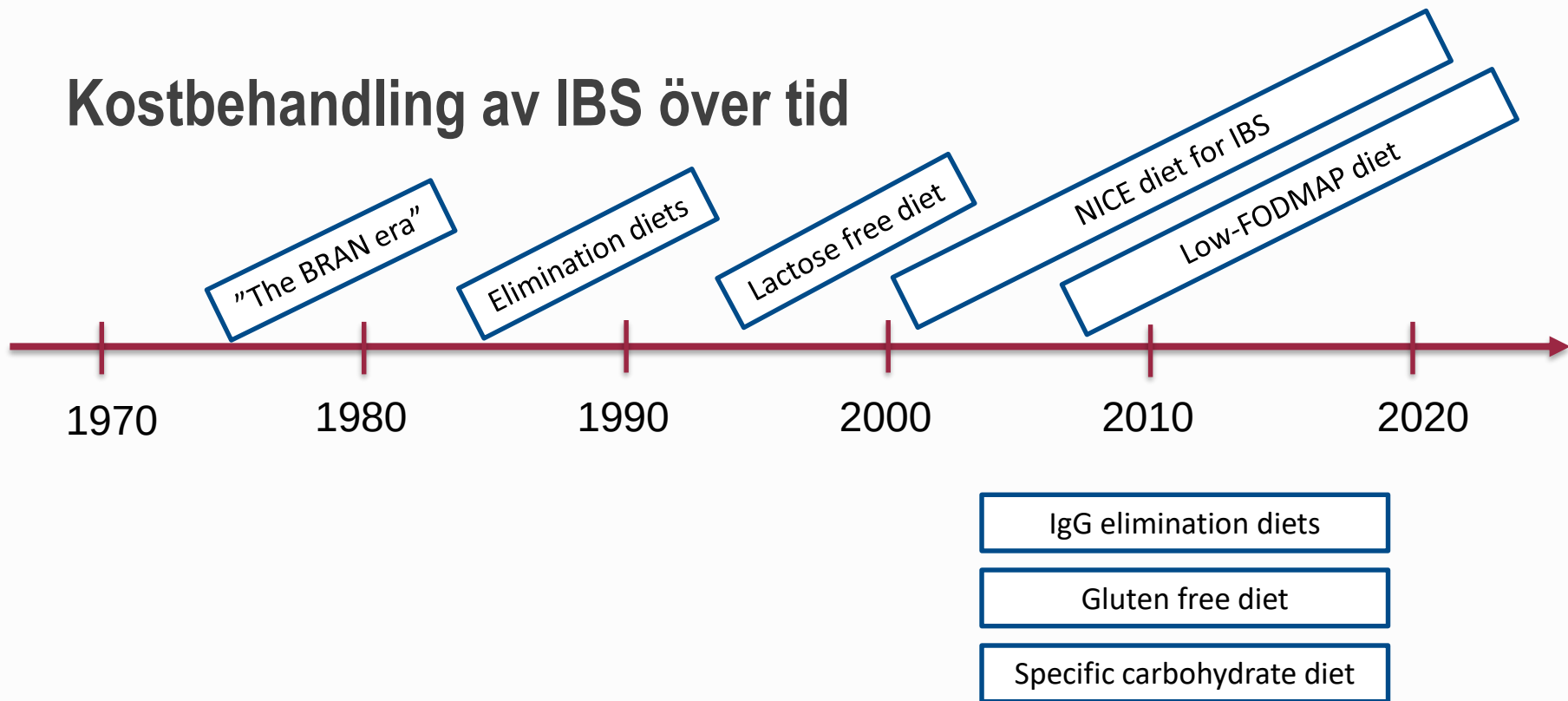


IBS karaktäriseras av ökad smärtkänslighet i tarmen

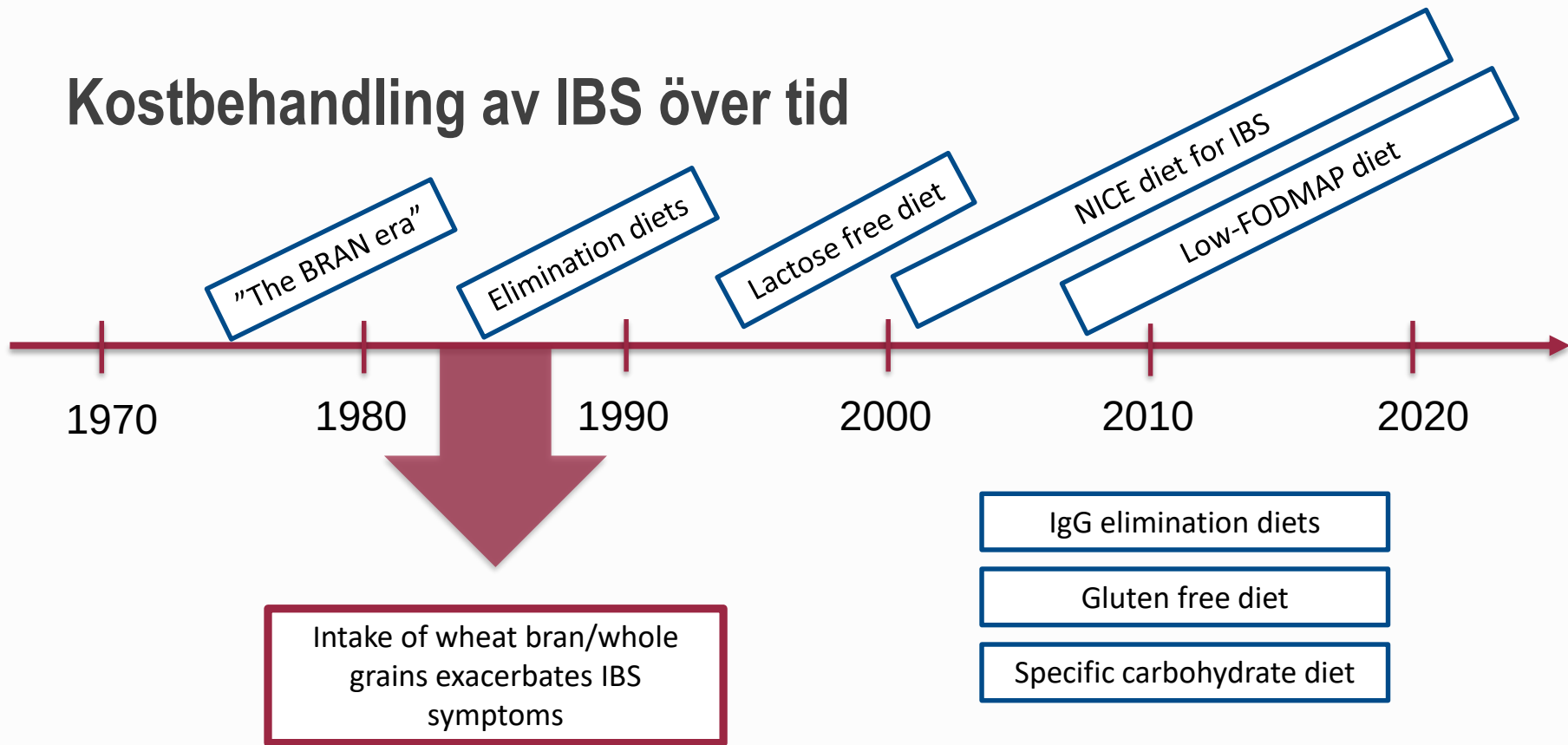


Mertz, H. Role of the brain and sensory pathways in gastrointestinal sensory disorders in humans. Gut: 2002

Kostbehandling av IBS över tid



Kostbehandling av IBS över tid



1.2.1.4 Diet and nutrition should be assessed for people with IBS and the following general advice given.

- Have regular meals and take time to eat.
- Avoid missing meals or leaving long gaps between eating.
- Drink at least 8 cups of fluid per day, especially water or other non-caffeinated drinks, for example herbal teas.
- Restrict tea and coffee to 3 cups per day.
- Reduce intake of alcohol and fizzy drinks.
- It may be helpful to limit intake of high-fibre food (such as wholemeal or high-fibre flour and breads, cereals high in bran, and whole grains such as brown rice).
- Reduce intake of 'resistant starch' (starch that resists digestion in the small intestine and reaches the colon intact), which is often found in processed or re-cooked foods.
- Limit fresh fruit to 3 portions per day (a portion should be approximately 80 g).
- People with diarrhoea should avoid sorbitol, an artificial sweetener found in sugar-free sweets (including chewing gum) and drinks, and in some diabetic and slimming products.
- People with wind and bloating may find it helpful to eat oats (such as oat-based breakfast cereal or porridge) and linseeds (up to 1 tablespoon per day). [2008]

Table 3 Clinical practice recommendations

Recommendation	PEN Grade ⁽¹⁴⁾	
1 Healthy eating & lifestyle		
Alcohol	Assess intake and screen for signs of binge drinking. Ensure alcohol intake is in keeping with safe national limits (2016)	C
Caffeine	Insufficient evidence to make a recommendation (2016)	D
Spicy food	If related to symptoms assess spicy food intake and trial restriction (2016)	C
Fat	If related to symptoms during or after eating, assess fat intake and ensure it is in line with national healthy eating guidelines (2016)	C
Fluid	No evidence to make a recommendation (2016)	
Dietary habits	Insufficient evidence to make a recommendation (2016)	D
2 Restricting milk and dairy products		
	In individuals with IBS where sensitivity to milk is suspected and a lactose hydrogen breath test is not available or appropriate, a trial period of a low lactose diet is recommended. This is particularly useful in individuals with an ethnic background with a high prevalence of primary lactase deficiency (2012)	D
	Use a low lactose diet to treat individuals with a positive lactose hydrogen breath test (2012)	D
3 Dietary fibre modification		
	Avoid using dietary supplementation of wheat bran to treat IBS. Individuals should not be advised to increase their intake of wheat bran above their usual dietary intake from (2012)	C
	For individuals with IBS-C, try dietary supplementation of linseeds of up to 2 tablespoons/day for a 3 month trial. Improvements in constipation, abdominal pain and bloating from linseed supplementation may be gradual (2016)	D
4 Fermentable carbohydrates		
	For individuals with IBS, consider a low FODMAP diet to improve abdominal pain, bloating and/or diarrhoea for a minimum of 3 ⁽⁸⁸⁾ or 4 weeks ^(87,91) . If no symptom improvement occurs within 4 weeks of strict adherence to the diet, then the intervention should be stopped and other therapeutic options considered (2016)	B
	There may be individual tolerance levels to FODMAPs. A planned and systematic reintroduction challenge of foods high in FODMAPs will identify which foods can be reintroduced to the diet and what individual tolerance levels are (2016)	D
5 Gluten		
	At this time no recommendation can be made to treat IBS symptoms with a gluten-free diet (2016)	D
6 Probiotic products to improve IBS symptoms		
	Advise that probiotics are unlikely to provide substantial benefit to IBS symptoms. However, individuals choosing to try probiotics are advised to select one product at a time and monitor the effects. They should try it for a minimum of 4 weeks at the dose recommended by the manufacturer (2016)	B
	Taking a probiotic product is considered safe in IBS (2016)	B
7 Elimination diets/ food hypersensitivity		
	Non-specific elimination diets are no longer valid to improve IBS symptoms (2016)	D

FODMAP, fermentable oligosaccharides, disaccharides, monosaccharides and polyols; IBS, irritable bowel syndrome; IBS-C, IBS – constipation-pre-dominant; PEN, Practice-based Evidence in Nutrition.

Varför kan intag av fullkorn vara problematiskt?

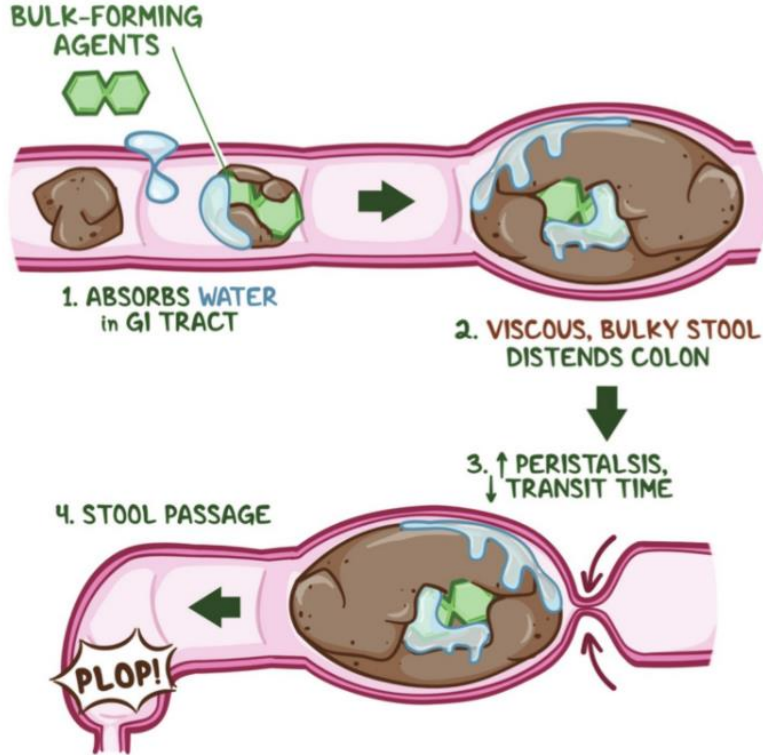


Image from Osmosis.org

Varför kan intag av fullkorn vara problematiskt?

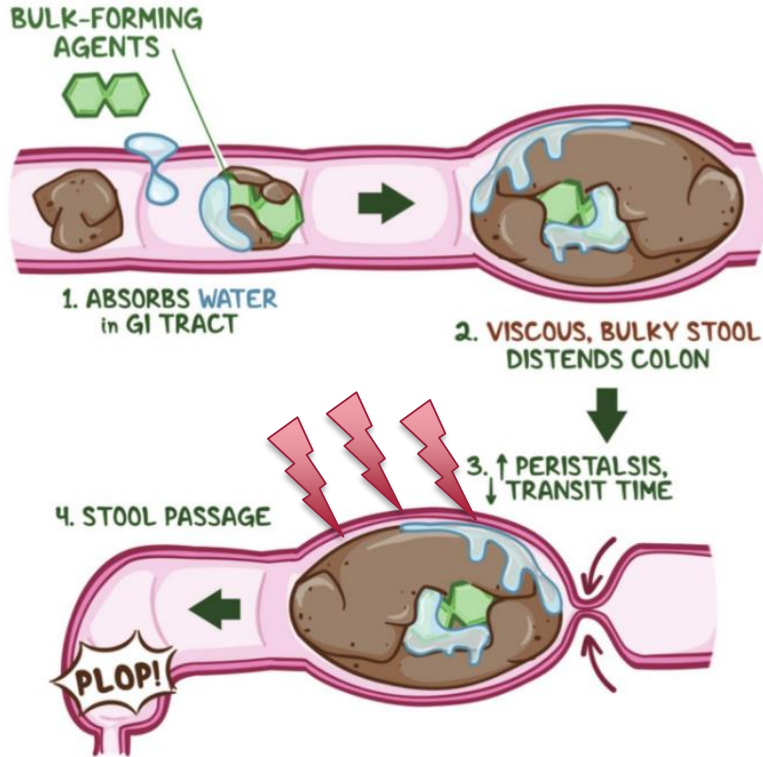
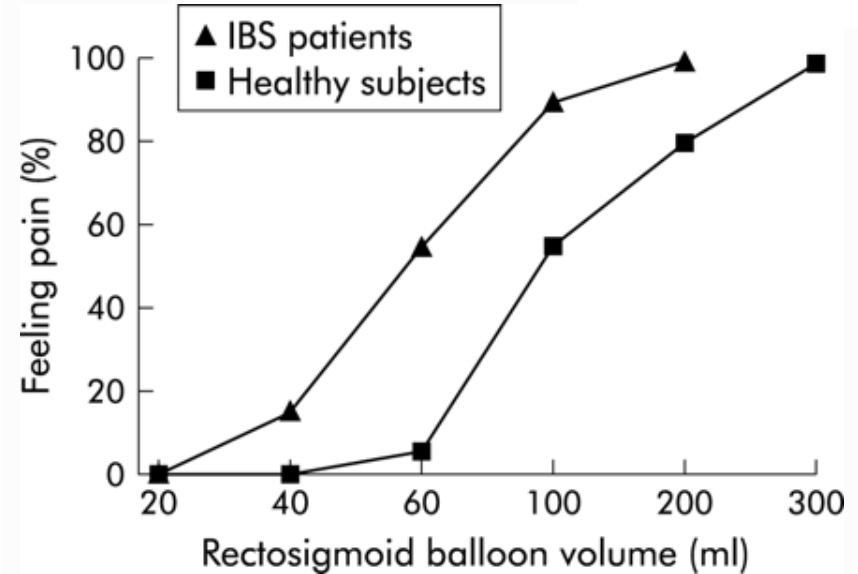


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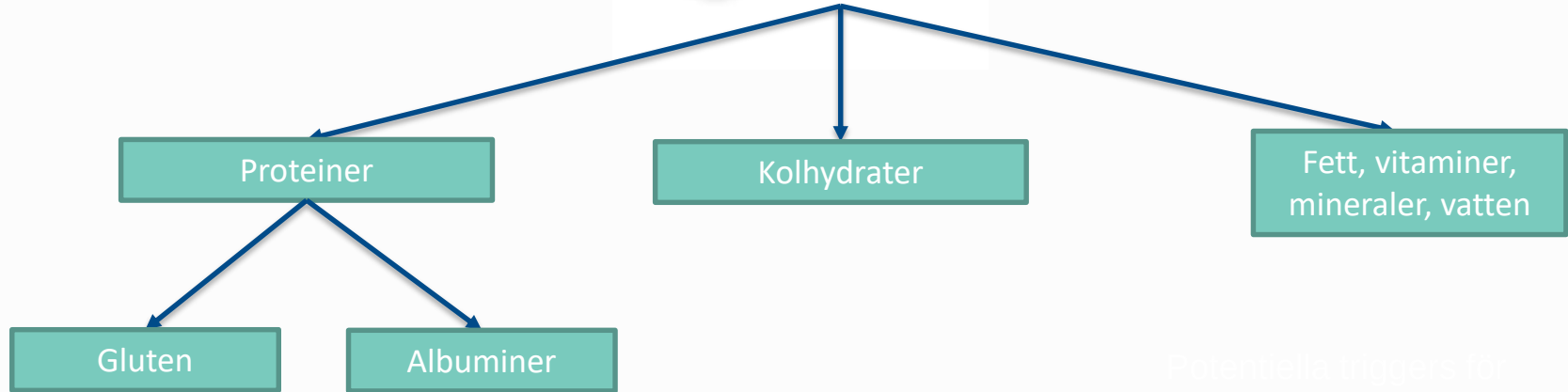
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Förväxlingsfaktorer

Översikt



Modifierad från: Algera, J. et al (2019).
The dietary management of patients with
irritable bowel syndrome: a narrative review
of the existing and emerging
evidence. *Nutrients*, 11(9), 2162.



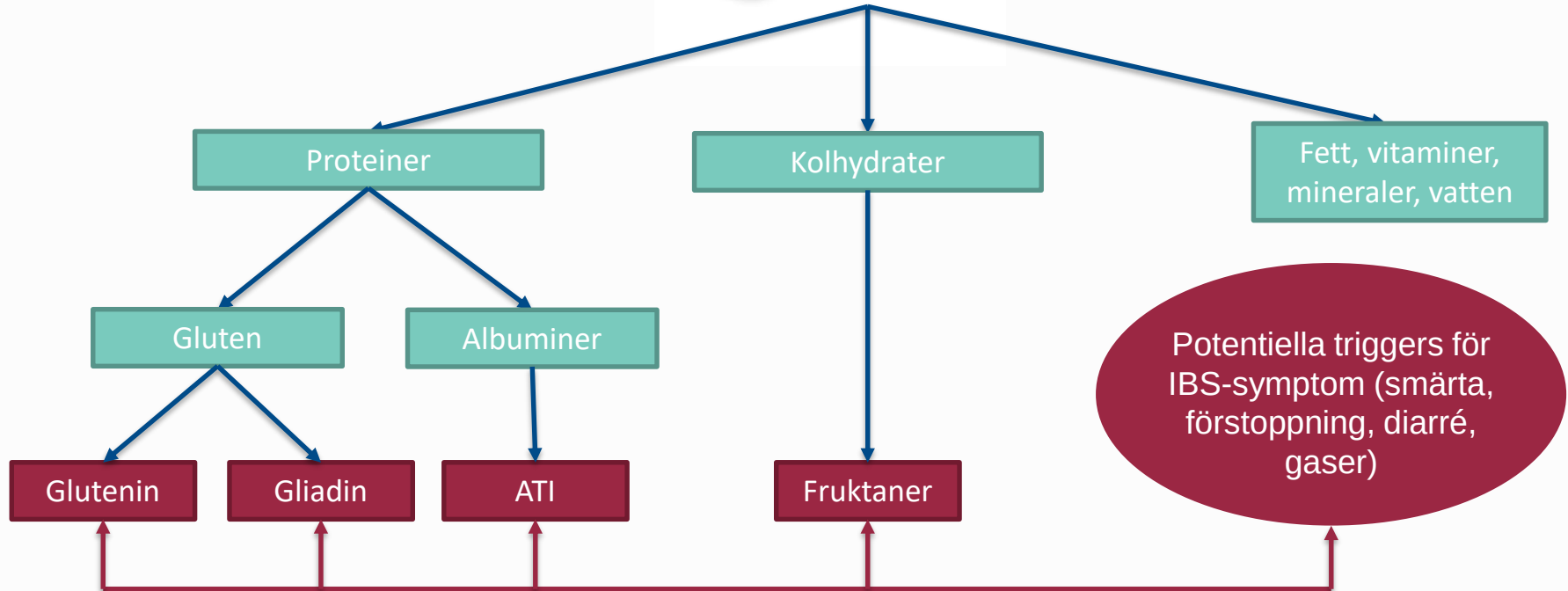
Potentiella trigger för
IBS-symptom (smärta,
förstoppning, diarré,
gasen)

Förväxlingsfaktorer

Översikt



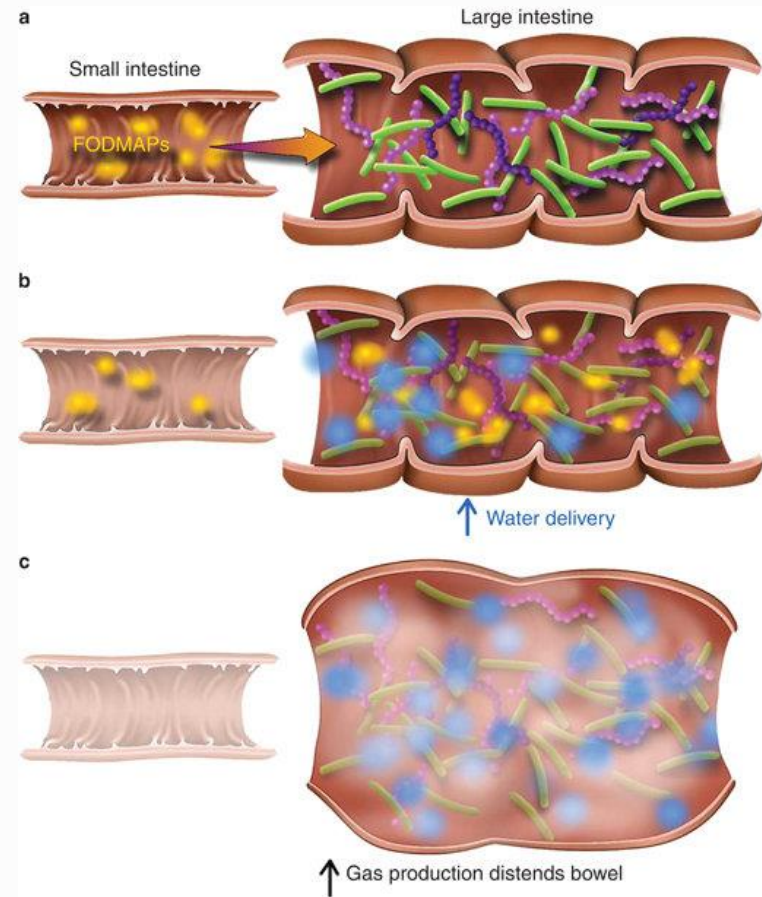
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of the existing and emerging
evidence. *Nutrients*, 11(9), 2162.



Förväxlingsfaktorer FODMAPs



Fruktaner:
fructo-oligosaccharides,
inulin



Shepherd, S et al. Short-Chain Carbohydrates and Functional Gastrointestinal Disorders, American Journal of Gastroenterology: May 2013

Förväxlingsfaktorer

Lokala allergilika reaktioner i tarmen

Table 1. Age Distribution of Patient Subgroups According to Identified Allergens

Group	Overall	CLE ⁺ (wheat)	CLE ⁺ (yeast)	CLE ⁺ (milk)	CLE ⁺ (soy)	CLE ⁺
CLE ⁺						
n	76	46	15	7	5	3
Mean age (y) ± standard deviation	42.7 ± 14.9	40.6 ± 13.9	43.4 ± 18.6	42.2 ± 9.2	46.9 ± 16.5	41.2 ± 15.8
Range (y)	20–76	20–76	22–72	27–58	21–62	25–75
% of overall	100.0	60.5	19.7	9.2	6.6	3.9
CLE ⁻						
n	32					
Mean age (y) ± standard deviation	43.8 ± 15.8					
Range	22–75					
HC						
n	14					
Mean age (y) ± SD	49.8 ± 12.8					
Range	39–78					

- Fritscher-Ravens A et al. Many Patients With Irritable Bowel Syndrome Have Atypical Food Allergies Not Associated With Immunoglobulin E, Gastroenterology (2019).
- Pickert CN Lorentz AManns MPBischoff SC. Colonoscopic allergen provocation test with rBet v 1 in patients with pollen-associated food allergy. Allergy 2012

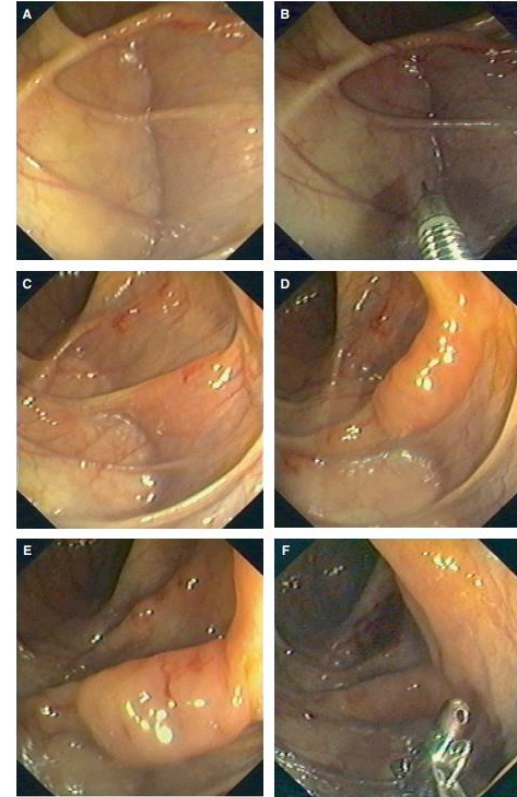


Figure 1 Colonoscopic allergen provocation test with recombinant Bet v 1. The cecal mucosa (A) was challenged with 0.2 ml of rBet v 1 dissolved in 0.9% NaCl at a concentration of 300 µg/ml using a fine needle (B). After 4 min, a weak wheal and flare reaction became

visible (C). The reaction became more prominent after 7 min (D) and maximal after 10 min (E). Approximately 15 min after allergen challenge, mucosal biopsies were taken from the reaction site for immunohistochemical analysis of the tissue (F).

Vad har du för symptom? Hur yttrar sig dina magtarmbesvär?

Problem med förstoppning

- Potentiell nytta av fiber som bidrar till bulk, men som fermenteras till låg grad (fullkorn, rotfrukter, nötter)
- Vätskeintag viktigt!
- Kan ha effekt på förstoppning men utebliven effekt på IBS-symptom (smärta, buksvullnad)



Vad har du för symptom? Hur yttrar sig dina magtarmbesvär?

Problem med smärta och buksvullnad

- Ät flera små portioner och tugga maten ordentligt
- Partikelstorlek → Knäckebröd
- Utred om besvären är kopplade till intag av fermenterbara kolhydrater



Vad har du för symptom? Hur yttrar sig dina magtarmsbesvär?

Problem med lös avföring

- Han ha fördel av att äta lösliga fibrer



Rekommendationer i praktiken

- Variera dina källor till fullkorn och utgå ifrån individuell tolerans
- Havre, råris, majs, amaranth, bovete, hirs, durra, (quinoa)
- Knäckebröd, surdegsbröd med dinkel



Dietary fibres and IBS: translating functional characteristics to clinical value in the era of personalised medicine

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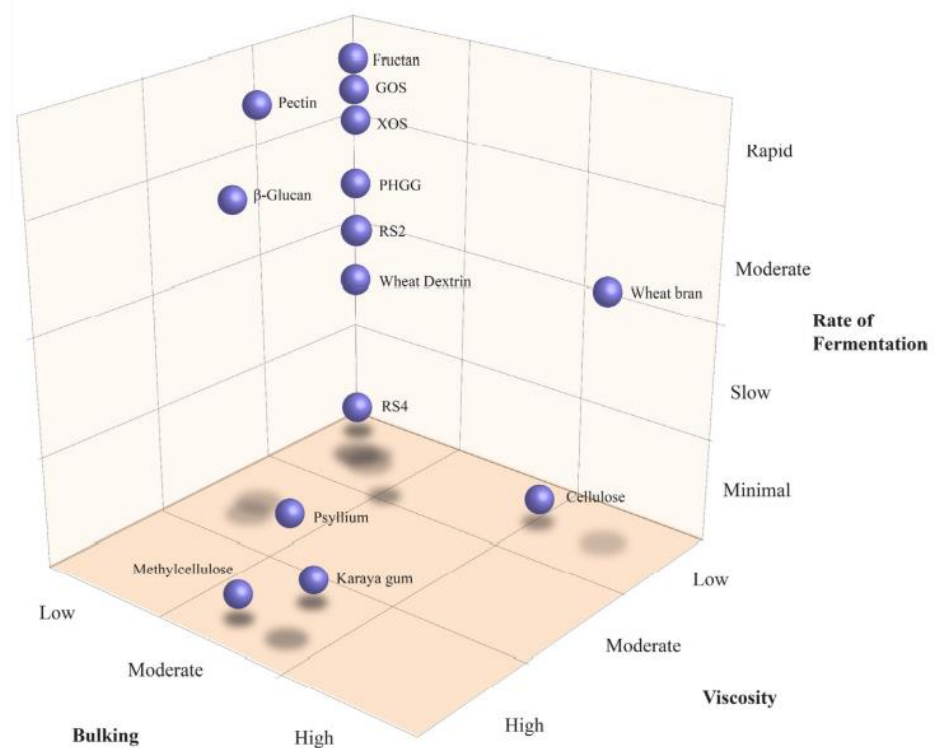


Figure 3 Overview of pure dietary fibre types (and wheat bran) and their overlapping functional characteristics. Some such as xylo-oligosaccharides (XOS), wheat bran, resistant starches (RS) have variable rates of fermentation and/or have subcomponents with different fermentability. GOS, galacto-oligosaccharides; PHGG, partially hydrolysed guar gum.



Tack!