



**Webinar – Management și Intervenție Nutrițională, 22-23 noiembrie 2024**

Tema ediției: Comunicarea nutrițională bazată pe dovezi, indiferent de vârstă

Tema dezbaterei: Preferințele alimentare – risc sau beneficiu?

# "Intervenții terapeutice în SII : când legumele bat pastilele"

Adrian Purcarea, Brașov/Sacele



Universitatea  
Transilvania  
din Brașov



SPITALUL MUNICIPAL  
**SĂCELE**



Fără conflict de interes (sper)

# **Sumar**

## **1. Introducere:**

1. criterii de clasificare, epidemiologie,
2. “fiziopatologie”
3. subtipuri clinice
4. sindromul algic funcțional

## **3. Dovezi terapeutice**

1. farmacologice
2. non-farmacologice.

## **4. Rolul dietei**

## **5. Concluzii și takeaway.**

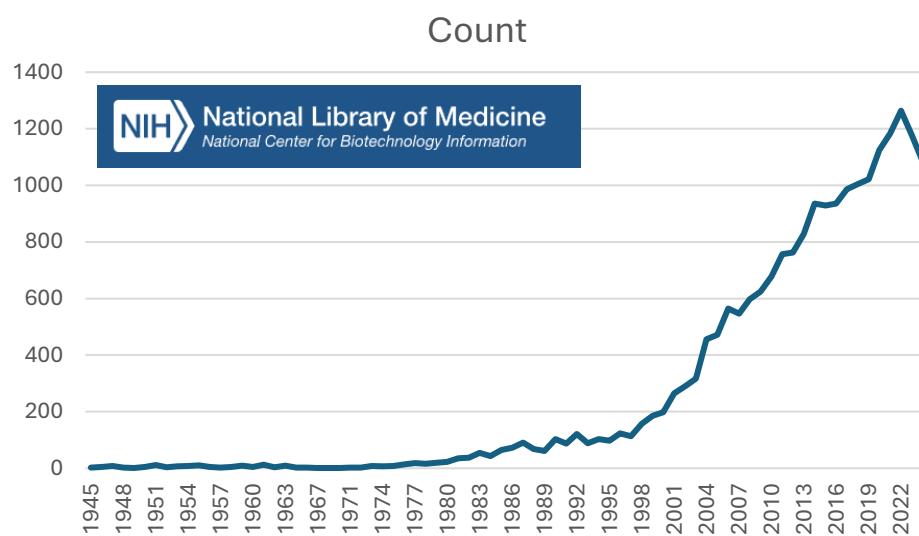
## C1. IRRITABLE BOWEL SYNDROME

### *Diagnostic criteria\**

Recurrent abdominal pain on average at least 1 day/week in the last 3 months, associated with two or more of the following criteria:

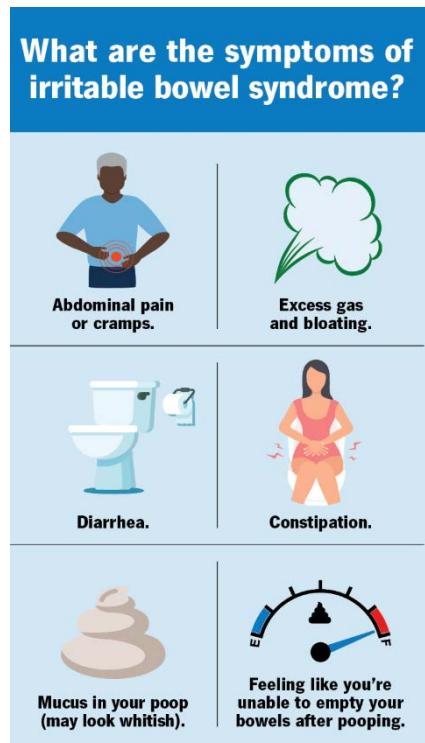
1. Related to defecation
2. Associated with a change in frequency of stool
3. Associated with a change in form (appearance) of stool

\* Criteria fulfilled for the last 3 months with symptom onset at least 6 months prior to diagnosis



# Diagnostic

- AND



- NOT



## CRITERII DE CLASIFICARE, EPIDEMIOLOGIE

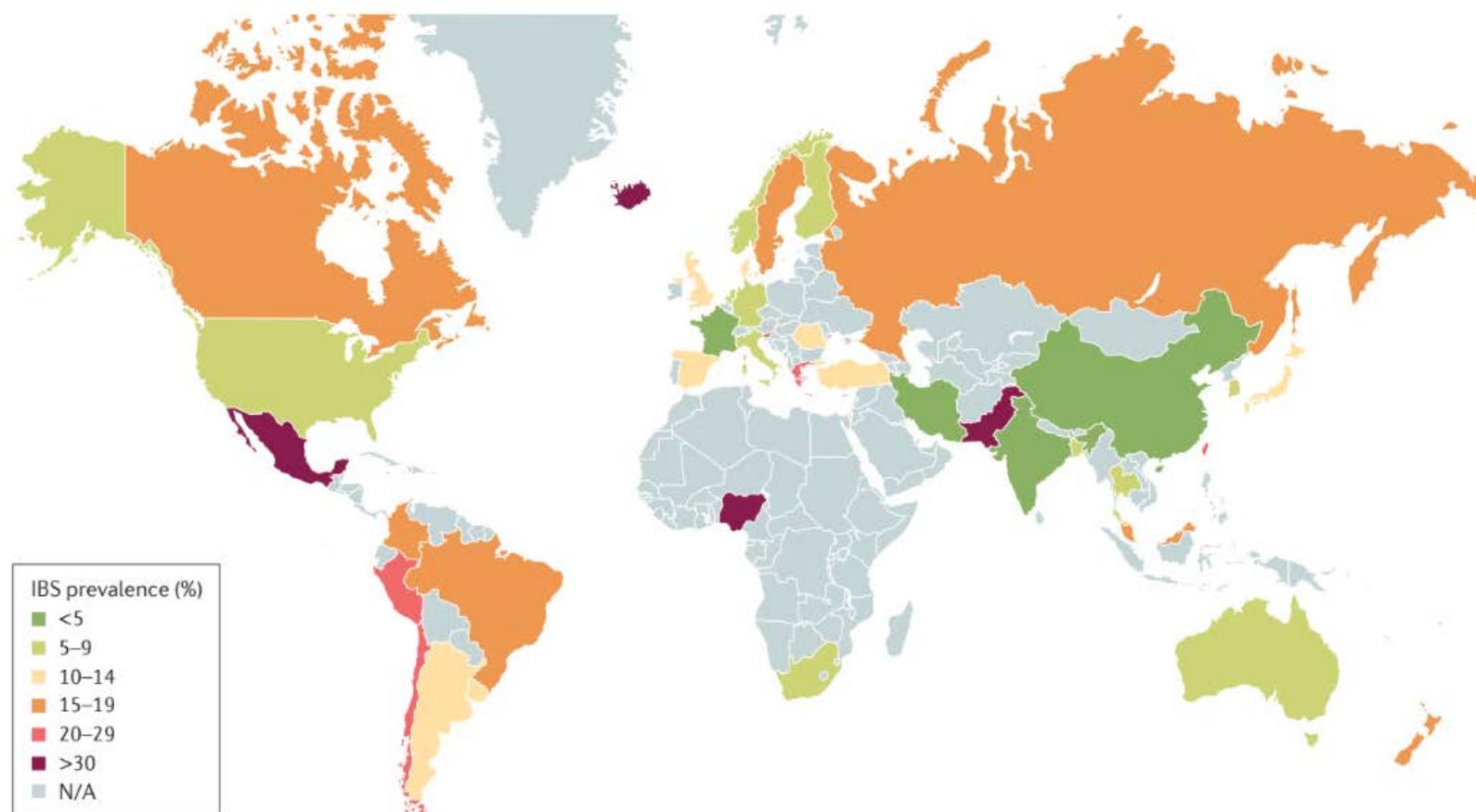


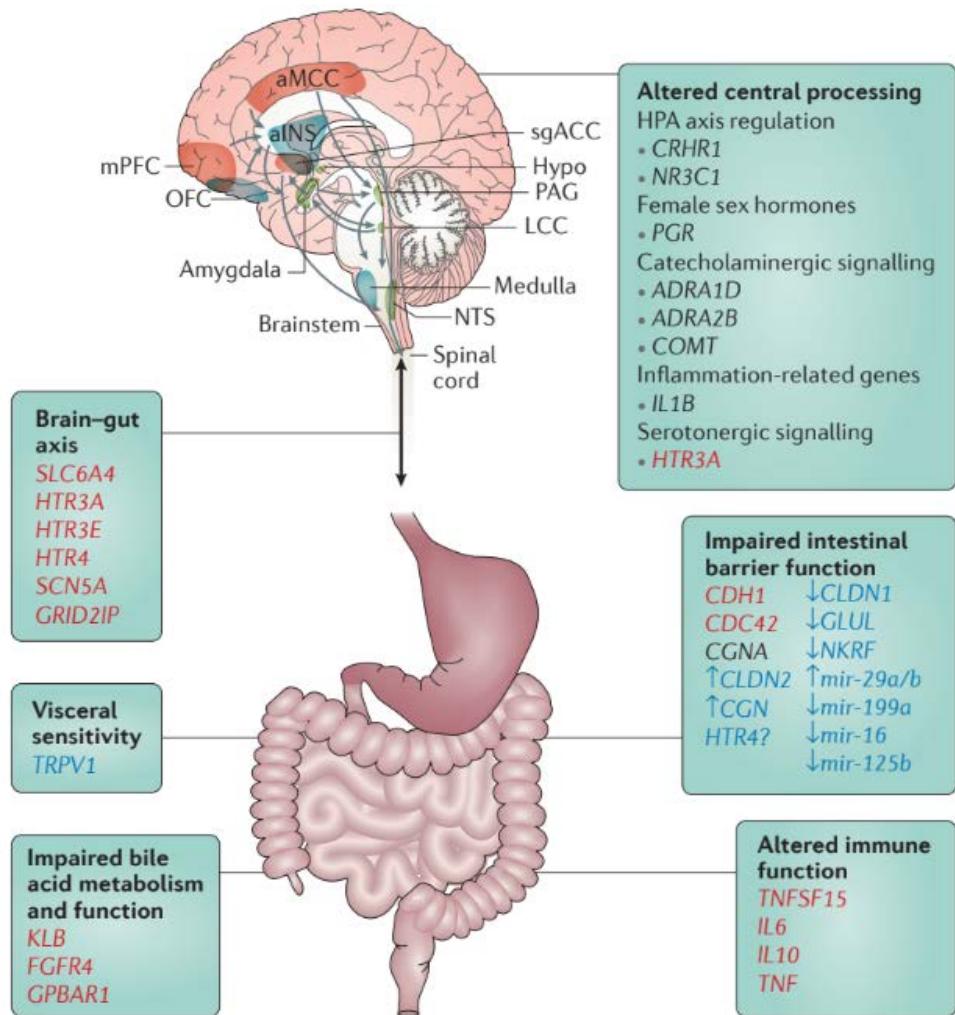
Figure 2 | IBS prevalence in population studies around the world. Pooled prevalence data per country are colour-coded. Data from REF. 1 are supplemented by studies from another nine countries (see [Supplementary information S1](#) (table)). IBS, irritable bowel syndrome; N/A, not applicable.

PRIMER

### Irritable bowel syndrome

Paul Erk1, Ossam Aziz2, Giovanni Barbara3, Adam D. Farmer4, Shin Fukudo5, Emrehan A. Mayer6, Beate Niesler7, Eamonn M. M. Quigley8, Mirjana Rajilić-Stojanović9, Michael Schemann10, Juliane Schwinde-Klunthe11, Magnus Simren12, Stephan Ziepe13 and Robin C. Spiller14

# “FIZIOPATOLOGIE”



• **FODMAPs:** Poor absorption leads to fermentation, gas production, and water retention, causing luminal distension and motility changes.

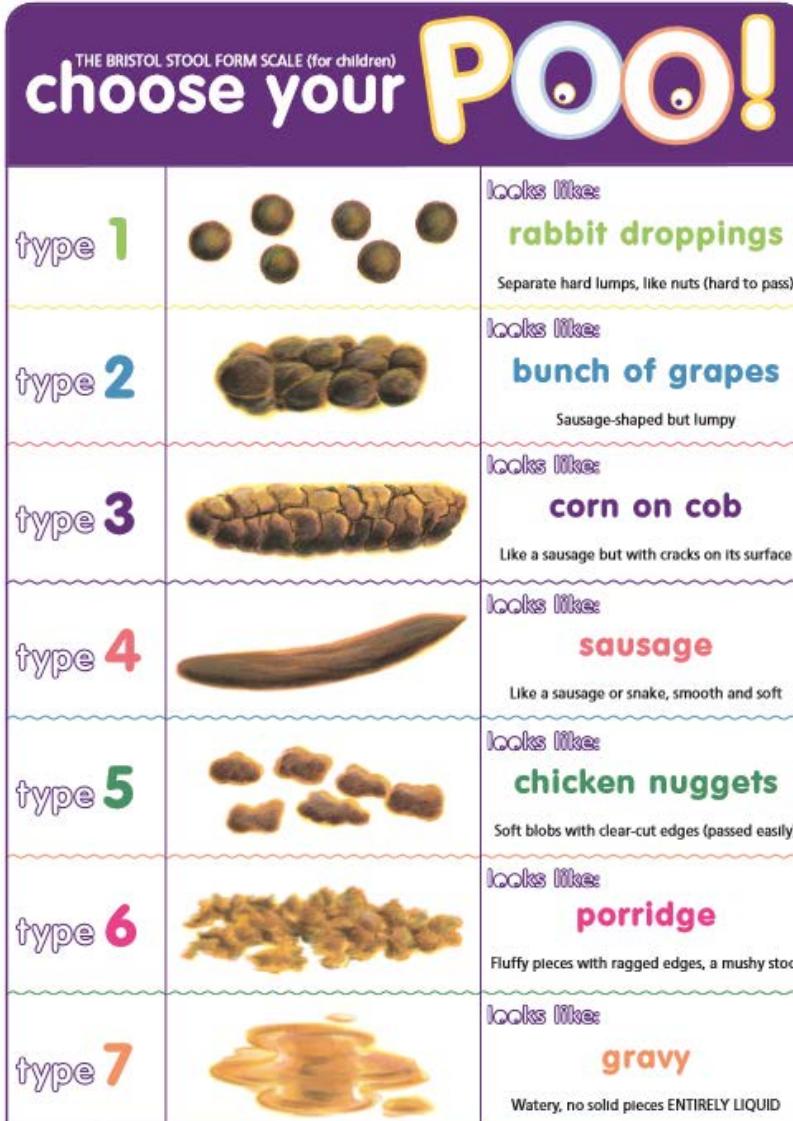
• **Gut-brain interactions:** Depression and somatization can amplify symptoms.

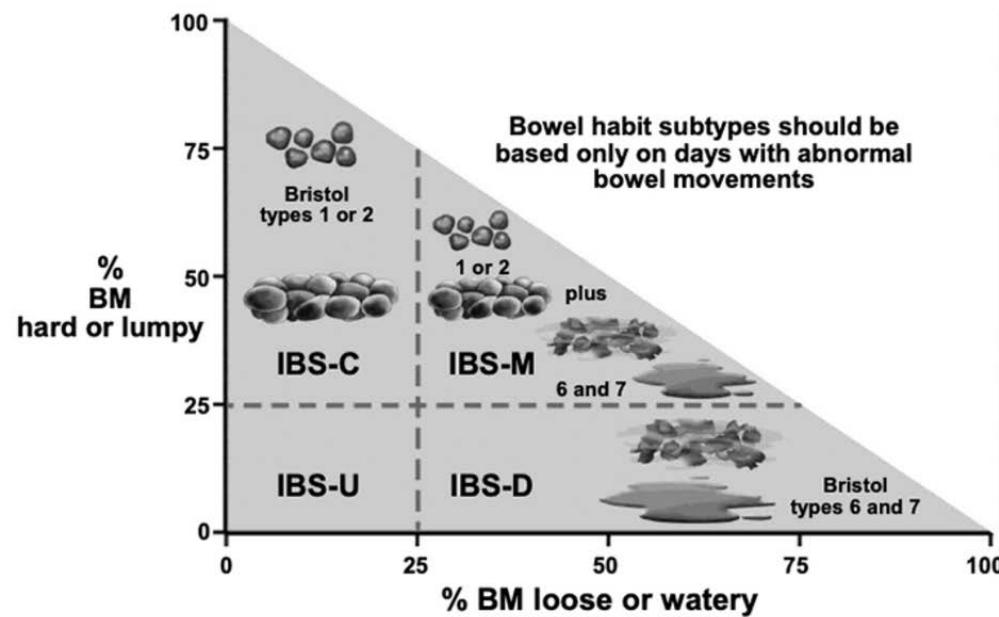
• **Local hypersensitivity:** Emerging evidence suggests local immune responses, including non-IgE-mediated food reactions

PRIMER

## Irritable bowel syndrome

Paul Erk1, Ossam Aziz2, Giovanni Barbara3, Adam D. Farmer4, Shin Fukudo5, Emre A. Mayer6, Beate Niesler7, Eamonn M. M. Quigley8, Mirjana Rajilić-Stojanović9, Michael Schemann10, Juliane Schiwele-Klunthe11, Magnus Simren12, Stephan Ziepe13 and Robin C. Spiller14





11-02b FM 12

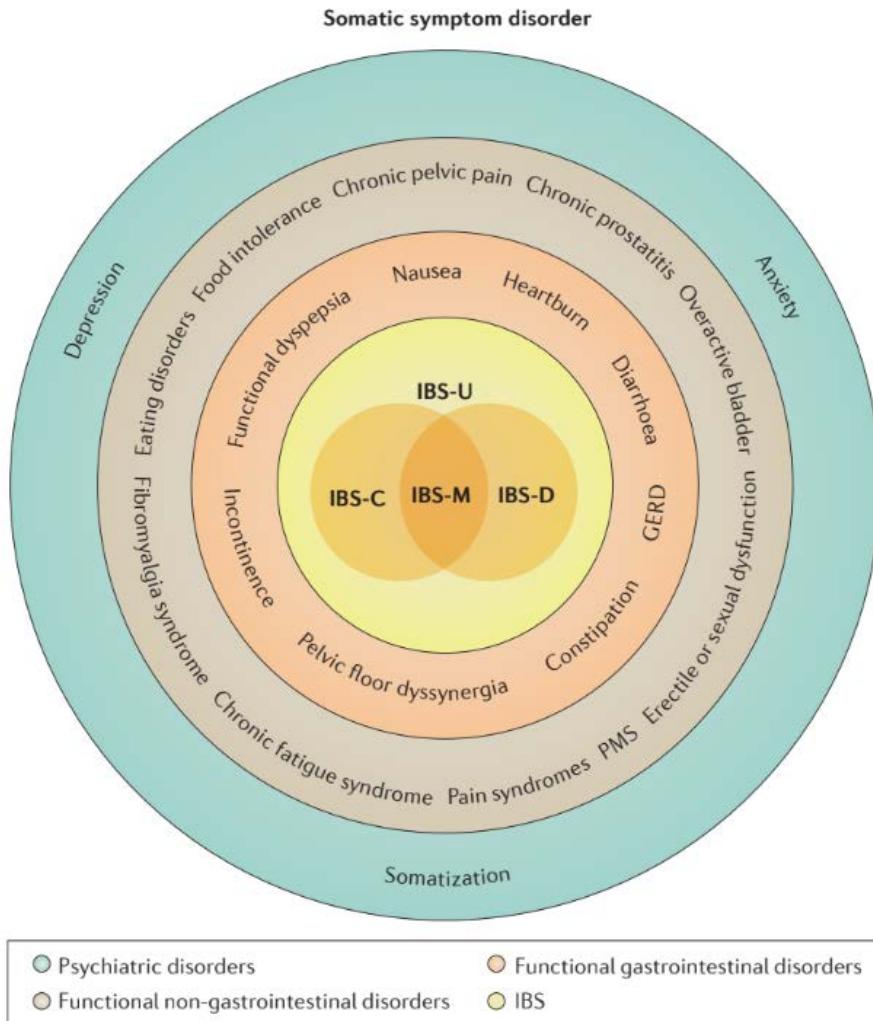
## IBS SUBTYPES:



IBS Subtypes are based on >25% of abnormal BM (types 1,2 or 6,7)

- IBS-C Types 1, 2 not 6, 7 >25%
- IBS-D Types 6, 7 not 1, 2 >25%
- IBS-M Types 1, 2 and 6, 7 >25%
- IBS-U No Type >25%

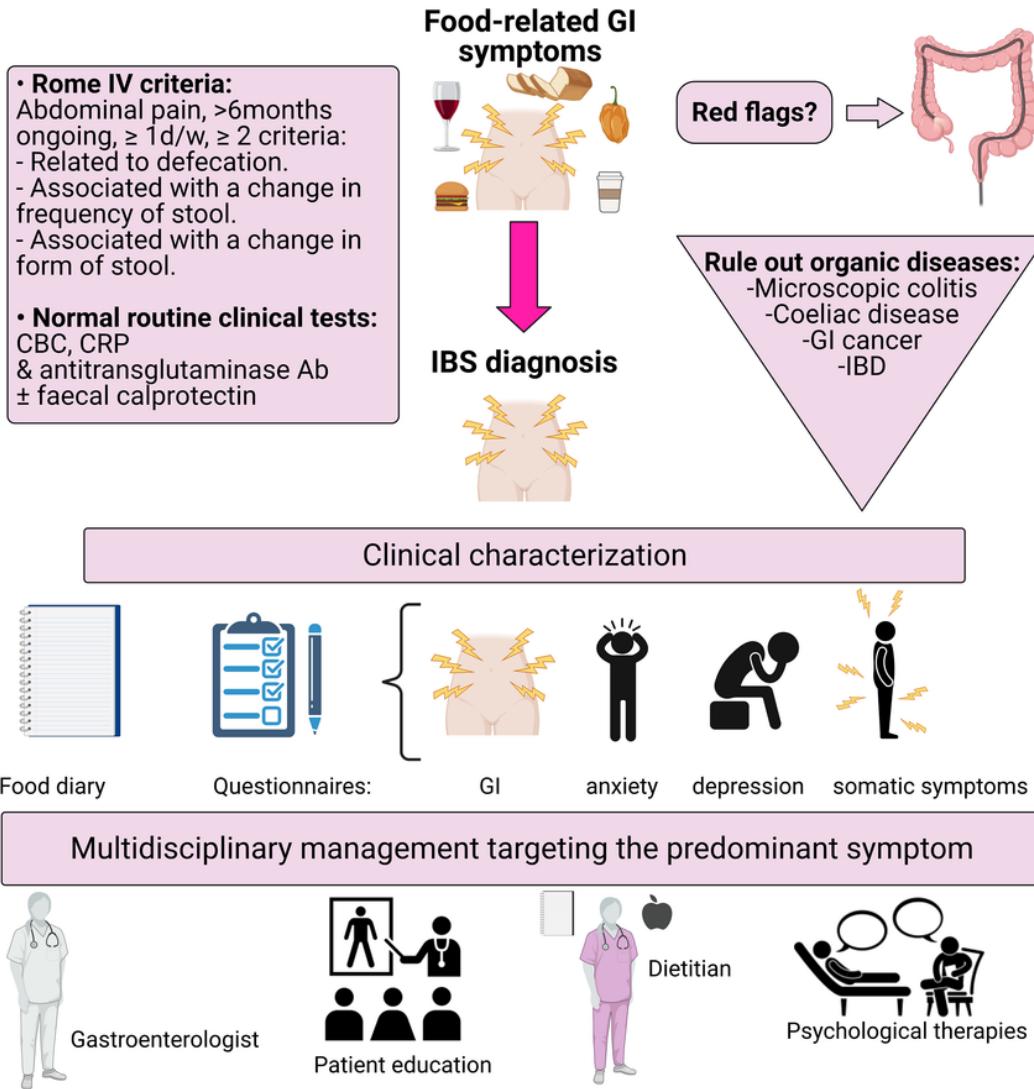
Figure 11-11



**Figure 3 | IBS-associated comorbidities.** A model of irritable bowel syndrome (IBS) and its associations with other clinical, intestinal, extra-intestinal and psychiatric conditions. For each of the listed disorders, overlap with IBS symptoms has been reported in the literature<sup>11</sup>. The different components should be viewed as layers of complexity: the IBS subtypes are part of the group of functional bowel disorders, these are part of all kinds of functional disorders and these again are part of a 'layer' of psychiatric disorders. GERD, gastroesophageal reflux disease; IBS-C, IBS with constipation; IBS-D, IBS with diarrhoea; IBS-M, mixed-type IBS; IBS-U, unsubtype IBS; PMS, premenstrual syndrome.

#### Irritable bowel syndrome

Paul Erk<sup>1</sup>, Ossam Aziz<sup>2</sup>, Giovanni Barbara<sup>3</sup>, Adam D. Farmer<sup>4</sup>, Shin Fukudo<sup>5</sup>,  
Emrean A. Mayer<sup>6</sup>, Beate Niesler<sup>7</sup>, Eamonn M. M. Quigley<sup>8</sup>, Mirjana Rajilić-Stojanović<sup>9</sup>,  
Michael Schemann<sup>10</sup>, Juliane Schwille-Kunthe<sup>11</sup>, Magnus Simren<sup>12</sup>, Stephan Ziepe<sup>13</sup>  
and Robin C. Spiller<sup>14</sup>



**84% din pacienti descriu triggerul ca fiind alimentar.**

**35% raporteaza stressul ca trigger**

**IgG testing for food sensitivities** is not recommended due to insufficient scientific support.

Received: 28 March 2022 | Accepted: 25 May 2022  
 DOI: 10.1002/ueg2.12265

REVIEW ARTICLE

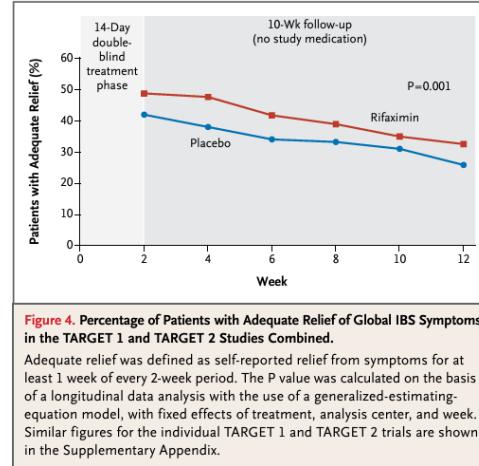
UEG Journal WILEY

**Irritable bowel syndrome with food-related symptoms: Future directions in the clinical management**

Chloé Melchior<sup>1,2,3</sup> | Joost Algera<sup>1</sup> | Esther Colomier<sup>1,4</sup> | Hans Törnblom<sup>1</sup> | Magnus Simrén<sup>1,5</sup>

# Dovezi terapeutice:

- **Placebo:** eficacitate clinica intre 31%. De prima intentie si 42% la retratament.
- **Rifaximina:** Dovezile principale reies din TARGET 1 si TARGET 2. Publicate in 2011. Randomizat, placebo controlat. IBS-D. Rezultate: reducere globala a turor simptomelor (pooled) cu 40.7% in lotul tratat comparative cu 31.7% in lotul placebo (reducere de 9%). NNT = 11. 550mg x3/zi. 14 zile. Reduce balonarea cu un NNT de 6. Nu scade durerea abdominala. Pret actual cca 500RON/ pacient/cura. In plus...a) ce zice TARGET 4? B) ce e mai relevant clinic? Balonarea sau durerea? C) Recidiva 64% in 18 saptamani . Retratament (contra placebo) cu eficaictate de 50% pt durere



## Dovezi terapeutice (2):

- **Antispastice :** 58% of antispasmodic patients improved compared to 46% of placebo; 13 studies; 1392 patients; RR 1.32; 95% CI 1.12 to 1.55; P < 0.001; NNT = 7) (ulei de mentă, trimebutine, pinaverium)
- **Antidepressants** abdominal pain: 54% improved vs 37% of placebo; 8 studies; 517 patients; RR 1.49; 95% CI 1.05 to 2.12; P = 0.03; NNT = 5), dar și în ce priveste evaluarea globală și scorul simptomelor (53% of antidepressants patients improved compared to 26% of placebo; 3 studies; 159 patients; RR 1.99; 95% CI 1.32 to 2.99; P = 0.001; NNT = 4).



- Consumul ridicat de cafeină ( $\geq 106,5$  mg/zi) crește șansele de a dezvolta IBS cu **47%** (OR: 1,47; 95% CI: 1,14–1,87).
- Consumatorii de cafea săptămânali prezintă un risc crescut de IBS cu **44%** comparativ cu cei care nu consumă cafea (OR: 1,44; 95% CI: 1,02–2,04).
- La femei (OR 1.48, IC 1,10-2) dar nu și la barbati



1-3 unitati



- **Diaree:** Odds Ratio (OR) = 2,1 (95% CI: 1,2–3,5, p = 0,006).
- **Greată:** OR = 2,4 (95% CI: 1,2–4,8, p = 0,01).
- **Durere abdominală:** OR = 2,1 (95% CI: 1,2–3,7, p = 0,009).
- **Indigestie:** OR = 2,0 (95% CI: 1,1–3,6, p = 0,004).



>4 unitati



Neurogastroenterology & Motility



Effects of chili on postprandial gastrointestinal symptoms in diarrhoea predominant irritable bowel syndrome: evidence for capsaicin-sensitive visceral nociception hypersensitivity

S. Gonlachanvit, A. Mahayosnond, P. Kullavanijaya  
First published: 30 December 2008 | <https://doi.org/10.1111/j.1365-2982.2008.01167.x> | Citations: 80

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Patumwan, Bangkok 10330, Thailand.  
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## •Voluntari sănătoși:

•Mesele picante și cele cu chili în capsule au indus doar arsuri abdominale ușoare comparativ cu mesele standard ( $P < 0.05$ ).

## •Pacienți IBS-D:

•Mesele picante și cele cu chili în capsule au provocat:  
•Durere abdominală semnificativă ( $P < 0.05$ ).  
•Arsuri abdominale semnificate ( $P < 0.05$ ).



Gastroenterology  
Volume 150, Issue 4, April 2016, Pages 875–887.e9

Original Research

Full Report: Clinical—Alimentary Tract

Histamine Receptor H1-Mediated Sensitization of TRPV1 Mediates Visceral Hypersensitivity and Symptoms in Patients With Irritable Bowel Syndrome

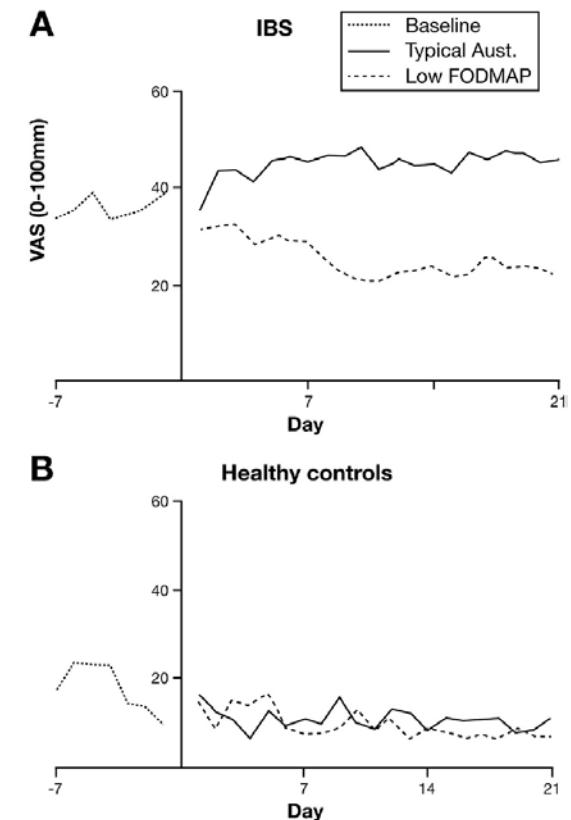
Miria M. Wouters <sup>1,2</sup>, Dafna Ballemans <sup>1,2</sup>, Sandra Van Wanrooy <sup>1,2</sup>, James Dooley <sup>2</sup>,  
Vincent Cibert-Goton <sup>3</sup>, Yeronda A. Alpizar <sup>4</sup>, Eduardo E. Valdez-Morales <sup>5</sup>, Yasmin Nasser <sup>5</sup>,  
Paul P. Van Velthoven <sup>6</sup>, Winde Vanbrabant <sup>6</sup>, Schalk Van der Merwe <sup>7</sup>, Raf Mols <sup>8</sup>,  
Bart Ghysen <sup>9</sup>, Carla Cirillo <sup>10</sup>, Inge Kortekoops <sup>11</sup>, Peter Carmeliet <sup>7</sup>, Willy E. Peetersmans <sup>11</sup>,  
Séverine Vermeire <sup>1</sup>, Paul Rutgeerts <sup>1</sup>, Patrick Augustijns <sup>9</sup>, Guy E. Boeckxstaens <sup>1,2</sup>, <sup>22</sup>

# FODMAP or no FODMAP

## LOW FODMAP DIET

| FOOD  | VEGETABLES  | FRUITS  | PROTEINS  | FATS   | STARCHES,<br>CEREALS &<br>GRAINS  |
|-------|---|---|---|--|---|
| EAT   |  |  |  |  |  |
| AVOID |  |  |  |  |  |

- The proportion of responders ( $\geq 50\%$  improvement in symptoms): Low-FODMAP diet group: Approximately **75%**.
- Typical diet group: Approximately **40-50%**.



Randomized Controlled Trial  Gastroenterology. 2014 Jan;146(1):67-75.e5.  
doi: 10.1053/j.gastro.2013.09.046. Epub 2013 Sep 25.

A diet low in FODMAPs reduces symptoms of irritable bowel syndrome

Emma P Halmos <sup>1</sup>, Victoria A Power <sup>2</sup>, Susan J Shepherd <sup>2</sup>, Peter R Gibson <sup>3</sup>, Jane G Muir <sup>3</sup>

Affiliations + expand

PMID: 24076059 DOI: 10.1053/j.gastro.2013.09.046

**Table 1 High FODMAP foods and alternative low FODMAP foods<sup>[24,79,80]</sup>**

| FODMAP   | High FODMAP foods   | Low FODMAP foods   |
|--|---|--|
| Oligosaccharides: fructans and/or galacto-oligosaccharides | Vegetables: artichokes, asparagus, beetroot, Brussels sprouts, broccoli, cabbage, fennel, garlic, leeks, shallots, okra, onions, peas<br>Cereals: wheat & rye when eaten in large amounts ( <i>e.g.</i> , bread, pasta, crackers)<br>Legumes: chickpeas, lentils, red kidney beans, baked beans<br>Fruits: watermelon, custard apple, white peaches, rambutan, kaki | Vegetables: carrot, cucumber, potato, bell pepper, eggplant, green beans, lettuce, spinach, chives, parsnip, pumpkin, silverbeet, spring onion (green only), tomato, zucchini, bamboo shoots, bok choy, choko, choy sum<br>Cereals: wheat-free grains or wheat-free flours and products made with these ( <i>e.g.</i> , bread, pasta, crackers), spelt and spelt products, oats, corn, rice, quinoa<br>Legumes: canned chickpeas |
| Disaccharides: Lactose                                     | Milk (cow, goat, sheep), yoghurt, soft & fresh cheeses ( <i>e.g.</i> , Ricotta, Cottage), ice cream   | Lactose-free milk, rice milk, almond milk, lactose-free yoghurt, hard cheeses ( <i>e.g.</i> , Cheddar, Parmesan, Swiss, Brie, Camembert), butter, ice-cream substitutes ( <i>e.g.</i> , dairy-free gelato, sorbet)   |
| Monosaccharides: Fructose                                  | Fruits: apples, pears, nashi pears, clingstone peaches, mango, sugar snap peas, watermelon, tinned fruit in natural juice, dried fruits<br><br>Honey<br><br>Sweeteners: fructose, high fructose corn syrup  | Fruits: banana, blueberry, grapefruit, grape, honeydew melon, kiwifruit, lemon, lime, mandarin, orange, tangelo, raspberry, strawberry, pawpaw, star fruit, passion fruit, rockmelon, carambola, durian<br><br>Honey substitutes: maple syrup<br><br>Sweeteners: sugar, glucose, artificial sweeteners not ending in “-ol”   |
| Polyols  | Fruits: apples, apricots, cherries, longon, lychee, nashi pears, nectarines, pears, peaches, plums, prunes, watermelon<br><br>Vegetables: avocado, cauliflower, mushrooms, snow peas<br>Sweeteners: sorbitol, mannitol, xylitol & others ending in “-ol”, isomalt   | Fruits: banana, blueberry, grapefruit, grape, honeydew melon, kiwifruit, lemon, lime, mandarin, orange, raspberry, pawpaw, star fruit, passion fruit, rockmelon, carambola, durian<br><br>Sweeteners: sugar, glucose, artificial sweeteners not ending in “-ol” ( <i>e.g.</i> , sucralose, aspartame)  |



Review > World J Gastroenterol. 2017 Jun 7;23(21):3771-3783. doi: 10.3748/wjg.v23.i21.3771.

## Diet in irritable bowel syndrome: What to recommend, not what to forbid to patients!

Anamaria Cozma-Petruț<sup>1</sup>, Felicia Loghin<sup>1</sup>, Doina Miere<sup>1</sup>, Dan Lucian Dumitrașcu<sup>1</sup>

Affiliations + expand

PMID: 28638217 PMCID: PMC5467063 DOI: 10.3748/wjg.v23.i21.3771



## Dairy & FODMAPs

@thegeudietitian

### HIGH FODMAP



### LOW FODMAP



## INTOLERANTA LA LACTOZA

- Mai frecventă la pacienții cu IBS-D comparativ cu grupul de control, pentru toate dozele de lactoză testate:
  - 10g:** 18% la IBS-D față de 3% la control (OR = 6.51; 95% CI: 1.38–30.8).
  - 20g:** 47% la IBS-D față de 22% la control (OR = 3.16; 95% CI: 1.43–7.02).
  - 40g:** 85% la IBS-D față de 68% la control (OR = 2.63; 95% CI: 1.08–6.42).

### Intoleranță auto-raportată vs. obiectivă:

- **63%** dintre pacienții cu IBS-D au raportat auto-intoleranță la lactoză (LI), comparativ cu **22%** din grupul de control (OR = 6.25; 95% CI: 2.78–14.0;  $p < 0.001$ ).
- nu a fost întotdeauna susținută de rezultatele testului respirator cu hidrogen (HBT)

### LACTOSE FREE CHEESES

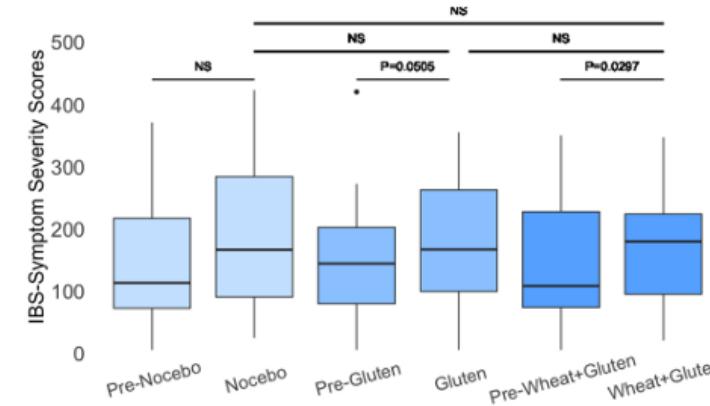
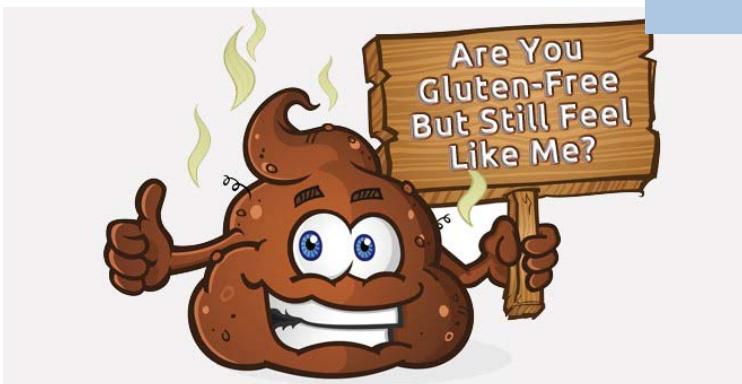
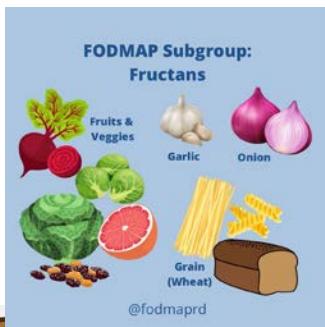
By The Cheese Wanker

Below detectable levels in lab studies (<1mg/100g or <2.4mg/100g depending on study)



Sources:

- Lactose residual content in PDO cheeses
- Detection of lactose in products with low lactose content
- The analysis of lactose in milk and cheese products by HPLC
- Food Standards ANZ Food Composition Database
- USDA Food Data Central



#### INVESTIGATING MECHANISMS THAT DRIVE SYMPTOMS IN PATIENTS WITH IRRITABLE BOWEL SYNDROME AND PERCEIVED GLUTEN SENSITIVITY

Caroline Seiler, Gaston Rueda, Pedro Miranda, Andrea Nardelli, Rajka Borovjevic, Detlef Schuppan, Paul Moayyedi, Elena F. Verdu, Stephen M. Collins, M. I. Pinto-Sánchez, Premysl Bercik

#### 1. Simptomele generale (S-SSS - Scorul total al simptomelor):

- Grupul cu gluten:** Scădere de **32%**, **Grupul placebo:** Scădere de **49%**.

#### 2. Intensitatea durerii abdominale:

- Grupul cu gluten:** Scădere de **45%**. **Grupul placebo:** Scădere de **52%**.

#### 3. Frecvența durerii abdominale:

- Grupul cu gluten:** Scădere de **26%**. **Grupul placebo:** Scădere de **46%**.

#### 4. Distensia abdominală:

- Grupul cu gluten:** Scădere de **29%**. **Grupul placebo:** Scădere de **63%**.

#### 5. Interferența cu funcționarea socială:

- Grupul cu gluten:** Scădere de **14%.** **Grupul placebo:** Scădere de **45%**.

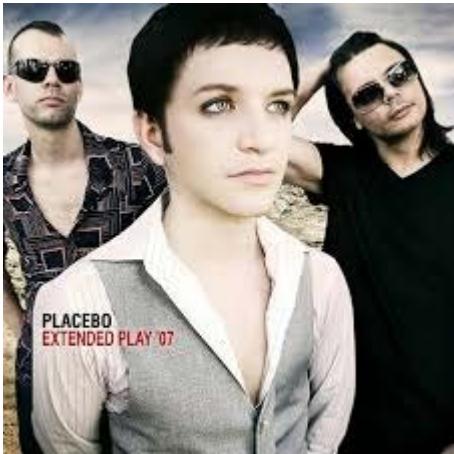
#### 6. Calitatea vieții:

- Grupul cu gluten:** Crestere de **23%.** **Grupul placebo:** Crestere de **32%.**

doi:10.1016/j.clnesp.2021.12.019. Epub 2021 Dec 24.

The effect of low FODMAP diet with and without gluten on irritable bowel syndrome: A double blind, placebo controlled randomized clinical trial  
Fatemeh Mohseini <sup>1</sup>, Shahram Aghah <sup>2</sup>, Naser Ebrahimi-Daryani <sup>2</sup>, Mohammad Taher <sup>3</sup>,  
Elyas Nataq-Eshnavi <sup>4</sup>, Sara Karimi <sup>3</sup>, Samira Rastgo <sup>3</sup>, Fatemeh Bourour <sup>1</sup>,  
Asita Hekmatdoost <sup>3</sup>

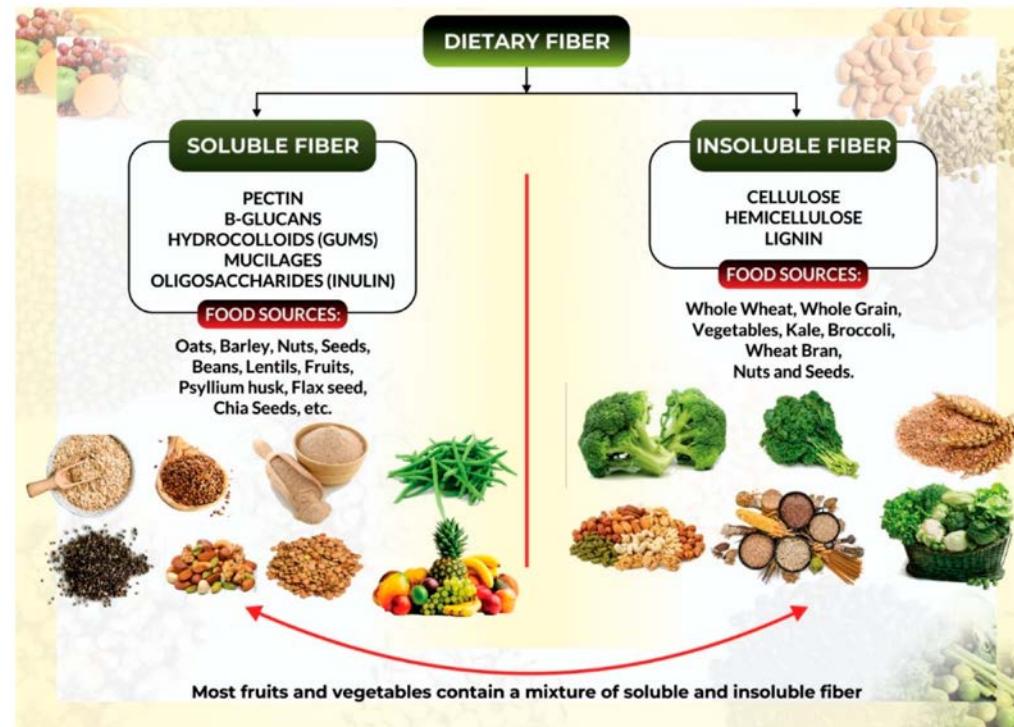
Affiliations + expand  
PMID: 35003241 DOI: 10.1016/j.clnesp.2021.12.019



**WHO ARE THE PLACEBO RESPONDERS IN IBS CLINICAL TRIALS?: A PROSPECTIVE STUDY OF A PLACEBO-CONTROLLED MULTISITE NIH TRIAL**

Jeffrey M. Lackner, Brian M. Quigley, Sigal Zilcha-Mano, Sarah Mason, Gregory D. Gudleski, Susan S. Krasner, Christopher Radziwon, Alison Vargovich, Patricia O'Leary, Paul Enck





25-35g/zi

SII-D/SII-C

RR d'absence d'amélioration des symptômes de

SII = 0,87 ; IC95 % : 0,80-0,94) vs placebo

NNT 7 vs placebo

IBS C dar si restul;

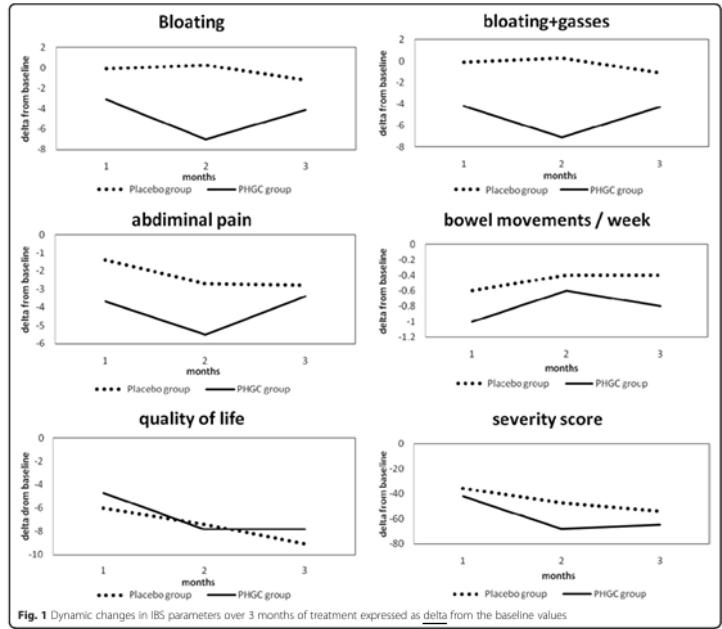


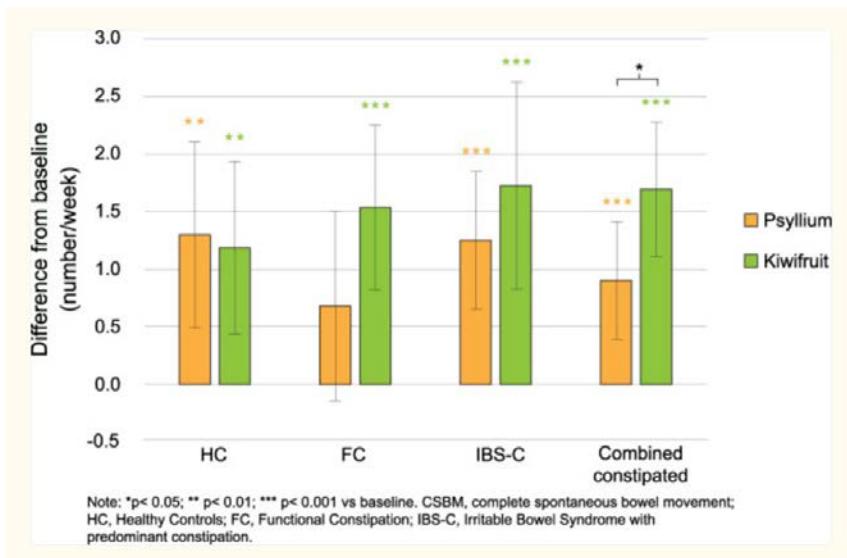
Fig. 1 Dynamic changes in IBS parameters over 3 months of treatment expressed as delta from the baseline values



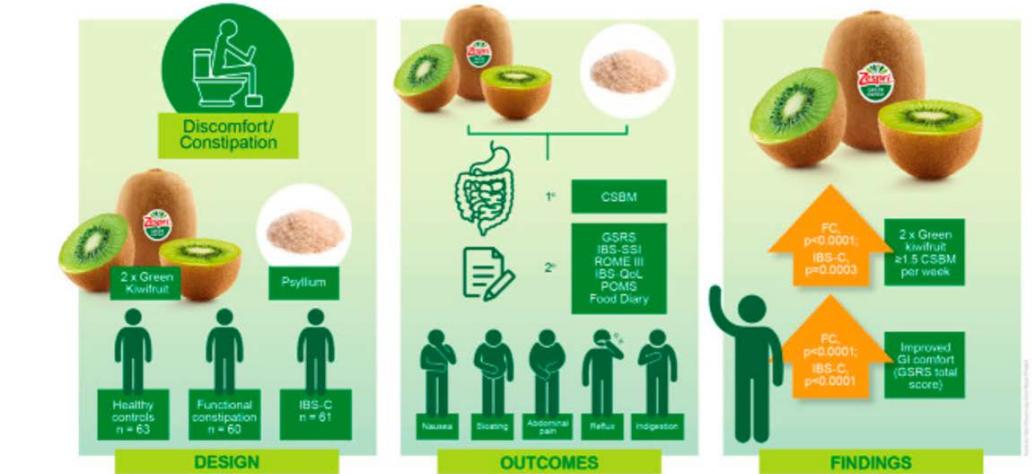
6 g/day PHGG for IBS patients with an expected clinical effect on bloating and gasses.

NNT = 1 / ARR = 1 / 0.20 = 5. Pret 15lei 250g

IBS C dar si restul;



## Green kiwifruit improves constipation and gastrointestinal comfort – RCT



Gearry et al. Am J Gastroenterol. 2022. doi:10.14309/ajg.0000000000002124

AJG The American Journal of GASTROENTEROLOGY

### Principalele rezultate

#### 1.Creșterea numărului de scaune spontane complete pe săptămână (CSBM):

- Kiwi: IBS-C: +1.73 pe săptămână
- Psyllium IBS-C: +1.87 pe săptămână

#### 2.Reducerea scorului total al simptomelor gastrointestinale (GSRS):

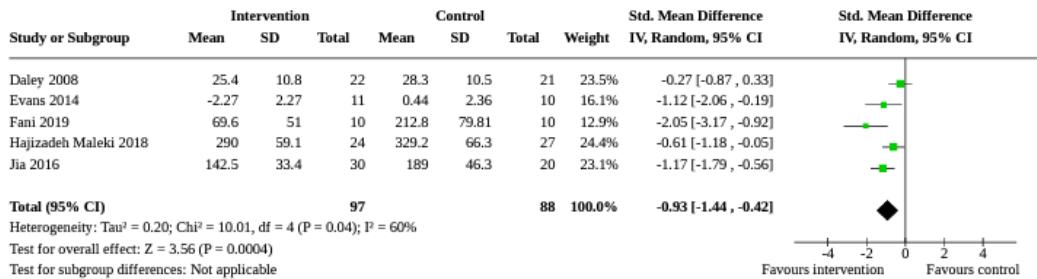
- Kiwi: IBS-C: Scădere de -0.36
- Psyllium: IBS-C: Scădere de -0.17

Consumption of 2 Green Kiwifruits Daily Improves Constipation and Abdominal Comfort—Results of an International Multicenter Randomized Controlled Trial

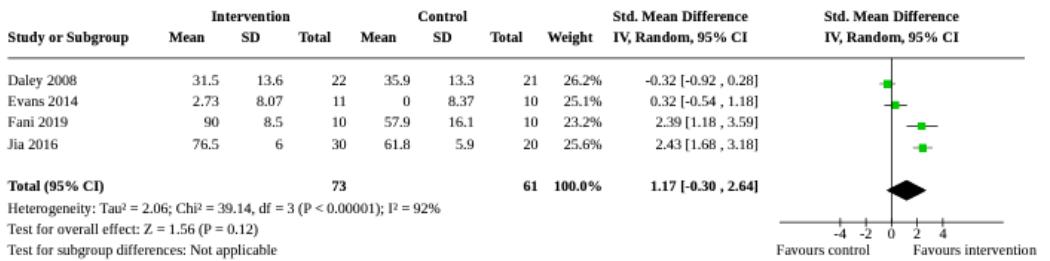
Richard Gearry <sup>1,2</sup>, Shin Fukudo <sup>2,3</sup>, Giovanni Barbara <sup>4</sup>, Barbara Kuhn-Sherlock <sup>5</sup>, Juliet Ansell <sup>6</sup>, Paul Blatchford <sup>6</sup>, Sarah Eady <sup>7</sup>, Alison Wallace <sup>7</sup>, Christine Butts <sup>7</sup>, Cesare Cremon <sup>4</sup>, Maria Raffaella Barbaro <sup>4</sup>, Isabella Pagano <sup>4</sup>, Yohei Okawa <sup>2</sup>, Tomohiko Muratubaki <sup>2</sup>, Tomoko Okamoto <sup>8</sup>, Mikiko Fuda <sup>9</sup>, Yuko Endo <sup>3</sup>, Michiko Kano <sup>2</sup>, Motoyori Kanazawa <sup>2,3</sup>, Naoki Nakaya <sup>10</sup>, Kumi Nakaya <sup>10</sup>, Lynley Drummond <sup>11</sup>



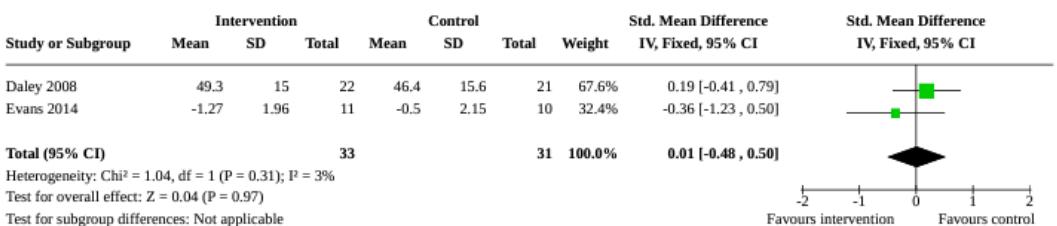
### Analysis 1.1. Comparison 1: Physical activity compared with usual care, Outcome 1: IBS symptoms



### Analysis 1.3. Comparison 1: Physical activity compared with usual care, Outcome 3: Quality of life



### Analysis 1.5. Comparison 1: Physical activity compared with usual care, Outcome 5: Abdominal pain



## Fecal microbiota transplantation for treatment of irritable bowel syndrome

✉ Sofie I Halkjær, Bobby Lo, Frederik Cold, Alice Hoejer H Christensen, Lise Lotte Gluud, Andreas M Petersen

Authors' declarations of interest

Version published: 18 May 2020 Version history

<https://doi.org/10.1002/14651858.CD013602> ↗

## Homeopathy for treatment of irritable bowel syndrome

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## Biofeedback for treatment of irritable bowel syndrome

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# De luat acasa

- SII, patologie **frecventa, suparatoare, fara impact asupra supravietuirii**
- SII face parte din mai largul **sindrom algic functional**
- SII pare sa fie **ritmat de anumite alimente** insa mai degraba autoraportat decat demonstate
- SII ritmat de stress
- SII pare sa raspunda la limitarea aportului de zaharide fermentabile, dar nu numai
- Educatia, increderea, cooperarea, suportul, sunt cel putin la fel de importante ca farmacoterapia

## **Webinar – Management și Intervenție Nutrițională, 22-23 noiembrie 2024**

Tema ediției: Comunicarea nutrițională bazată pe dovezi, indiferent de vârstă

Tema dezbaterei: Preferințele alimentare – risc sau beneficiu?



Va multumesc!!