

71° Congresso Nazionale Fimmg - Metis

UN MEDICO PER LA PERSONA, LA FAMIGLIA, LA SOCIETÀ

PERCORSI SIMPeSV PER UN AMBULATORIO
DEGLI STILI DI VITA

NELLE PATOLOGIE GASTROINTESTINALI
COLONPATIE

Daniela Livadiotti

5 - 10 ottobre 2015

SIMPeSV

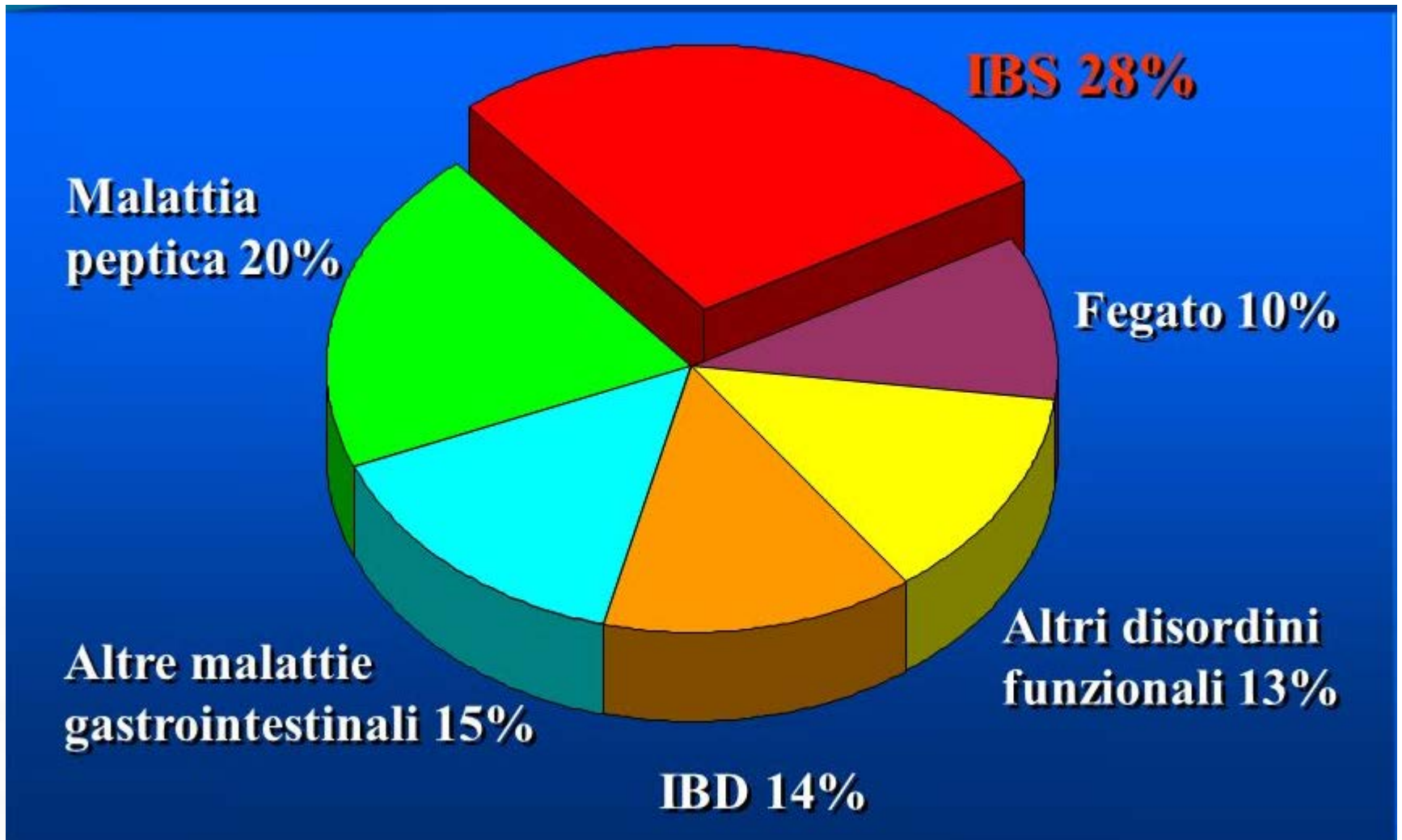
Società Italiana di Medicina
di Prevenzione e degli Stili di Vita





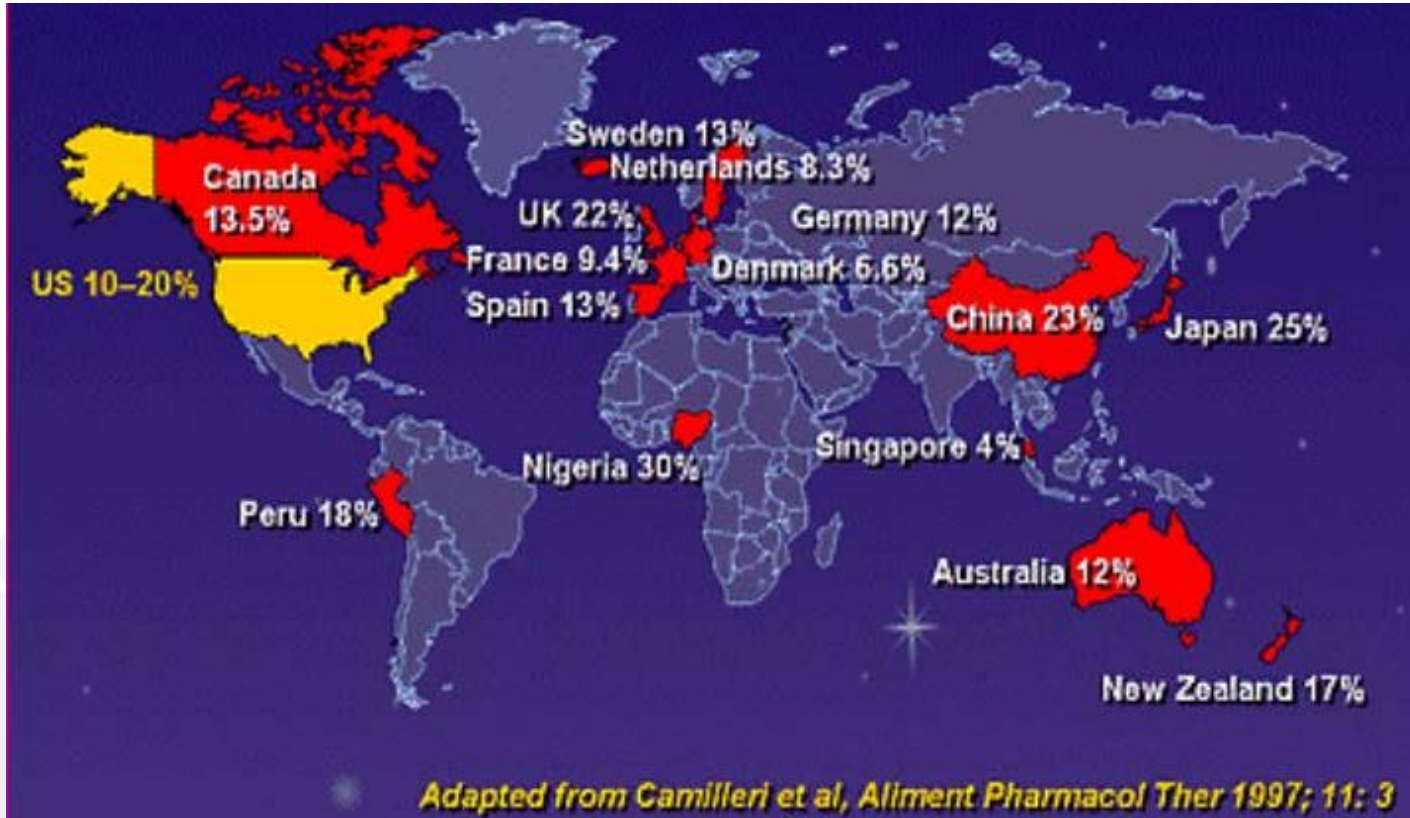
SINDROME DELL'INTESTINO IRRITABILE

IBS



E' il disturbo GI più frequente

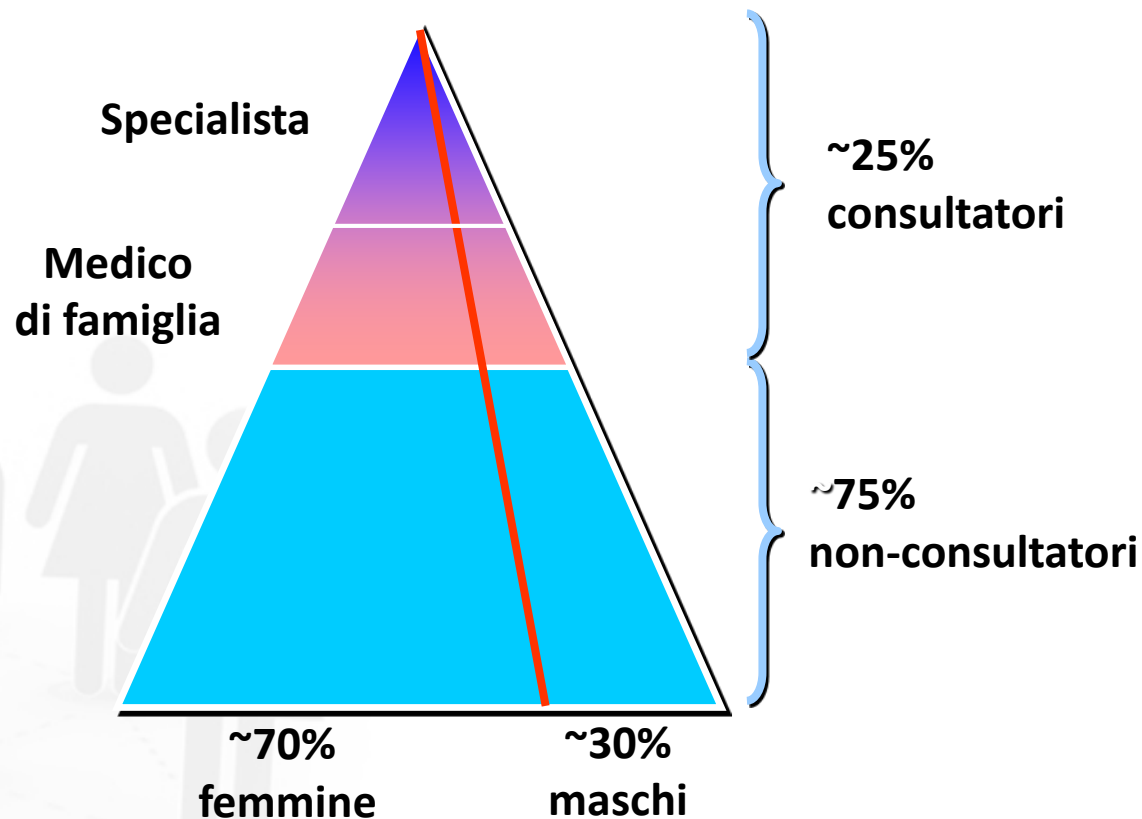
EPIDEMIOLOGIA



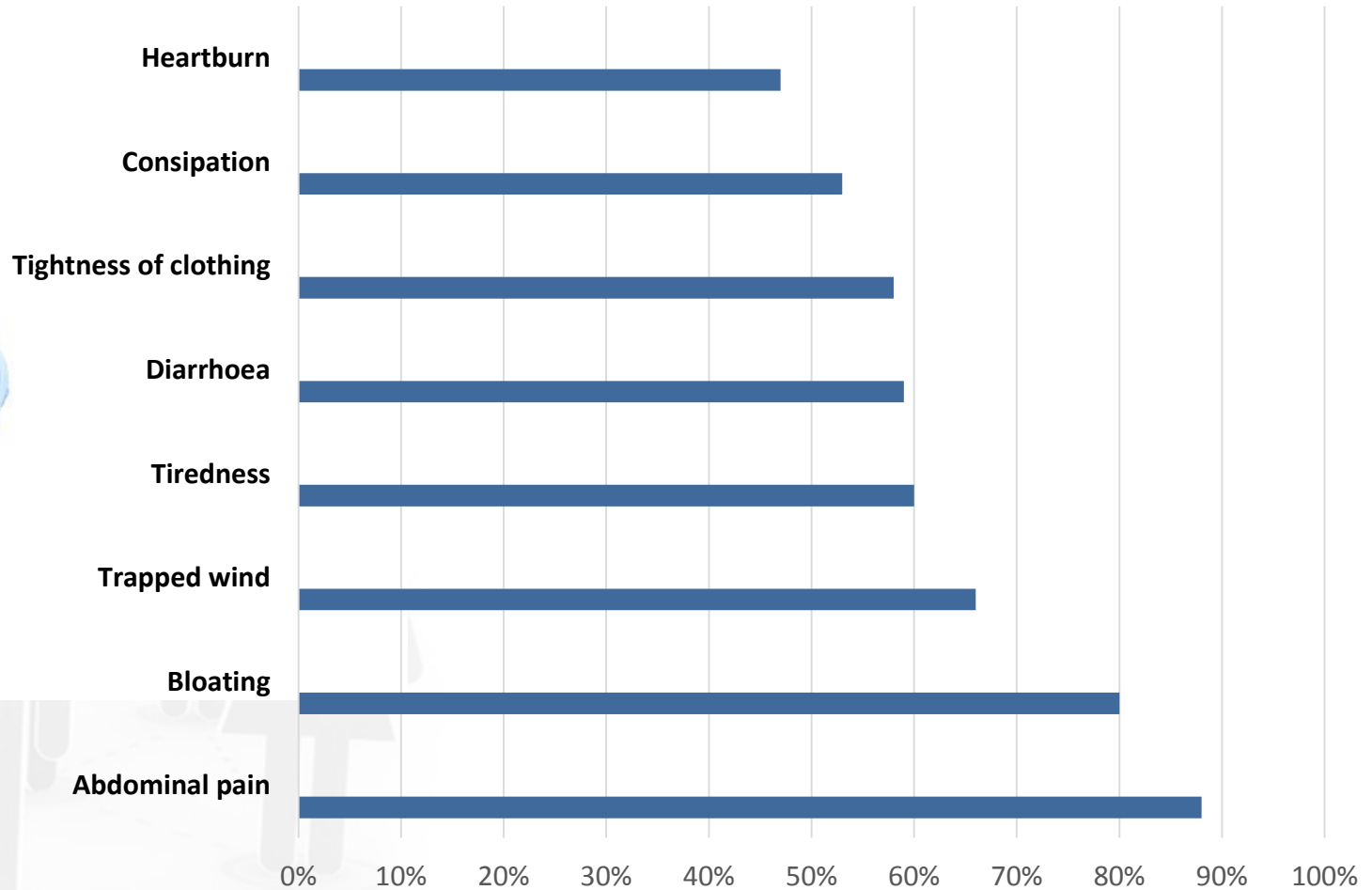
- Prevalenza nei paesi industrializzati 15-20%
- Rapporto M/F 1:2
- Più frequente nei giovani adulti (<45 anni)

EPIDEMIOLOGIA

Pazienti che si recano dal medico



SINTOMI PRINCIPALI



Hungin et al, *Aliment Pharmacol Ther*, 2003

CRITERI DIAGNOSTICI PER LA SINDROME DEL COLON IRRITABILE CRITERI DI ROMA III

Dolore o fastidio addominale ricorrente per almeno 3 giorni negli ultimi 3 mesi associato ad almeno 2 dei seguenti sintomi








Miglioramento con l'evacuazione

Esordio associato a modificazioni della forma delle feci

Esordio associato a modificazione della frequenza delle evacuazioni

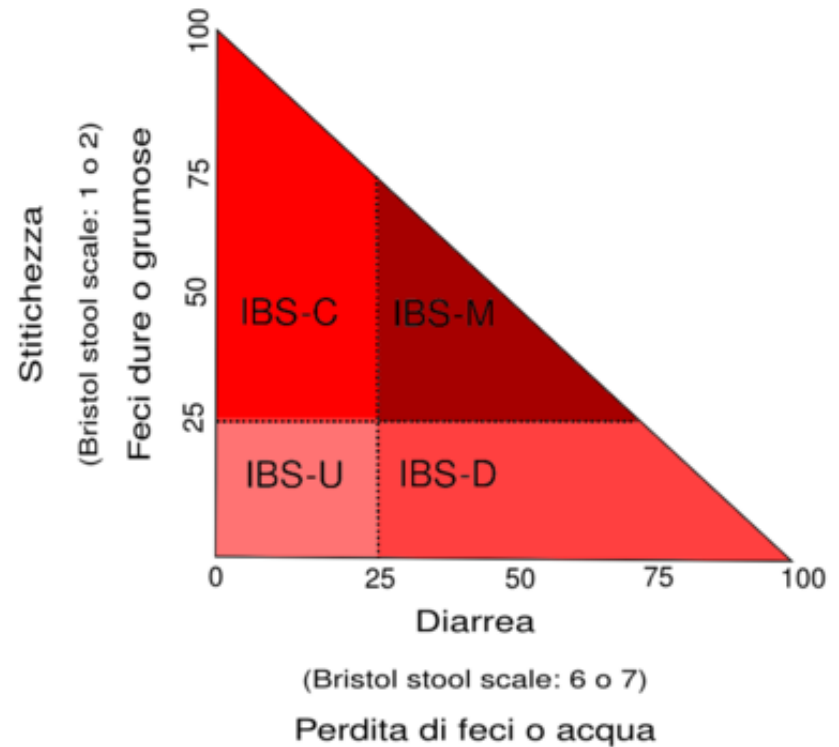
CLASSIFICAZIONE IN BASE ALL' ALVO

Bristol Stool Chart

Type 1		Separate hard lumps, like nuts (hard to pass)
Type 2		Sausage-shaped but lumpy
Type 3		Like a sausage but with cracks on the surface
Type 4		Like a sausage or snake, smooth and soft
Type 5		Soft blobs with clear-cut edges
Type 6		Fluffy pieces with ragged edges, a mushy stool
Type 7		Watery, no solid pieces. Entirely Liquid

SOTTOTIPI

(secondo i criteri di Roma III)



ESAME OBIETTIVO



- **METEORISMO**
- **CORDA COLICA**

TEST DI LABORATORIO

(da fare nel sospetto di IBS)



- **Esame emocromocitometrico** (per escludere anemia)
- **VES, PCR** (per escludere IBD)
- **Transglutaminasi** (per escludere celiachia → alta sensibilità e specificità)



Questi esami hanno limitate prove di utilità clinica, ma possono essere comunque di supporto alla diagnosi

DA NON FARE

- **Colonscopia**
- **Sangue occulto**
- **Ecografia**
- **Coprocoltura**
- **Breath test**
- **Funzionalità tiroidea**



Non ci sono sufficienti prove di efficacia per usare questi test di routine nel caso di pazienti che rispondono ai criteri positivi e **che non abbiano alcuna RED FLAG**

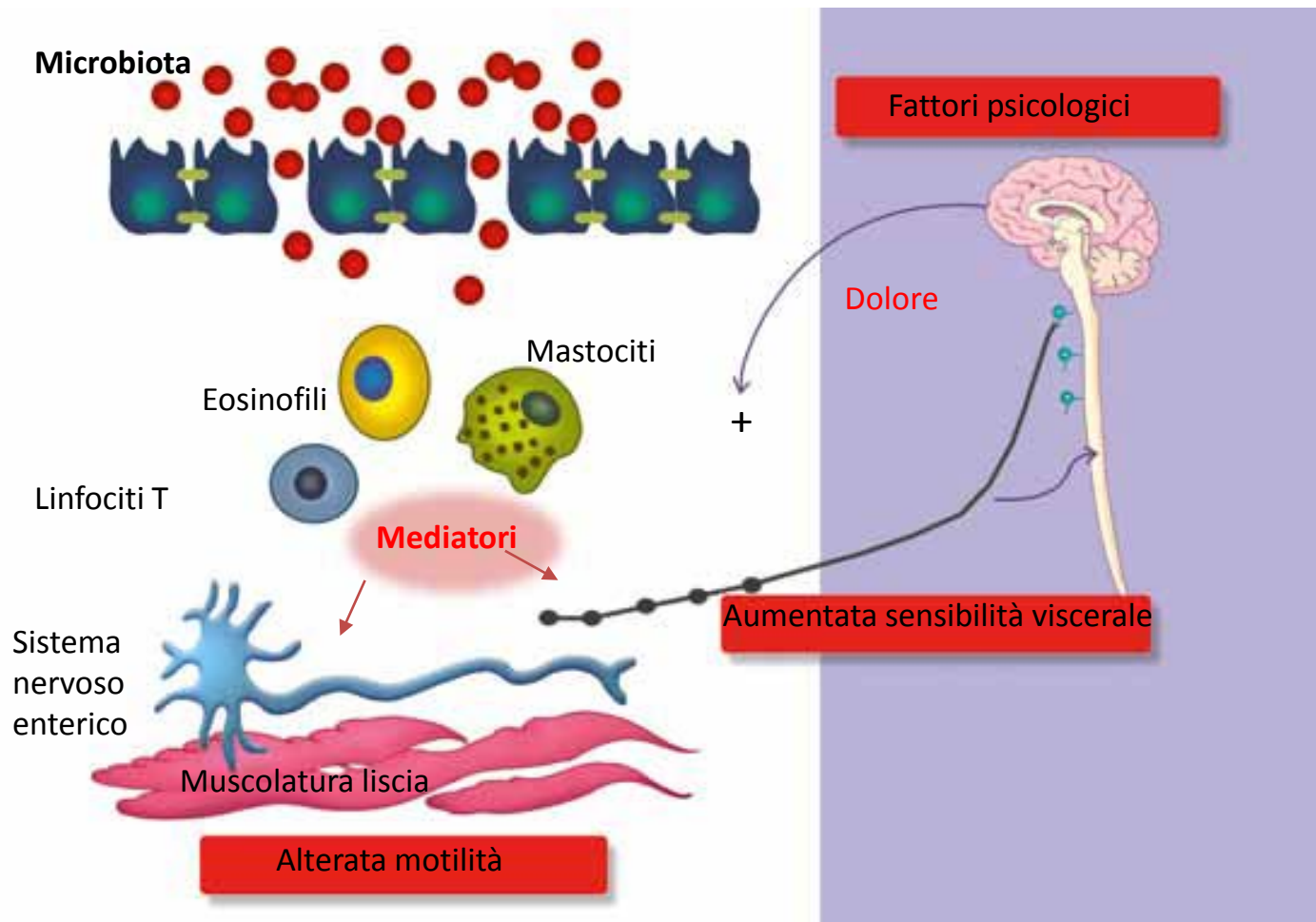


RED FLAGS



- **risveglio notturno provocato dai disturbi addominali**
- **cambiamento delle abitudini dell'alvo che persiste da 6 o più di settimane**
- **febbre**
- **perdita di peso**
- **presenza di sangue nelle feci**
- **anemia**
- **anamnesi familiare positiva per IBD o neoplasie**

FISIOPATOLOGIA DELLA IBS



MICROBIOTA

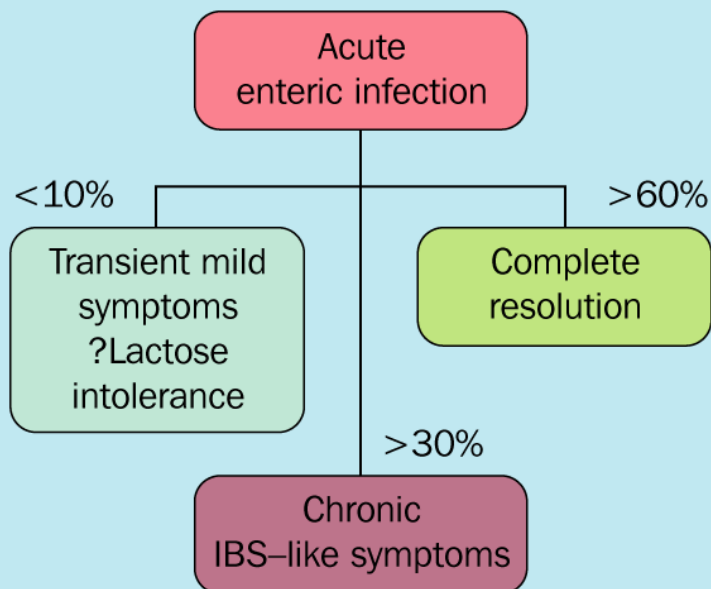
- Nei pazienti con IBS vi può essere un'alterata flora microbica, responsabile di un'aumentata fermentazione ed eccessiva produzione di gas. Il microbiota determina inoltre attivazione di una risposta immune a livello mucosale con incremento della permeabilità epiteliale, attivazione dei nocicettori e disregolazione del sistema nervoso enterico

Simre M, Barbara G, *Intestinal microbiota in functional bowel disorder: a Rome foundation report* Gut 2013

- Nel sangue periferico dei pazienti con IBS vi sono Ab contro Ag del microbiota (bacterial flagellin) ed elevati livelli di citochine a dimostrazione dell'esistenza di un'alterata interazione tra ospite e microbiota con conseguente risposta immune sistemica

Barbara G et al, *The immune system in irritable bowel syndrome*
J Neurogastroenterol Motil 2011

IBS POST-INFETTIVA

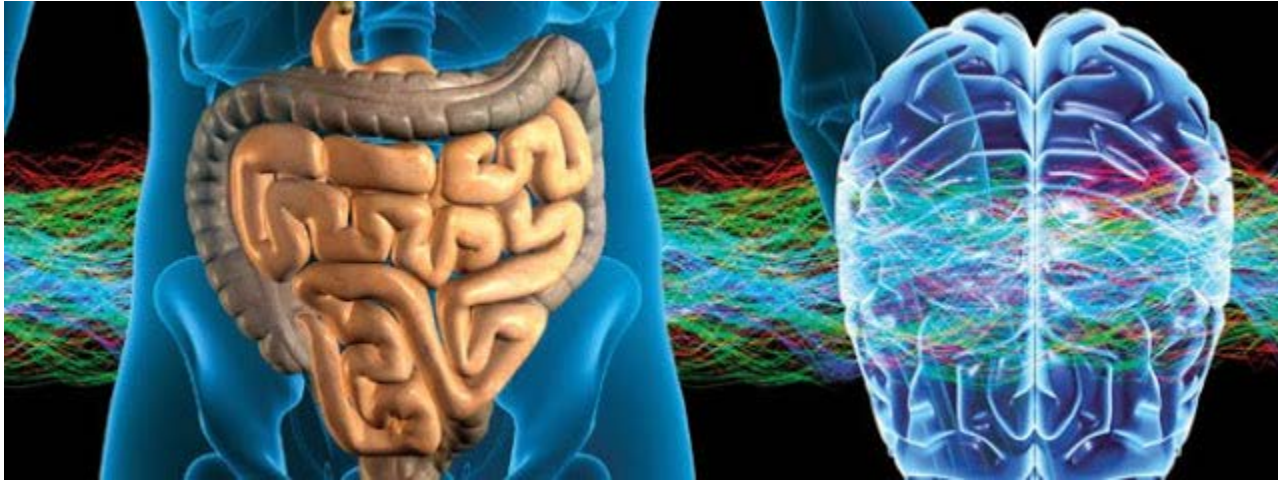


FATTORI DI RISCHIO

- Virulenza del patogeno
- Severità dell'episodio acuto
- Età < 29 anni
- Sesso femminile
- Fattori genetici
- Fattori psicosociali
- Antibiotici

Un episodio acuto di infezione gastroenterica è un forte rischio per lo sviluppo di IBS

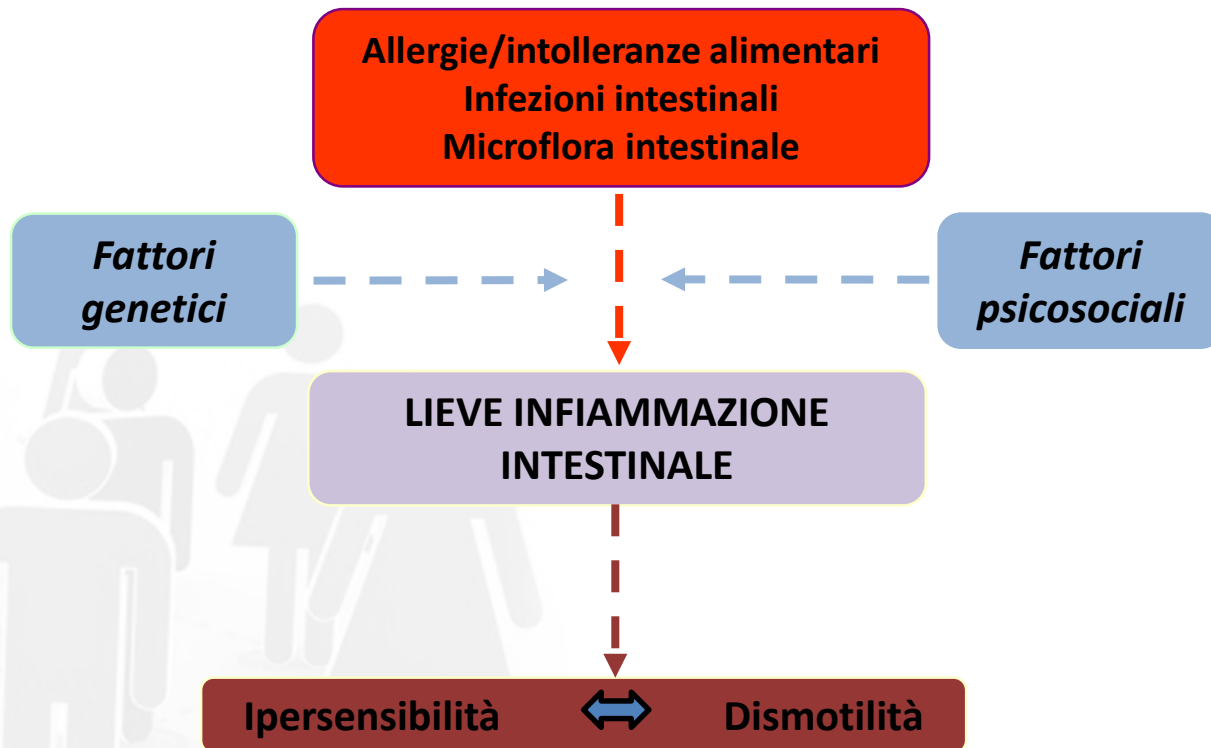
ASSE CERVELLO-INTESTINO



I due cervelli si interconnettono strettamente, tramite una ricca rete di fibre nervose, il GUT-BRAIN AXIS ("asse cervello-intestino"), secondo un sistema di relazioni bidirezionale

MECCANISMI PATOGENETICI DELL'IBS

MILD INFLAMMATION



TERAPIA



Basata sul sintomo predominante
e sulla sua gravità

STILE DI VITA

- Dare adeguate informazioni al paziente
- Adeguare la dieta
- Fare regolare attività fisica

TERAPIA FARMACOLOGICA

Terapie singole o combinate con

- Antispastici
- Lassativi
- Antidiarroici
- Antidepressivi

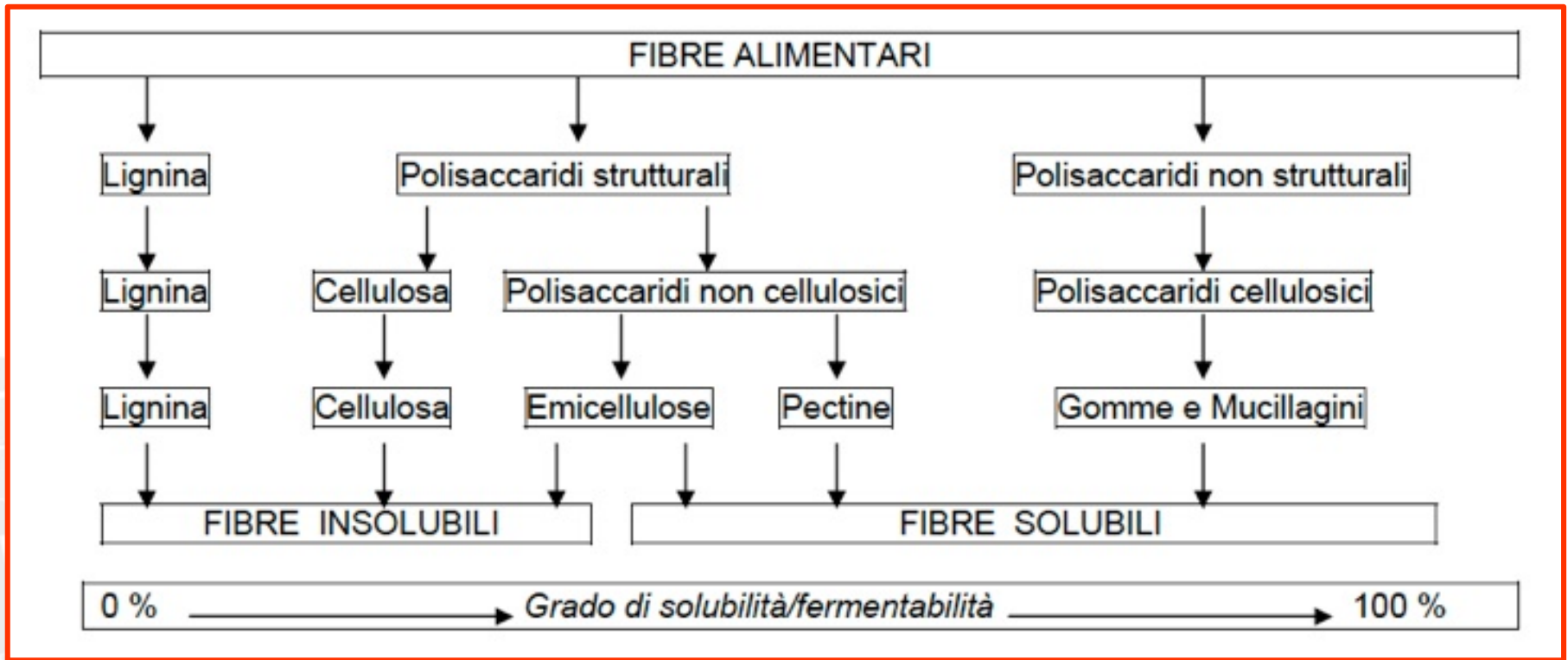
DARE ADEGUATE INFORMAZIONI

- **Ascoltare con attenzione**
- **Riconoscere la serietà del disturbo**
- **Spiegare la natura dei sintomi**
- **Non accondiscendere alle richieste del paziente**
- **Rassicurare (DOPO attenta valutazione)**



"I'm afraid that your irritable bowel syndrome has progressed. You now have furious and vindictive bowel syndrome."

FIBRE



Le **fibre insolubili** possono peggiorare il dolore e la distensione addominale.
Al contrario, **le fibre solubili** migliorano i sintomi

Bijkerk CI *Systematic review: the role of different types of fibre in the treatment of irritable bowel syndrome*. Aliment Pharmacol Ther, 2004 Feb

Soluble or insoluble fibre in irritable bowel syndrome in primary care?

Randomised placebo controlled trial.

DESIGN:

Randomised controlled trial.

SETTING:

General practice.

PARTICIPANTS:

275 patients aged 18-65 years with irritable bowel syndrome.

INTERVENTIONS:

12 weeks of treatment with 10 g psyllium (n=85), 10 g bran (n=97), or 10 g placebo (rice flour) (n=93).

MAIN OUTCOME MEASURES:

The primary end point was adequate symptom relief during at least two weeks in the previous month, analysed after one, two, and three months of treatment to assess both short term and sustained effectiveness. Secondary end points included irritable bowel syndrome symptom severity score, severity of abdominal pain, and irritable bowel syndrome quality of life scale.

RESULTS:

The proportion of responders was significantly greater in the psyllium group than in the placebo group during the first month (57% v 35%; relative risk 1.60, 95% confidence interval 1.13 to 2.26) and the second month of treatment (59% v 41%; 1.44, 1.02 to 2.06). Bran was more effective than placebo during the third month of treatment only (57% v 32%; 1.70, 1.12 to 2.57), but this was not statistically significant in the worst case analysis (1.45, 0.97 to 2.16). After three months of treatment, symptom severity in the psyllium group was reduced by 90 points, compared with 49 points in the placebo group (P=0.03) and 58 points in the bran group (P=0.61 versus placebo). No differences were found with respect to quality of life. Fifty four (64%) of the patients allocated to psyllium, 54 (56%) in the bran group, and 56 (60%) in the placebo group completed the three month treatment period. Early dropout was most common in the bran group; the main reason was that the symptoms of irritable bowel syndrome worsened.

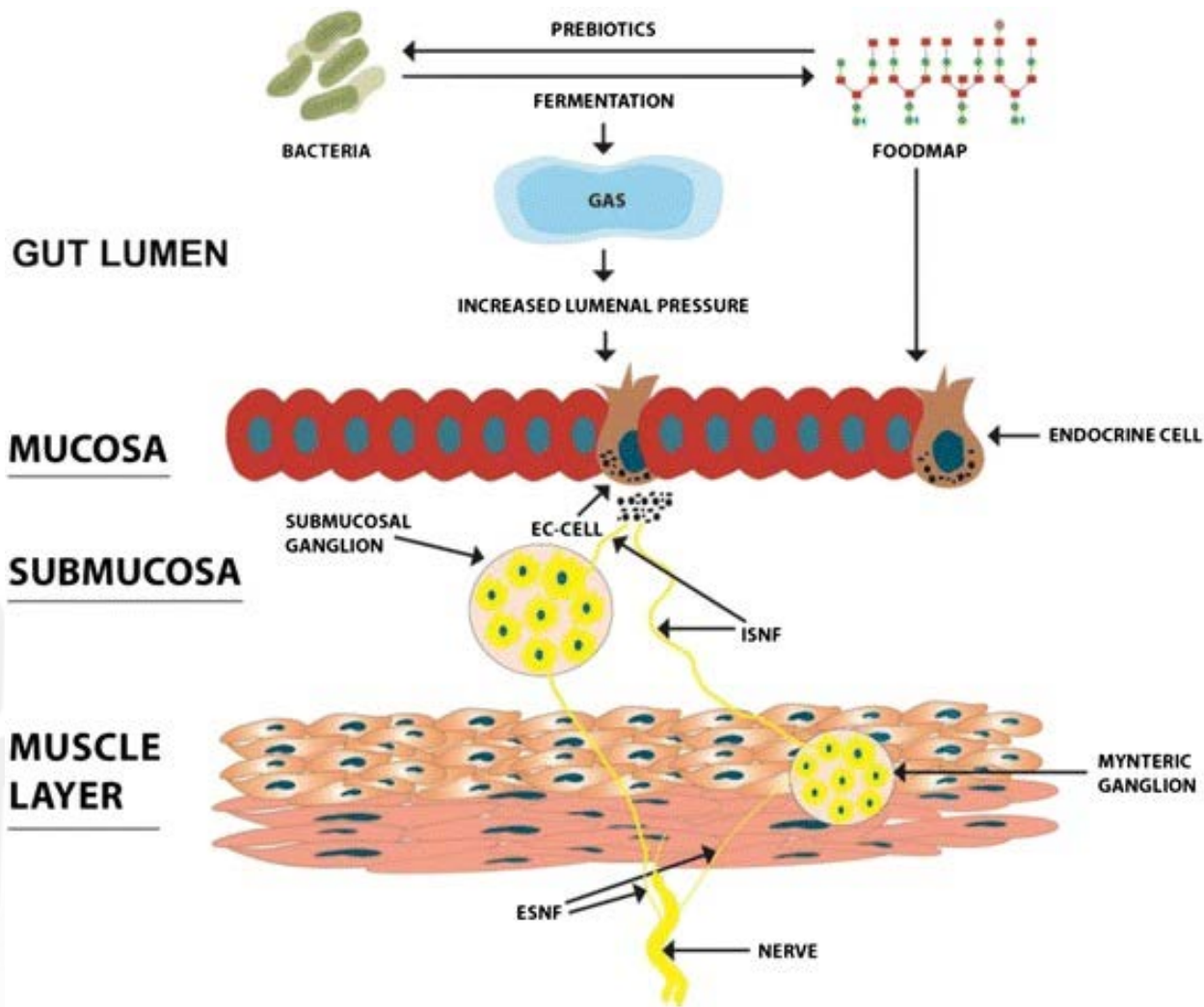
CONCLUSIONS:

Psyllium offers benefits in patients with irritable bowel syndrome in primary care

FODMAP



Gibson PR, Shepherd SJ. *Evidence-based dietary management of functional gastrointestinal symptoms: The FODMAP approach.* J Gastroenterol Hepatol.2010



El-Salhy and Gudersen, *Diet in irritable bowel syndrome*, Nutr j 2014 Apr 14

Fonti alimentari ad ALTO CONTENUTO di FODMAP	Fruttosio	Lattosio	Oligosaccaridi (fruttani-galattani)	Polioli
	<p>Frutta: mele, pere, pesche, mango, anguria</p> <p>Miele</p> <p>Dolcificanti: fruttosio, sciroppo di mais</p> <p>Alte dosi di fruttosio: concentrati di frutta, conserve di frutta, succhi di frutta, frutta secca</p>	<p>Latte: mucca, capra, pecora, gelati</p> <p>Formaggi: morbidi e freschi (per es. ricotta)</p>	<p>Verdure: carciofi, asparagi, barbabietole, cavolini di Bruxelles, broccoli, cavoli, finocchio, aglio, gombo, cipolle, piselli, scalogno</p> <p>Cereali: Frumento e segale se consumati in grandi quantità (pane, pasta, couscous, crackers, biscotti)</p> <p>Legumi: ceci, lenticchie, fagioli, fave</p> <p>Frutta: anguria, pesche bianche, cachi</p>	<p>Frutta: mele, albicocche, ciliegie, pere, pesche, susine, prugna, anguria</p> <p>Verdura: avocado, cavolfiori, funghi, piselli</p> <p>Dolcificanti: sorbitolo, mannitolo, xilitolo e altri che terminano in -olo</p>
Fonti alimentari a BASSO CONTENUTO di FODMAP	Fruttosio	Lattosio	Oligosaccaridi (fruttani-galattani)	Polioli
	<p>Frutta: banana, mirtillo, pompelmo, uva, melone, kiwi, limone, mandarino, arancia, lampone, fragola</p> <p>Sostitutivi del miele: sciroppo d'acero</p> <p>Dolcificanti: tutti eccetto i polioli</p>	<p>Latte: latte delattosato, di soia, di riso</p> <p>Formaggi: formaggi duri e stagionati</p> <p>Sostituti del gelato: sorbetti</p> <p>Burro</p>	<p>Verdure: germogli di bambù, sedano, peperoni, melanzane, fagiolini, lattuga, erba cipollina, zucca, cipolla verde, pomodoro</p> <p>Cereali: prodotti senza glutine e farro</p>	<p>Frutta: banana, mirtillo, pompelmo, kiwi, mandarino, limone, arancia, uva, lampone, fragola</p> <p>Dolcificanti: zucchero (saccarosio), glucosio, dolcificanti che non terminano in -olo</p>

PROBIOTICI

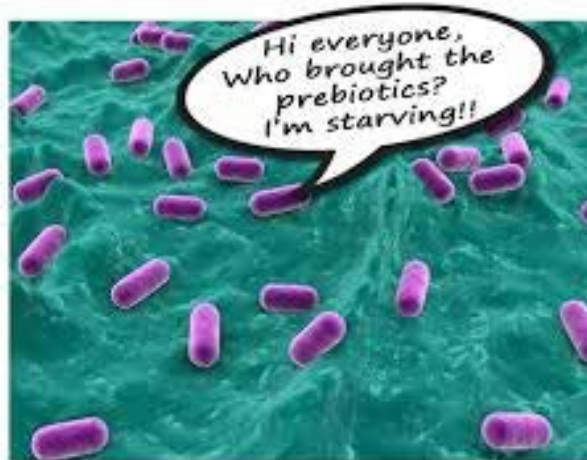


Prodotti farmaceutici: miscela di singoli o multipli ceppi di microrganismi vitali

Prodotti nutrizionali: microrganismi aggiunti o presenti naturalmente nei cibi (alimenti funzionali)

PREBIOTICI

- Sono carboidrati complessi non digeribili che nutrono il microbiota promuovendone la crescita e l'attività
- Sono i FOS (fruttooligosaccaridi) e l'INULINA
- Vengono utilizzati da soli o in associazione con probiotici
- Ci sono evidenze sufficientemente buone che l'uso di probiotici, soprattutto in combinazione, porti ad un miglioramento globale dei sintomi
- Non ci sono grosse evidenze di efficacia con l'uso di soli prebiotici



A lactobacillus party

ALOE VERA

ALOE VERA



- L'uso di aloe vera va scoraggiato nei pazienti con IBS
- Non ci sono evidenze scientifiche sulla sua efficacia
- Ci sono prove di effetti collaterali: squilibrio elettrolitico, ipopotassiemia, disidratazione
- Attenzione soprattutto nei pazienti con comorbidità

ATTIVITA' FISICA

Physical activity improves symptoms in irritable bowel syndrome: a randomized controlled trial.

[Johannesson E¹](#), [Simrén M](#), [Strid H](#), [Bajor A](#), [Şadik R](#).

OBJECTIVES:

Physical activity has been shown to be effective in the treatment of conditions, such as fibromyalgia and depression.

Increased physical activity improves GI symptoms in IBS. Physically active patients with IBS will face less symptom deterioration compared with physically inactive patients.

Physical activity should be used as a primary treatment modality in IBS

RESULTS:

A total of 38 (73.7% women, median age 38.5 (19-65) years) patients in the control group and 37 (75.7% women, median age 36 (13-55) years) patients in the physical activity group completed the study. There was a significant difference in the improvement in the IBS-SSS score between the physical activity group and the control group (-51 (-130 and 49) vs. -5 (-101 and 118), $P=0.003$). The proportion of patients with increased IBS symptom severity during the study was significantly larger in the control group than in the physical activity group.

CONCLUSIONS:

Increased physical activity improves GI symptoms in IBS. Physically active patients with IBS will face less symptom deterioration compared with physically inactive patients. Physical activity should be used as a primary treatment modality in IBS.

CONSIGLI PER IL PAZIENTE

Consigli alimentari



- Bere almeno 8 bicchieri di acqua al giorno
- Evitare bevande gassate o alcoliche
- Limitare l'uso di cibi che favoriscono la produzione di gas
- Limitare l'uso di alimenti ricchi in fibre insolubili ed incrementare l'introito di fibre solubili
- Limitare l'introito di FODMAP
- Limitare caffè e té

CONSIGLI PER IL PAZIENTE



- **Fare piccoli pasti ad orari regolari**
- **Mangiare lentamente masticando accuratamente il cibo**
- **Regolarizzare l'evacuazione**
- **Ridurre il peso se in sovrappeso**
- **Fare attività fisica in maniera costante che, oltre a portare benefici all'intestino e all'organismo intero, riduce lo stress che può essere un cofattore nell'IBS**



DIVERTICOLOSI DEL COLON



TERMINOLOGIA AGGIORNATA

DIVERTICOLOSI semplice presenza di diverticoli in assenza di sintomatologia

MALATTIA DIVERTICOLARE SINTOMATICA NON COMPLICATA (SUDD) sintomi analoghi a quelli del colon irritabile, storia naturale benigna con complicanze <1% a 5 anni

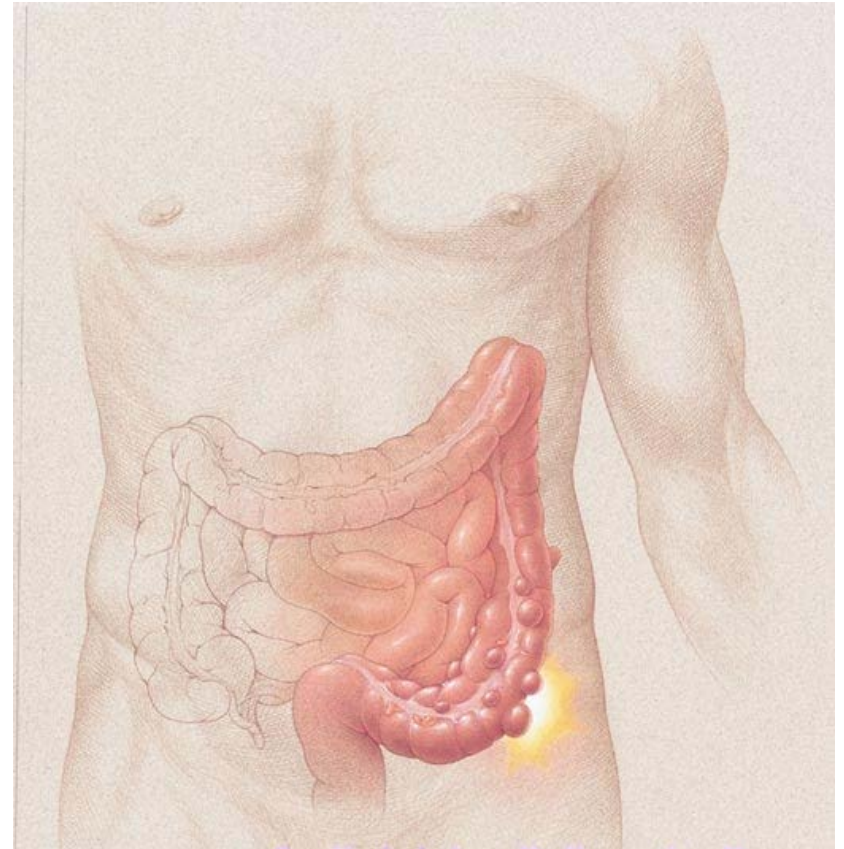
DIVERTICOLITE dolore addominale severo in sede tipica associato ad alterazioni dell'alvo, febbre e leucocitosi

MALATTIA DIVERTICOLARE COMPLICATA diverticoliti ricorrenti, sanguinamento, stenosi, perforazione, fistolizzazione, ascessi

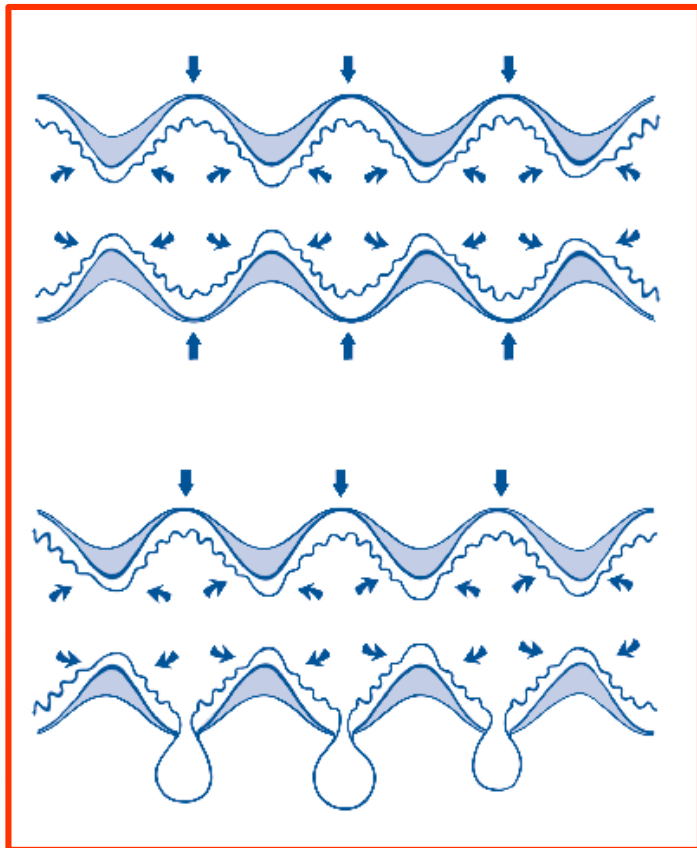
COLITE SEGMENTARIA ASSOCIATA AI DIVERTICOLI (SCAD) flogosi cronica della mucosa interposta con risparmio del colon destro e del retto

DIVERTICOLOSI DEL COLON

- Prevalenza molto bassa al di sotto dei 30 anni
- Aumenta dopo i 50 anni
- Raggiunge il 70% dopo gli 80 anni
- Il sigma è colpito nel 65% dei casi



PATOGENESI



LOCI MINORIS RESISTENTIAE

Forami obliqui

Arterie perforanti (plesso
sottomucoso e muscolare)

CAMERE DI SEGMENTAZIONE

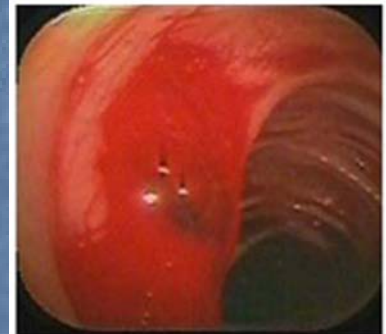
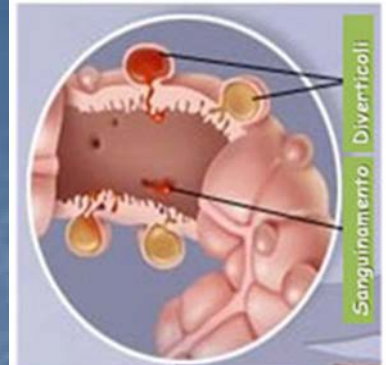
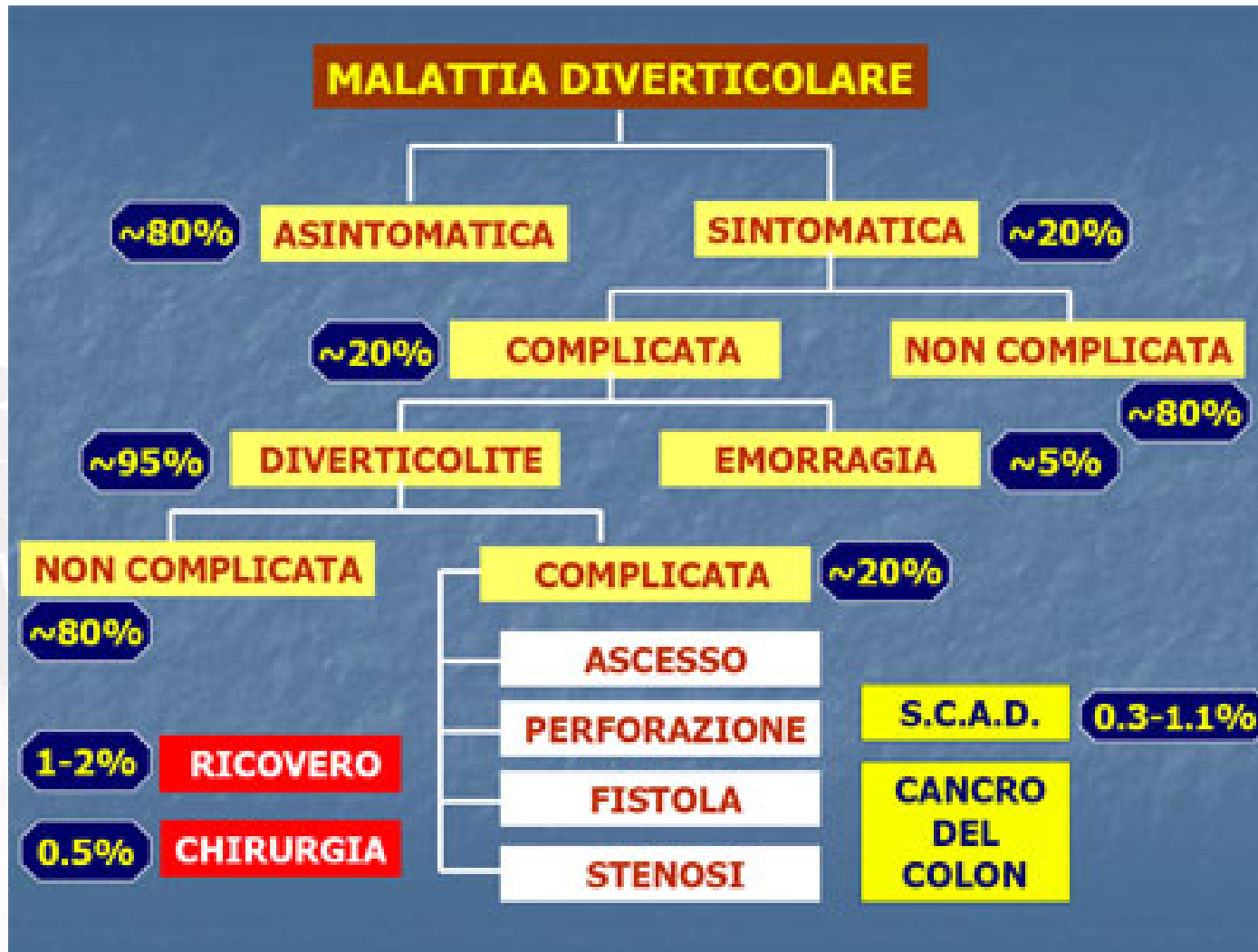
Camere chiuse formate per l'effetto
di contrazioni segmentarie
(Painter e Truelove, 1964)

LEGGE DI LAPLACE

P (pressione) = T (tensione) /
 r (raggio)

La pressione intraluminale è
maggiore dove minore è il raggio
del cilindro cavo (Almy, 1965)

STORIA NATURALE





FATTORI di RISCHIO

FATTORI GENETICI

The genetic influence on diverticular disease--a twin study

[Granlund J](#)¹, [Svensson T](#), [Olén O](#), [Hjern F](#), [Pedersen NL](#), [Magnusson PK](#), [Schmidt PT](#).

Aim

To assess the heritability of DD in a large population-based sample of twins.

Methods

The Swedish Twin Register, which includes the Swedish Twin Cohort, was used to identify twins with a diagnosis of DD. All twins with a diagnosis of DD were included in the study.

Genetic susceptibility is an important component, along with individual specific environmental factors, for the development of diverticular disease of the colon

Severity of the disease.

Results

A total of 104 452 twins met the inclusion criteria. Of these, 2296 had a diagnosis of DD. The OR of developing the disease given one's co-twin was affected was **7.15** (95% CI: 4.82–10.61) for MZ and **3.20** (95% CI: 2.21–4.63) for SS-DZ twins. Similarly, concordance rates and tetrachoric correlations were higher in MZ than those in SS-DZ twins. The heritability was estimated to 40% and the non shared environmental effects to 60%.

DIETA POVERA DI FIBRE

Diet and risk of diverticular disease in Oxford cohort of European Prospective Investigation into Cancer and Nutrition (EPIC): prospective study of British vegetarians and non-vegetarians

Objective To examine the associations of a vegetarian diet and dietary fibre intake with risk of diverticular disease.

Consuming a vegetarian diet and a high intake of dietary fibre were both associated with a lower risk of admission to hospital or death from diverticular disease

diverticular disease between the ages of 50 and 70 for meat eaters was 4.4% compared with 3.0% for vegetarians. There was also an inverse association with dietary fibre intake; participants in the highest fifth (≥ 25.5 g/day for women and ≥ 26.1 g/day for men) had a **41%** lower risk (0.59, 0.46 to 0.78; $P < 0.001$ trend) compared with those in the lowest fifth (< 14 g/day for both women and men). After mutual adjustment, both a vegetarian diet and a higher intake of fibre were significantly associated with a lower risk of diverticular disease.

Crowe F et al, *BMJ* 2011.

RIDOTTA ATTIVITA' FISICA

Physical activity decreases diverticular complications

[Strate LL](#)¹, [Liu YL](#), [Aldoori WH](#), [Giovannucci EL](#).

OBJECTIVES:

Little is known about the effect of physical activity on diverticular complications. This study prospectively examined the associations between physical activity and diverticular bleeding and diverticulitis.

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Data from this large prospective cohort suggest that physical activity lowers the risk of diverticulitis and diverticular bleeding. Vigorous activity appears to account for this association

During 18 years of follow-up, 800 cases of diverticulitis and 383 cases of diverticular bleeding were identified. Total cumulative physical activity was associated with a decreased risk of diverticulitis and diverticular bleeding. After adjustment for potential confounders, the RR for men in the highest quintile of total activity (≥ 57.4 metabolic equivalent hours per week (MET-h/week)) was 0.75 (95% confidence interval, CI, 0.58-0.95) for diverticulitis and 0.54 (95% CI, 0.38-0.77) for bleeding, as compared with men in the lowest quintile (≤ 8.2 MET-h/week). Vigorous activity was inversely related to diverticulitis in a high vs. low comparison (multivariable RR, 0.66; 95% CI, 0.51-0.86) and bleeding (multivariable RR, 0.61; 95% CI, 0.41-0.90), whereas nonvigorous activity was not. These results were similar for recent (simple updated) and baseline activity.

FUMO

Smoking and the risk of diverticular disease in women.

[Hjern F](#)¹, [Wolk A](#), [Håkansson N](#).

BACKGROUND:

The relationship between smoking and the risk of diverticular disease is unclear. An observational cohort study was undertaken to investigate the association between smoking and diverticular disease.

METHODS:

Women in the Swedish Mammography Cohort born between 1914 and 1948 were followed from 1997 to 2008. Information on smoking and other lifestyle factors was collected through questionnaires. Patients with symptomatic diverticular disease were identified from Swedish national registers. Relative risks (RRs) of symptomatic diverticular disease (resulting in hospital admission or death) according to smoking status were estimated using Cox proportional hazards models.

RESULTS:

Of 35 809 women included in the study, 561 (1.6 per cent) had symptomatic diverticular disease. In multivariable analysis, **current smokers had an increased risk of symptomatic diverticular disease compared with non-smokers** after adjustment for age, intake of dietary fibre, diabetes, hypertension, use of acetylsalicylic acid, non-steroidal anti-inflammatory drugs or steroid medication, alcohol consumption, body mass index, physical activity and level of education (RR 1.23, 95 per cent confidence interval 0.99 to 1.52). Past smokers also had an increased risk (RR 1.26, 1.02 to 1.56). **Smokers had a higher risk of developing a diverticular perforation/abscess than non-smokers** (RR 1.89, 1.15 to 3.10).

CONCLUSION: Smoking is associated with symptomatic diverticular disease.

FUMO

Smoking increases the incidence of complicated diverticular disease of the sigmoid colon.

[Turunen P¹](#), [Wikström H](#), [Carpelan-Holmström M](#), [Kairaluoma P](#), [Kruuna O](#), [Scheinin T](#).

BACKGROUND AND AIMS:

The aim of this study was to establish whether smoking is associated with complicated diverticular disease and adverse outcomes of operative treatment of diverticular disease. Smoking has been

We conclude that smoking increases the likelihood of complications in diverticulosis coli. The development of complicated disease also seems to proceed more rapidly in smokers

had an increased rate of perforations ($p = 0.040$) and postoperative recurrent diverticulitis episodes ($p = 0.019$).

CONCLUSIONS:

We conclude that smoking increases the likelihood of complications in diverticulosis coli. The development of complicated disease also seems to proceed more rapidly in smokers. Key words: Sigmoid resection; laparoscopy; laparoscopic sigmoidectomy; smoking and diverticular disease; complicated diverticular disease; diverticulitis

OBESITA'

Body mass index and diverticular disease: a 28-year follow-up study in men.

[Rosemar A](#)¹, [Angerås U](#), [Rosengren A](#).

PURPOSE:

The objective of this study was to investigate whether overweight and obesity in midlife predict future diverticular disease in men.

Overweight and obesity were strongly linked to future severe diverticular disease leading to hospitalization

lowest risk. After adjustment for covariates, the risk increased linearly in men who had a body mass index of 22.5 to 25 (multiple-adjusted hazard ratio, 2.3; 95 percent confidence interval, 0.9-6; 25-27.5 (hazard ratio, 3 (1.2-7.6)), 27.5-30 (hazard ratio 3.2, (1.2-8.6)), and 30 or greater (hazard ratio 4.4, (1.6-12.3)) kg/m² (P for linear trend = 0.004). Men with a body mass index of < or =20 kg/m² had a nonsignificantly elevated risk (hazard ratio, 3 (0.7-12.5)). Smoking (hazard ratio, 1.6 (1.1-2.3) and diastolic blood pressure (hazard ratio, 1.02 (1.01-1.04) per mmHg) also were independently related to risk of diverticular disease.

CONCLUSIONS:

In a large community-based sample of middle-aged men, overweight and obesity were strongly linked to future severe diverticular disease leading to hospitalization.

DA SFATARE....

Nut, corn, and popcorn consumption and the incidence of diverticular disease.

[Strate LL](#)¹, [Liu YL](#), [Syngal S](#), [Aldoori WH](#), [Giovannucci EL](#).

CONTEXT:

Patients with diverticular disease are frequently advised to avoid eating nuts, corn, popcorn, and seeds to reduce the risk of complications. However, there is little evidence to support this recommendation.

OBJECTIVE:

To determine whether consumption of nuts, corn, and popcorn was associated with the risk of diverticular disease.

Men without known diverticular disease, nut, corn, and popcorn consumption did not increase the risk of diverticulosis or diverticular complications. The recommendation to avoid these foods to prevent diverticular complications should be reconsidered

RESULTS:

During 18 years of follow-up, there were 801 incident cases of diverticulitis and 383 incident cases of diverticular bleeding. We found inverse associations between nut and popcorn consumption and the risk of diverticulitis. The multivariate hazard ratios for men with the highest intake of each food (at least twice per week) compared with men with the lowest intake (less than once per month) were 0.80 (95% confidence interval, 0.63-1.01; P for trend = .04) for nuts and 0.72 (95% confidence interval, 0.56-0.92; P for trend = .007) for popcorn. No associations were seen between corn consumption and diverticulitis or between nut, corn, or popcorn consumption and diverticular bleeding or uncomplicated diverticulosis.

CONSIGLI PER IL PAZIENTE



- **Aumentare l'introito di fibra, in maniera graduale, fino al raggiungimento delle dosi giornaliere consigliate di 30-35 g/die**
- **Fare attività fisica che mantiene tonici i muscoli addominali migliorando la motilità intestinale**
- **Smettere di fumare se fumatori**
- **Fare cinque pasti al giorno mantenendo una certa regolarità sugli orari, frazionando i pasti**
- **Limitare il consumo di alimenti che possono irritare la mucosa intestinale come spezie, cibi piccanti, tè, caffè, cacao**

LO STRESS NON
MI PROVOCA
NESSUNA REAZIONE
PSICOSOMATICA.!



GRAZIE