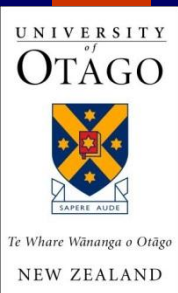


Referral and Management of Gut Problems

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Gastroenterology and Endoscopy Specialists



Gastrointestinal symptoms are...

- Common
- Limited
- Under-reported
- Usually benign
- Sometimes serious
- Investigated invasively

GI symptoms in the community

- Upper GI symptoms

- Dyspepsia / reflux 42% of adults (2000)
17% discussed with GP
- Dyspepsia incidence 16%
- Heartburn 30%

- BEACH

- Upper GI disorders 4/100 encounters
- New upper GI disorders 1.2/100 encounters

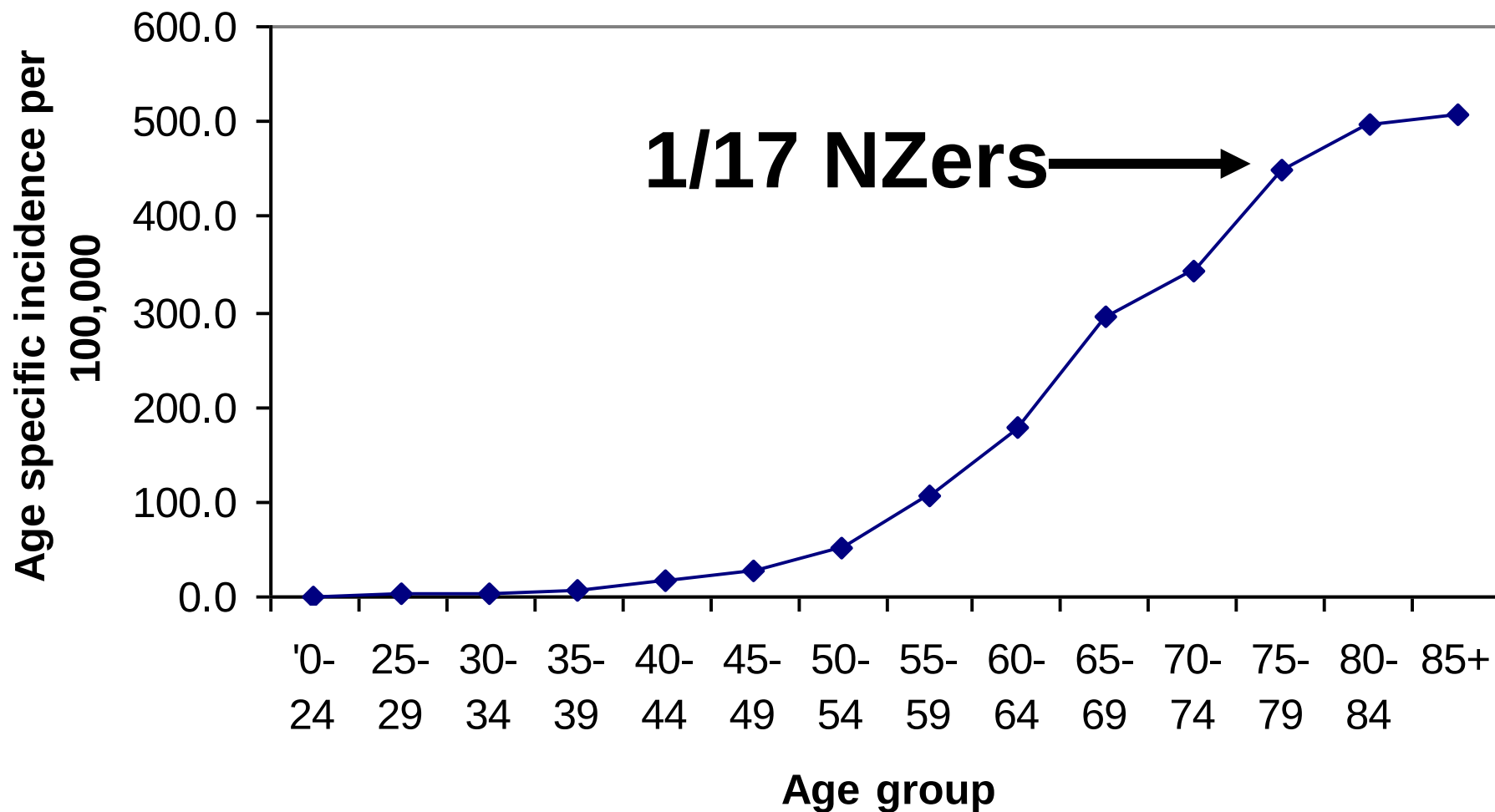
GI symptoms in the community

- Lower GI symptoms
 - Random postal survey (US)
 - IBS 10.1%
 - Constipation 15.8%
 - Diarrhea 17.6%
 - Abdominal pain 15.2%
- BEACH
 - Diarrhea 1.3/100 encounters
 - Abdominal pain 1.2/100 encounters

Gut symptoms are limited

- Discrimination of GI symptoms for pathology alone is poor

Age-specific CRC Risk in NZ



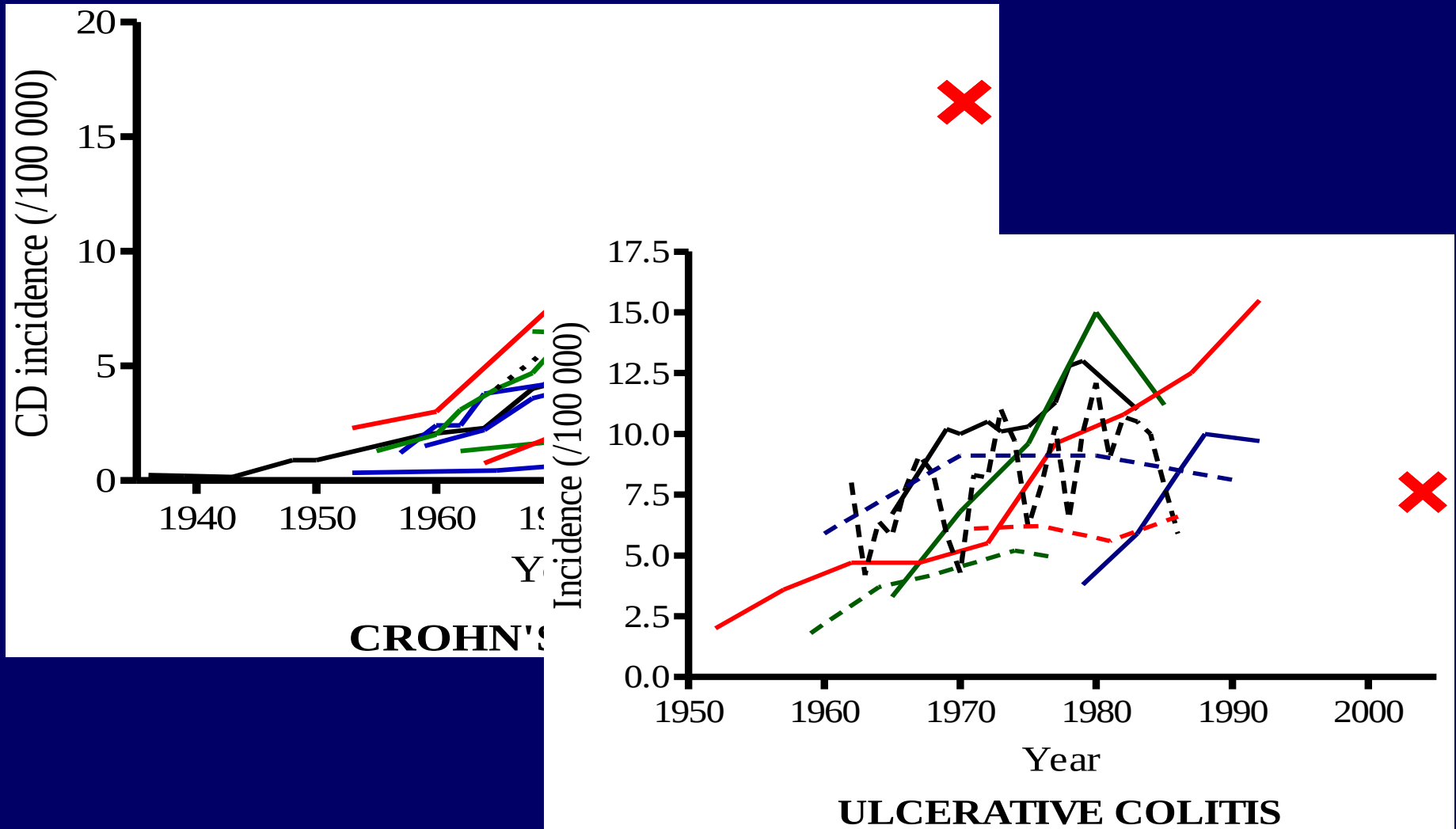
How do we do compare to the rest?

	Age-standardised (world) incidence per 100,000		Age-standardised (world) mortality per 100,000	
Country	Male	Female	Male	Female
New Zealand	53.0	42.2	23.2	18.6
Australia	47.4	35.9	18.7	13.3
United Kingdom	39.2	26.5	17.5	12.4
United States	44.6	33.1	15.2	11.6
Denmark	41.0	33.0	23.3	19.2

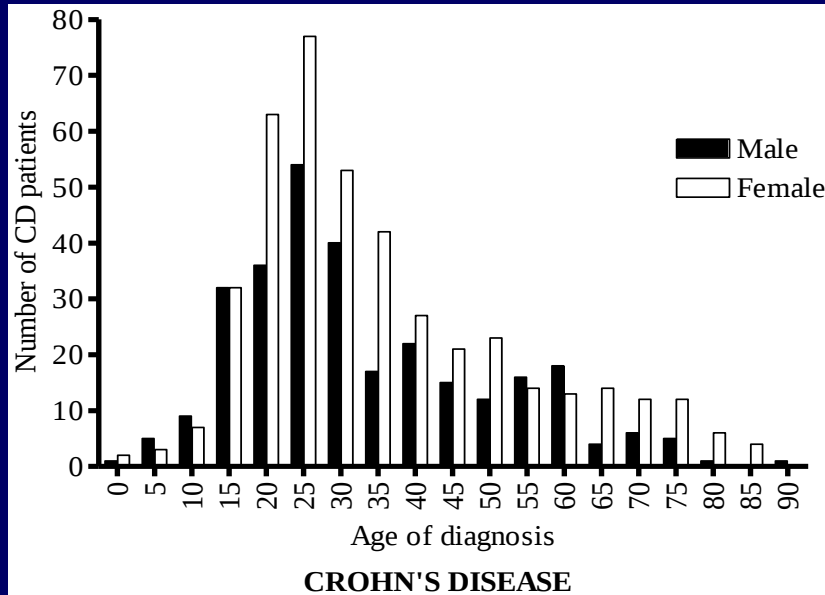
NZ Gastrointestinal Cancer Incidence

• Colorectal	2716
• Oesophageal	219
• Gastric	341
• Pancreatic	403

IBD Incidence in Canterbury (2004)



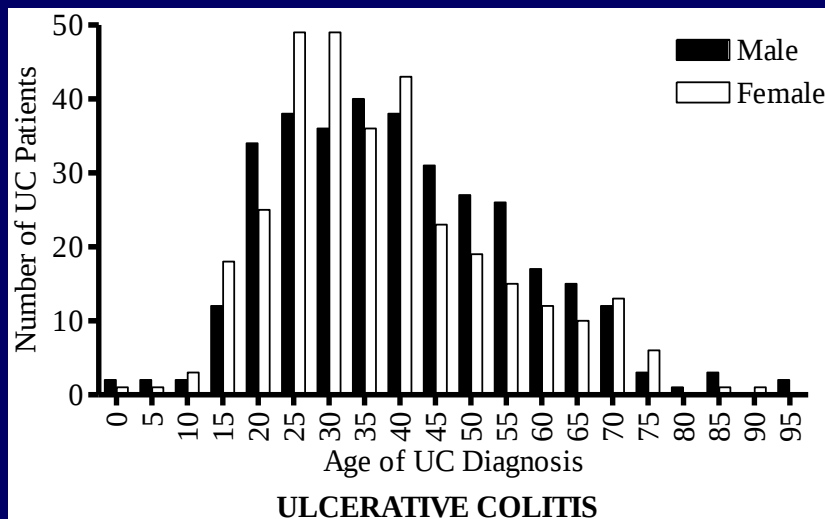
Inflammatory Bowel Disease



Canterbury Prevalence
~2000 patients / 500,000

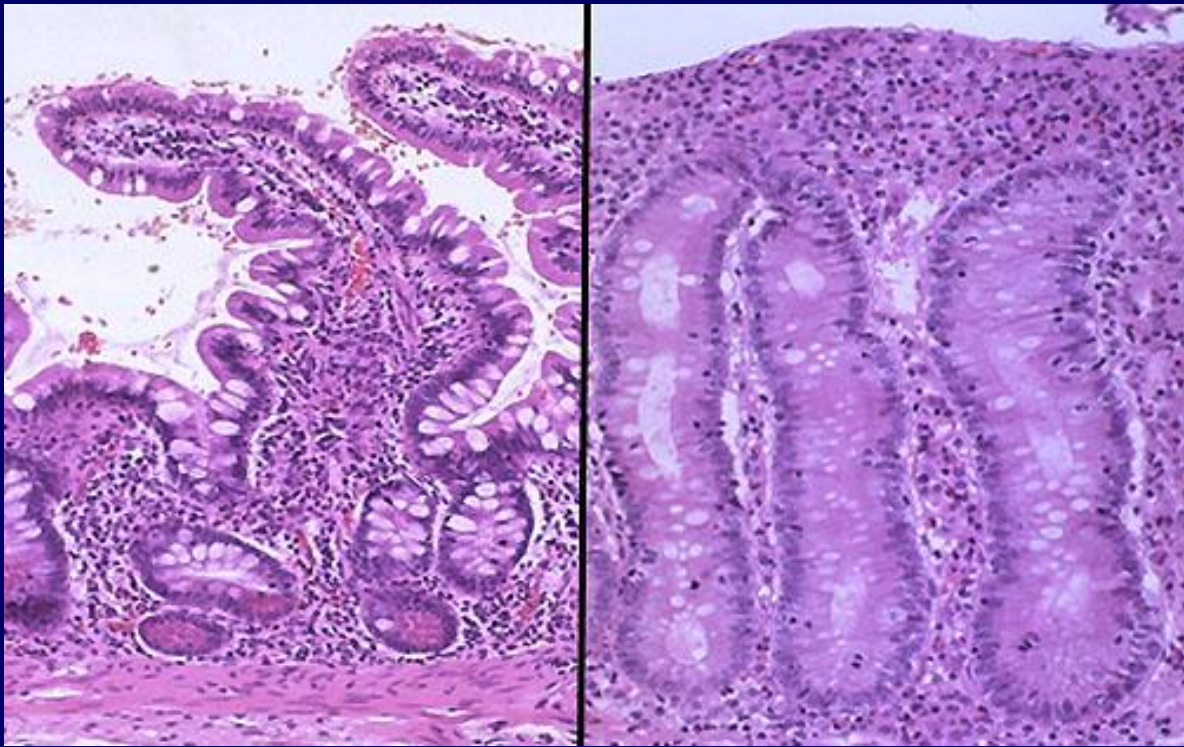
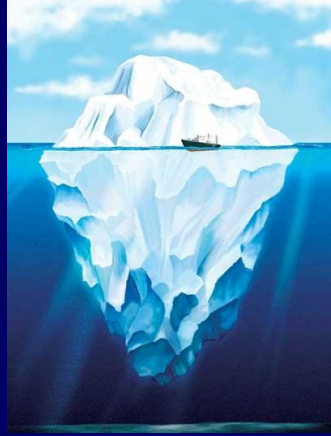
= 0.4% IBD prevalence

CD > UC



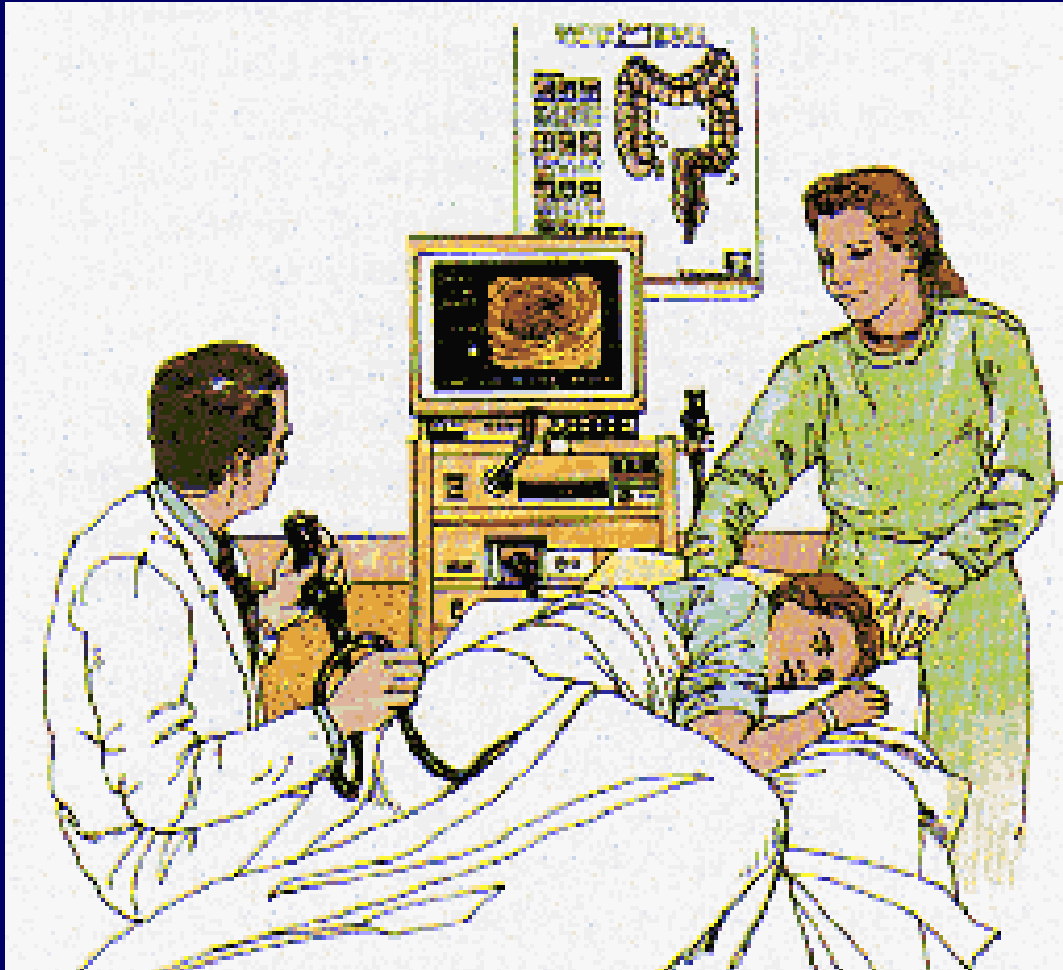
Coeliac disease

- Canterbury 1/86 general population



So if it's so hard to diagnose significant GI disease, why not scope everyone?

The Gastroenterologist's view of colonoscopy



- Safe
- Well-tolerated
- Sensitive
- Specific

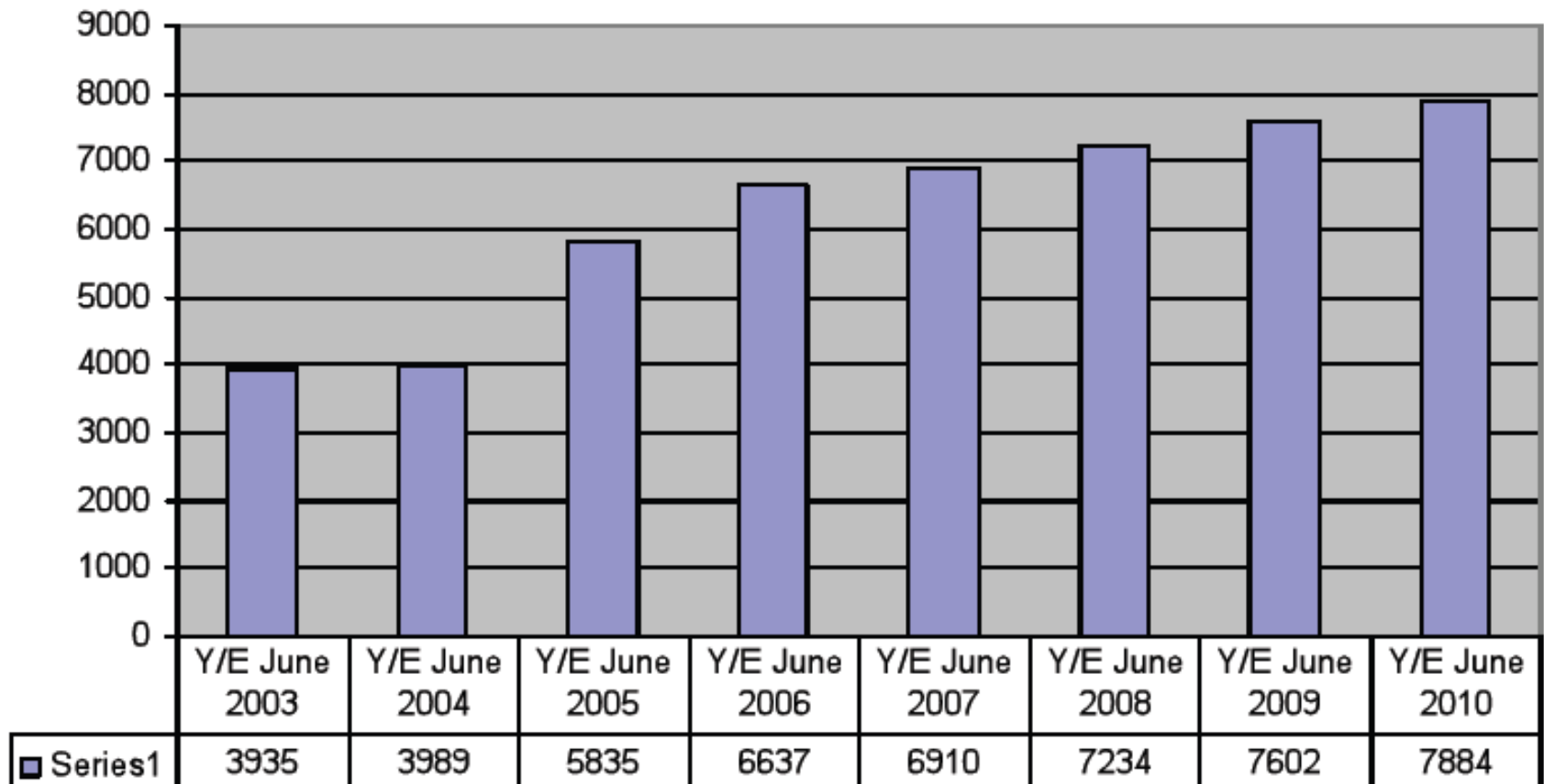
The patient's view of colonoscopy



- Invasive
- Expensive
- Dangerous
- Inconvenient

Endoscopy numbers (CPH)

Endoscopy numbers completed within normal hours



Gastrointestinal symptoms are...

- Common
- Limited
- Under-reported
- Usually benign
- Sometimes serious
- Investigated invasively with a limited resource

The diagnostic approach

- General practice
 - Dealing with the masses
- Referral practice
 - Trying to ration an expensive / invasive resource
- Screening / surveillance
 - The curveball

To ensure that the right people are referred, we need robust pathways for primary care

Upper GI symptoms



Demographics

- Onset age >50y (40y for Maori, PI, Asian)

Symptoms

- Unexplained weight loss
- Dysphagia / odynophagia
- Haematem / melaena
- Severe unremitting Sx

Personal History

- Peptic ulcer disease
- Upper GI malignancy

Family history

- Upper GI malignancy

Examination

- Palpable abdominal mass

Investigation

- Fe deficiency anaemia

Additional Upper GI investigations

- Coeliac markers
 - tTG or EMA Ab (with total IgA)
- Calcium
- CRP
- Thyroid function
- Helicobacter pylori testing

Lower GI symptoms



Demographics

- Onset age >50y

Symptoms

- Unexplained weight loss
- Rectal bleeding
- Severe unremitting Sx
- Nocturnal symptoms

Personal History

- CRC / IBD
- Perianal disease

Family history

- CRC (age and number)
- IBD

Examination

- Palpable abdominal mass
- Perianal disease

Investigation

- Fe deficiency anaemia
- ↑CRP

Additional Lower GI investigations

- Coeliac markers
 - tTG or EMA Ab (with total IgA)
- Fe studies, B12, Folate
- Faecal pathogen testing
- Faecal Occult Blood
 - Needs IHC confirmation of guiac tests
 - Patients borderline triage for colononoscopy
- Faecal calprotectin
 - Not always - see later

Inflammatory bowel disease

history

- Family history of IBD
- Relationship to smoking
- Oral aphthous ulcers
- Perianal disease
- Extraintestinal manifestations
 - Joints
 - Skin
 - Eyes
 - Liver

Referral for opinion / endoscopy

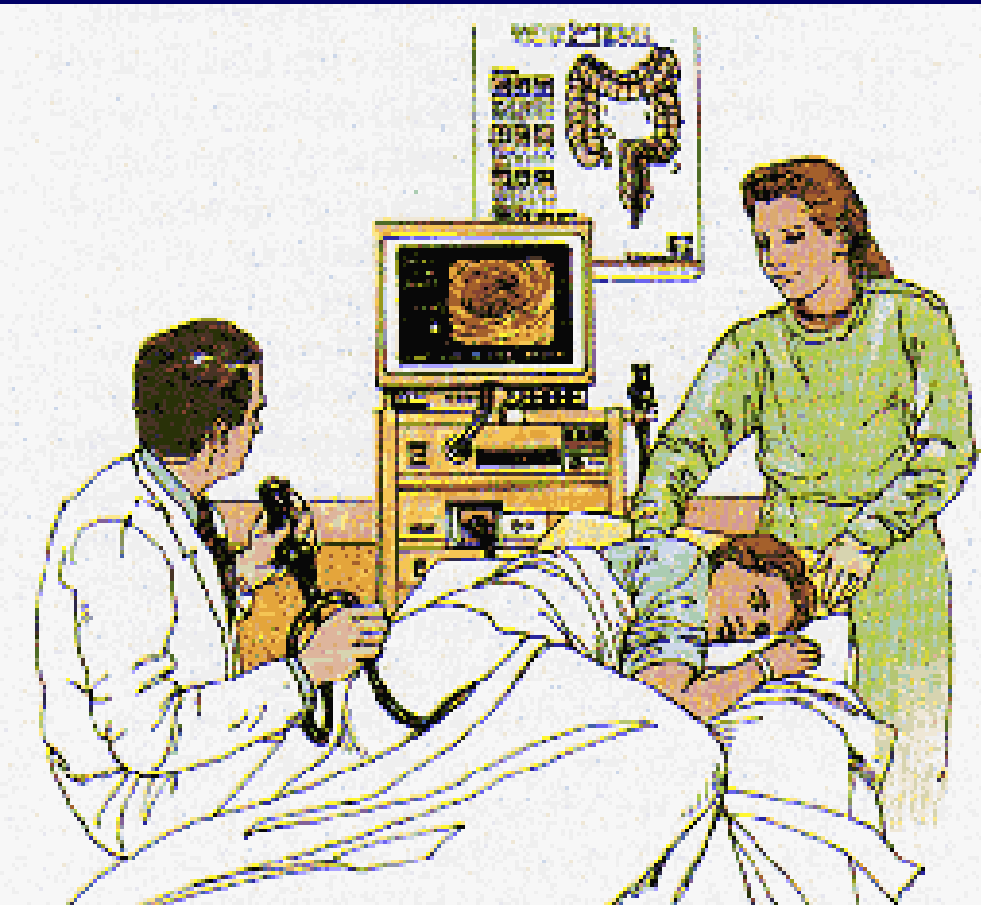
when is the right time?

- Any red flags
- Any sign of non-functional disease
- Poorly-controlled symptoms without flags
- Lack of response to first line treatment
- High levels of anxiety

But what about reality at CDHB?

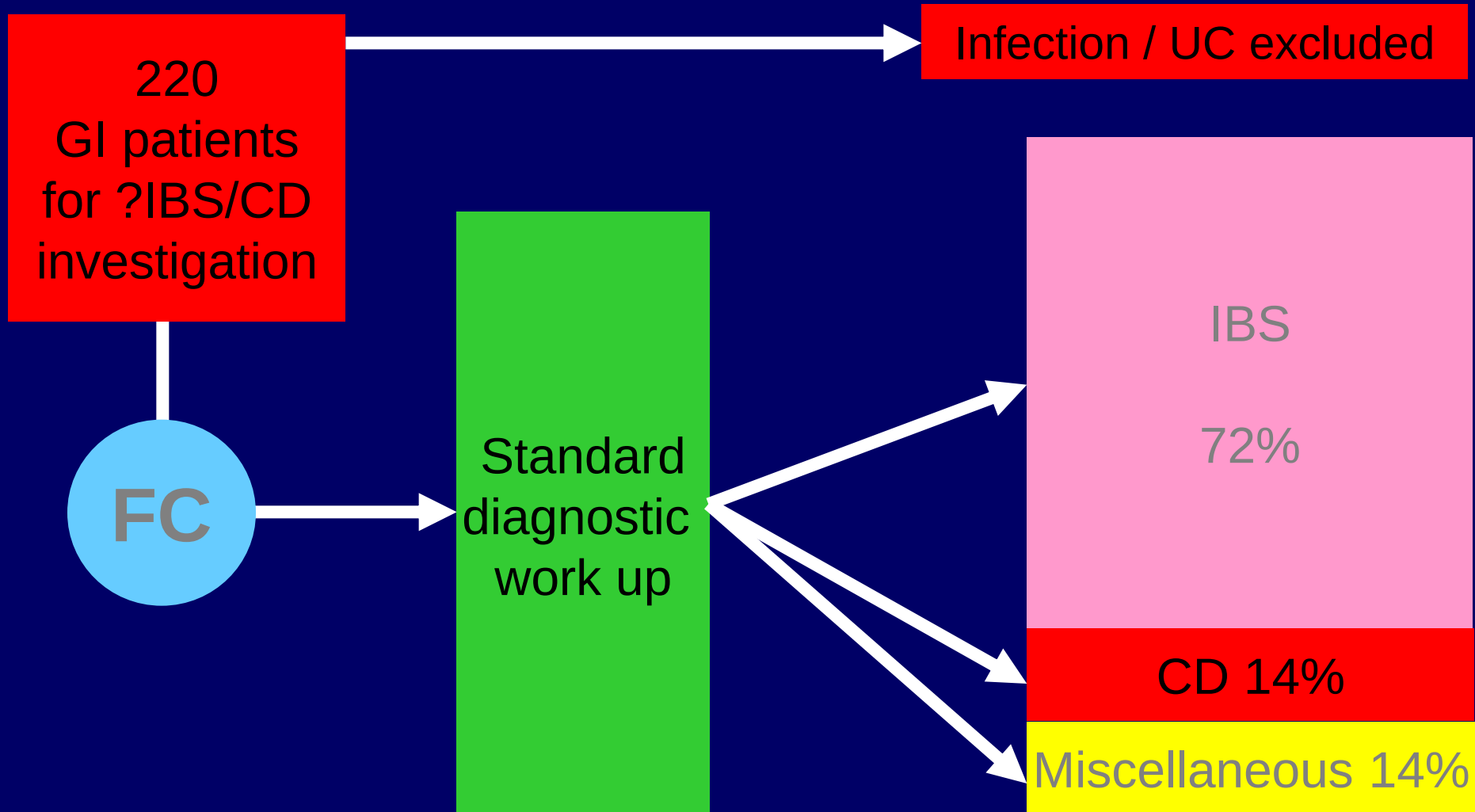
- Those with red flags will be seen / scoped
 - Please provide + / - history and bloods on referrals
- Those with functional symptoms will not
- Overall shift in resource to have patients with symptoms seen early
- If you are still worried, even with no red flags, then call us

Differing opinions regarding colonoscopy



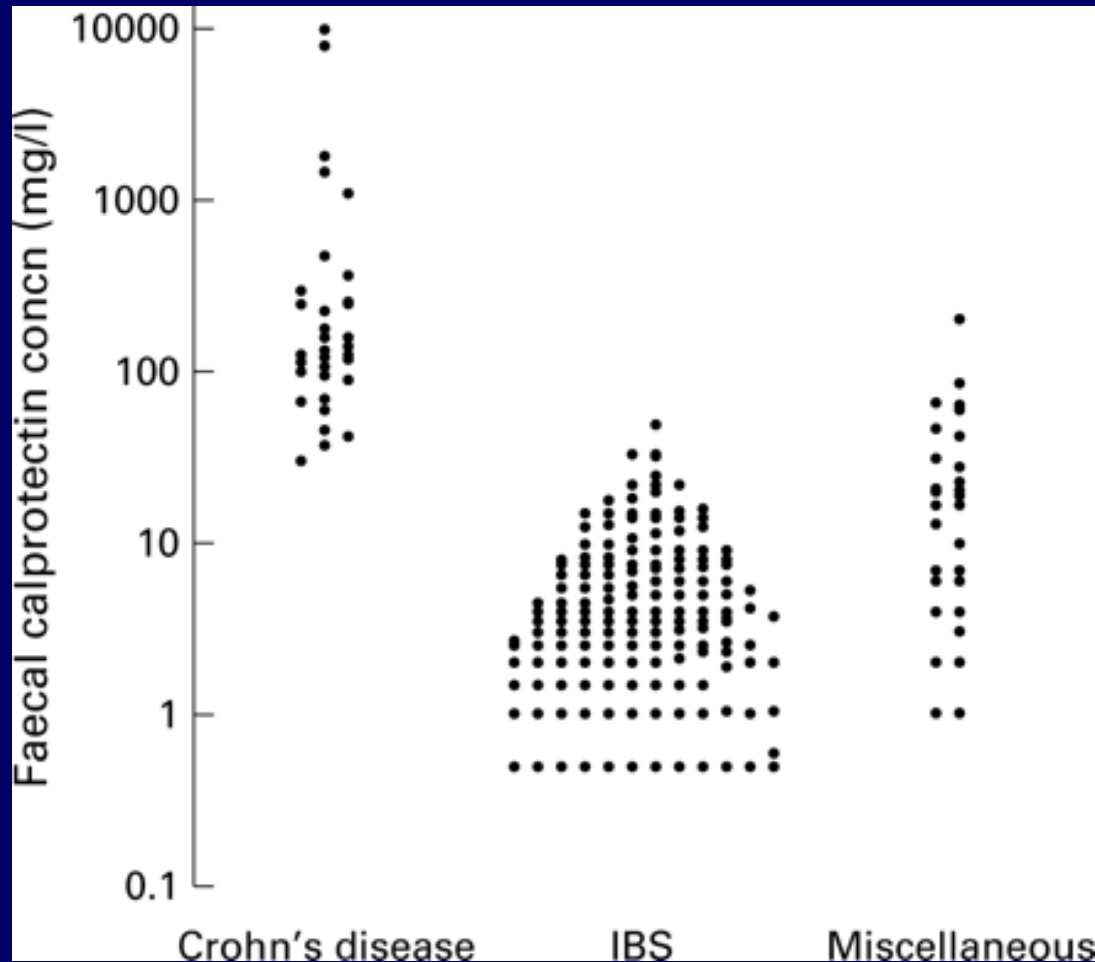
A simple method for assessing intestinal inflammation in Crohn's disease.

Tibble et al. Gut 2000



A simple method for assessing intestinal inflammation in Crohn's disease.

Tibble et al. Gut 2000



Faecal Calprotectin

YES

- Patient with unexplained GI symptoms atypical for IBS
- Symptomatic patient with IBD - ?functional symptoms

NO

- Patient with IBD flaring
- Patient over 55y with change of bowel habit
- Patient with red flags

Positively diagnosing IBS

IBS is not a diagnosis of exclusion...

3/12 continuous or recurring symptoms:

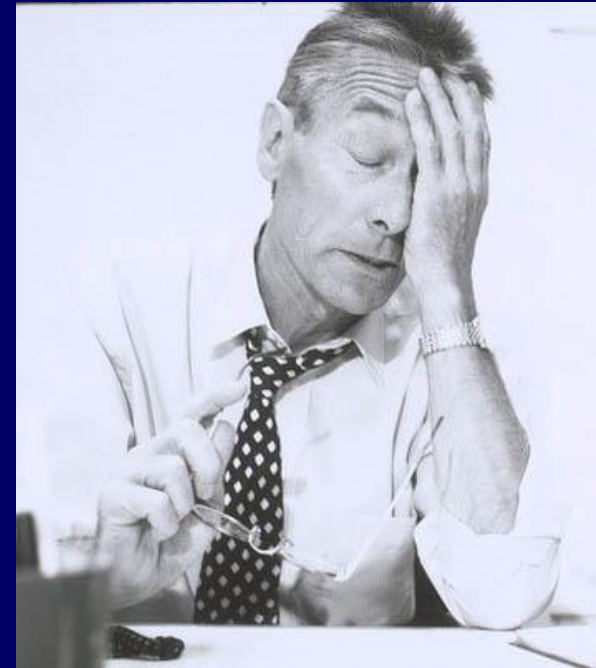
- Abdominal pain or discomfort
 - Relieved with defaecation
 - Change in stool frequency or consistency
- Two or more of the following $\frac{1}{4}$ of the time
 - Altered stool frequency
 - Altered stool form (eg watery, loose or hard stools)
 - Altered stool passage (eg incomplete evacuation, straining)
 - Passage of mucous
 - Bloating / abdominal distension

Functional Gastrointestinal Disease

history

- Variability, variability, variability
 - Form, frequency, association with other symptoms
- Absence of nocturnal symptoms
- Incomplete rectal evacuation
- Family history of IBD, Coeliac, CRC
 - Relationship of symptoms to smoking
 - Oral ulcers, Perianal disease, Extraintestinal symptoms

So now you have made the diagnosis
of IBS, what do you do ...



What I tell people with IBS

- Reassurance
 - Exclusion of more sinister pathology
 - People don't die but the symptoms may be unpleasant
 - This is a common problem (1/6 women, 1/9 men)
 - If you can be reassured ...

What I tell people with IBS

- Visceral Hypersensitivity
 - There are more nerves in your gut than your brain
 - Your gut is more sensitive than other peoples'
 - This sensitivity translates to more symptoms
 - We don't know how to make your gut less sensitive



What I tell people with IBS

- Let's concentrate on triggers
 - What is the worst symptom? (Drug approach)
 - Diarrhoea
 - Loperamide
 - Bloating / wind
 - Avoid too much fibre
 - Abdominal pain
 - Peppermint capsules, mebeverine, buscopan
 - Constipation
 - Laxatives, movicol

What I tell people with IBS

- Let's concentrate on triggers
 - Infections
 - (IBS can be like a magnifying glass)
 - Stress
 - Most people have a change in bowel habit
 - Aim to break the cycle
 - Diet
 - Patients really get this

Dietary Management of IBS

IBS Pathophysiology

"Causes"

**Poorly
understood**

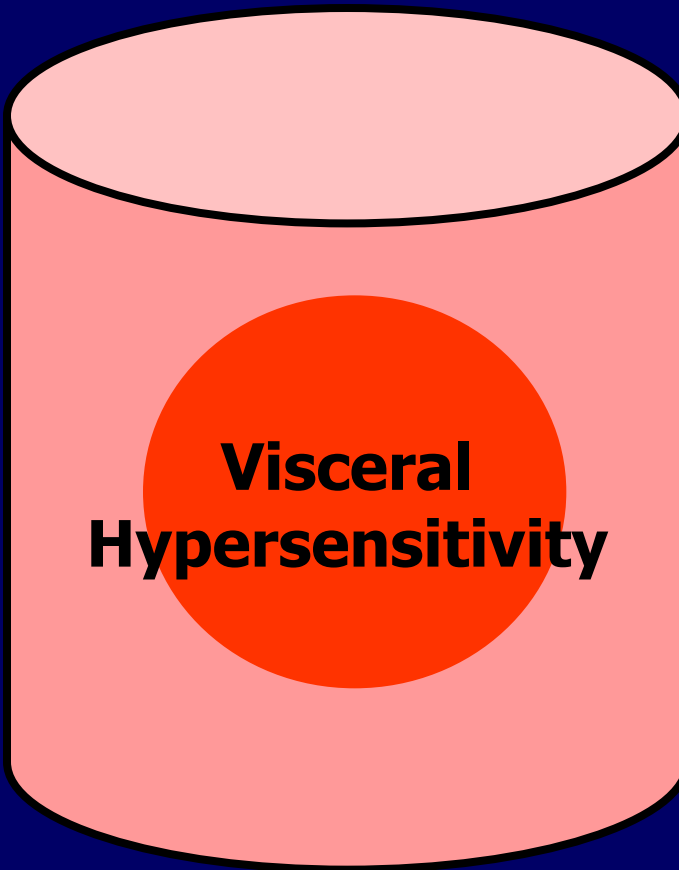
**Visceral
Hypersensitivity**

"Triggers"

Fluid

Gas

Stress



What are FODMAPs?

Fermentable

Oligosaccharides

Disaccharides

Monosaccharides

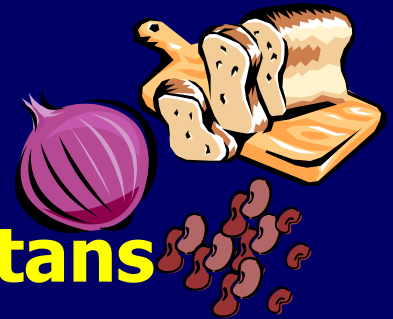
And

Polyols

What are FODMAPs?

F

Oligosaccharides **fructans, galactans**



D

M

A

P

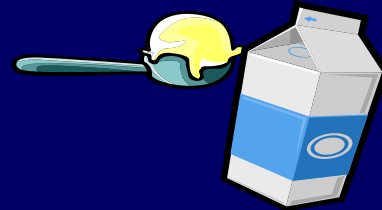
What are FODMAPs?

F

O

Disaccharides

lactose



M

A

P

What are FODMAPs?

F

O

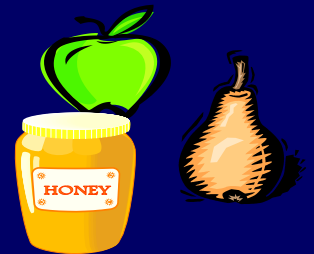
D

Monosaccharides

fructose
(in excess of glucose)

A

P



What are FODMAPs?

F

O

D

M

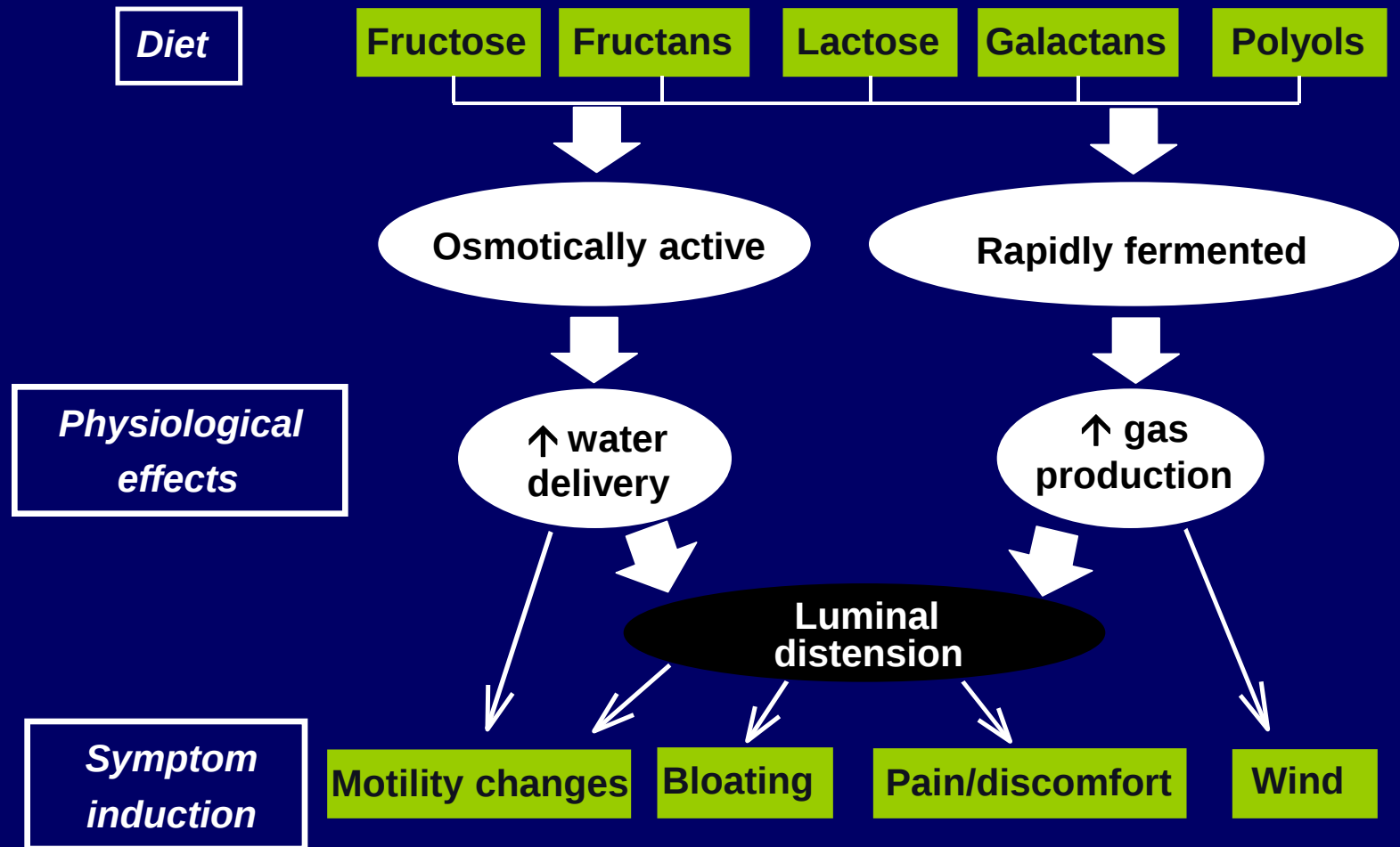
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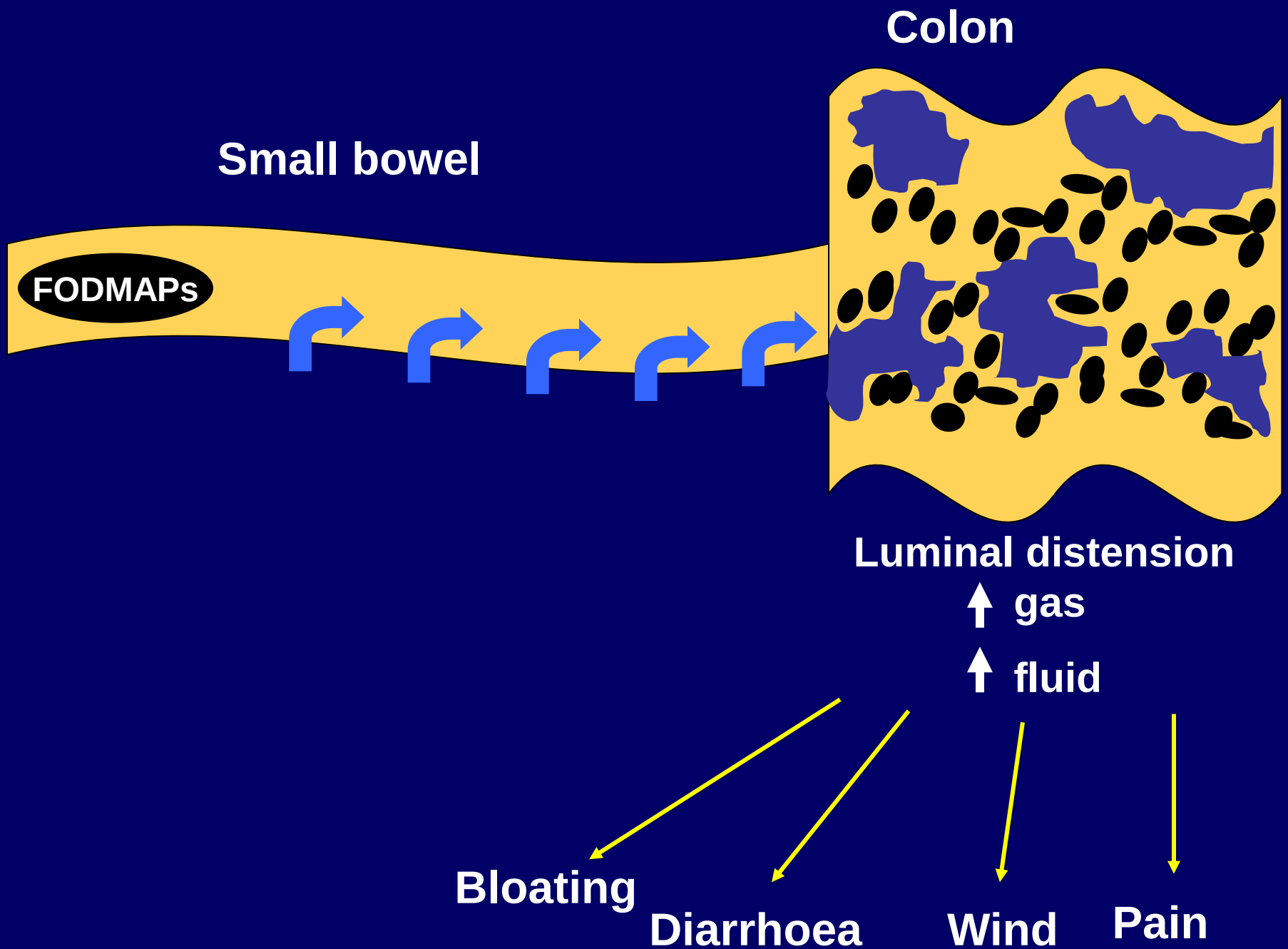
Polyols

sorbitol



The FODMAP hypothesis





Positive Hydrogen Breath Test

Time (minutes)

	0	15	30	45	60	75	90	105	120	135	150	165	180	Symptoms
Sugar														
Lactulose 29-1-2007	0	0	0	0	3	21	15	24	23					None reported
Fructose 30-1-2007	0	0	0	12	22	38	37	46	20					Abdominal pain and diarrhoea
Lactose 10-2-2007	1	0	0	0	0	0	0	0	0					None reported

Low FODMAP diet in IBS

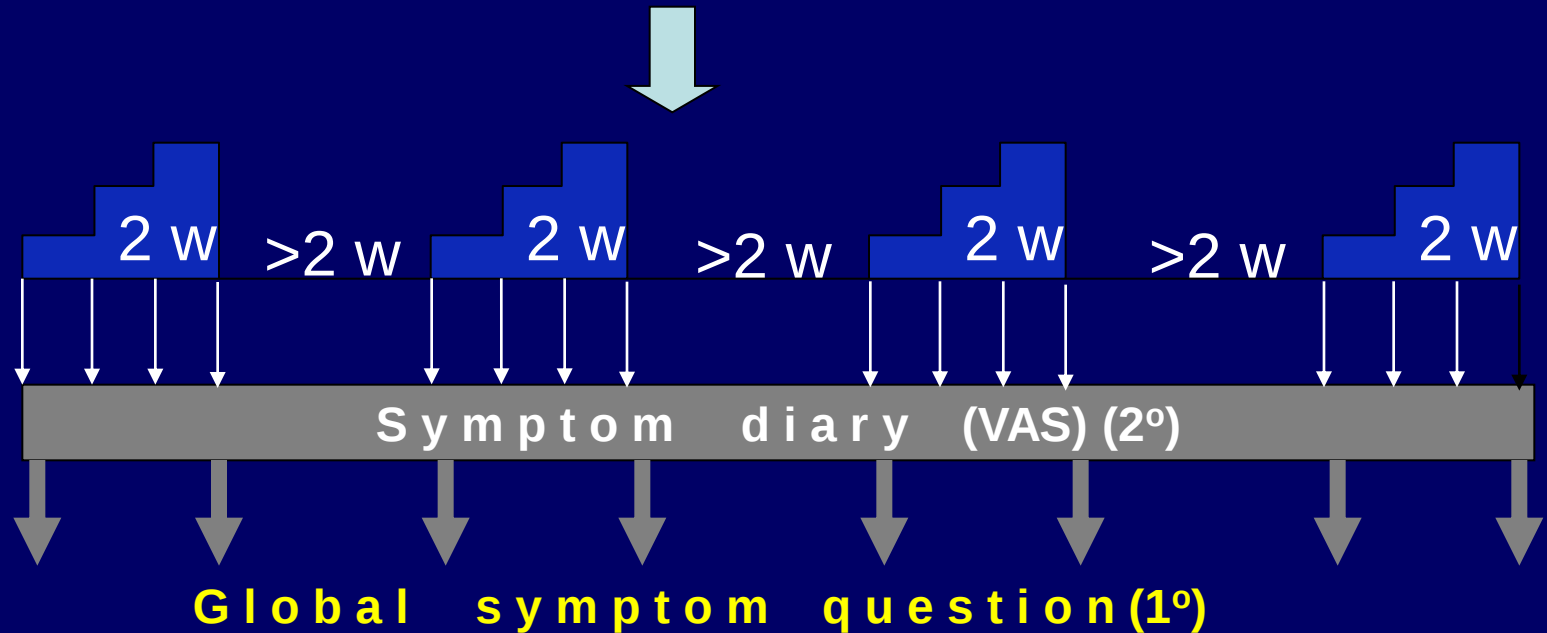
- n = 25
- 23-60 years, 4 male
- IBS (Rome II)
- FM +ve breath test
- Previous symptom improvement on low FODMAP diet

Study design

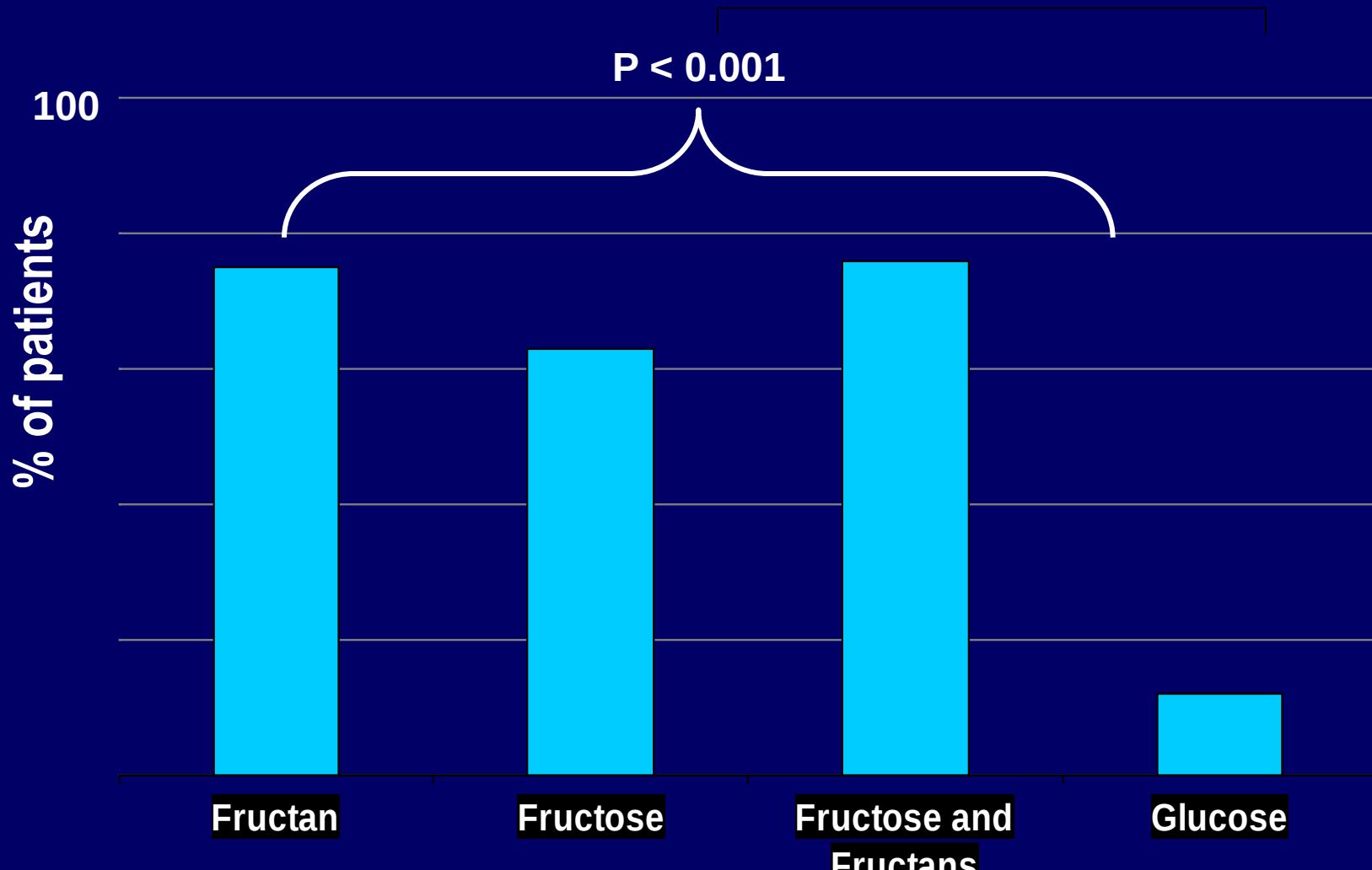
- Fructan 7 g tds
- Fructose 14 g tds
- Fructose + fructan tds
- Glucose (placebo) 7 g tds

LOW FODMAP DIET (supplied to patient)

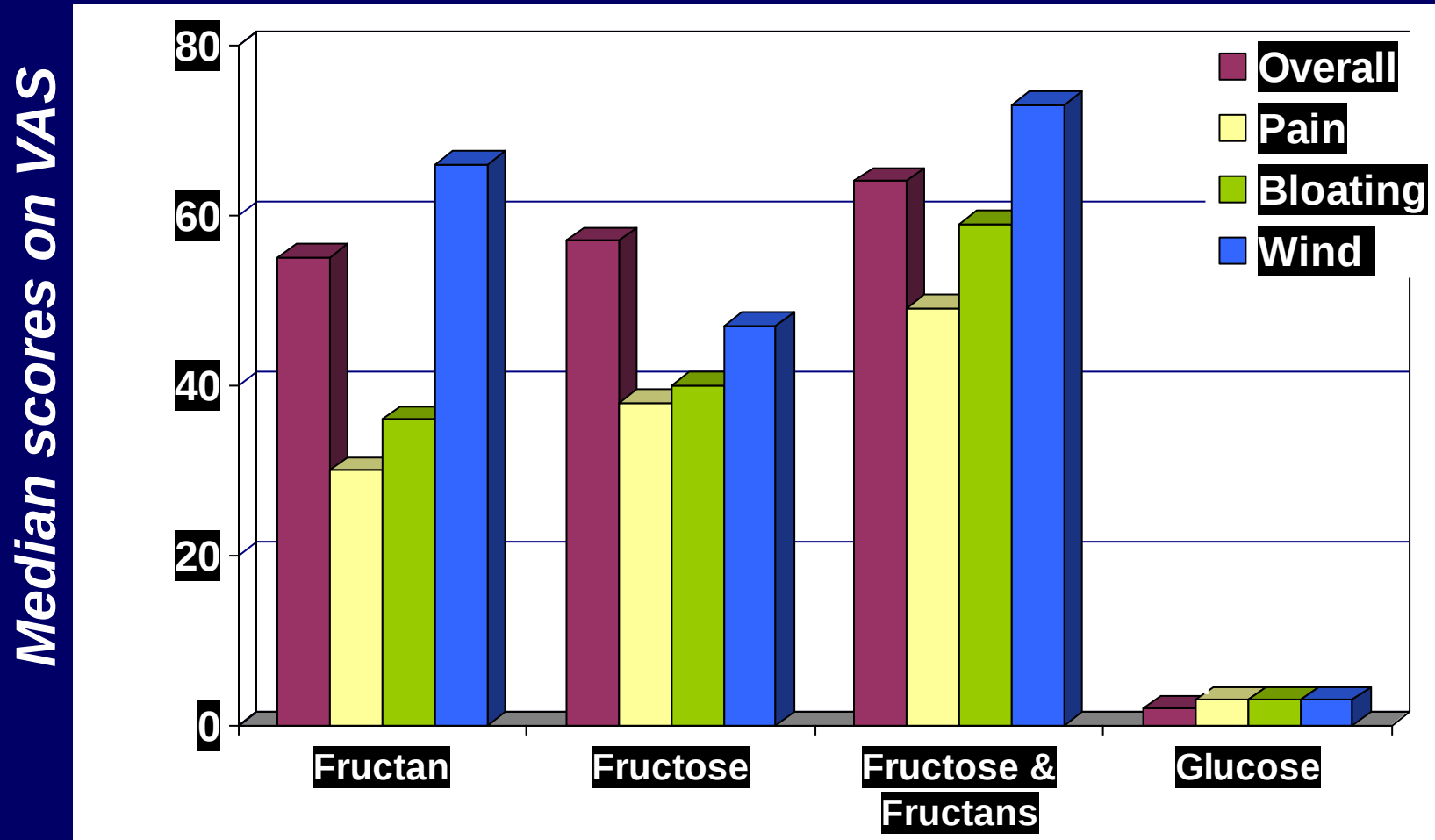
>2 week run-in



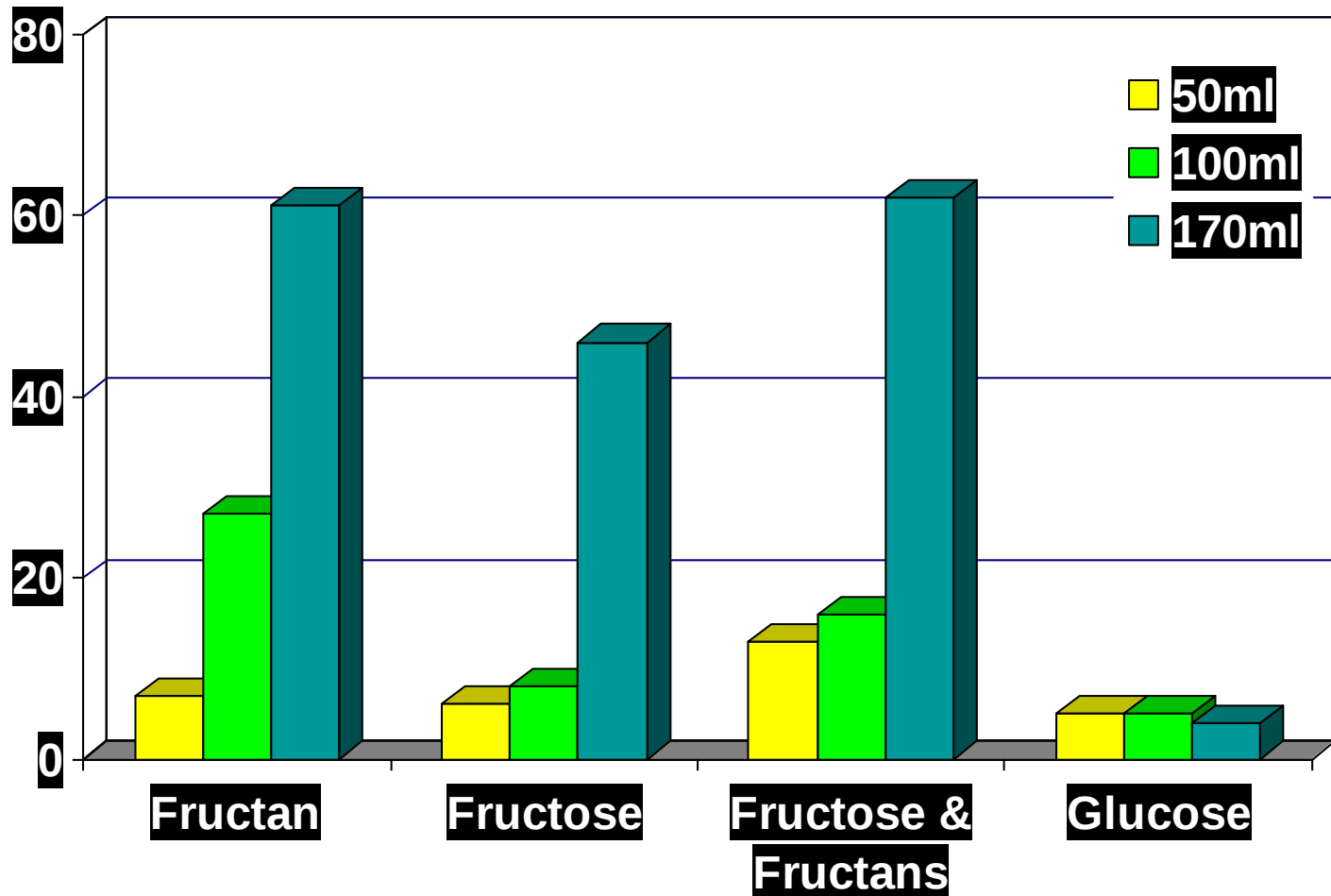
1^o end-point:
Symptoms not adequately controlled



2^o end-point: Symptom scores



Effect of dose on overall symptom score



Luminal Gastroenterology Diagnosis Summary

- Watch for Red Flags and refer early
- Diagnose IBS positively where possible
- When referring, remember the details
- FBC, ESR/CRP, Fe studies, B12, folate, faecal specimen
- Use calprotectin when it matters
- In public, standard functional symptoms will not get scoped

Functional GI Symptoms

- Investigate appropriately
- Diagnose positively
- Spend time explaining the diagnosis
- Manage expectations
- Work on diet and stress