



III SESSIONE NUTRIZIONE IN ETÀ EVOLUTIVA

Presidente: Giuseppe Saggesi

Moderatori: Luigi Morcaldi, Leonello Venturelli

20 minuti per...

Dietoterapia per i DFGI:
Il ruolo dei latti speciali



Silvia.Salvatore@uninsubria.it

Childhood Functional Gastrointestinal Disorders: Neonate/Toddler

Gastroenterology 2016;150:1443-1455

Benninga MA, et al.

I DFGI



Rigurgito

Coliche

Diarrea
funzionale

Stipsi

Rome IV

- Ruminazione infantile
- S: Vomito ciclico



Dischezia



Sono utili i latti speciali?

I DISORDINI FUNZIONALI GASTROINTESTINALI IN ETÀ PRESCOLARE

Atti XXVII Congresso Nazionale SIPPS // CONSENSUS 2015



I DFGI: un camaleonte clinico da riconoscere ...perché..



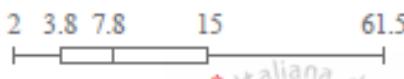
Infantile colic and fussing/crying (n=30 studies)



Regurgitation (n=13 studies)



Functional constipation (n=8 studies)



Functional diarrhoea (n=2 studies)

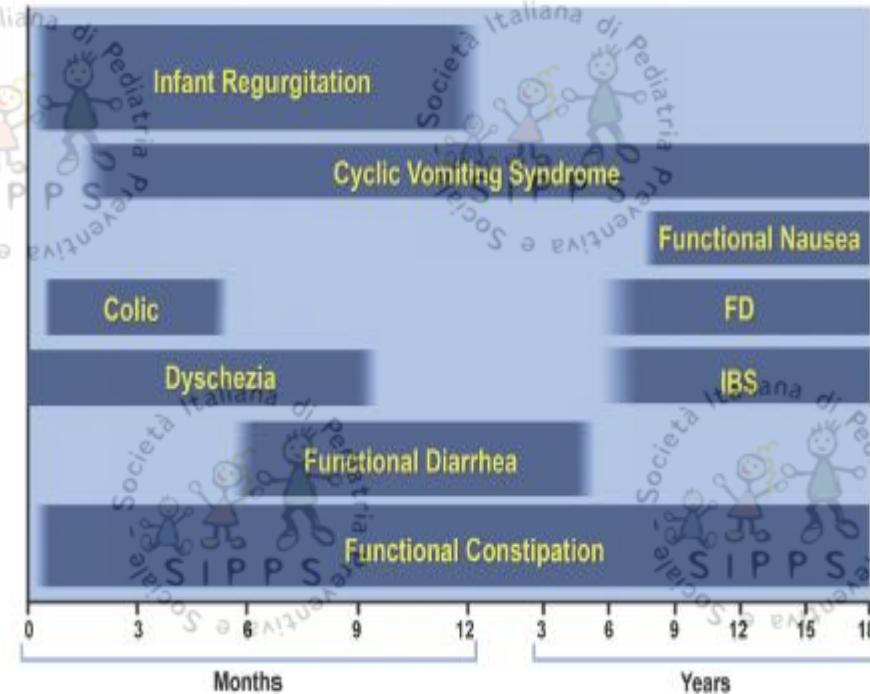


Dyschezia (n=3 studies)



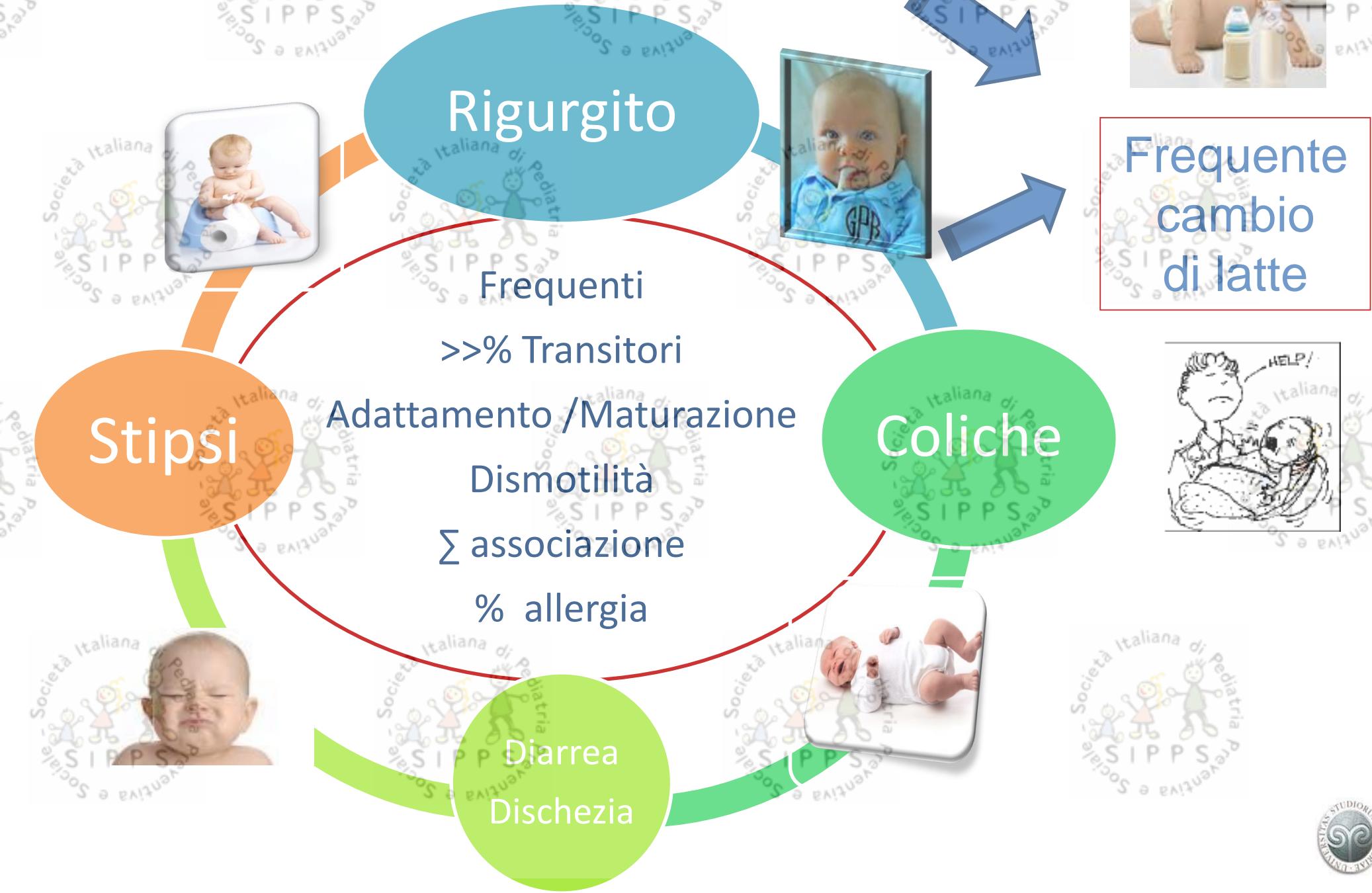
Vandenplas Y et al. JPGN 2015

SONO MOLTO FREQUENTI !



ETA'

Caratteristiche dei DFGI



Formule speciali per lattanti



- Parziali (pHF / HA)
- Spinte (eHF)

Idrolisate

Elementari

Delattosate

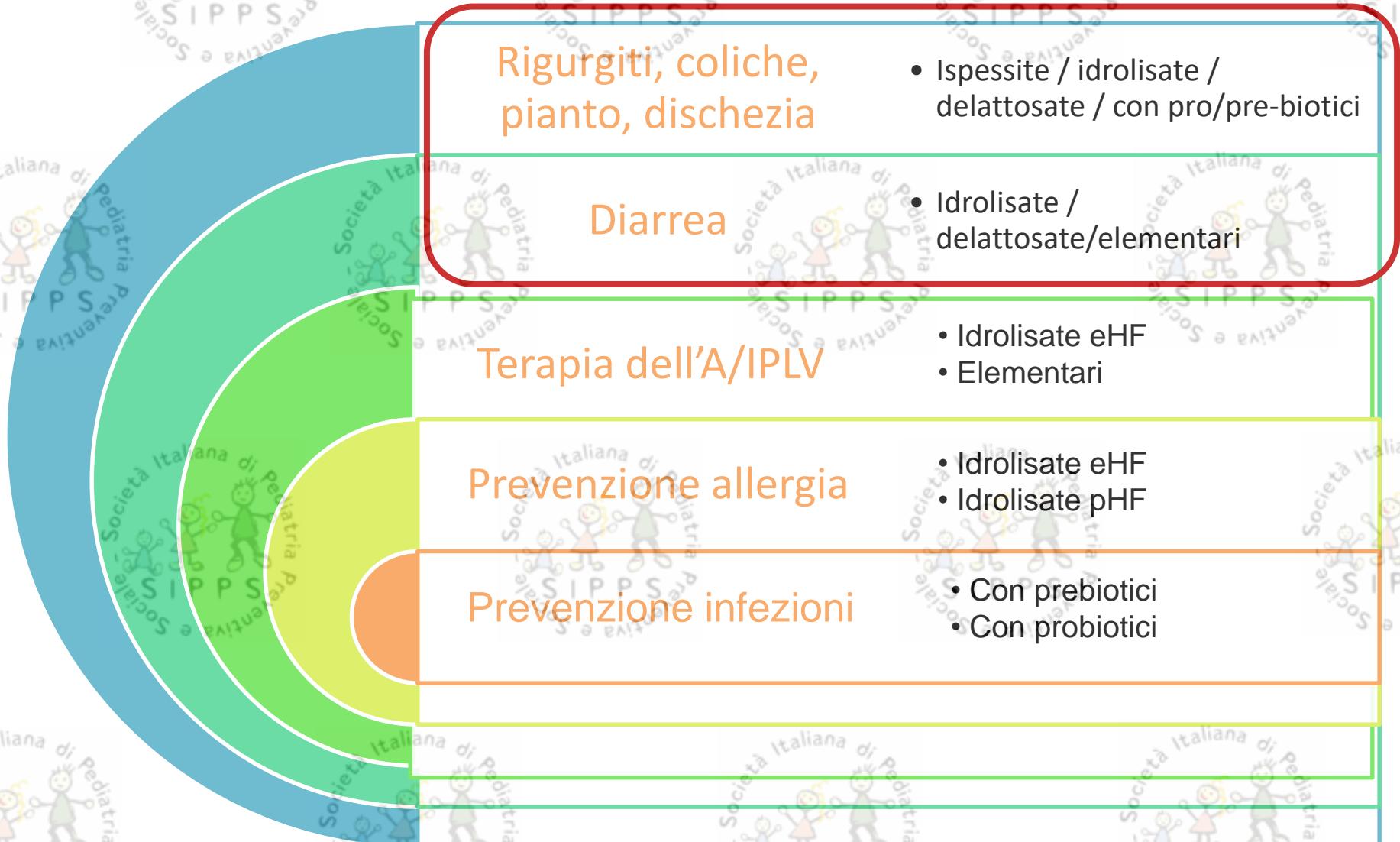
Con aggiunta:

- Meno lattosio
- Senza lattosio

- Solo aminoacidi (AA)

- Ispessente
- Prebiotici
- Probiotici
- β -palmitato

Formule speciali per lattanti: per cosa e quali

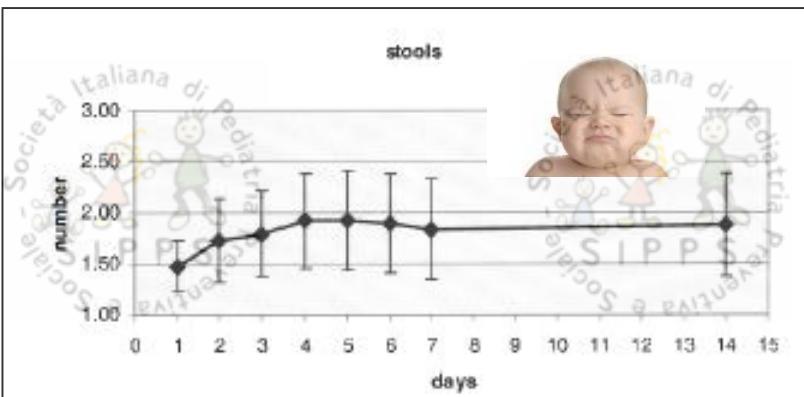
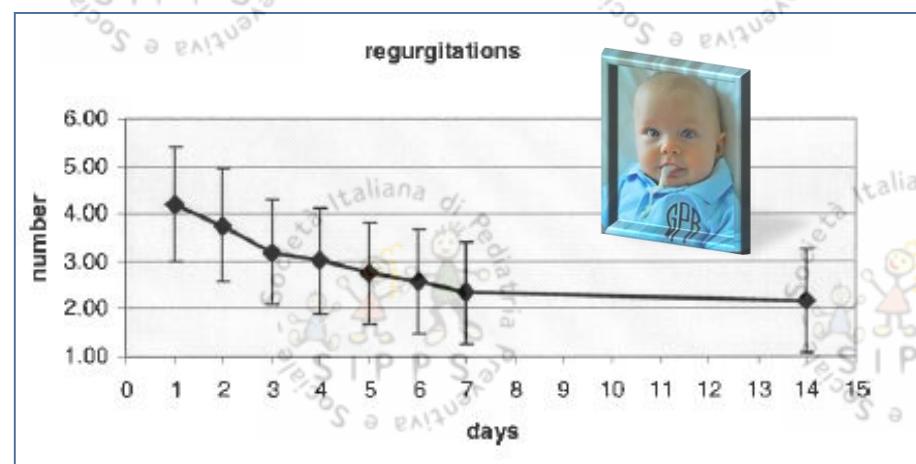
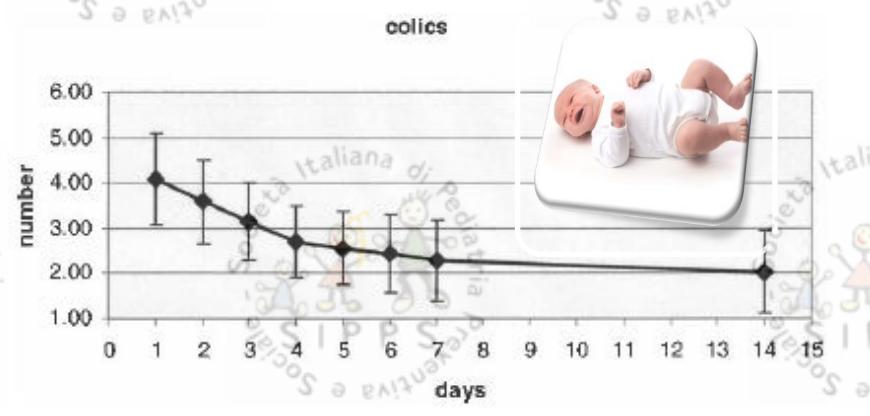




“Minor” feeding problems during the first months of life: effect of a partially hydrolysed milk formula containing fructo- and galacto-oligosaccharides

F Savino¹, F Cresi¹, S Maccario¹, F Cavallo², P Dalmasso², S Fanaro³, R Oggero¹, V Vigi³ and L Silvestro¹

infants that might benefit from dietary treatment. A formula containing fructo- and galacto-oligosaccharides, partially hydrolysed proteins, low levels of lactose and palmitic acid in the β position and higher density has been tested to reduce the occurrence of these symptoms. The aim



MA...
No gruppo controllo
Vs. evoluzione naturale ?
Vs. standard formula ?

Childhood Functional Gastrointestinal Disorders: Neonate/Toddler

Gastroenterology 2016;150:1443-1455

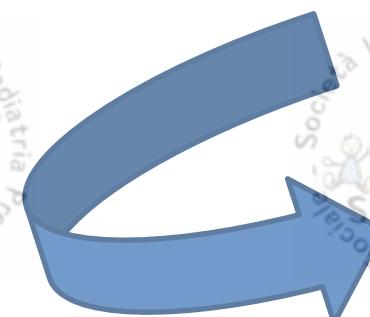
Benninga MA, et al.

Rome IV

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Sono utili i latti speciali?

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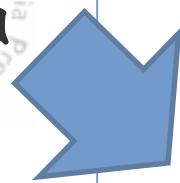


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Dischezia del lattante: Criteri diagnostici

Lattante < 9 mesi di vita

1. Almeno 10 minuti di sforzi e pianto prima di un tentativo o passaggio di **feci morbide**
2. Nessun altro problema di salute



Tappa di maturazione :
Nessun trattamento

Roma III, Hyman PE et al. Gastroenterology 2006

Roma IV, Benninga MA et al. Gastroenterology 2016



Dischezia del lattante:

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Qual è il ruolo della terapia dietetica

- Non evidenze di efficacia di interventi dietetici nel trattamento della dischezia.
- L'allattamento al seno esclusivo sembrerebbe ridurre il rischio di dischezia

Qual è il ruolo di prebiotici, probiotici e sinbiotici (supplementi)?

- Non prove di efficacia nel trattamento della dischezia





Stipsi funzionale nel lattante

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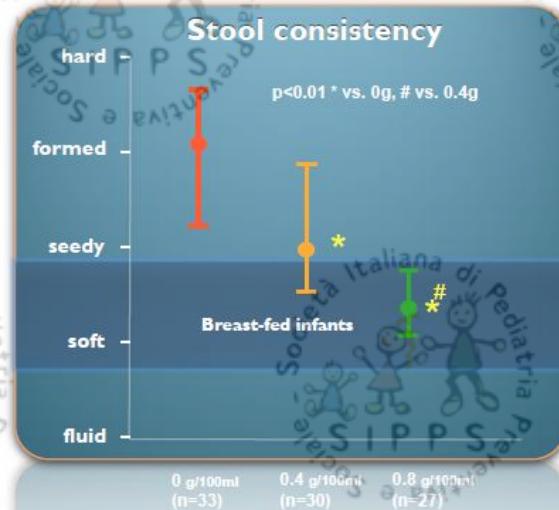
Sono utili le formule parzialmente (pHF) o quelle estesamente idrolisate (eHF)? Sono utili le formule "anti-stipsi"?

- Evidenze scientifiche non sufficienti per raccomandare le formule idrolisate. **Solo nei casi di stipsi refrattaria e sospetta APLV giustificato un trial di esclusione di 2-4 settimane con eHF**, a cui deve seguire, se miglioramento, il test di provocazione orale per la conferma diagnostica.
- I pochi studi, solo per le **formule supplementate con prebiotici e β-palmitato, hanno dimostrato minimi effetti sulla consistenza delle feci** ma non sulla frequenza delle evacuazioni.
- Possono comportare un eccessivo intake di Mg.



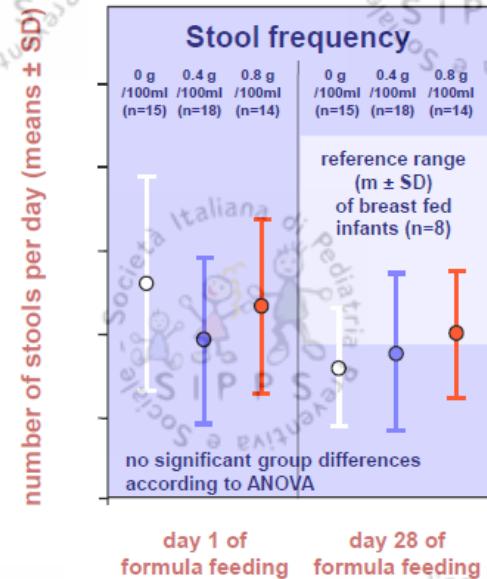
Prebiotici e consistenza delle feci

EFFETTO DI GOS/FOS NEI NEONATI A TERMINE - CARATTERISTICHE FECALI -

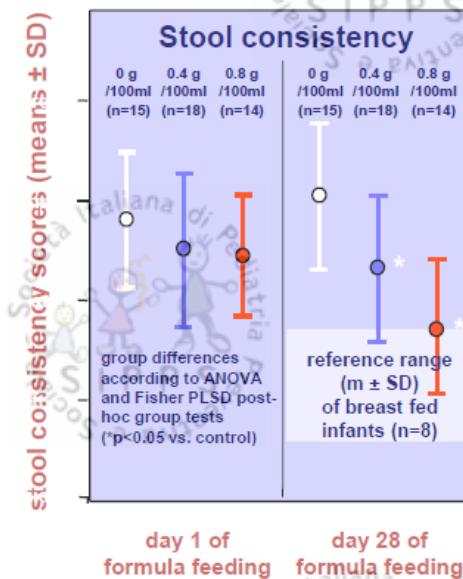


Effetto dose dipendente sulla consistenza delle feci

Moro et al 2002



day 1 of formula feeding day 28 of formula feeding



day 1 of formula feeding day 28 of formula feeding

Moro 2003

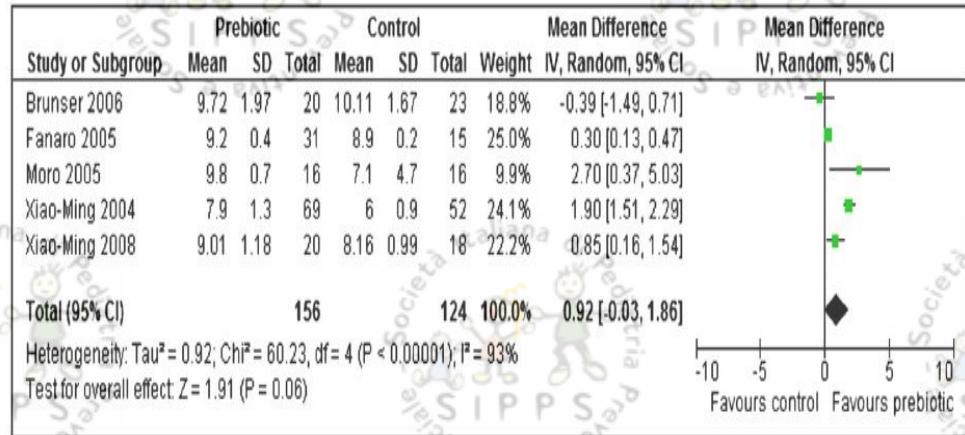


Figure 9 Prebiotics versus controls, outcome: Bifidobacteria -log10(CFU) per gram stool.

POSIZIONE DEGLI ACIDI GRASSI SULLA MOLECOLA DEL TRIGLICERIDE



Therapeutic effect of “Novalac-IT®” in infants with constipation

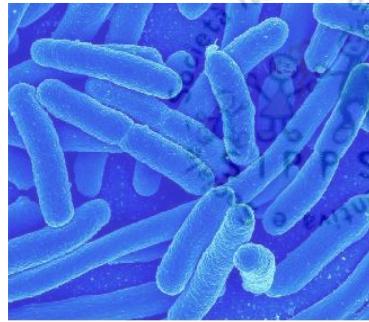


Studio prospettico randomizzato in 93 lattanti

Formula arricchita di magnesio (9.1 g /100 mL)

- Miglioramento significativo, dopo 4 e 8 settimane, sia della consistenza sia della frequenza delle evacuazioni rispetto ad una formula “fortificata” (al 20%)
- Nessun effetto collaterale riportato
- Miglioramento ponderale ed ottima assunzione

Chao H-C. Nutrition 2007;23:469-473



Formule con probiotici



Outcome	Probiotic	Results
Colic, irritability, crying	B.lactis, BL999 and LPR, L. reuteri, L GG, L. salivarius B.lactis + S. thermophilus	Negative
		Reduction
Stool frequency	B.lactis, BL999 and LPR LGG	Negative Reduction
Stool consistency	B.lactis, BL999 and LPR, L. reuteri LGG	No effect Modest effect



NON EVIDENZA DI BENEFICIO



Diarrea funzionale

Quesito 3. Sono utili le formule parzialmente o quelle estesamente idrolisate e basso contenuto/senza lattosio, con maltodestrine?

Non esiste letteratura che possa supportare tale affermazione e, pertanto, non esiste raccomandazione in tal senso.



E' opportuno quindi evitare alcuni errori come l'eccessiva assunzione di zuccheri (succchi di frutta, sorbitolo) ed il ridotto apporto di grassi e fibre.



Se sospetto di allergia alimentare dieta di eliminazione per 2-4 settimane e poi challenge



Formule delattosate



Rationale:

- Lactose and sucrose-free formula for infants with fussiness, gas or diarrhea due to lactose malabsorption-sensitivity
- eHF for possible cow's milk intolerance /allergy



Formule delattosate

- Lattanti con fuci a spruzzo, eritema perineale o positività per le sostanze riducenti nelle fuci o al breath test.
- Un solo studio su 20 lattanti con breath test positivo al lattosio: passaggio da una formula standard (lattosio 7g/100 ml) ad una a ridotto contenuto di lattosio (3g/100 ml) ha portato un significativo miglioramento nel 85% dei casi con **riduzione del pianto e del meteorismo**, miglioramento del comportamento alimentare e riduzione della positività del breath test.

Infante-Pina. WJG

EFFECT OF LACTOSE ON GUT MICROBIOTA AND METABOLOME OF INFANTS WITH COW'S MILK ALLERGY

Francavilla R et al. PAI 2012

- 
1. The addition of lactose to an extensively hydrolyzed formula is able to positively modulate the composition of gut microbiota by increasing the total fecal counts of *Lactobacillus/Bifidobacteria* and decreasing that of *Bacteroides/Clostridia*.
 2. The positive effect is completed by the increase of median concentration of short chain fatty acids, especially for acetic and butyric acids demonstrated by the metabolomic analysis.



CONSENSUS 2015

I disordini funzionali gastrointestinali in età prescolare

Sono utili le formule parzialmente idrolisate o le formule anti-colica?

Non vi sono evidenze di efficacia per raccomandare entrambe le formule nei lattanti con coliche funzionali.

Choosing
wisely!

Ci può essere una relazione con le allergie alimentari?

In assenza di segni di allarme (reazioni cutanee dopo assunzione di latte, specie se formula, inappetenza, scarso accrescimento, vomito, diarrea, muco e sangue nelle feci) non è giustificato porre il sospetto di APLV.



Reduction of crying episodes owing to infantile colic: a randomized controlled study on the efficacy of a new infant formula



partially hydrolysed whey proteins, prebiotic oligosaccharides (OS), with a high β -palmitic acid content.



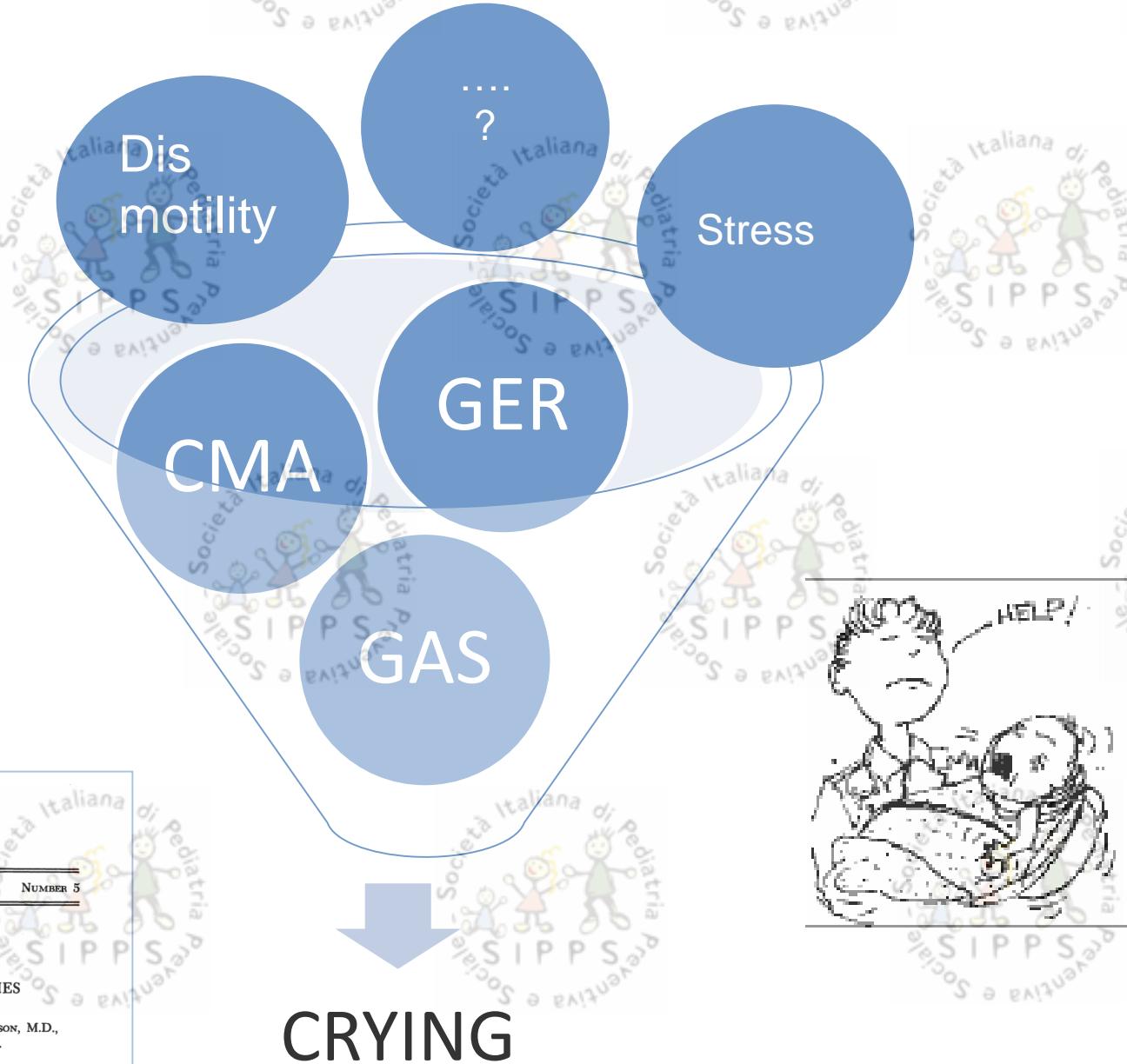
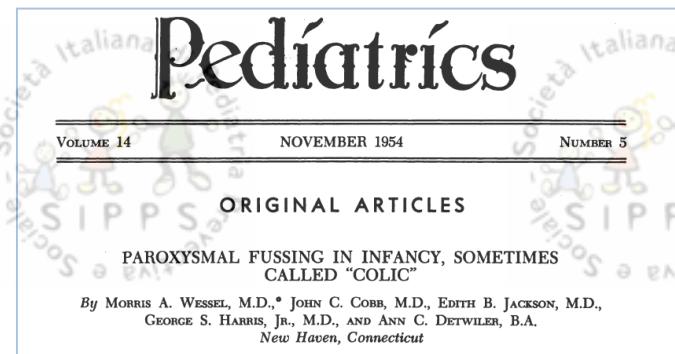
Protein (g)	1.7	1.4
Whey/casein ratio	100:0	60:40
Carbohydrate (g)	8.4	7.5
Lactose	2.9	7.3
Maltodextrin	4.6	—
Starch	1.5	—
Prebiotic OS (g) (90% GOS; 10% FOS)	0.8	0.4
Fat (g)	3.3	3.5
Palmitic acid	0.58	0.59
β -palmitic	0.24	0.07

RESULTS: 199 infants. Infants receiving the new formula had a significant \downarrow in colic episodes after 1 week (-3.5 ± 1.9 vs. -1.7 ± 1.9) & in crying episodes at day 14 (1.76 ± 1.6 vs. 3.32 ± 2.1)

Which is the cause of the colic?

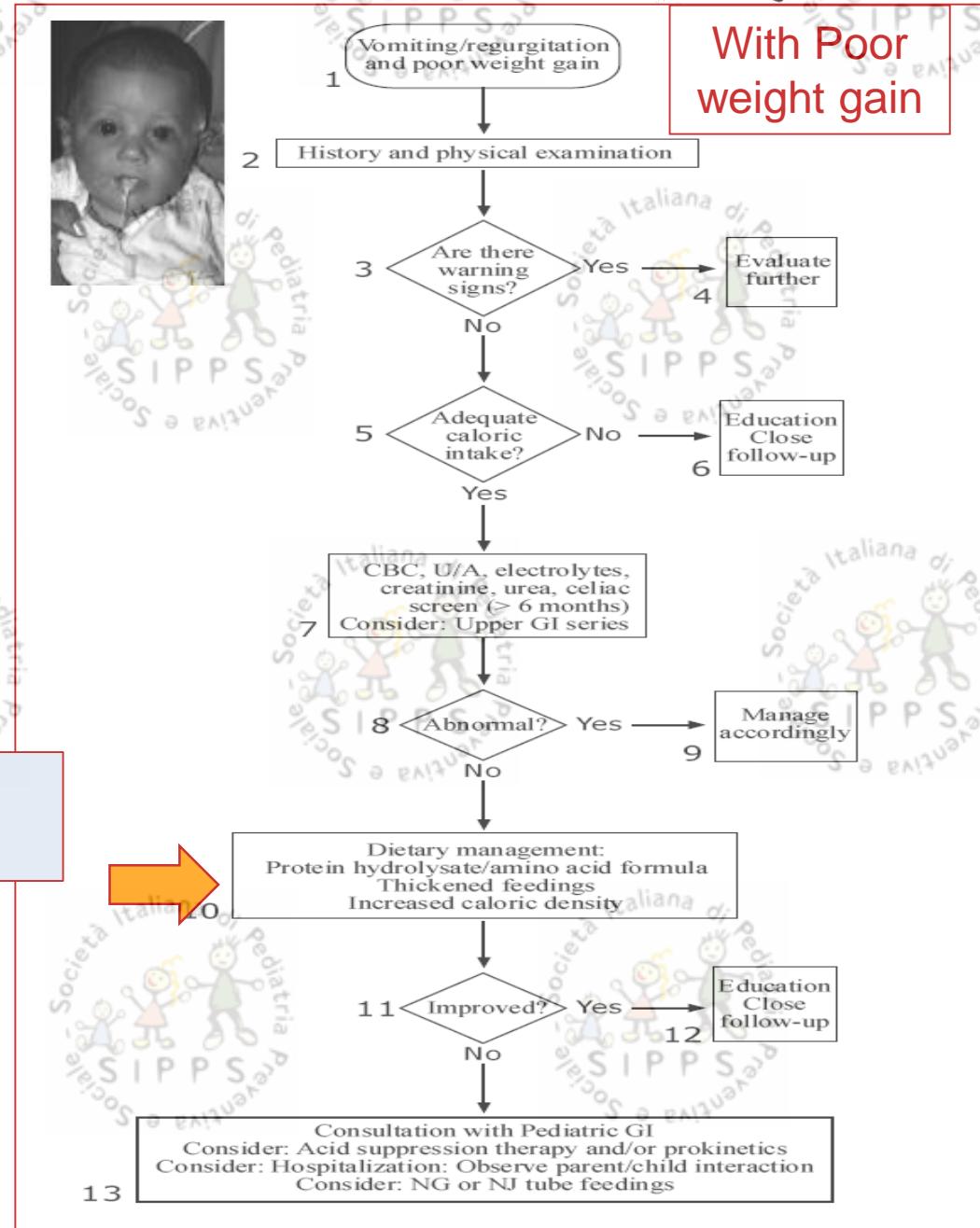
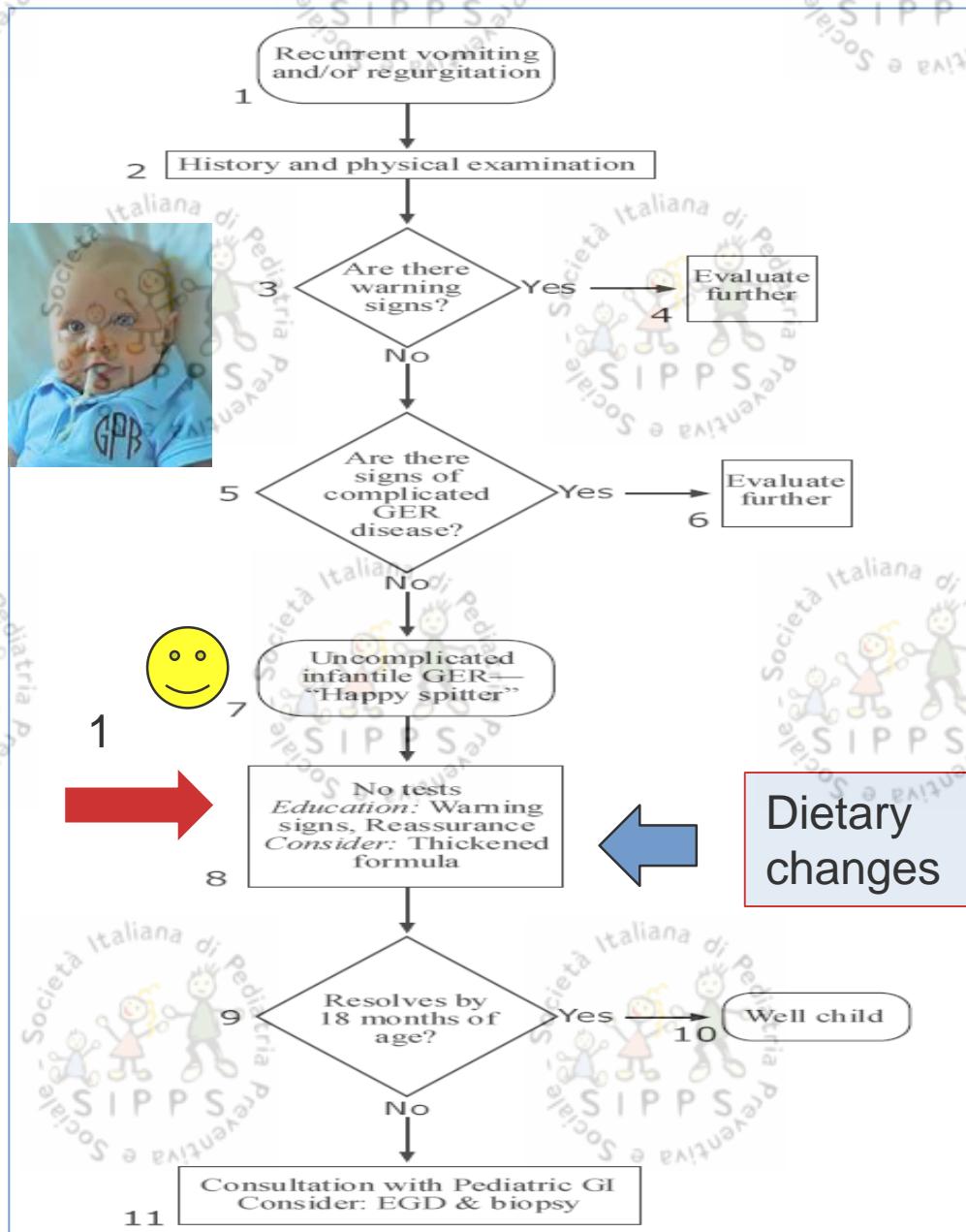


Cause
Obscure
Lengthy
Infant
Crying



Approach to regurgitation in infants

....From the guidelines



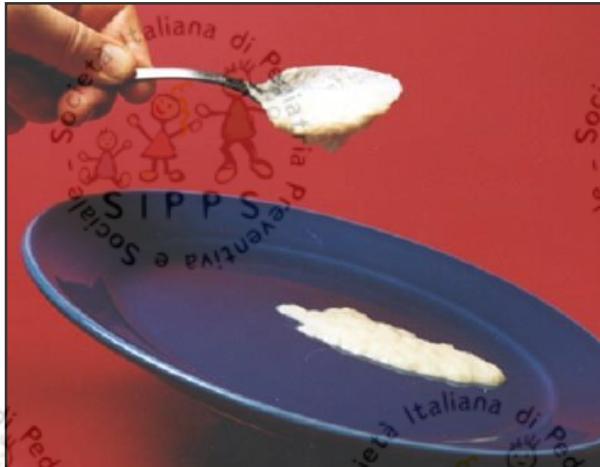


Thickened formulas: The basic concept

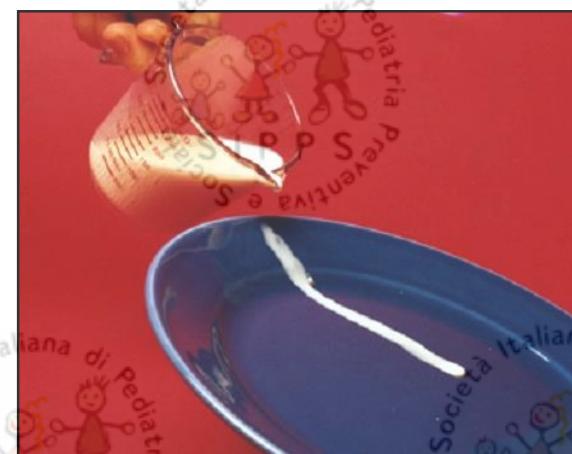
ABRACADABRA
ABRACADABR
ABRACADAB
ABRACADA
ABRACAD
ABRACA
ABRAC
ABRA
ABR
AB
A

You want a food that doesn't splash every time the baby moves or the stomach churns.
Thickened liquids don't splash out of the stomach as easily.

Thickened formula



Unthickened formula



Anti-regurgitation formulas ... why, for what and which ?

Parental
concern

Reduce
Regurgitation

Reduce
other
symptoms

Increase
weight



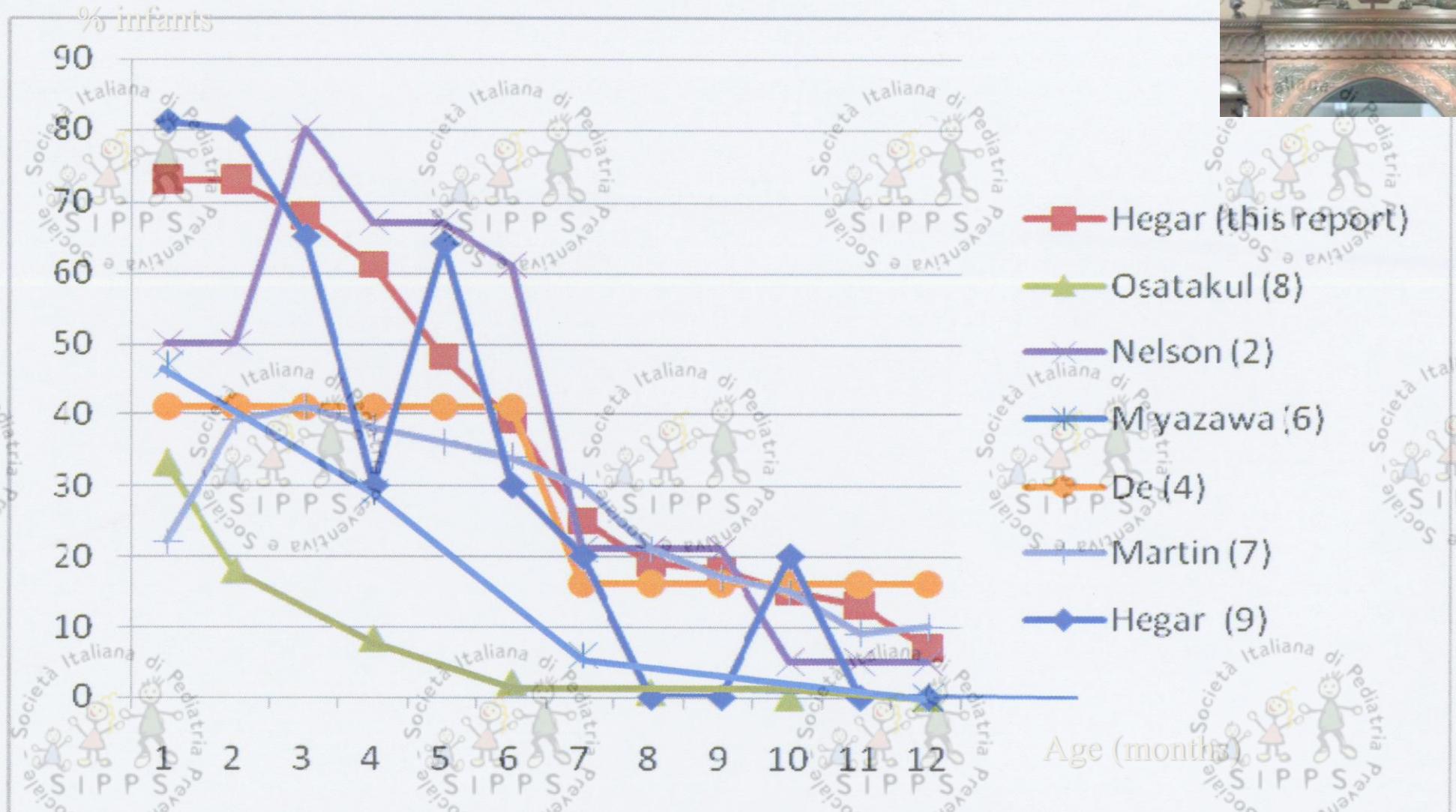
Breast is
best



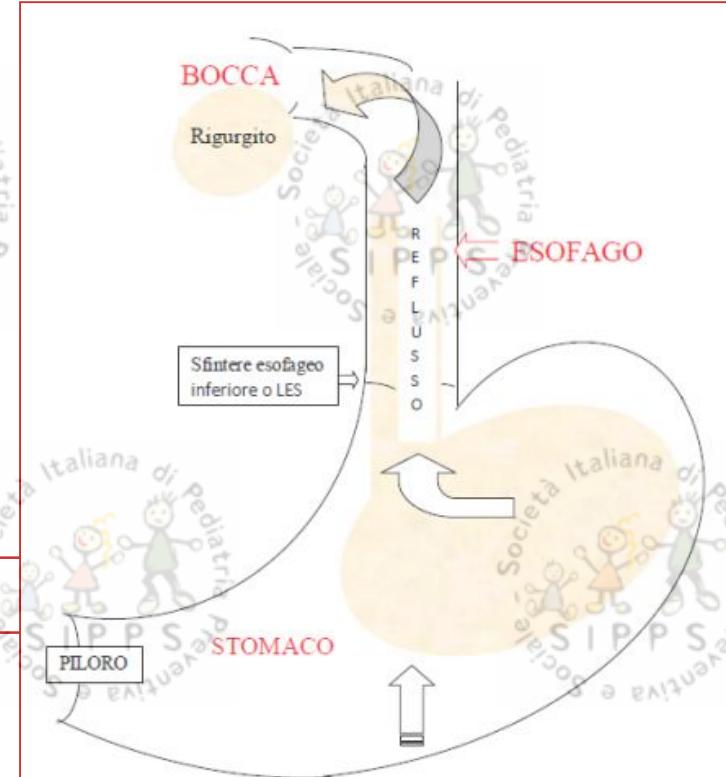
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Natural evolution of regurgitation in healthy infants

Hegar B, Vandenplas Y. Acta Paediatr 2009;98:1189-93



I. EVITARE ECCESSO DI LIQUIDI



RGE ----RIGURGITO ++PIANTO

Problemi respiratori?

The Effect of Thickened-Feed Interventions on Gastroesophageal Reflux in Infants: Systematic Review and Meta-analysis of Randomized, Controlled Trials

Andrea Horvath, MD, Piotr Dziechciarz, MD, Hania Szajewska, MD

14
RCT

Thickened F (compared to StF) significantly

- ↑ the % of infants with no regurgitation, slightly
- ↓ the No. of regurgitation/ vomiting per day and
- ↑ weight gain per day



No definitive data showed that one particular thickening agent is more effective than another



Thickened formulas: what to know

Table 1: Summary of the trials reporting the effect, expressed as (mean) episodes of regurgitation, with thickened formulas

	At inclusion	With AR-formula (after 1 to 4 weeks)
	2.71 ± 0.60	2.30 ± 0.56

Thickener agent	Viscosity	Digestion	Gastric Emptying	Regurgitation	GER /pH parameters	Max limit gr/100ml	Side effects
CAROB/ LOCUST bean gum	↑↑	No	↓ =	↓	↓ n° ↑ longest episode ↓/ = RI%	1 gr	Diarrhoea
CORN starch	↑	=	=	↓	↓ all ↓ RI%	2 gr	/
RICE starch	↑	=	unknown	↓	↓ n° = RI% = all	2 gr	Cough Constipation Arsenicum load

Xinias 2005	5.60 ± 4.15	2.57 ± 2.71
Mean number of regurgitations/day (all studies)	5.43	2.50



Antiregurgitation formulas



Commercial
Thickened
formula

“Home-brew”
Thickened
formula

PROS

Homogeneous &
nutritional balanced
composition

Viscosity > in stomach

Cheap

Easy to prepare



CONS

More expensive

Risk of over-use?

> sucking effort

Delayed gastric emptying

Inconsistency in composition

Too high viscosity & calories



CONSENSUS 2015

I disordini funzionali gastrointestinali in età prescolare

Quesito 3. Sono utili i latti formulati anti-rigurgito, le formule parzialmente (pHF) o quelle estesamente idrolisate (eHF)?

Choosing wisely!

Le formule anti-rigurgito, con proteine intere o parzialmente idrolisate (pHF), non modificano l'indice di reflusso acido (IR). L'efficacia di alcune di esse nel ridurre la frequenza degli episodi di rigurgito è ancora controversa e, comunque, di rilevanza clinica difficilmente quantificabile in base alla letteratura attualmente disponibile.

Grazie al tranquillo profilo di sicurezza possono essere incluse tra le misure da suggerire per il sollievo dai sintomi, al fine di ridurre le ansie della famiglia. Le formule estesamente idrolisate (eHF) non sono indicate nel rigurgito funzionale.

.... & the guidelines

Journal of Pediatric Gastroenterology and Nutrition
49:498–547 © 2009 by European Society for Pediatric Gastroenterology, Hepatology, and Nutrition and
North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition

Pediatric Gastroesophageal Reflux Clinical Practice Guidelines: Joint Recommendations of the North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition (NASPGHAN) and the European Society for Pediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN)

Co-Chairs: *Yvan Vandenplas and †Colin D. Rudolph

Committee Members: ‡Carlo Di Lorenzo, §Eric Hassall, ||Gregory Liptak,
¶Lynnette Mazur, #Judith Sondheimer, **Annamaria Staiano, ††Michael Thomson,
‡‡Gigi Veereman-Wauters, and §§Tobias G. Wenzl

The infant with recurrent vomiting and poor weight gain.

Management may include a 2-week trial of an extensively hydrolysed formula or AAF to exclude cow's milk allergy; increasing the caloric density of formula; and/or thickening of formula and education as to appropriate daily volume to be given.

Careful follow up of interval weight change and caloric intake are essential.



CONSENSUS 2015

I disordini funzionali gastrointestinali in età prescolare

Quesito 1. Ci può essere una relazione con le allergie alle proteine del Latte Vaccino (APLV)?

La prevalenza di APLV nei lattanti con rigurgito è ancora controversa anche per una difficile distinzione clinica tra queste due condizioni. In assenza di segni di allarme (concomitante broncospasmo, ritardo di crescita, alvo diarreico e spiccata irrequietezza ed irritabilità) non è giustificato porre il sospetto di APLV.

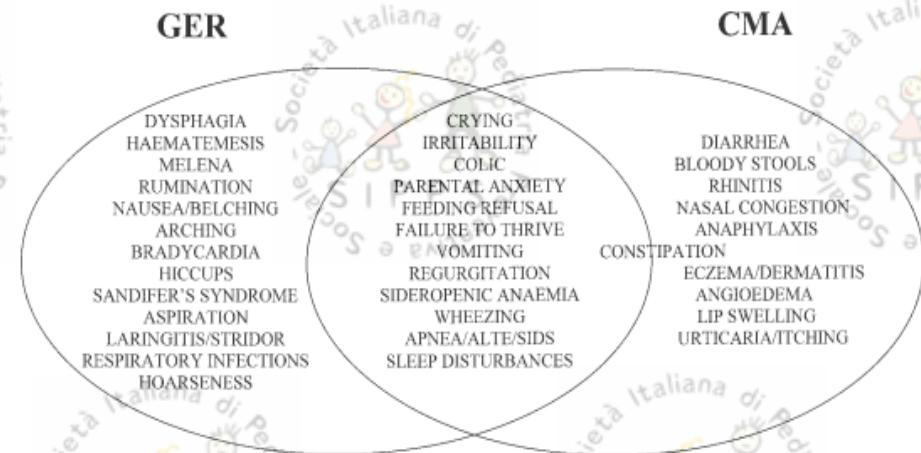


Fig 1. Symptoms attributed to GER and to CMA.

Extensive protein hydrolysate formula effectively reduces regurgitation in infants with positive and negative challenge tests for cow's milk allergy

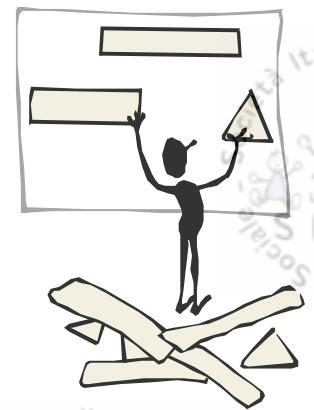


- ❖ All confirmed CMPA cases tolerated extensive hydrolysates (eCH).
- ❖ The symptom-based score decreased significantly in all infants within a month, and the highest reduction was in those with confirmed CMPA.
- ❖ **Regurgitation was reduced in all infants, but fell more with the thickened version (T-eCH), especially in infants with a negative challenge.**





Tolerance and growth in children with cow's milk allergy fed a thickened extensively hydrolyzed casein-based formula



Results: Thirty infants (n = 30) were included in a 4-month study. The Col

1 respectively, after 14 d

9 patients, significantly d

The percentage of infant

(20/30) at inclusion to 90

inclusion, significantly im

Table 3 Change from baseline of CoMiSS and parameters contributing to the CoMiSS at 14 days

	Inclusion (N = 30)	D14 (N = 30)
CoMiSS, mean (\pm SD)	7.4 (4.4)	3.2 (2.3)*
Regurgitation score ^a , mean (\pm SD)	1.6 (1.6)	0.9 (1.0)*
Crying score ^a , mean (\pm SD)	1.7 (1.1)	0.8 (0.6)*
Stool consistency, N (%)		
Type VII (hard)	6 (20.0)	2 (6.7)
Type III/IV (formed)	16 (53.3)	20 (66.7)
Type V (soft)	4 (13.3)	7 (23.3)
Type VI (mushy)	3 (10.0)	1 (3.3)
Type VII (watery)	1 (3.3)	0 (0.0)

GER

DYSPHAGIA
HAEMATEMESIS
MELENA
RUMINATION
NAUSEA/BELCHING
ARCHING
BRADYCARDIA
HICCUPS
SANDIFER'S SYNDROME
ASPIRATION
LARINGITIS/STRIDOR
RESPIRATORY
INFECTIONS
HOARSENESS



CMA

IRRITABILITY
COLIC
PARENTAL ANXIETY
FEEDING REFUSAL
FAILURE TO THRIVE
VOMITING
REGURGITATION
SIDEROOPENIC ANAEMIA
WHEEZING
APNEA/ALTE/SIDS
SLEEP DISTURBANCES

DIARRHEA
BLOODY STOOLS
RHINITIS
NASAL CONGESTION
ANAPHYLAXIS
CONSTIPATION
ECZEMA/DERMATITIS
ANGIOEDEMA
LIP SWELLING
URTICARIA/ITCHING



GER and CMA. Salvatore S, Vandenplas Y. Pediatrics 2002;110:972-84



REVIEW ARTICLE

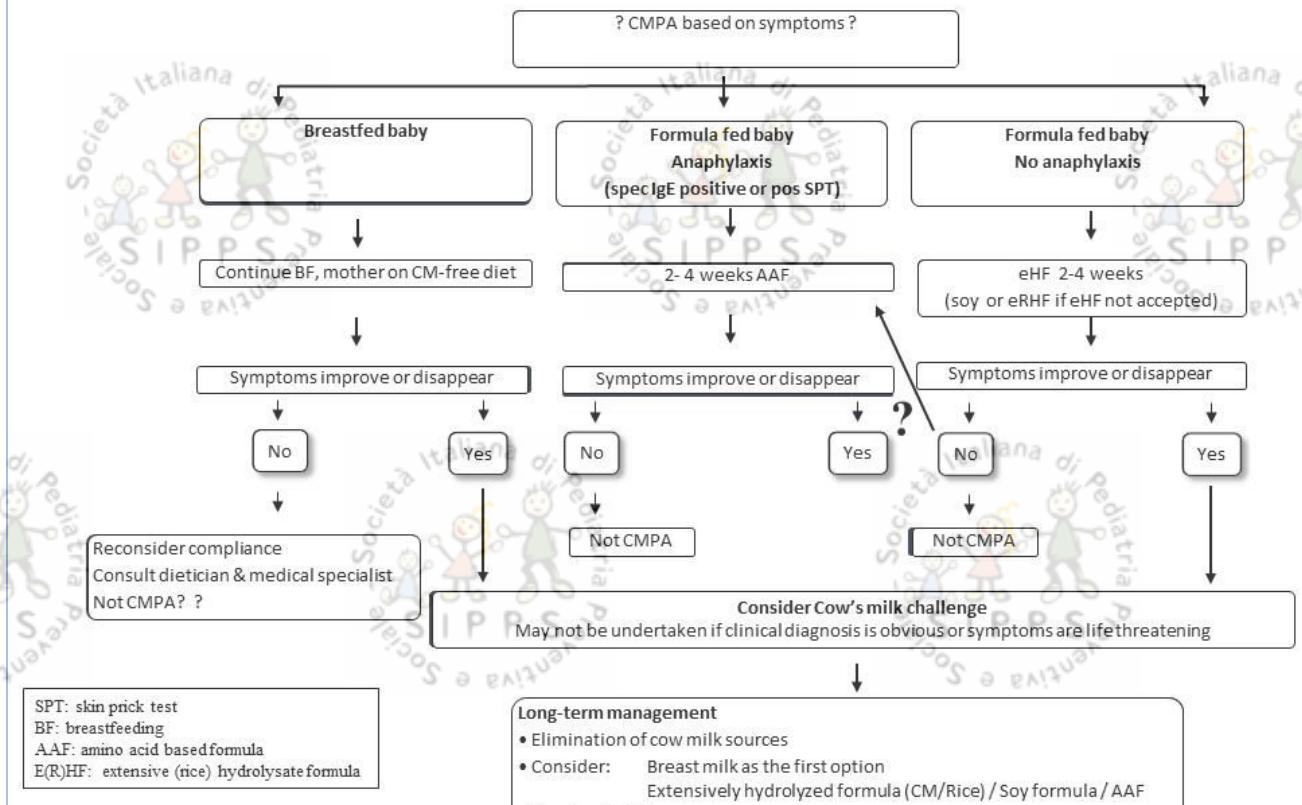
Functional gastro-intestinal disorder algorithms focus on early recognition, parental reassurance and nutritional strategies

Yvan Vandenplas (yvan.vandenplas@uzbrussel.be)¹, Marc Benninga², Ilse Broekaert³, Jackie Falconer⁴, Frederic Gottrand⁵, Alfredo Guarino⁶, Carlos Lifschitz⁷, Paolo Lionetti⁸, Rok Orel⁹, Alexandra Papadopoulou¹⁰, Carmen Ribes-Koninckx¹¹, Frank M. Ruemmele^{12,13}, Silvia Salvatore¹⁴, Raanan Shamir¹⁵, Michela Schäppi¹⁶, Annamaria Staiano⁶, Hania Szajewska¹⁷, Nikhil Thapar¹⁸, Michael Wilschanski¹⁹

Key notes

- Up to 50% of all infants present with symptoms of regurgitation, infantile colic and/or constipation during the first 12 months of life.

Cow Milk Protein Allergy (CMPA)



I DISORDINI FUNZIONALI GASTROINTESTINALI IN ETÀ PRESCOLARE

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- Sono utili le formule pHF e eHF?



Rigurgito

Coliche



Diarrea

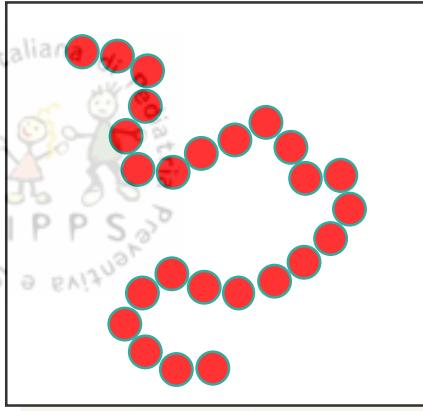


Stipsi

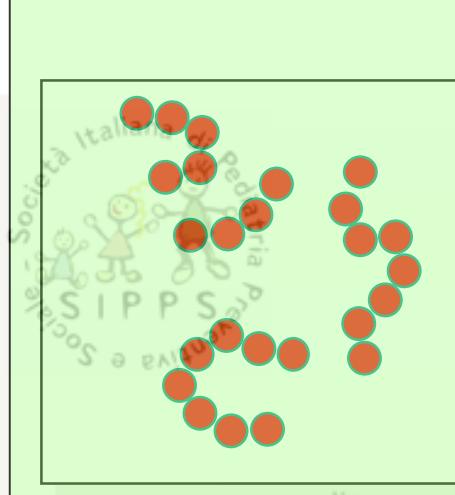


Hydrolysed formulas

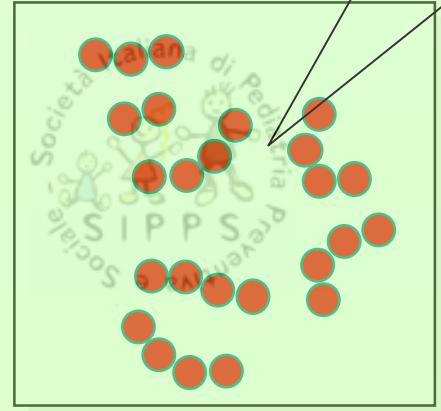
eHFs-C contain
40-60% free amino
acids



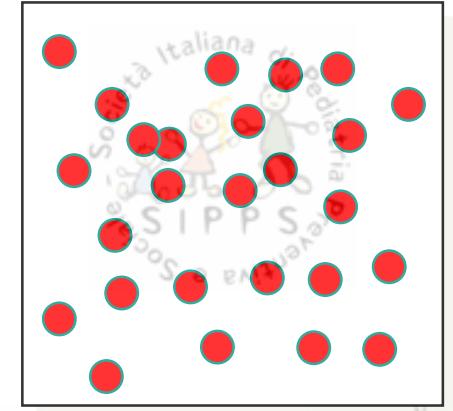
Intact protein



Partial hydrolysis



Extensive hydrolysis



Amino-acids

ALLERGENICITY

TOLERANCE



HYDROLYSED FORMULAS: everyone is different

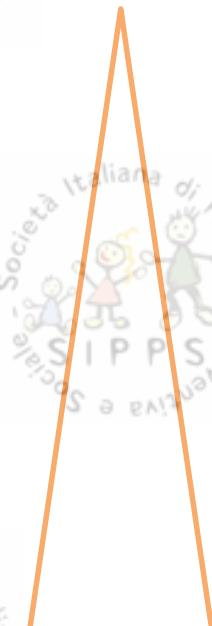
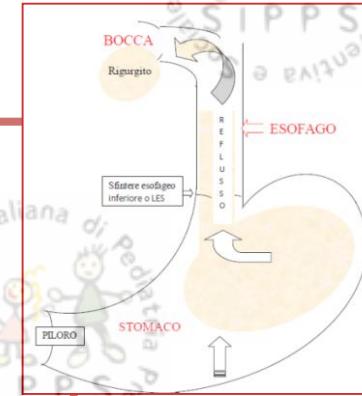
- PROTEIN SOURCE (rice, casein, whey proteins)
- METHOD OF HYDROLYSIS
(heat, enzymes, ultrafiltration....)
- % OF HYDROLYSIS: pHF, eHF (Kdaltons)
- Content of BETA-LATTOGLOBULIN
- **PRESENCE of lactose, DHA, nucleotides, pre/probiotics....**
- OSMOLARITY



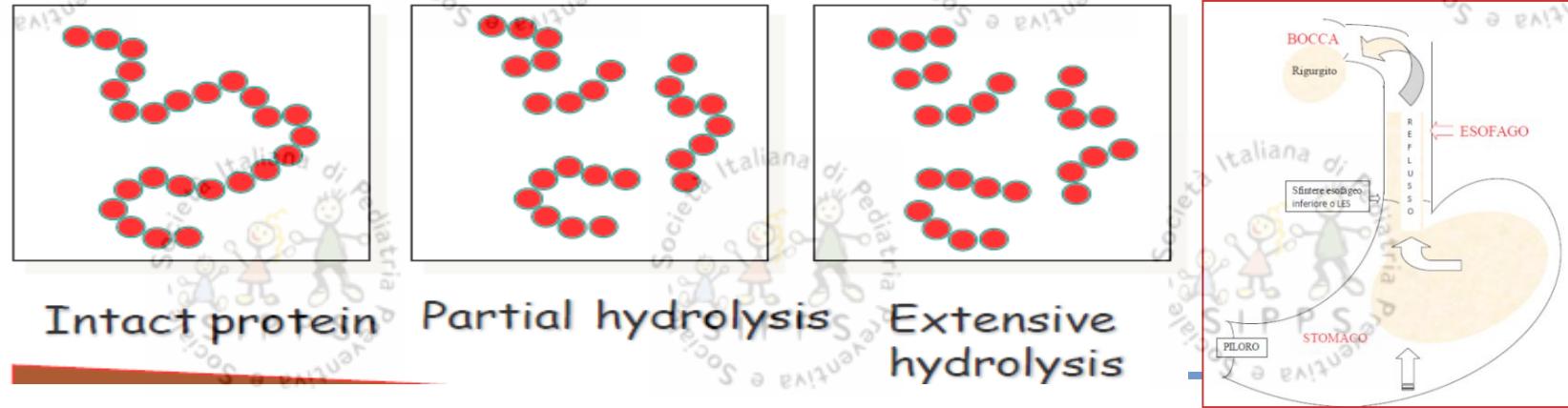
1. The “results” of one formula cannot be transferred to a different one
2. New formulas are different from old ones

Gastric emptying in infants with or without GOR according to type of milk. Billeau C. Eur J Clin Nutr 1990;44:577-83

- 201 infants (90 control; 111 with GOR)
- GE not different in function of age, sex
- Gastric residual content (after 120 min) *in control infants*
 - human milk 18 +/- 11 %
 - whey-hydrolysate 16 +/- 21 %
 - acidified formula 25 +/- 17 %
 - whey 26 +/- 19 %
 - casein 39 +/- 17 %
 - follow-up formula 47 +/- 19 %
 - whole cow's milk 55 +/- 19 %



GE in healthy newborns fed an intact protein formula (IPF), a partially (pHF) and an extensively hydrolysed (eHF) formula



- DBRCT with breath test (¹³C-OA)
- 20 healthy infants (mean age 31 d, range 6 d-13 wk):
IPF, pHF, or eHF formulas
- **eHF: gastric emptying significantly faster than IPF or pHF**
(median time 46 vs. 55 and 53 min, Wilcoxon, P<0.05)

Hydrolysed protein accelerates the gastrointestinal transport of formula in preterm infants

Studio cross-over in 15 lattanti pre-termine

Table 2. Gastro-intestinal transit time in hours measured by carmine red passage.

	All infants	First formula was Formula H	First formula was Formula S
N	15	8	7
Transit time Formula H	9.8 (5–20.8)	9.4 (5–18)	12.2 (6–20.8)
Transit time Formula S	19 (6–66)	21.8 (6–44)	15.5 (8.3–66)
Difference in transit time (Formula S – Formula H)	12 (-3.75–45.3)	13.2 (-3.75–33.8)	8.8 (1.3–45.3)

Data are shown as median (minimum – maximum). Formula H, hydrolysed protein formula; Formula S, standard preterm formula (native protein).

FS: PLV con rapporto C:S = 60:40

FH: proteine idrolisate con rapporto C:S= 60:40

Il latte di formula contenente proteine parzialmente idrolisate migliora lo svuotamento gastrico, accelera il transito intestinale e riduce la consistenza delle feci.

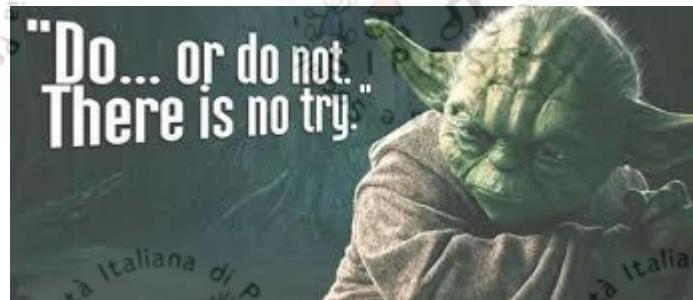
ALIMENTAZIONE E REFLUSSO: “TOP TEN” advices



- I. EVITARE IPERALIMENTAZIONE - LIQUIDI EXTRA
- II. POSIZIONE CORRETTA
- III. INTERVALLI MINIMI GARANTITI = mantenere una distanza di sicurezza
- IV. BREAST IS BEST
- V. FORMULE SPECIALI SOLO SE NECESSARIO
- VI. FARE LA SCELTA GIUSTA
- VII. VALUTARE IL RISULTATO
- VIII. (TEST DI) REINTRODUZIONE FORMULA NORMALE APPENA POSSIBILE
- IX. SVEZZARE a tempo
- X. LIMITARE alimenti che facilitino il reflusso



Come scegliere un latte idrolisato



In base a:

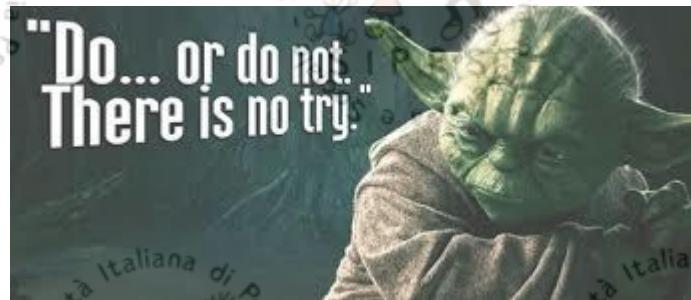
1. Tipo di presentazione
2. Cosa trattare
3. Cosa ottenere
4. Tipo di paziente (e genitore)

“fare o non fare...”



Letteratura
esistente

Come scegliere un latte idrolisato



“fare o non fare...”

Allergia al latte

- No pHF
- SI eHF (o AAF)

Disturbi
funzionali GI

- pHF ??
- SI eHF per 2-4 settimane se sintomi severi e sosp allergia

Svuotamento
gastrico

- Poco con pHF
- SI eHF

Considerare in
pazienti
neurologici

Prevenzione
allergia

- pHF/eHF per eczema ??
- NO per allergia respiratoria



DFGI o allergia alimentare ?

Perché è difficile distinguere?

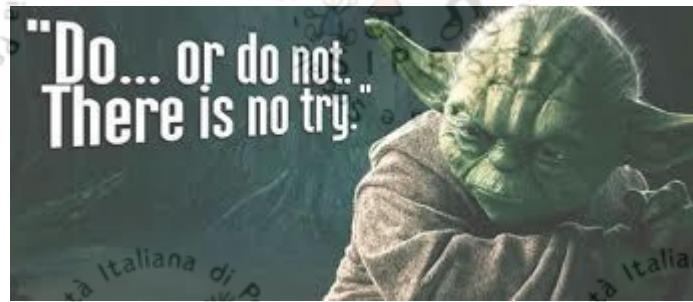
- A. Sintomi simili e non specifici
- B. Molti lattanti con DFGI hanno forme non-IgE medicate
= test allergologici poco utili
- C. Possibile risposta a idrolisati per:
 - ✓ effetto su motilità
 - ✓ ridotto/assente lattosio
- D. Effetto di probiotici/prebiotici....



La diagnosi di allergia alimentare DEVE essere appropriata:

1. Risposta clinica entro 2-4 settimane
2. Challenge = ancora sintomi oppure tolleranza acquisita

Come scegliere un latte idrolisato



“fare o non fare...”

In base a:

1. Tipo di presentazione
2. Cosa trattare
3. Cosa ottenere
4. Tipo di paziente (e genitore)



- i. Solo per sintomi importanti
- ii. Non risposta ad altri rimedi



Should Partial Hydrolysates Be Used as Starter Infant Formula? A Working Group Consensus

ABSTRACT

Partially hydrolyzed formulas (pHFs) are increasingly used worldwide, both in the prevention of atopic disease in at-risk infants and in the therapeutic management of infants with functional gastrointestinal manifestations.

only limited data could be found on the efficacy and safety of pHF in healthy term infants. Available data do not indicate that pHFs are potentially harmful for healthy, term infants. With respect to long-term outcomes, particularly referring to immune, metabolic and hormonal effects, data are, however, nonexistent. From a regulatory point of view, pHFs meet the nutrient requirements to be considered as standard formula for term healthy infants. Cost, which is different from country to country, should be considered in the

Summary

Based on the limited available literature, pHF tend to have some beneficial effect on functional GI manifestations such as regurgitation and constipation, although the evidence is insufficient

to formulate a recommendation. In addition, many of the formulas studied are either low in lactose, supplemented with pre- and/or probiotics, or with β -palmitate (ie, structured triglycerides with palmitic acid in the *sn*-2 position). Thus, it is often not possible to separate the potential effect of the partial hydrolysate from other changes in formula composition.

I DISORDINI FUNZIONALI GASTROINTESTINALI IN ETÀ PRESCOLARE

Atti XXVII Congresso Nazionale SIPPS // CONSENSUS 2015



- Sono utili le formule pHF e eHF?



Rigurgito

- Efficacia controversa e formula dipendente
- No effetto su acido
- No eHF se non altri sintomi

Coliche

- Non evidenza per pHF
- MA..Componenti aggiuntivi
- Si eHF in coliche severe (da APLV?)

Diarrea Funzionale

- Non evidenza
- Utili se allergia al latte

Stipsi funzionale

- . No aumento frequenza di evacuazioni
- pHF (+ altro) = fuci più morbide
- eHF se da allergia



Dietoterapia per i DFGI: Il ruolo dei latti speciali

Quando? A chi ?

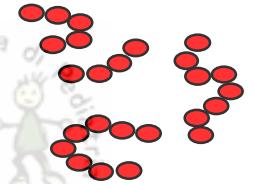
Rigurgiti/coliche/stipsi/diarrea

1. Esclusi segnali di allarme
2. Sintomi persistenti
3. Sintomi severi
4. Non risposta ad altri approcci/ trattamenti



**CHOOSING
WISELY !**

Idrolisati



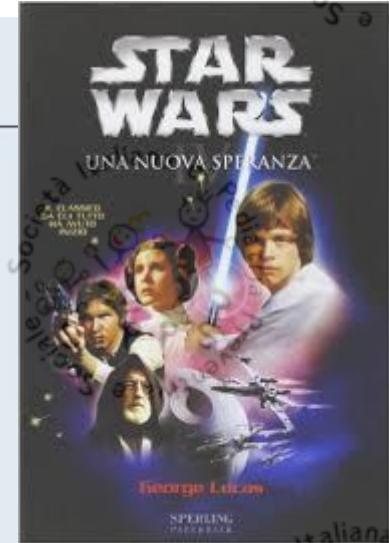
- Sospetta allergia alimentare
- Dismotilità gastrica
- ? Test allergologici ?
- Programmare challenge
- Minor tempo possibile

A workshop report on the development of the Cow's Milk-related Symptom Score awareness tool for young children

Yvan Vandenplas (yvan.vandenplas@uzbrussel.be)¹, Christophe Dupont², Philippe Eigenmann³, Ame Host⁴, Mikael Kuitunen⁵, Carmen Ribes-Konink⁶, Neil Shah^{7,8}, Raanan Shamir⁹, Annamaria Staiano¹⁰, Hania Szajewska¹¹, Andrea Von Berg¹²

Table 1 Symptom-based clinical score (*)

Symptom	Score
Crying (°)	0 ≤1 h/day 1 1–1.5 h/day 2 1.5–2 h/day 3 2–3 h/day 4 3–4 h/day 5 4–5 h/day 6 ≥5 h/day
Regurgitation (23)	0 0–2 episodes/day 1 ≥3 to ≤5 of small volume 2 >5 episodes of >1 coffee spoon 3 >5 episodes of ± half of the feed in < half of the feeds 4 Continuous regurgitations of small volumes >30 min after each feed 5 Regurgitation of half to complete volume of a feed in at least half of the feeds 6 Regurgitation of the complete feed after each feeding
Stools (Bristol scale) (25)	0 Type 1 and 2 (hard stools) 2 Type 3 and 4 (normal stools) 4 Type 5 (soft stool) 6 Type 6 (liquid stool, if unrelated to infection) 8 Type 7 (watery stools)
Skin symptoms	0–6 Atopic eczema Head neck trunk Arms hands legs feet Absent 0 0 Mild 1 1 Moderat 2 2 Severe 3 3
Respiratory symptoms	0 or 6 Urticaria (no 0/yes 6) 0 No respiratory symptoms 1 Slight symptoms 2 Mild symptoms 3 Severe symptoms



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The SBS scores range from zero to 33. Each symptom has a maximum score of six, apart from respiratory symptoms, which have a maximum score of three. An arbitrary cut-off value of ≥ 12 was selected as the criterion to pick up infants at risk of CMPA. A score of 12 requires the presence of at least two severe symptoms and a score higher than 12 requires the presence of at least three symptoms and the involvement of two organ systems.

- The CoMiSS awareness tool does not replace a food challenge, and its usefulness will need to be evaluated by a prospective randomised study



Dietoterapia per i DFGI: Il ruolo dei latti speciali



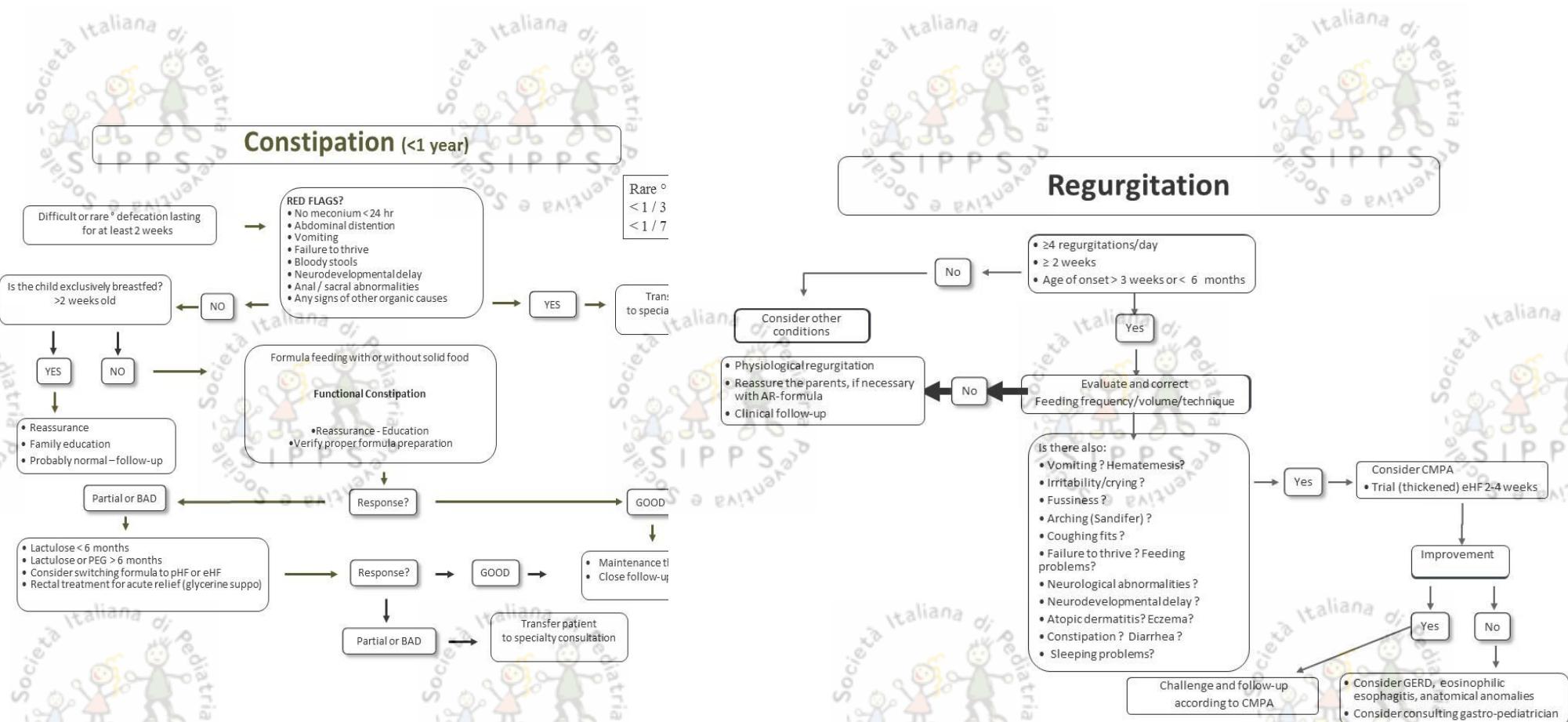
GRATIE

Silvia.Salvatore@uninsubria.it

REVIEW ARTICLE

Functional gastro-intestinal disorder algorithms focus on early recognition, parental reassurance and nutritional strategies

Yvan Vandenplas (yvan.vandenplas@uzbrussel.be)¹, Marc Benninga², Ilse Broekaert³, Jackie Falconer⁴, Frederic Gottrand⁵, Alfredo Guarino⁶, Carlos Lifschitz⁷, Paolo Lionetti⁸, Rok Orel⁹, Alexandra Papadopoulou¹⁰, Carmen Ribes-Koninckx¹¹, Frank M. Ruemmele^{12,13}, Silvia Salvatore¹⁴, Raanan Shamir¹⁵, Michela Schäppi¹⁶, Annamaria Staiano⁶, Hania Szajewska¹⁷, Nikhil Thapar¹⁸, Michael Wilschanski¹⁹



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- No aumento frequenza di evacuazioni
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- eHF se allergia

Double-blind comparative trial with two anti-regurgitation formulae
Y. Vandenplas . JPGN 2013;57:389-93

RESULTS

- 3 day diary : Only 77% did regurgitate >5 times/day
- A significant decrease in the mean No. & volume of regurgitation with both AR formulas
- Better results for the one pWH with added starch
- No difference was reported in stool frequency and consistency between the two groups