



Functionele darmstoornissen bij kinderen en adolescenten. Diagnose?

Nieuwe perspectieven met medische hypnotherapie.

Tania Mahler

Pediatrische Gastroenterologie en Nutritie

Specifieke competentie in hypnose voor behandeling van FGID

Adjunct Kliniekhoofd

Universitair Kinderziekenhuis Koningin Fabiola, Brussel

~

Consulent

Universitar Kinderziekenhuis Brussel

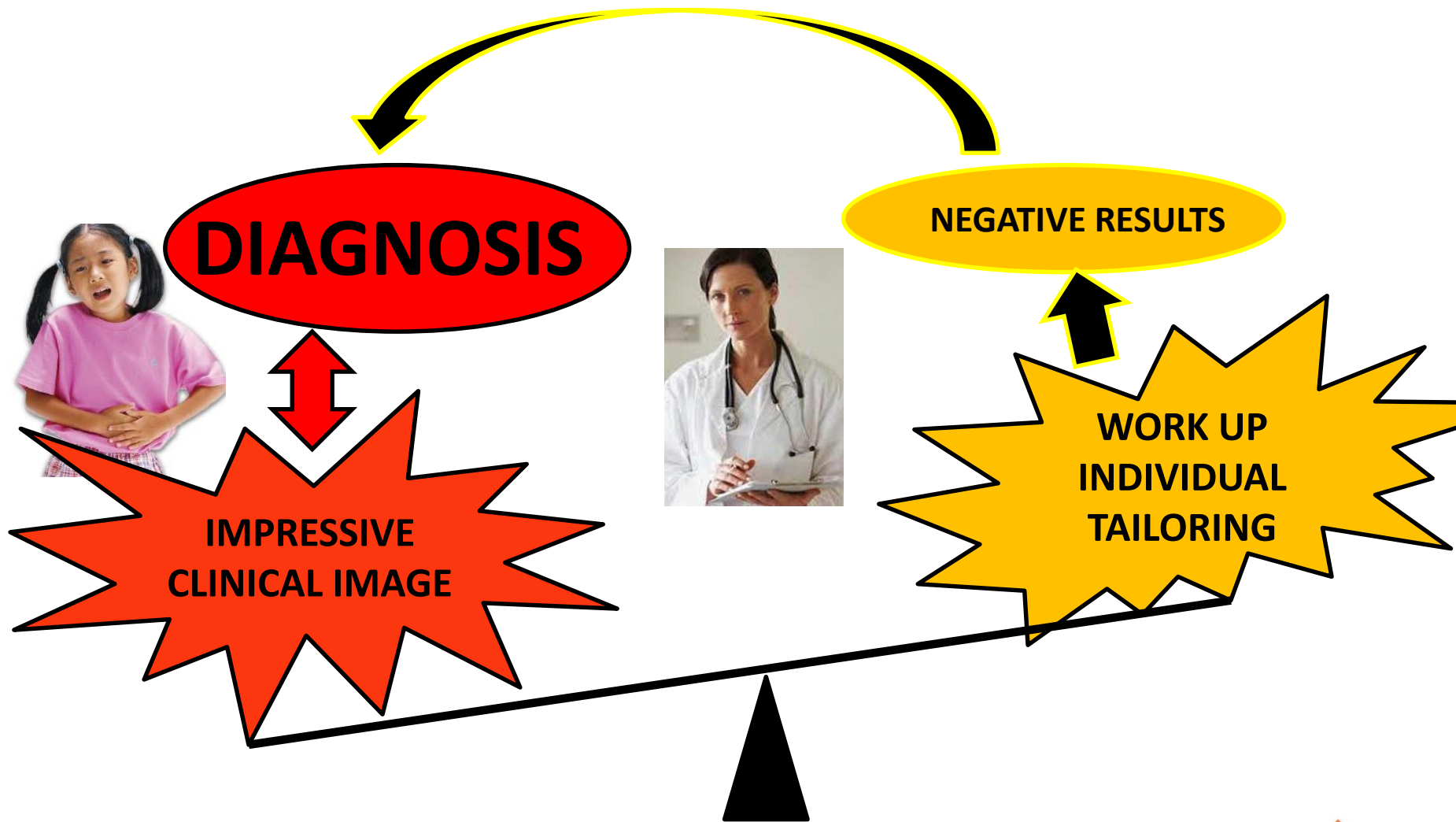
Pain

**DYSFUNCTION
HANDICAPPED**

SCHOOL and work absenteeism

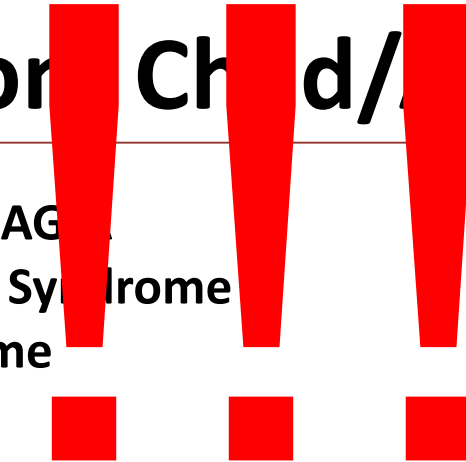
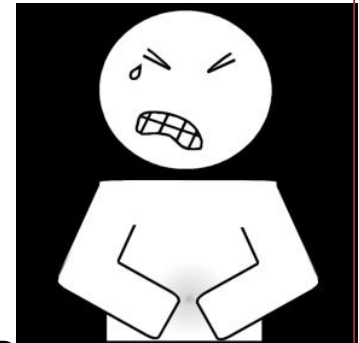
**Discomfort
Diarrhea
Constipation
Abdominal
fullness**





Childhood Functional GI Disorders: Rome III classification

- VOMITING AND AEROPHAGIA
- Infant Ruminant Syndrome
- Infant Regurgitating Syndrome

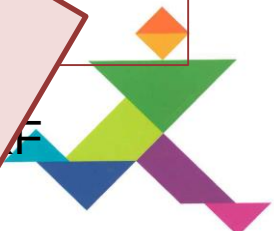


- H2. CHILDHOOD FUNCTIONAL GI DISORDERS
- H2a. Functional Dyspepsia
- H2b. Irritable Bowel Syndrome
- H2c. Abdominal Migraine
- H2d. Childhood Functional Diarrhea
- H2d1. Childhood Functional Diarrhea = FAPS
- H3. CONSTIPATION AND INCONTINENCE
- H3a. Functional Constipation
- H3b. Nonretentive Fecal Incontinence

Gastroenterology (volume 20, issue 5, May 2006).



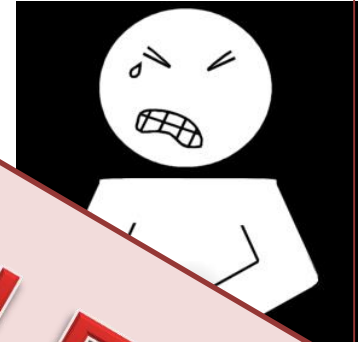
Universitair Ziekenhuis Brussel



Childhood Functional GI Disorders: Rome III

Child/Adolescent

- H2. Functional Bowel Disorders
- H2a. Functional Constipation
- H2b. Irritable Bowel Syndrome
- H2c. Abdominal Pain
- H2d. Childhood Functional Dyspepsia
- H2d1. Childhood Functional Dyspepsia
- H3. CONSTIPATION AND INCONTINENCE
- H3a. Functional Constipation
- H3b. Nonretentive Fecal Incontinence



**FUNCTIONELE
DARMZIEKTEN
ZIJN WEL DEGELIJK
EEN ZIEKTE !**

Gastroenterology (volume 20, issue 5, May 2006).

Childhood Functional GI Disorders:

Rome III classification: Infant/Toddler

- **G1. Infant Regurgitation**
- **G2. Infant Rumination Syndrome**
- **G3. Cyclic Vomiting Syndrome**
- **G4. Infant Colic**
- **G5. Functional Diarrhea**
- **G6. Infant Dyschezia**
- **G7. Functional Constipation**

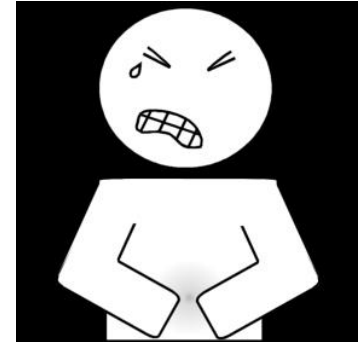


Gastroenterology (volume 20, issue 5, May 2006).

<http://www.romecriteria.org/>

Childhood Functional GI Disorders: Rome III classification: Child/Adolescent

- **H1. VOMITING AND AEROPHAGIA**
- H1a. Adolescent Rumination Syndrome
- H1b. Cyclic Vomiting Syndrome
- H1c. Aerophagia



- **H2. ABDOMINAL PAIN-RELATED FUNCTIONAL GI DISORDERS**
 - H2a. Functional Dyspepsia
 - H2b. Irritable Bowel Syndrome = IBS
 - H2c. Abdominal Migraine
 - H2d. Childhood Functional Abdominal Pain = FAP
 - H2d1. Childhood Functional Abdominal Pain Syndrome = FAPS
-
- **H3. CONSTIPATION AND INCONTINENCE**
 - H3a. Functional Constipation
 - H3b. Nonretentive Fecal Incontinence

Gastroenterology (volume 20, issue 5, May 2006).



Universitair Ziekenhuis Brussel

HUDERF



Pathofysiologie: functionele ziekten van het gastro-intestinaal stelsel

1. “pijn tussen de 2 oren”



Pathofysiologie: functionele ziekten van het gastro-intestinaal stelsel

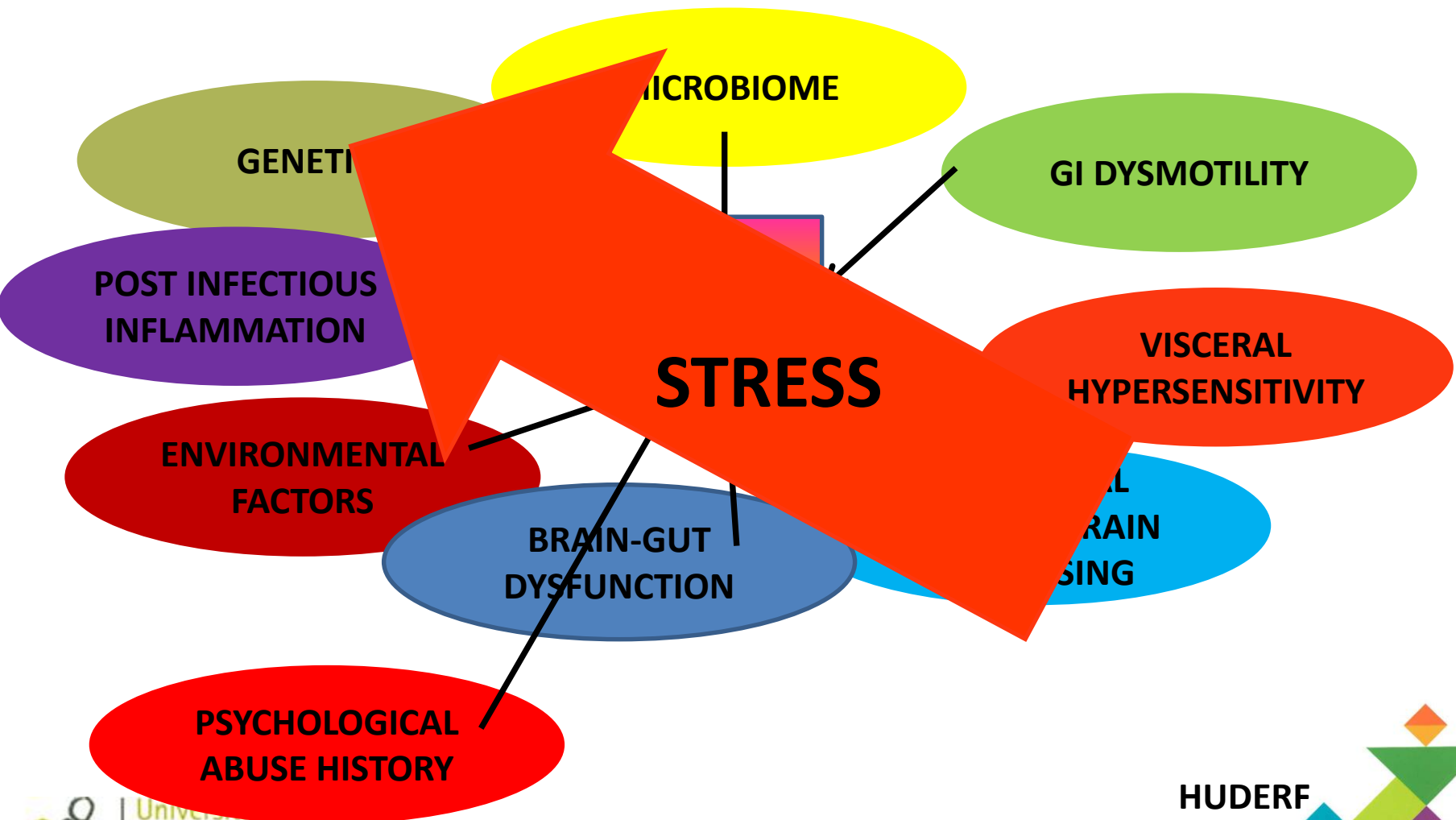
2. Psychosomatische klachten



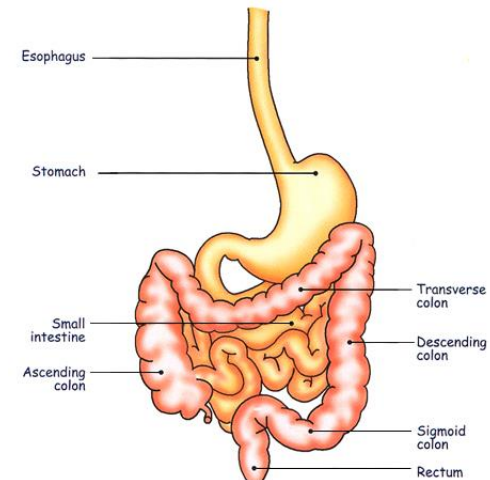
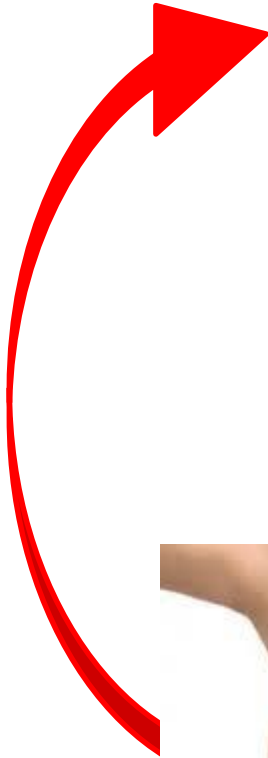
Pathofysiologie: functionele ziekten van het gastro-intestinaal stelsel

MULTIFACTORIEEL

Pathophysiology: Abdominal pain syndromes

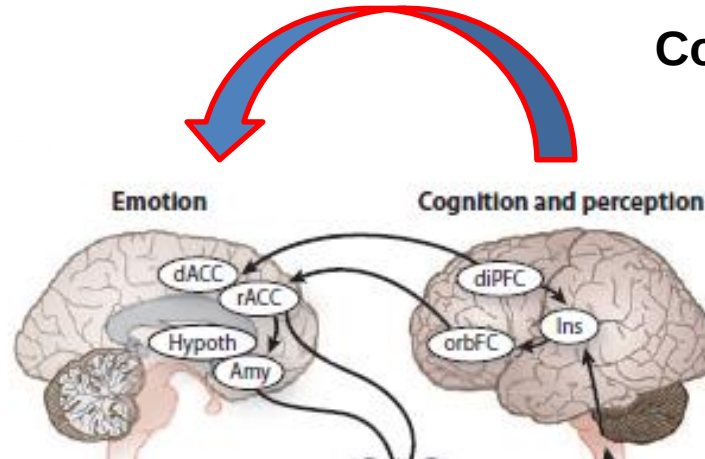


Van waar komt de pijn?
Intesiteit?



Mayer and Tillisch. The Brain-Gut Axis in
Abdominal Pain Syndromes. Annu. Rev. Med.
2011. 62:381–96

Communicatie Gut-Brain axis

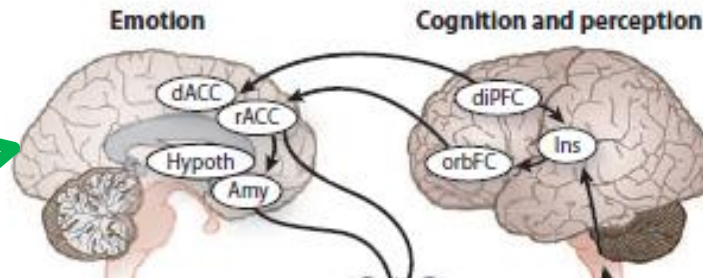


**Wanneer heb ik de pijn nog eens ervaren?
Welke oplossing heb ik ?**



Communication Gut-Brain axis

Geruststelling
Aangename
omgeving
....



Vermindering van de pijn

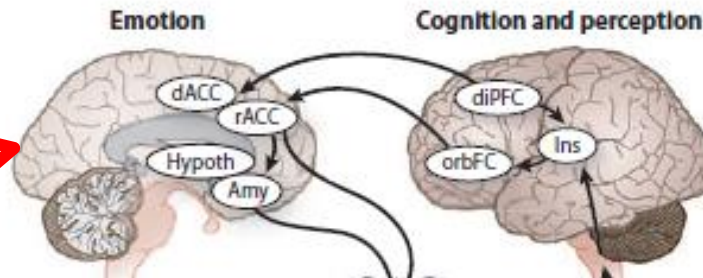


Mayer and Tillisch. The Brain-Gut Axis in Abdominal Pain Syndromes. Annu. Rev. Med. 2011. 62:381–96

Communication Gut-Brain axis

**Angst
Stress
Slechte ervaring
of gebeurtenis**

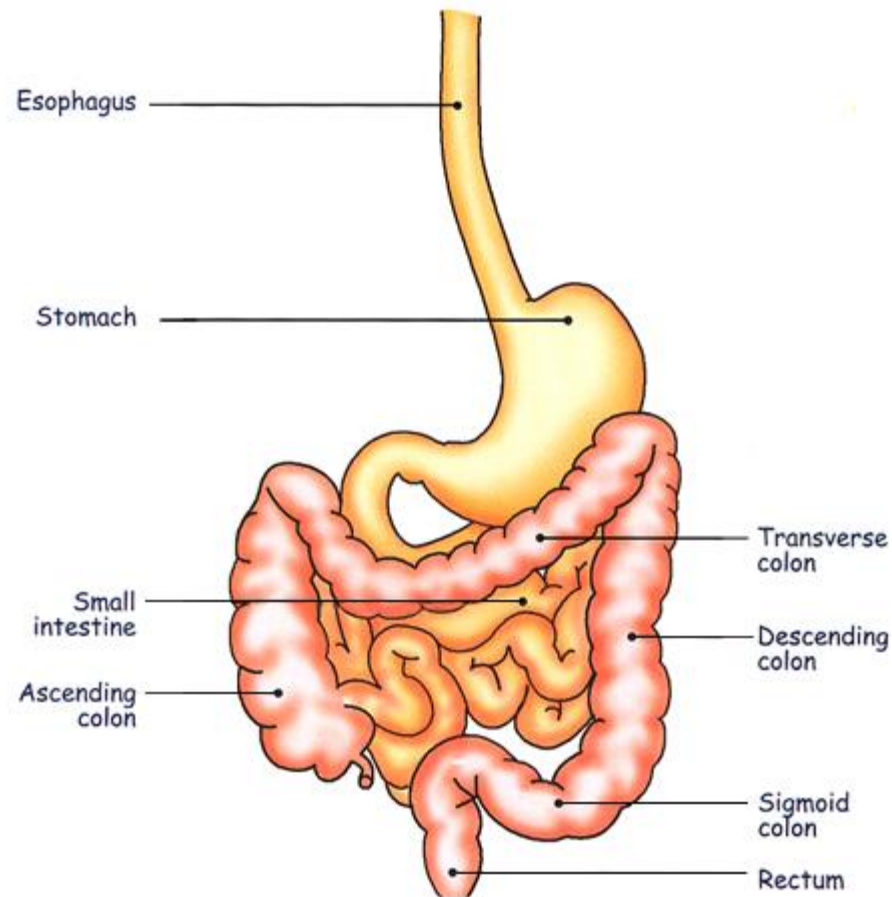
...



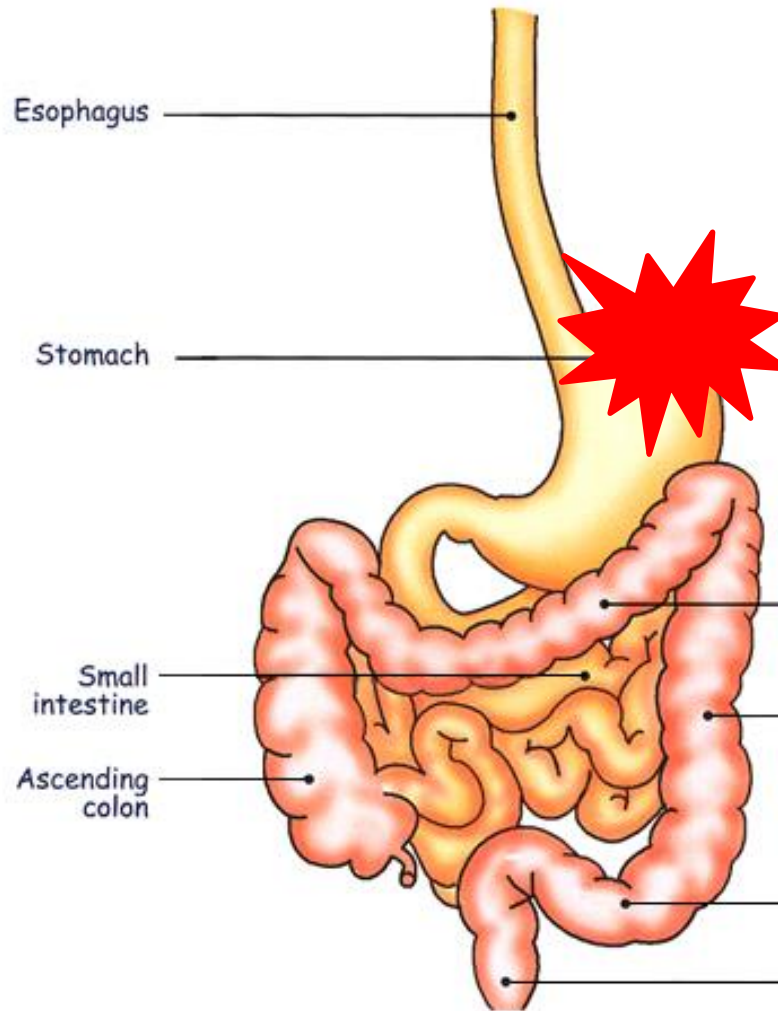
Toename pijn



VISCERALE NORMOSENSITIVITEIT



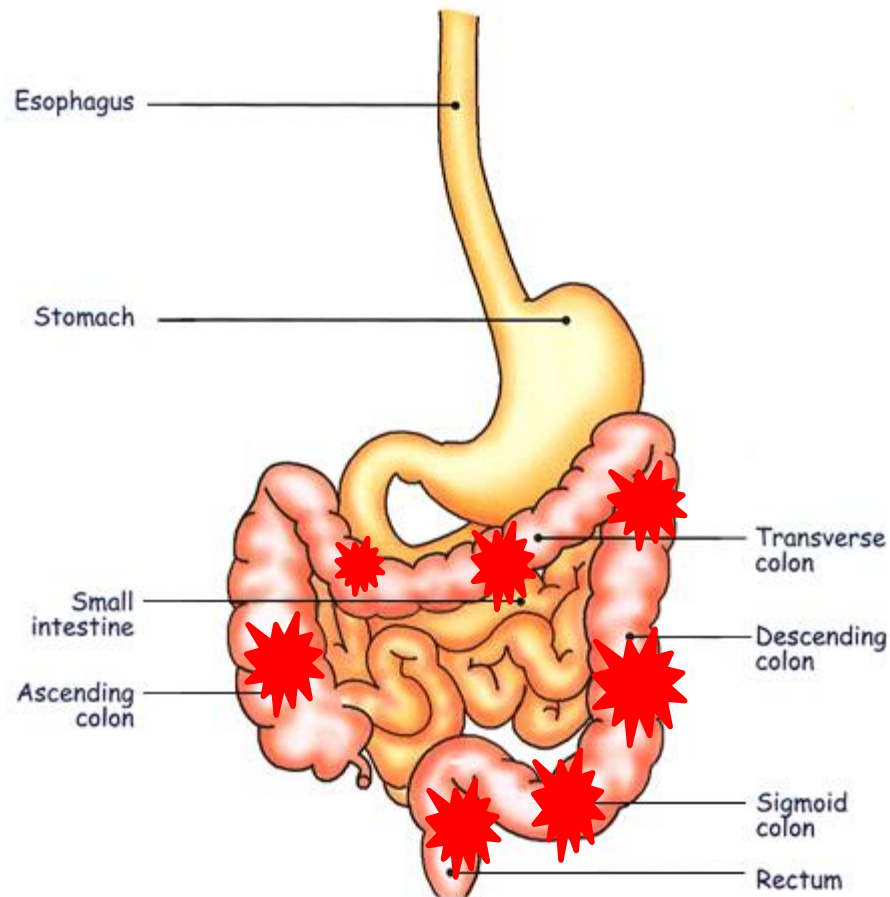
VISCERALE NORMOSENSITIVITEIT



**Knorren van
De maag**



VISCERALE NORMOSENSITIVITEIT



Signaal voor defecatie



VISCERALE HYPERSENSITIVITEIT

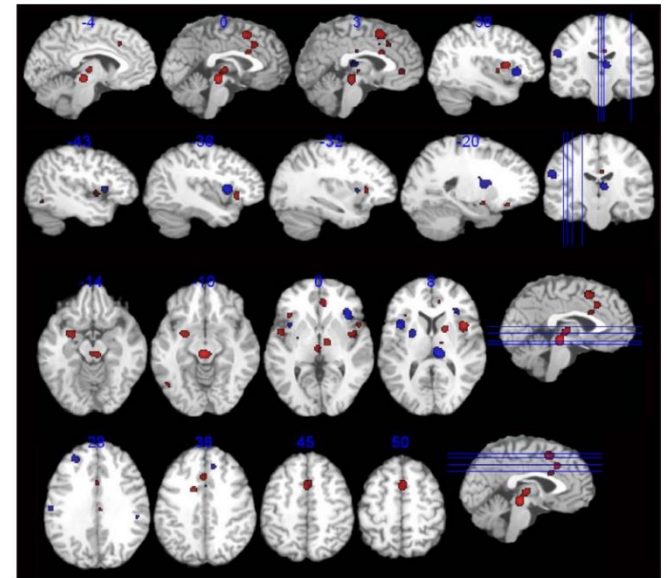
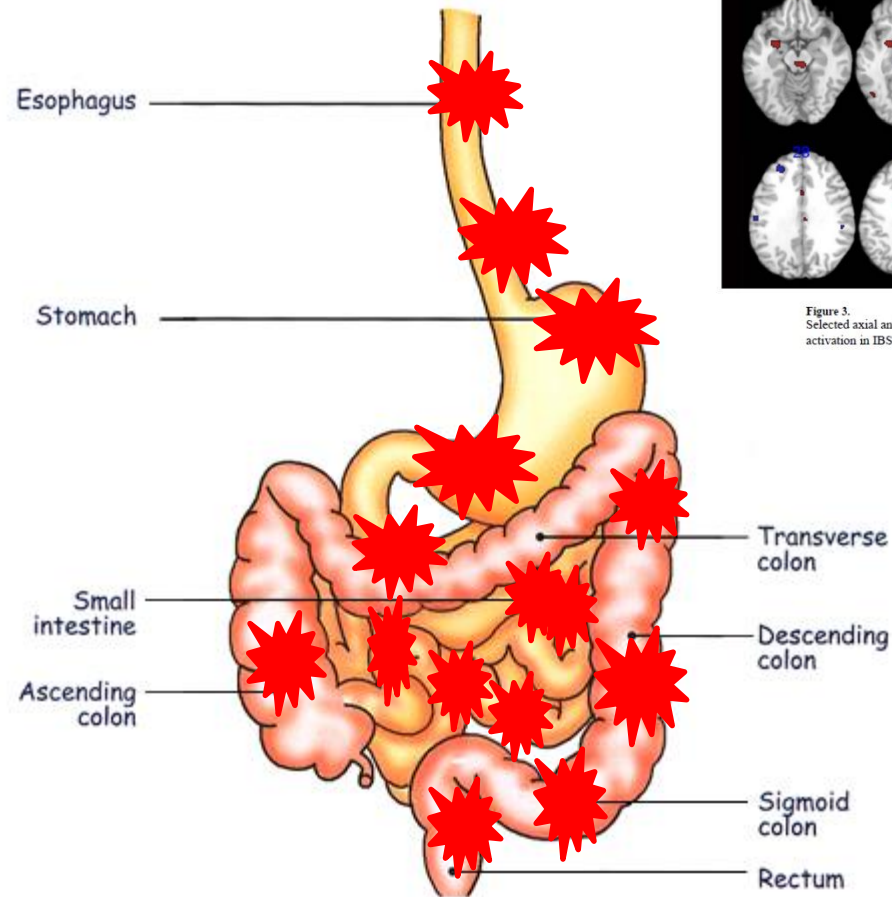


Figure 3. Selected axial and sagittal slices representing brain areas demonstrating difference greater activation in IBS (red) and greater activation in Controls (blue) across all studies.

BEHANDELING: functionele darmstoornissen

- Elke behandeling → hoog placebo percentage (20-50%)

- vezels
- Lactose arme voeding
- voedingsallergie
- Probiotica
- H2 remmers – PPI
- Serotonergisch medicatie
- Tricyclic antidepressiva

Guandalini et al. **VSL#3** improves symptoms in children with IBS: a multicenter, randomised, placebo-controlled, double-blind crossover study. JPN 2010;51:24-30.

Francavilla et al. A randomized controlled trial of **Lactobacillus GG** in children with functional abdominal pain. Pediatrics 2010;126:e1445-52

Horvath et al. Meta-analysis: Lactobacillus rhamnosus GG for abdominal pain-related functional gastrointestinal disorders in childhood. Aliment Pharmacol Ther 2011;33:1302-10

Romano et al. **Lactobacillus reuteri** in children with functional abdominal pain (FAP). J Paediatr Child Health 2010

?





BEHANDELING: functionele darmstoornissen

- Elke behandeling → hoog placebo percentage (20-50%)

- vezels
- Lactose arme voeding
- voedingsallergie
- Probiotica
- H2 remmers – PPI
- Serotonergisch medicatie
- Tricyclic antidepressiva

?



- “een goede uitleg”: 40- 70 % oplossen van het probleem

- Ondersteuning
- Empathie
- “geen gevaarlijke ziekte”

Vlieger et al. Walker's Pediatric Gastrointestinal disease 5th ed. 2008.



Mind-Brain-Body interactions

DR EMERAN MAYER

Alongside colleagues Drs Naliboff, Chang, and Tillisch, Dr Emeran Mayer, of UCLA's Center for Neurobiology of Stress, explains how new technologies are pushing aside medical orthodoxy in the pursuit of solutions to complex gastrointestinal problems



Could you begin with an overview of the work you do at the University of California Los Angeles (UCLA)?

As a practicing gastroenterologist I see patients with complex, chronic gastrointestinal problems. The majority of patients are referred from across the country or seek a second, third or fourth opinion. They all fall in the category of disorders of mind-brain-gut interactions. As a clinical investigator, I pursue research in mind-brain-body interactions with a primary focus on the interface of pain, stress and emotions in the human brain. Also, I am Director of the UCLA Centre for Neurobiology of Stress (CNS).

How has technological progress advanced your work?

It has primarily influenced research into mechanisms underlying mind-brain-body interactions, and mind-body therapies. The advent and rapid progress in neuroimaging of the brain has been the main driving force in this. Structural and functional magnetic resonance imaging (fMRI) and positron emission tomography have rapidly advanced our knowledge of how the brain responds to stimuli from the body (interoception), how it responds to stress and expectation of pain, and how pain, stress and emotions are processed and modulated by the brain.

Functional disorders like Irritable Bowel Syndrome (IBS) have been considered psychosomatic; what success has there been in countering this prevalent opinion among clinicians?

One could argue that mind-body interactions are just another expression for psychosomatic interactions. At a clinical level, both refer to the same phenomenon of dose interactions between psychological processes (or activities of the mind) and bodily symptoms. However, a major change has occurred in viewing the brain as the main mediator between these processes. Rather than speculating about the influence of unconscious processes on the expression of distinct patterns of disease, now we can directly study neurobiological processes, including interactions between early traumatic life experiences and genetic factors, which often play a role in symptom generation. We now need to reframe the old erroneous and biased viewpoint of many clinicians that symptoms are 'all in the head' to a neurobiological based concept, that the brain is a key mediator in mind-brain-body interactions.

Could you outline the potential therapeutic benefits your work could produce for Inflammatory Bowel Diseases (IBD) and Irritable Bowel Syndrome (IBS) sufferers?

Our work will have major implications for the development and evaluation of more effective treatments for both disorders. We have a longstanding interest in changes in the brain-gut axis in IBD and recently began investigating the effects of gut inflammation on the expression of an important signalling system in the brain. We are also studying how gut inflammation changes the brain's response to emotional stimuli. I strongly believe that mind-brain-gut interactions play a major role in severity and exacerbation of IBD and therefore therapies targeted at the mind-brain may become an important complementary component to IBD treatment. The role of psychosocial factors and stress are well established for IBS and other functional

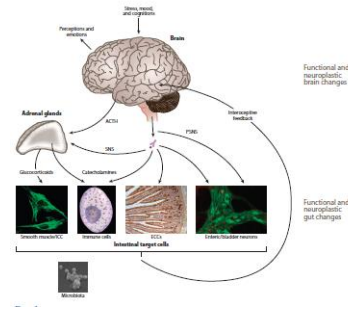
bowel disorders. In the absence of any reliable symptom-related biomarkers, brain imaging has become an essential approach to identify the neurobiological underpinnings of this disorder. A better understanding of these mechanisms will legitimise IBS and related disorders as a real disease, identify treatment targets within the central nervous system, and enable the objective evaluation of new interventions.

To what degree do 'gut instincts' relate to physical wellbeing?

Our gut is by far the largest interface we have with the outside world – the size of a football field. It is packed with trillions of microorganisms which communicate with the gut and it has its own immune, endocrine and nervous systems. In terms of complexity this system is therefore only comparable to the brain. There is no doubt that the impact of signals reaching the brain from this complex organ must have major influences on homeostasis, wellbeing and mental function.

What areas of research is the UCLA-CNS going to be pursuing in the future?

Under the umbrella of mind-brain-body interactions, brain-gut interactions will continue to be a main area of research. Specifically: developing a fully integrated model of bidirectional brain-gut interactions; understanding interoceptive, cognitive and emotional factors influencing food intake in health and disease; explaining symptoms in functional bowel disorders such as IBS, and bidirectional interactions between brain and gut in chronic gut inflammation. We will develop understanding of the neurobiological and genetic basis of persistent pain disorders (such as fibromyalgia or interstitial cystitis) and evaluate and develop new treatments to improve these disorders; pharmacologically by identifying symptom generating brain signalling systems for drug targeting and non-pharmacologically by identifying the neurobiological mechanisms of mind-body treatments including yoga, meditation, cognitive behavioural therapy and hypnosis.

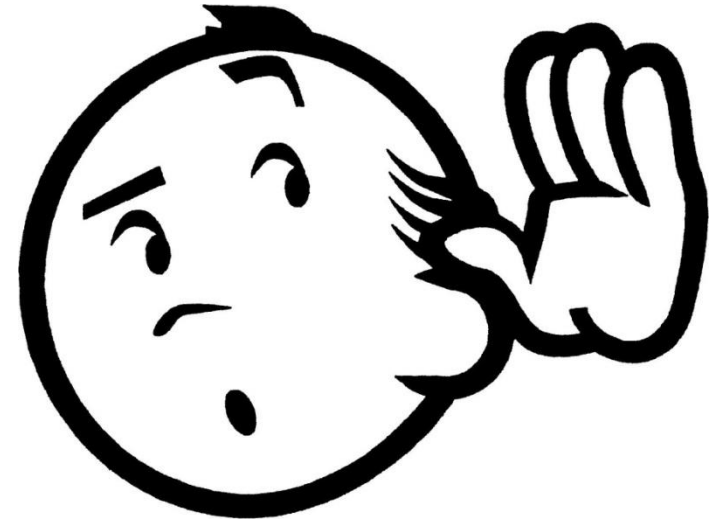


new treatment options for these disorders; **pharmacologically** by identifying symptom generating brain signalling systems for drug targeting and **non-pharmacologically** by identifying the neurobiological mechanisms of mind-body treatments including yoga, meditation, cognitive behavioural therapy and hypnosis.

WWW.RESEARCHMEDIA.EU 2011
Mayer and Tillisch. The Brain-Gut Axis in Abdominal Pain Syndromes.
Annu. Rev. Med. 2011. 62:381–96

Nonpharmacological complementary treatments in FGIDs

- Placebo
- Physical exercise
- Diets
- Psychological therapies
- (Cognitive) behavioral therapy
- **Medical hypnosis**
- Mindfulness
- Yoga
- Osteopathy
- Fysiotherapy
- Herbs
-



Hypnotherapy in severe irritable bowel syndrome: further experience

P J WHORWELL et al. Gut, 1987, 28, 423-425

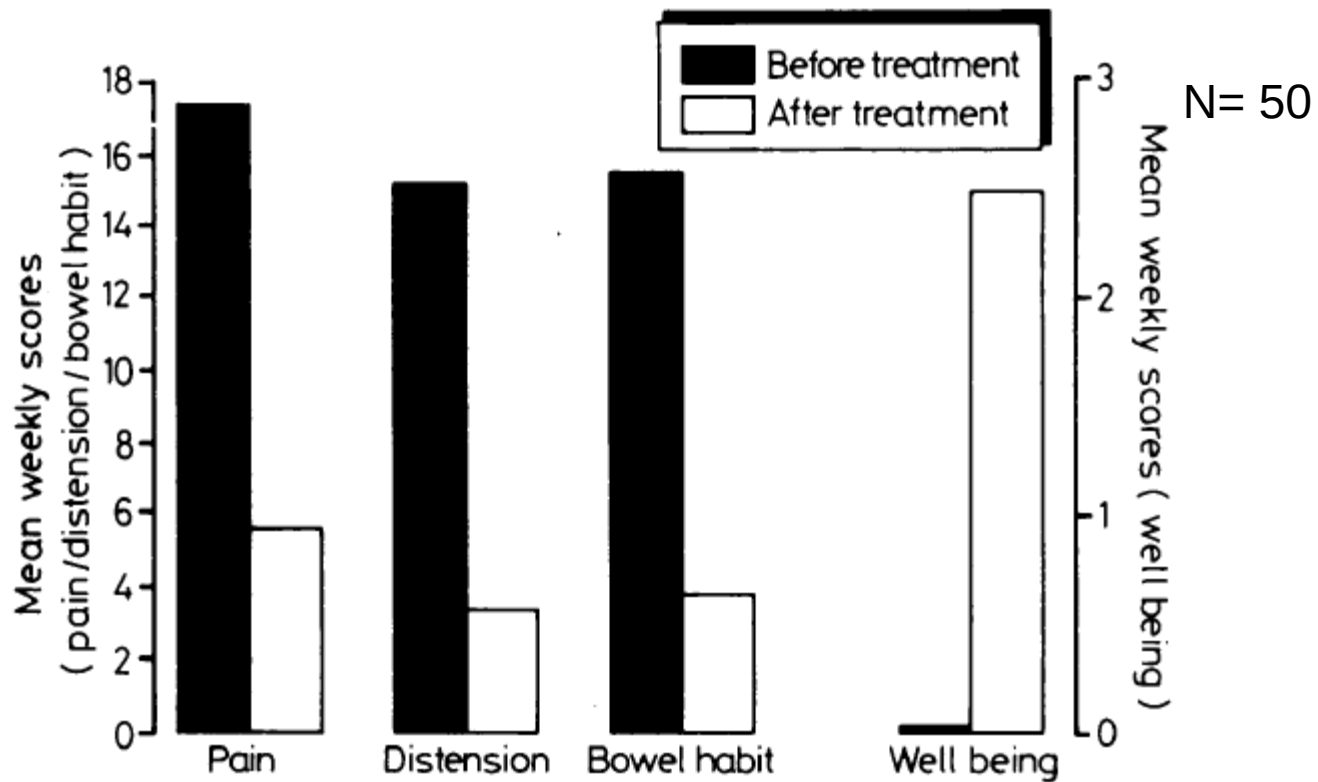


Figure *Change in individual symptoms with treatment.*

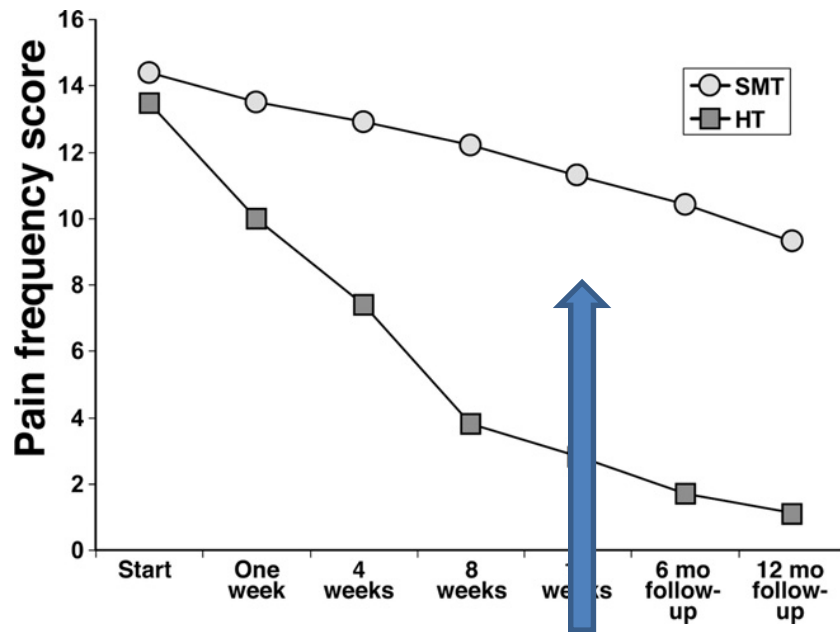
Lindfors et al. Am J Gastroenterol 2011;2:1232-4.

Moser et al. Am J Gastroenterol 2013;108(4): 602-609

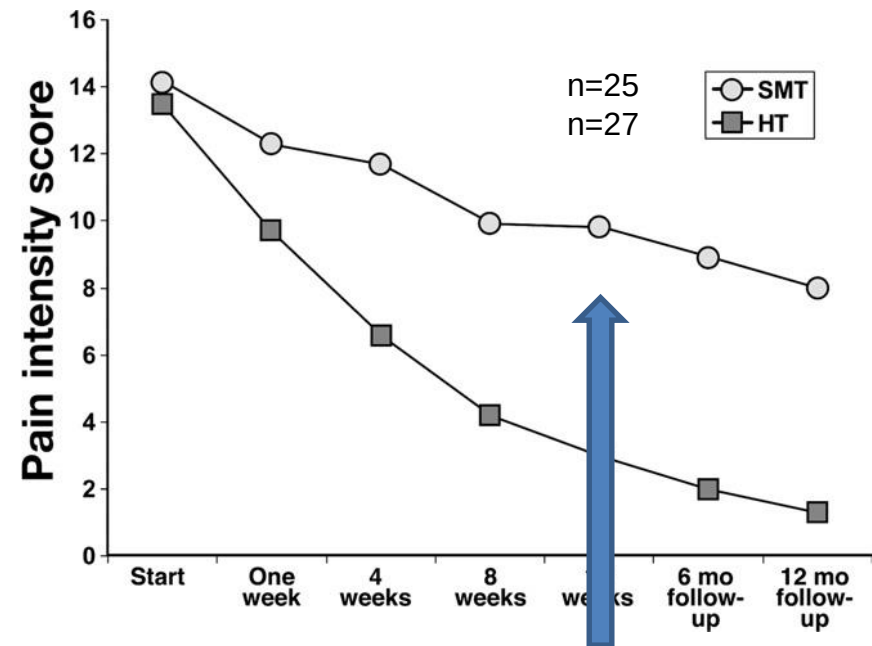
Vlieger et al. Gastroenterology 2007;133(5): 1430-6.



25% SMT responders > 85% Hypnosis
clinical remission after 1 year. $p < 0,001$

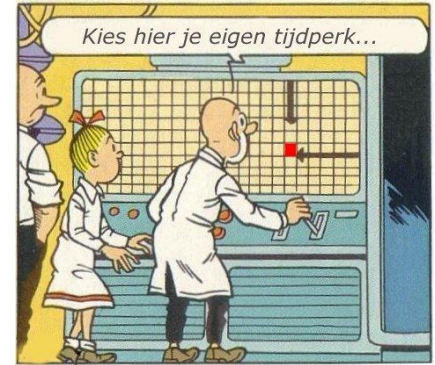


Therapy stop



Therapy stop

After $\pm$ 4,8 years (3,4 -6,7) follow-up:



- 20% SMT responders $><$ 68 % Hypnosis clinical remission ,
p= 0,005
- No differences QOL, doctor's visits and missed school days

Vlieger et al. , *The American Journal of Gastroenterology* 2012; 107, 627-631.

Long-term effects of hypnotherapy in patients with refractory irritable bowel syndrome.

Lindfors P et al. Scandinavian Journal of Gastroenterology 2012; 47: 413-420.

- **244 patients hypnotherapy:** Gothenburg n=80, Gävle n=30, Stockholm n=134
 - Median 4 years of follow-up
 - Responders (very much better, moderately better) : 49 %
 - Responders : **all patients** reported that hypnotherapy was worthwhile
 - Non-responders: Still **74% found hypnotherapy worthwhile !!!!**
 - 69% of responders versus 31% of non-responders : reduction of visits for GI symptoms to a GP
 - 64% of responders versus 32% of non-responders : consulted their GE less often after hypnotherapy

Long-term improvement in **functional dyspepsia** using hypnotherapy. Calvert et al. Gastroenterology 2002;123: 1778-85.

- 126 patients randomized – treatment 16w
- follow-up period: 56 w
- Results:
 - long term improvement of symptoms
 - 73% hypnotherapy (n= 26)
 - 43% supportive + ranitidine (n =29) p <0,01
 - 34% supportive + placebo (n= 24) p <0,02
 - Consultations were also reduced in the hypnotherapy group (median 1) compared with the other two comparator groups (median 4). p<0,001
 - None in the hypnotherapy group had to restart medication, 90% in medical treatment group and 82% in supportive group

Long-term improvement in **functional dyspepsia** using hypnotherapy. Calvert et al. Gastroenterology 2002;123: 1778-85.

- 126 patients randomized – treatment 16w
- follow-up period: 56 w
- Results:
 - long term improvement of symptoms
 - 73% hypnotherapy (n= 26)
 - 43% supportive + ranitidine (n =29) $p < 0,01$
 - 34% supportive + placebo (n= 24) $p < 0,02$
 - Consultations were also reduced in the hypnotherapy group (median 1) compared with the other two comparator groups (median 4). $p < 0,001$
 - None in the hypnotherapy group had to restart medication, 90% in medical treatment group and 82% in supportive group



Mahler $T^{1,2}$, Vandenplas Y^2 and Scaillon M^1 .

HYPOPHARYNGEAL TREATMENT OF A PATIENT WITH SUPRAGASTRIC BELCHING, A PATIENT WITH RUMINATION AND A PATIENT WITH CYCLIC VOMITING: 3 PEDIATRIC CASES.

Mahler T^{1,2}, Vandenplas Y² and Scallion M¹

¹ University children's hospital Queen Fabiola, ULB

² UZ Brussel / VUB, Brussels, Belgium.

Supragastric belching, rumination and cyclic vomiting are functional GI disorders (FGID) in children and adolescents (ROME III). When persisting, these symptoms can have debilitating, disturbing social life. Actual medical treatment is often disappointing. New therapies have been developed to target the dysregulation in the brain-gut axis. In different clinical trials hypnotherapy had been effective in IRS and functional abdominal pain (syndromed). Based on these results we found it challenging to try this therapy in other FGID entities.

AIM AND METHODS

We want to illustrate the efficacy of hypnotherapy [HYT] for treatment of supragastric belching (SB), rumination (RM) and cyclic vomiting (CV) in 3 patients [pt].

Hypnotherapy:

It is a treatment mediated with specific therapeutic goals and specific techniques utilized to reach the patient in a state of hypnosis.

Patients:

A natural state of shared consciousness, leading to a relaxation and an increased receptivity to suggestions and requests to guide the patient. Their own attention is focused on positive suggestions. These ideas work in a hypnotic state.

CONCLUSIONS:

Actual medical treatment is disappointing in supragastric belching, rumination and cyclic vomiting. Although the number of CVs is limited, we report these 3 cases that have successfully treated with HYT, teaching the efficacy of this treatment in fact satisfactory. More cases are needed to evaluate the efficacy of this therapy is beneficial in larger groups.

Abstract	Keywords
Supragastric belching, rumination and cyclic vomiting are functional GI disorders (FGID) in children and adolescents (ROME III). When persisting, these symptoms can have debilitating, disturbing social life. Actual medical treatment is often disappointing. New therapies have been developed to target the dysregulation in the brain-gut axis. In different clinical trials hypnotherapy had been effective in IRS and functional abdominal pain (syndromed). Based on these results we found it challenging to try this therapy in other FGID entities.	Supragastric belching, rumination and cyclic vomiting, functional GI disorders, hypnotherapy, brain-gut axis, IRS, functional abdominal pain.

RESULTS:

patient 1 (F) (current onset SB), since 3 months. Complaints started at the age of 4 years, being very frequent. The reports include postprandial, aynous and RM. Her history is unremarkable, except for psychomotor because of anxiety. Upper endoscopy (EGD) with biopsies, histology and manometry were normal. Operative laparoscopy did not improve her symptoms.

patient 2 (F) is referred for periods and belches, since 1 year and 6 months. She was misdiagnosed, EGD showed normal findings. She was treated with PPI, without significant clinical amelioration, even to make the diagnosis.

patient 3 (12y) was hospitalized for CV with haematemesis. Since the age of 5, the frequency of these autisms was increasing. GI and neurological examination were normal and ineffective, they were already seen by the paediatrician for months in hospital. She was misdiagnosed with EGD shown on acute endoscopy (EGD) with normal findings and manometry (EGD) on 6 months follow-up.

TREATMENT:

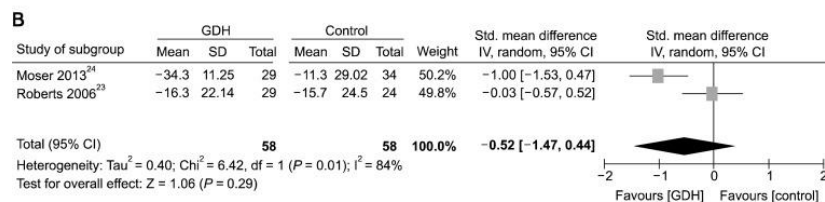
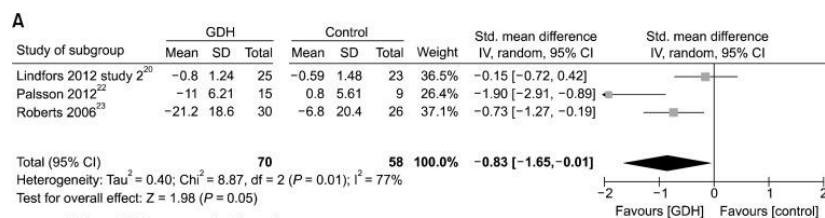
After 3 months of these symptoms as well as the fact that the HYT was indicated was explained, 1st patient. After 10 sessions, the symptoms disappeared. 2nd patient. After 8 sessions, pt had a reduction in severity and number of autisms. 3rd patient. After 10 sessions, pt was free. She is doing autisms on a regular basis.

J Neurogastroenterol Motil. 2014

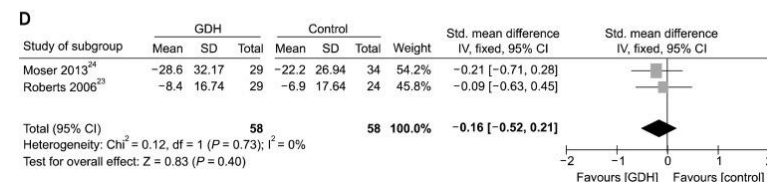
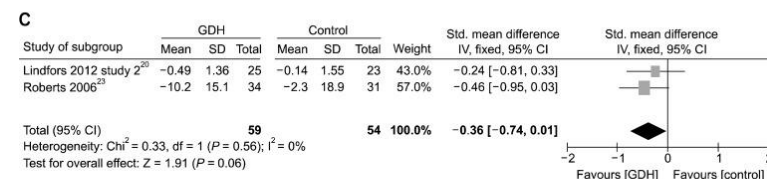
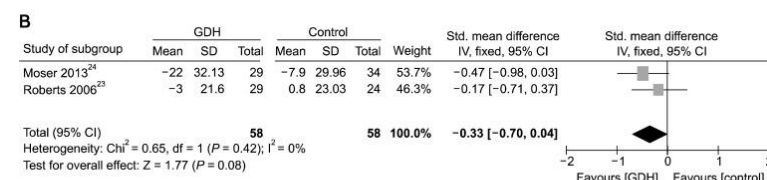
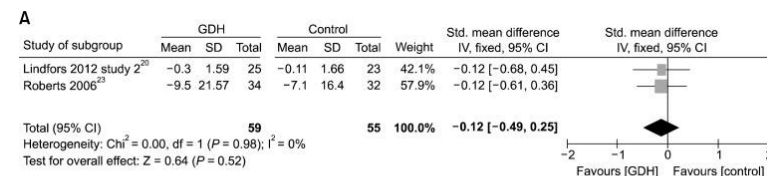
The Efficacy of Hypnotherapy in the Treatment of Irritable Bowel Syndrome: A Systematic Review and Meta-analysis

[Han Hee](#) et al.

Forest plots of abdominal pain change score. (A) Meta-analysis of 3 months results. (B) Meta-analysis of 1-year results. GDH, gut-directed hypnotherapy; Std., standardized.



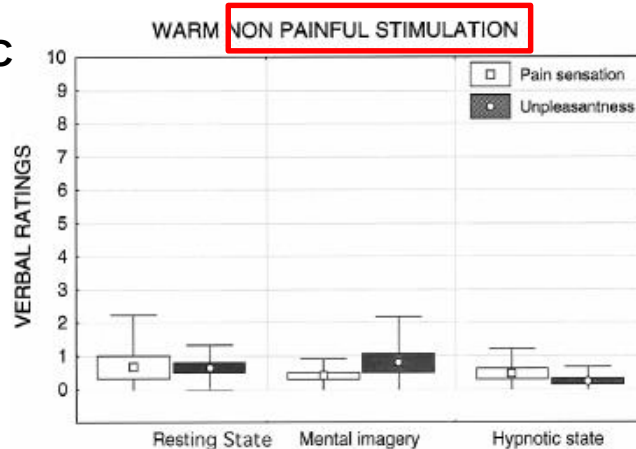
Forest plots of constipation change score at 3 months (A) and 1 year (B), diarrhea change score at 3 months (C) and 1 year (D). GDH, gut-directed hypnotherapy; Std., standardized.



POSSIBLE MECHANISMS OF HYPNOSIS

HYPNOSIS: EFFECT ON PAIN

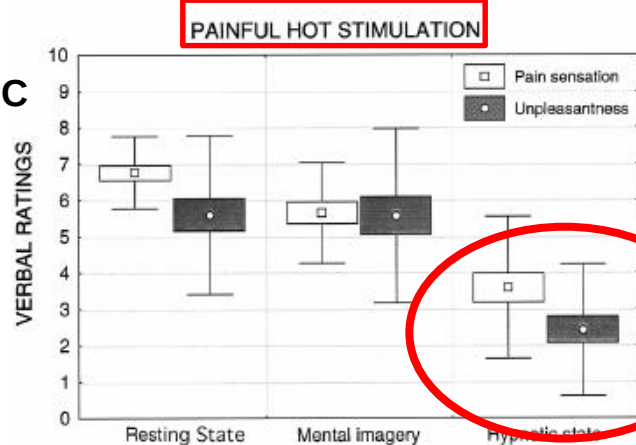
$\pm t 39,1^{\circ}\text{C}$



n = 11 healthy volunteers

$P < 0,001$ for hot stimuli between HS versus RS and MI

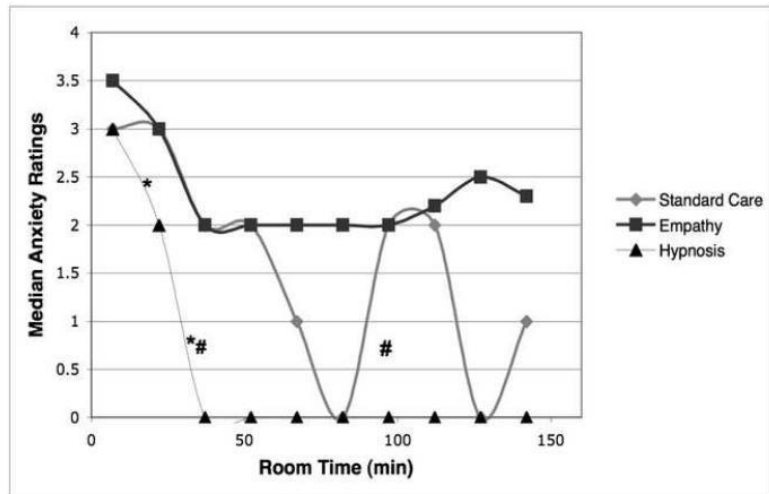
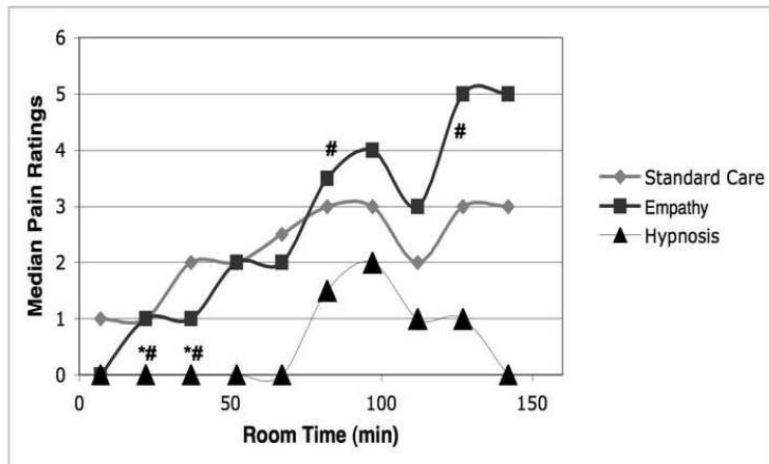
$\pm t 47,2^{\circ}\text{C}$



Neural Mechanisms of Antinociceptive Effects of Hypnosis

Faymonville et al. Anesthesiology 2000; 92:1257–67

HYPNOSIS: EFFECT ON PAIN



Procedural pain and anxiety

n=201, tumor embolisations by standard angiographic technique via transfemoral approach

Hypnosis patients had less pain, anxiety, and medication use than patients receiving standard care treatment.

- * indicates a significant difference between hypnosis and standard treatment
- # indicates a significant difference between empathy and hypnosis treatment.

[J Vasc Interv Radiol. 2008](#)

[Lang et al .Beneficial Effects of Hypnosis and Adverse Effects of Empathic Attention during Percutaneous Tumor Treatment: When Being Nice Does Not Suffice](#)

HYPNOSIS AND BRAIN ACTIVITY

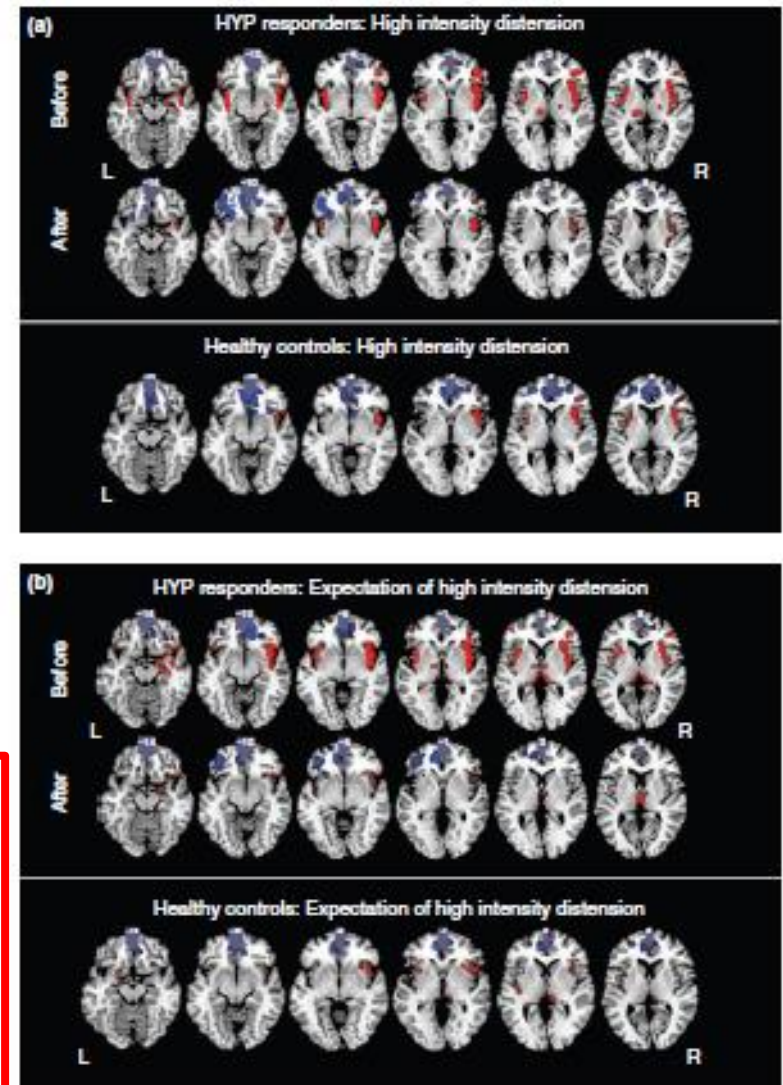
2013 AP&T Alimentary Pharmacology and Therapeutics

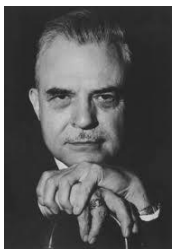
Effect of hypnotherapy and educational intervention on brain response to visceral stimulus in the irritable bowel syndrome

M. B. O. Lowén^{*,†}, E. A. Mayer[‡], M. Sjöberg[§], K. Tillisch[‡], B. Naliboff[§], J. Labus[§], P. Lundberg^{***,††,‡‡,§§}, M. Ström^{†,¶¶}, M. Engström^{***} & S. A. Walter^{*}

Figure 5 | (a) Blood oxygen level dependent response during high-intensity rectal distension before (top panel), after (middle panel) a course of successful hypnotherapy in IBS patients. Blood oxygen level dependent response to the same stimuli in healthy controls is shown in the bottom panel. Images thresholded at $P < 0.01$ are uncorrected. Red colour represents increased and blue colour decreased blood oxygen level dependent response. Numbers indicate slice level. (b) Blood oxygen level dependent response during expectation of high-intensity rectal distension before (top panel), after (middle panel) a course of successful hypnotherapy in IBS patients. Blood oxygen level dependent response to the same stimuli in healthy controls is shown in the bottom panel. Images thresholded at $P < 0.01$ are uncorrected. Red colour represents increased and blue colour decreased blood oxygen level dependent response. Numbers indicate slice level.

Following treatment, the brain response to high intensity distension was similar to that observed in HC → hypnotherapy and education could normalize the central processing of visceral stimuli in IBS.





MEDISCHE HYPNOSE



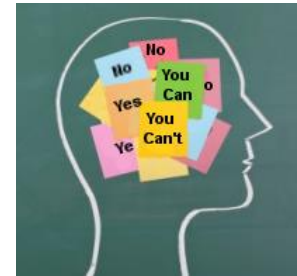
Een natuurlijke toestand van diepe concentratie gekoppeld aan een verminderde aandacht voor perifere gebeurtenissen of gedachten.

Hypnose is een behandeling waarbij met specifieke technieken een therapeutisch doel nagestreefd wordt, waarbij de patiënt in hypnotische trance een positieve verandering kan teweegbrengen.

Patient zegt: "ik heb een probleem".

Patient denkt: "een probleem heeft bezit genomen van mijn leven".

Slachtoffer van een situatie waar patiënt geen controle meer over heeft



HYPNOTHERAPY



Patienten worden
"eigen dokter"

Patienten leren actief deel et nemen om een oplossing te zoeken in plaats van de situatie te ondergaan

Alledaagse trance

Everyday Forms of Hypnosis?



©2001 HowStuffWorks

Hypnotherapie

- volledig bewust
- dempt alle omgevingsgeluiden
- intense focus op één onderwerp
- uitsluiten van alle andere gedachten
- hyper-aandachtig
- extreme suggestibiliteit
- relaxatie
- toegenomen verbeelding



Table 2. Qualities Reported by Individuals Who Have Experienced Hypnosis

Hypnosis experiences

- Feelings of relaxation and peace
- Focused attention
- Suspension of orientation toward time and place
- Automatic responses
- An absence of judging

Note. Adapted from Price & Barrell (1999).

Hypnotherapie: wat is het niet?

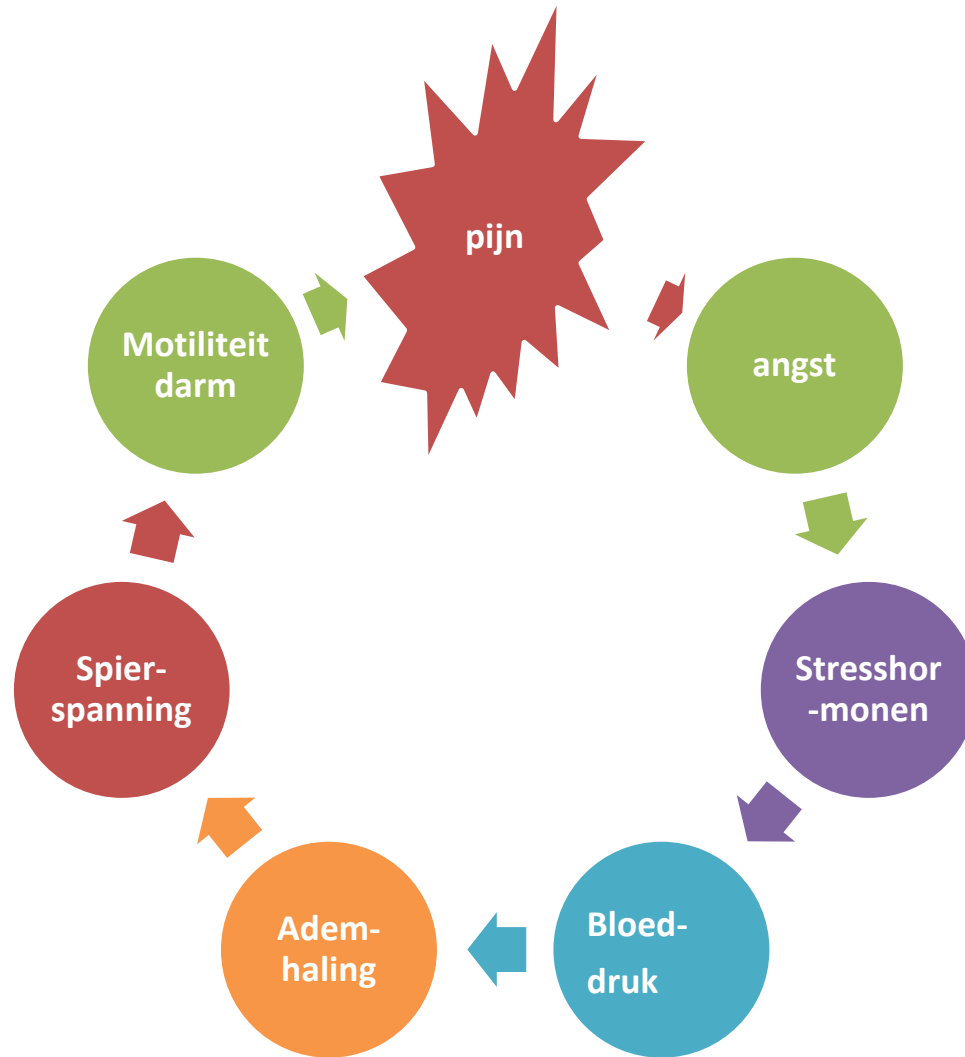
- **Controle verlies → betere controle van jezelf, van wat je doet en denkt of zegt. In trance kan nooit iemand je iets laten zeggen of doen wat je niet wil !**
- **Slapen**
- **Je kan nooit in trance blijven**
- **Theater hypnose**
- **Medische hypnose uitgevoerd door een deskundige kan je nooit schaden**
- **Arts moet binnen zijn vakdomein blijven**

Table 3. Common Myths and Misconceptions About Hypnosis

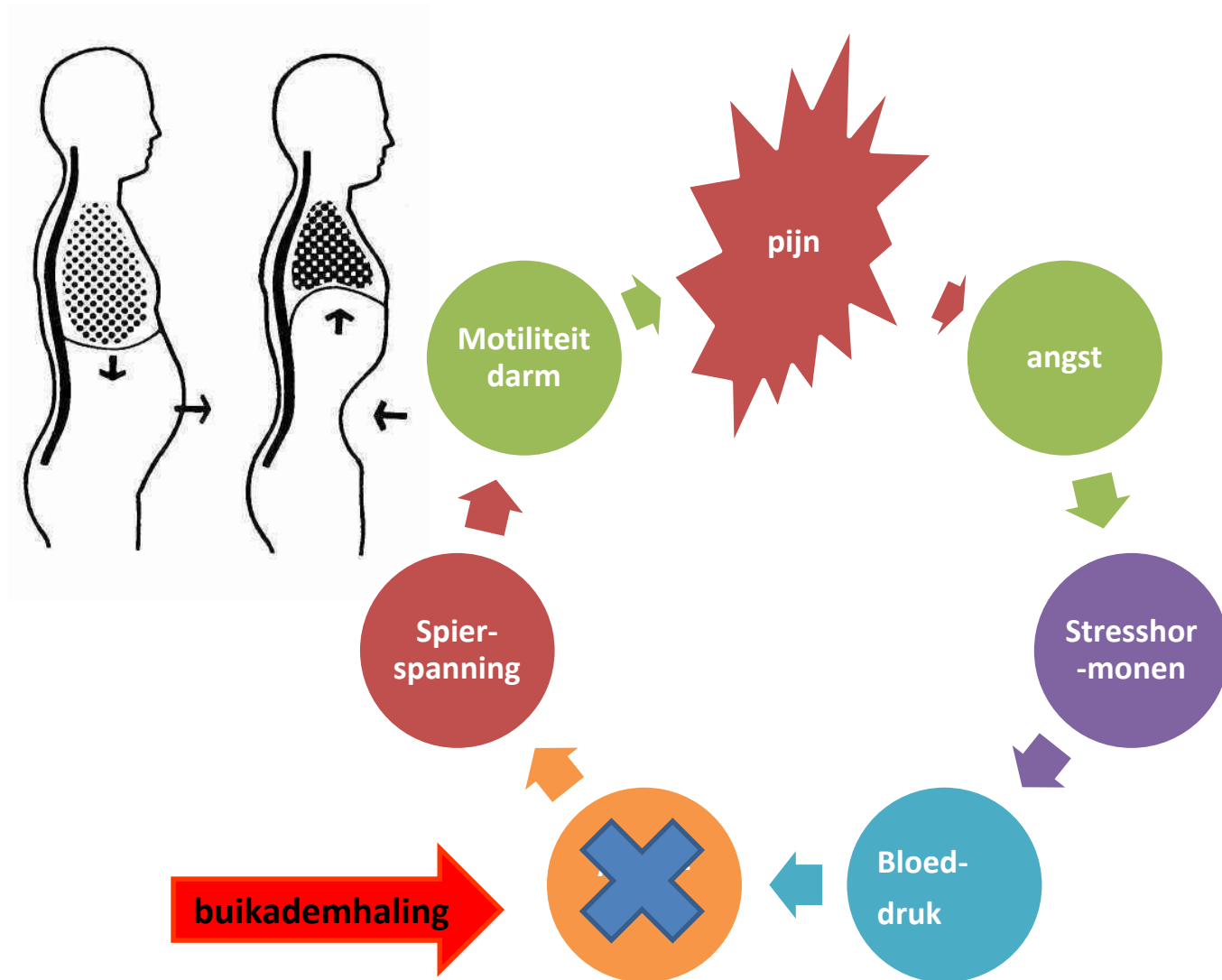
Myth	Actual condition
The client is being controlled by the hypnotist.	The client is a full participant in the experience and is not being controlled by the hypnotist. The client will be aware of everything that is said and done and will be able to terminate the experience at any point.
Only some people can be hypnotized. If you can be hypnotized, you have a weak mind.	Everyone can be hypnotized. However, there are measurable degrees of hypnotic suggestibility, resulting in some individuals being able to achieve deeper levels of the hypnosis experience than others.
You can be made to do something against your will.	The client retains an awareness of the suggestions that are made by the hypnotist and will be able to reject those suggestions that violate his/her personal integrity.
Symptom removal means a new symptom appears.	Symptom substitution does not occur. Pain is a physiologic experience; the modulation of pain using hypnosis does not promote symptom substitution.

Note. Adapted from Desai, Chaturvedi, & Ramachandra (2011).

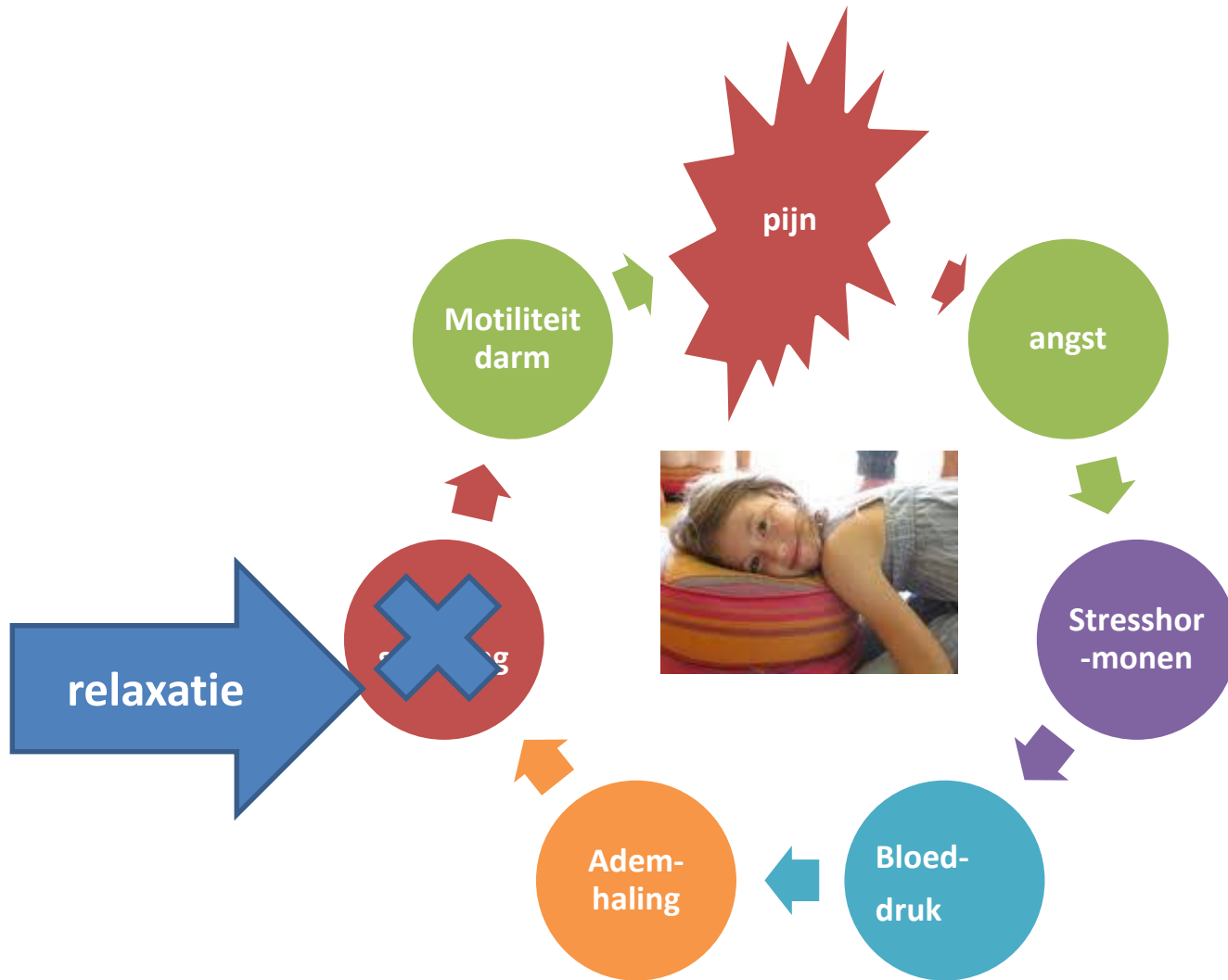
Hoe werkt hypnose therapie ?



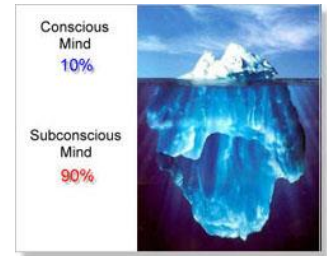
Hoe werkt hypnose therapie ?



Hoe werkt hypnose therapie ?



Bewust -Onbewust

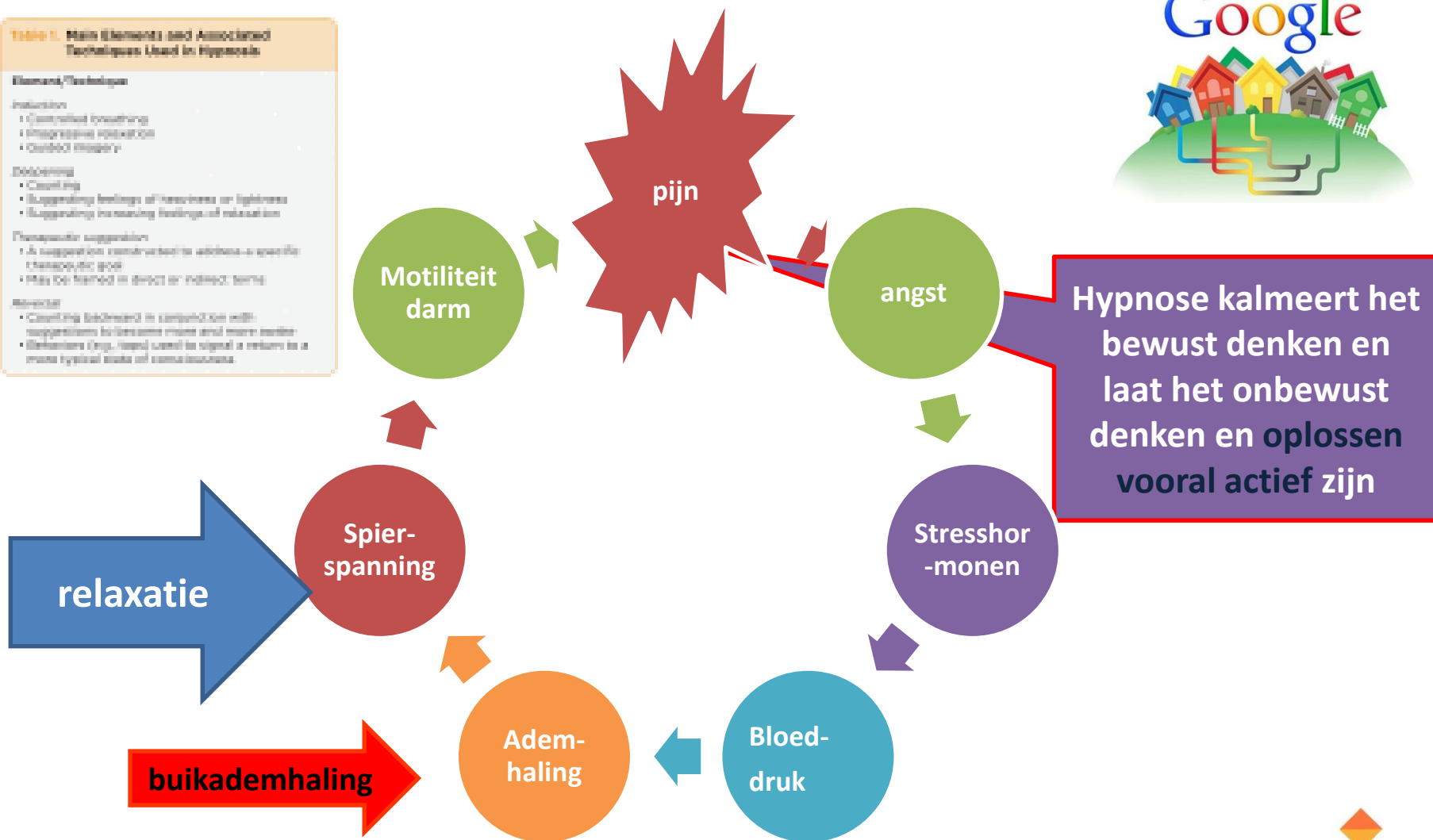


- **Onbewuste denken – 90 %**
 - Alles wat je automatisch doet
 - Alle processen waarbij je informatie krijgt over elk deel van je lichaam
 - Probleem oplossend denken....zoals bv in je dromen
- **Bewust denken – 10 %**
 - Beslissingen nemen

Hypnose kalmeert het bewust denken en laat het onbewust denken en oplossen vooral actief zijn

Hoe werkt hypnose therapie ?

Table 1. Main Elements and Associated Techniques Used in Hypnosis	
Element/Technique	
Intention	• Controlled breathing • Imaginative visualization • Guided imagery
Induction	• Counting • Suggesting feelings of heaviness or lightness • Suggesting increasing feelings of relaxation
Therapeutic suggestion	• A suggestion constructed to address a specific therapeutic goal • May be framed in direct or indirect terms
Reversal	• Counting backward in conjunction with suggestions to become more and more awake • Behaviors (e.g., hand wave) used to signal a return to a more typical state of consciousness





Mijn collega's:

UKZKF/HUDERF

Patrick Bontems
Michèle Scaillon
Assaad Salame
Sammy Cadranel
Emmanuel Lenga
Céline Halb
Kahli Kotilea
Joyce Mekhael



UZKB

Yvan Vandenplas
Bruno Hauser
Thierry Devreker
Elisabeth Degreef
Gigi Veereman
Assaad Salame



UZA

Els Van De Vijver
Jan Taminiau
Ann Roete

Alle verwijzende artsen

en natuurlijk al mijn patiënten en hun ouders voor hun vertrouwen.

What is now proved was once only imagined .

William Blake 1757-1827

When you cease to dream, you cease to live..

Malcolm S. Forbes 1919-1990

*When I examine myself and my methods of thought,
I come to the conclusion that the gift of fantasy has meant
more to me than my talent for absorbing positive knowledge..*

Albert Einstein 1879-1955



Tree of hope
Frida Kahlo