

BENEO-Institute

**A brief summary of our nutrition
related educational activities
May 2015 – July 2016**





Together
we contribute to
better nutrition
and **health**

Matching today's expectations

What do consumers expect from nutrition today?



To be **safe**





To be **healthy**

To be **tasty**

To be **convenient**

To be **functional**

Discovering our range of nutrients and benefits

Products	Functional fibres	Functional carbohydrates	Specialty rice ingredients	Functional proteins
Natural sources	Chicory root 	Sugar beet 	Rice 	Wheat 
Benefits	<ul style="list-style-type: none">• Digestive health• Fibre enrichment• Better calcium absorption• Weight management• Fat & sugar replacement	<ul style="list-style-type: none">• Low glycaemic effect• Prolonged energy• Toothfriendly• Weight management• Sugar replacement	<ul style="list-style-type: none">• Clean label• Creaminess, crispiness• Enhanced viscosity• Tasty dairy substitution	<ul style="list-style-type: none">• Vegetable protein source• Improved performance• Better texture stability• High and reliable quality• Non-GMO• Neutral taste

New scientific research, presented at: 48th ESPGHAN-Congress, Amsterdam, May 2015




EARLY NUTRITION
Long-term effects of early nutrition on later health



New research on:

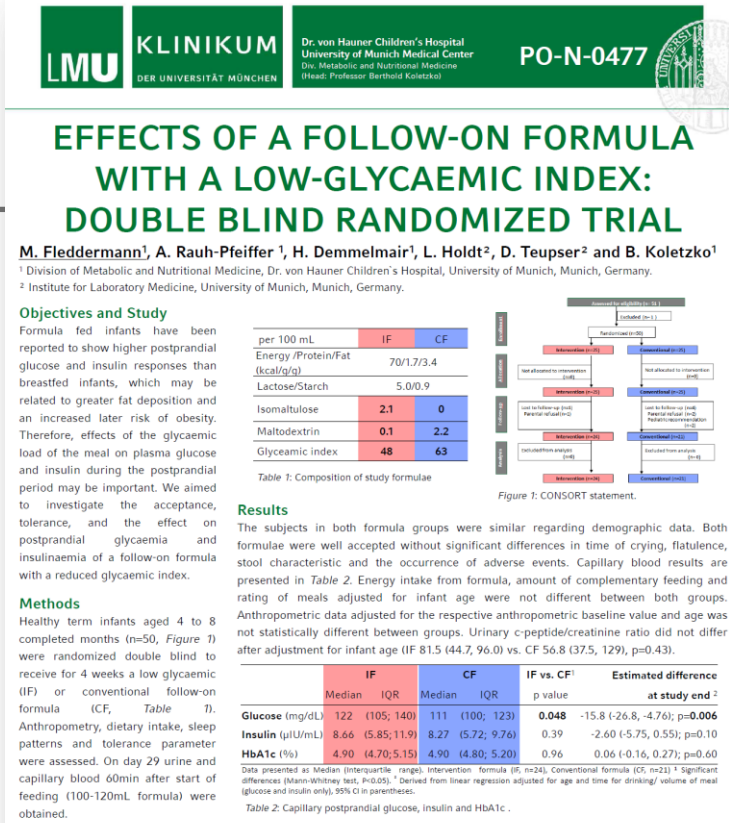
Palatinose™

Orafti® inulin type fructans

New scientific research, presented at: 48th ESPGHAN-Congress, Amsterdam, May 2015

Effects of a follow-on formula with a low-glycaemic index: double blind randomized trial

"AMELIE" – Acceptance and Metabolism of Isomaltulose
@ LMU, Munich, Germany (PI: Prof. Dr. Berthold Koletzko)



Conclusions

Follow-on formula containing isomaltulose (PalatinoseTM) was accepted very well. Postprandial differences were not observed from the single time-point blood analysis. The peak of blood glucose might be earlier in infants aged 4 to 8 completed months than 60min after start of feeding. Blood withdrawal at a single time point limits the conclusions that can be drawn for metabolic differences between the formulae. Non-invasive assessment of urinary c-peptide excretion might be a suitable marker for energy and protein intake of infants aged 4 to 8 completed months.

The presented data is part of a PhD thesis accomplished by Manja Fieddermann at the Medical Faculty of the Ludwigs-Maximilians-University of Munich. No conflict of interest is declared by all authors. Contact: manja.fieddermann@med.uni-muenchen.de. This study was funded by BENEIO Group, Germany, and supplied the respective formulae. BENEIO, a member of the Südzucker Group, reserves the exclusive right to use the results and data for possible Health Claim requests. Further, the research leading to these results was part of the European Union's Seventh Framework Programme (FP7/2007-2013), project EarlyNutrition under grant agreement n°289346.

The Use Of Inulin-type Fructans Improves Stool Consistency In Constipated Children. A Pilot Study.

ESPGHAN2015-1454

The Use Of Inulin-type Fructans Improves Stool Consistency In Constipated Children. A Pilot Study.

Ferre N¹, Escribano J¹, Castillejo G¹, Luque V* ¹, Mariona Gispert¹, Marta Zaragoza-Jordana¹, Carme Rubio-Torrents¹, Stephan Theis², Ricardo Closa¹

¹Universitat Rovira i Virgili, Reus, Spain, ²BeneoGMB, Mannheim, Germany

Introduction

Functional constipation is one of the most common gastrointestinal complaints in children (1-2). The treatment is long lasting and more than 30% still having problems beyond puberty probably because most of the therapeutic approaches are not clearly effective (3). Moreover there are few studies on a particular intervention, especially in the age range 2-5 years. Prebiotics are considered as a new option to treat constipation in children (4).

Our aim was testing the beneficial effects of a daily dose of Orafit inulin - type fructans supplementation on 2 - 5 years-old constipated children in a Pilot study.

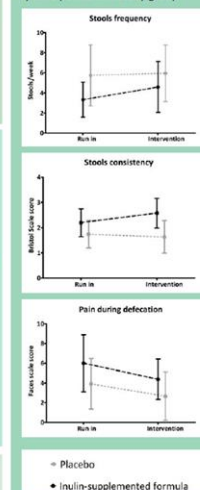
Results

Eleven children in each study group were recruited (n=22). From those, 17 completed the study protocol without any exclusion criteria. Results showed that Orafit inulin - type fructans supplemented children showed softer stools compared to control group (p=0.003). The longitudinal analyses showed that whereas no significant changes were induced in controls, treated children softened their stool consistency after the intervention (p=0.040). Pain during defecation was reduced during intervention irrespectively of the study group.

Conclusions

Prebiotic inulin - type fructans improves the stool consistency in functionally constipated 2-5 y-old children.

Figure 1: Gastrointestinal symptoms by time period and study group



Methods

Double - blind, randomized, placebo - controlled parallel group trial, where 2 - 5 y - old constipated children (according to Rome III Criteria) received 2 daily doses of 2g/d Orafit inulin - type fructans or the same amount of placebo (maltodextrin) during 6 weeks. Primary outcome was stool consistency assessed by a continuous daily bowel symptoms diary. Secondary outcomes were: stool frequency and gastrointestinal symptoms. Dietary intake as well as use of drugs or other products affecting gastrointestinal was controlled.

References

1. Tabbers MM. Clinical practice. Diagnosis and treatment of functional constipation. *Eur J Pediatr*. 2011; 170(8):955-63.
2. Rubin G, et al. Chronic constipation in children. *BMJ*. 2006; 333(7577):1001-6.
3. Figueir MAM, et al. Functional constipation in children: a systematic review on aetiological and predictive factors. *J Pediatr Gastroenterol Nutr*. 2010; 50(3):256-68.
4. Sabater-Molina M, et al. Dietary fructooligosaccharides and potential benefits on health. *J. Physiol. Biochem*. 2009; 65(3):315-28.

Disclosure of Interest: N. Ferre: None Declared, J. Escribano: None Declared, G. Castillejo: None Declared, V. Luque: None Declared, M. Gispert: None Declared, M. Zaragoza-Jordana: None Declared, C. Rubio-Torrents: None Declared, S. Theis: Conflict with: Promoter employee, R. Closa: None Declared



Conclusions
Prebiotic inulin - type fructans improves the stool consistency in functionally constipated 2-5 y-old children.

4th Beneficial Microbes Conference, The Hague, March 2015

GUT MICROBIOTA FOR HEALTH Experts Exchange

The effect of chicory inulin consumption on fecal metabolite profiles in a randomized, placebo controlled cross-over human intervention study

Vicky de Preter¹, Manuela Sailer², Stephan Theis², Kristin Verbeke¹

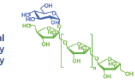
¹Translational Research Center for Gastrointestinal Diseases (TARGID), Laboratory of Digestion and Absorption, KU Leuven, Belgium
²BENE-O-Institute, Beneo GmbH, Mannheim/Germany

Background & Objective

The prebiotic concept targets the selective dietary modulation of the gut microbiota composition and its activity that are positively associated with host health and well-being. Intake of prebiotic fibres such as chicory-derived inulin leads to a shift to more saccharolytic fermentation. Saccharolytic fermentation generates in particular short-chain fatty acids (SCFA) and is considered as more beneficial compared to proteolytic fermentation. This has been demonstrated by various *in vitro* and *in vivo* studies.

Objectives

To evaluate the modulation of bacterial fermentation in fecal samples induced by chicory-derived inulin intake in healthy subjects using a metabolomics approach.



Study design

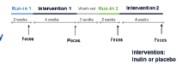
The study was conducted as a randomized, placebo controlled, cross-over trial and included four study periods (2 run-in phases, 2 intervention phases). Subjects (n = 51; age between 21 and 73 years) collected 4 times a fecal sample during the last 7 days of the four study periods.

Test products used:

- Inulin: 12 g Orafti® inulin per day
- Placebo: 12 g maltodextrin per day

Fecal sample analysis:

Volatile organic compounds (VOC) of the fecal samples were analyzed using a GC-MS approach and multivariate statistical analysis was performed.



Results: Inulin intake leads to a more pronounced saccharolytic fermentation

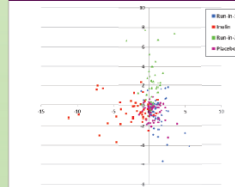


Figure 1: PLS-DA plot showing the classification of samples according to the study period.

For the PLS-DA analysis sample specific VOCs were excluded, resulting in 296 VOCs that were included in the analysis. Each data point represents a fecal sample. Samples obtained after intake of inulin cluster differentially from samples obtained after the run-in periods and placebo periods even though no complete separation was obtained.

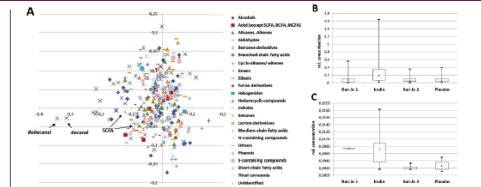


Figure 2: Corresponding loading plot of the PLS-DA plot showing the metabolites, organized per chemical class, that contribute to the discrimination of samples (A). Relative concentrations of dodecanal (B) and decanal (C) during the different study periods.

The loading plot visualizes the metabolites responsible for the discrimination of inulin samples shown in Figure 1. The intake of inulin led to a more pronounced saccharolytic fermentation. This metabolic shift was mainly apparent from the changes in SCFA and many aldehydes after inulin ingestion. In particular the aldehydes dodecanal and decanal have been identified as important drivers for the metabolic shift towards a more saccharolytic profile. The major part of produced SCFA by fermentation of inulin is absorbed by epithelial cells [1,2]. Thus, only a small proportion of SCFA is recovered in fecal samples. This contributes probably to the finding that SCFA were found to be less discriminative compared to the aldehydes.

Results: Descriptive statistics

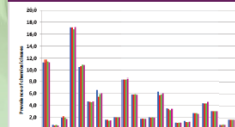


Figure 3: Prevalence of different chemical classes during the 4 study periods.

In total, 361 different VOCs were identified and relatively quantified with a mean number of 99 ± 11.1 per sample. No difference in number of VOCs per sample (99 ± 11.1) was found between the different intake periods. 65 VOCs were sample specific and 30 VOCs were present in all samples. All VOCs were categorized into chemical classes. Most abundant VOCs were aldehydes, alcohols and benzene derivatives. No differences were found in the prevalence of chemical classes between the different study periods.

Conclusion

This study demonstrates with a metabolite profiling approach that the consumption of chicory-derived inulin promotes saccharolytic fermentation in healthy volunteers. In particular, aldehydes (dodecanal and decanal) and SCFA were the drivers towards a more pronounced saccharolytic profile.

It is generally accepted that saccharolytic fermentation results in beneficial effects for the host. Therefore, this metabolic analysis suggests that intake of chicory-derived inulin could contribute to a more beneficial colonic environment for the host.

References

1. Cummings JH, Macfarlane GT, Englyst HN. Prebiotic digestion and fermentation. *Am J Clin Nutr* (2001);73(suppl):415S-425S.
2. Roberfroid MB. Dietary fiber, inulin, and oligofructose: a review comparing their physiological effects. *Crit Rev Food Sci* (1993);33(2):103-148.

Abbreviations

BCFA, branched-chain fatty acids; GC-MS, gas chromatography mass spectrometry; MCFAs, medium-chain fatty acids; PLS-DA, partial least square discriminant analysis; SCFA, short-chain fatty acids; VOC, volatile organic compounds

„The effect of chicory inulin consumption on fecal metabolite profiles in a randomized, placebo controlled cross-over human intervention study“

Events & Speeches

ASIA



30th Scientific Conference - Nutrition Society of Malaysia, Kuala Lumpur, June 2015

beneo
institute
connecting nutrition and health



Promoting Child Nutrition....

Slowly available carbohydrates
and natural dietary fibres for a
better metabolic set up – be
prepared for the future!

30th Scientific Conference of the Nutrition Society of
Malaysia

Anke Sentko
Vice President Regulatory Affairs &
Nutrition Communication
BENEО GmbH / BENEО Institute

15060p-ASQ/NSMalaysia June 9, 2015

Int. Symposium of Food & Nutrition (ISFAN) Jakarta, June 2015



beneo
institute
connecting nutrition and health

**New insights in functional
carbohydrates in science and
legislation**



Anke Sentko
Vice President Regulatory Affairs &
Nutrition Communication
BENEIO GmbH / BENEIO Institute, Germany

15061p ASD-ISFAN Indonesia 03.06.2015



31st Scientific Conference Nutrition Society of Malaysia, 31st May – 1st June 2016, Kuala Lumpur



“Better Nutrition, Healthier Malaysians”

Eat smart – Steer your metabolic and digestive health with science-based ingredients

Goh Peen Ern

Manager Nutrition Communication, BENEEO Institute, BENEEO Asia-Pacific



EVENTS: S. AMERICA & MEXICO





SLAN

Sociedad Latinoamericana de Nutrición

BENEO Symposium:

“Digestive Health: more important than ever”

Chaired by: Prof. Angela Zuleta (University of Buenos Aires)

Monica Montani (BENEO Latin America, Brazil):

Introduction to BENEO Institute & ***“BENEO Orafit chicory root fibres origin, production, application”***

Prof. Closa Monasterolo (Hospital Universitari Joan XXIII, Tarragona):

“Prebiotic inulin type fructans as bioactive components in paediatrics: benefits for digestive health and function”

Christiaan Kalk (BENEO-Institute):

“Chicory fibre and support of bowel regularity”

Symposium by Prof. Angela Zuleta

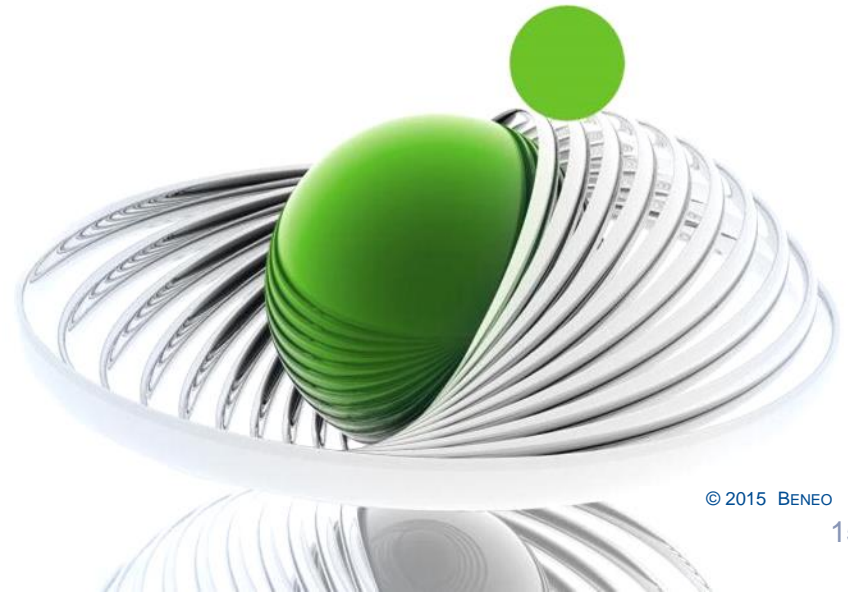
“Carbohydrates: A nutritional look, strategies for incorporation into a healthy diet”

Christiaan Kalk:

“Isomaltulose: nutritional and metabolic effects”



EVENTS: USA & CANADA



33rd International Symposium on Diabetes and Nutrition, Toronto

DNSG 2015

33rd International Symposium on Diabetes and Nutrition

FRIDAY, JUNE 12TH

8:30-10:20 PREBIOTICS AND NOVEL CARBOHYDRATE INGREDIENTS IN DIABETES

Chairs: Angela Rivellesse & Dario Rahelic

8:30-8:50 Slowly and rapidly absorbed carbohydrates on postprandial metabolism in type 2 diabetes
(Thomas Linn, Germany)

8:50-9:10 Metabolic benefits of prebiotic fibre intake
(Raylene Reimer, Canada)

9:10-9:30 Achieving low glycaemic response diets within food-based approaches to healthy eating
(Geoffrey Livesey, United Kingdom)

9:30-9:40 Oral Abstract 11 - Lowering Glucose and Insulin Responses to a Starchy Staple: From Formulation to Flux **(David Mela, Netherlands)**

9:40-10:00 Panel Discussion
(Thomas Linn, Raylene Reimer, Geoffrey Livesey, David Mela)





Sponsored speech by Prof. Bob Rastall, University of Reading, UK
on:

**“Prebiotic manipulation of the gut microbiome and metabolome:
is this a health benefit”**



Prebiotic modulation of the gut
microbiome and metabolome:
is this a health benefit?

Professor Bob Rastall
Department of Food and Nutritional Sciences
The University of Reading

EVENTS: EUROPE



6th Dietary Fibre Conference, Paris 2015

6th International Dietary Fibre Conference 2015 From Fibre Functionality to Health 1 - 3 June 2015, Paris, France

What's new on prebiotic fibres – some snapshots

Stephan Theis

Beneo, DE

Email: Stephan.Theis@beneo.com

The role of dietary fibres in health maintenance is well acknowledged and attributed to several physiological effects such as blood lipids reduction, attenuation of postprandial blood glucose and insulin response, bowel regularity and colonic fermentation. Inulin-type fructans are established dietary fibres that contribute to these fibre effects and help to fill the gap between daily intake and dietary recommendations. Apart from their fibre function they have been shown to be effective prebiotics, i.e. they are "selectively fermented ingredients that result in specific changes in the composition and/or activity of the gastrointestinal microbiota, thus conferring benefits upon host health". The prebiotic effect is now a well-established scientific fact. Inulin-type fructans are amongst the best studied prebiotics, and are amongst the very few that are accepted as "proven" prebiotic fibres. Since the concept was first defined it has been subject of intensive research, and prebiotic research has continued at a rapid pace with more than 1000 research articles published over the past 5 years. Recent health-related research beyond the effects of prebiotic fibers on the gut ecosystem and digestive health includes the effects on energy intake and body weight management, metabolic benefits and improvements in obesity related disorders. This presentation will highlight the latest evidence from novel systematic reviews, human intervention studies as well as mechanistic investigations that continue to support the benefits of inulin-type fructans as fermentable prebiotic fibers.

Keywords: Inulin-type fructans, Fermentation, Prebiotic, Dietary fibre.

beneo institute
connecting nutrition and health

What's new on prebiotic fibres – Some snapshots

Manuela Sailer, Stephan Theis
BENEÖ-Institute, BENEÖ GmbH, Mannheim/Germany

Dietary fibres and their physiological effect

The role of dietary fibres in health maintenance is well acknowledged and attributed to several physiological effects such as:

- Blood lipids reduction,
- Attenuation of postprandial blood glucose and insulin response,
- Bowel regularity, and
- Colonic fermentation.

Inulin-type fructans are established dietary fibres that contribute to these fibre effects and help to fill the gap between daily intake and dietary recommendations.

Conclusion:
To highlight latest findings and news that continue to support the benefits of inulin-type fructans as fermentable prebiotic fibres.

Prebiotic research

Apart from their fibre function inulin-type fructans have been shown to be effective prebiotics, i.e. they are "selectively fermented ingredients that result in specific changes in the composition and/or activity of the gastrointestinal microbiota, thus conferring benefits upon host health".

Since the concept was first defined it has been subject of intensive research, and prebiotic research has continued at a rapid pace with more than 1000 research articles published over the past 5 years.

Figure 1: Pattern number of articles related to prebiotic research since 1995.

New findings on inulin-type fructans highlight the importance of the fermentation process

Colonic fermentation of carbohydrates

Soluble dietary fibres like inulin-type fructans (inulin and oligofructose (OF)) are fermented by the gut microbiota resulting in short-chain fatty acids (SCFA) production.

Increased SCFA production is reported to result in a variety of health benefits. Recent findings demonstrate for instance that SCFA play a role in appetite regulation and energy and glucose homeostasis.

Overweight and obese humans: Oratib® OF affects appetite and gut hormones^[1]

- 22 overweight/obese adults, 30 g/d Oratib® OF or cellulose (control) during 8 weeks
- Oratib® OF in comparison to the non-fermentable cellulose led to:
 - Higher acetate in serum and breath H₂
 - Lower sensation of hunger
 - Higher PYY levels (p=0.008)
- Oratib® OF subjects significantly reduced energy intake compared to baseline (P=0.01) over other non-fermentable dietary fibres.

➔ Oratib® OF might provide benefits on appetite sensation and related gut hormones (PYY) over other non-fermentable dietary fibres.

Rodent data with Oratib® SynergyTM and Oratib® OFTM

Animal data in rodents support the particular importance of SCFA from fermentation of Oratib® inulin-type fructans in mediating the metabolic benefits associated with intake of inulin-type fructans.

Figure 2: Colonic fermentation of inulin-type fructans

Figure 3: Schematic overview showing that increased colonic SCFA production mediates health benefits on the host.

Recent positive EFSA opinions

Oratib® Inulin & normal bowel function

- Submission to EFSA by Beneo-Craft
- Positive EFSA opinion^[2] received 1/2015

➔ "Chicory inulin contributes to normal bowel function by increasing stool frequency"

Chicory-derived oligofructose/inulin & lower blood glucose rise

- Positive EFSA opinion^[3] received 3/2014

Recent systematic reviews & meta-analyses

- Prebiotics decrease the rate of infections in infants and children.^[4]
- Prebiotics improve satiety and reduce postprandial glucose and insulin response.^[5]
- Inulin has positive effect on bowel function.^[6]
- Inulin has beneficial effects on total cholesterol, LDL-C as well as triglycerides in hyperlipidemic subjects.^[7]
- Prebiotics reduce total cholesterol and LDL-C in adult subjects with overweight and obesity.^[8]
- Prebiotics reduce triglyceride and increase HDL-C levels in diabetics.^[9]

References & Abbreviations

[1] Sailer M et al. Obesity (Berl). 2014 Jun 25;26(12):2014-2024. doi: 10.1007/s00125-014-3211-1. [2] EFSA Journal. 2015 Jun 15;13(6):1479-1490. doi: 10.1017/S1368980114000000. [3] EFSA Journal. 2014 Jun 15;12(6):1479-1490. doi: 10.1017/S1368980114000000. [4] Sailer M et al. Obesity (Berl). 2014 Jun 25;26(12):2014-2024. doi: 10.1007/s00125-014-3211-1. [5] Sailer M et al. Obesity (Berl). 2014 Jun 25;26(12):2014-2024. doi: 10.1007/s00125-014-3211-1. [6] Sailer M et al. Obesity (Berl). 2014 Jun 25;26(12):2014-2024. doi: 10.1007/s00125-014-3211-1. [7] Sailer M et al. Obesity (Berl). 2014 Jun 25;26(12):2014-2024. doi: 10.1007/s00125-014-3211-1. [8] Sailer M et al. Obesity (Berl). 2014 Jun 25;26(12):2014-2024. doi: 10.1007/s00125-014-3211-1. [9] Sailer M et al. Obesity (Berl). 2014 Jun 25;26(12):2014-2024. doi: 10.1007/s00125-014-3211-1.

Take-home messages

- The prebiotic research is and will continue in a rapid pace.
- New research findings contribute to our understanding how the fermentation process resulting in increased production of SCFA is linked to various health benefits observed for prebiotic fibres like inulin-type fructans.
- BENEÖ succeeded in receiving a positive EFSA opinion for chicory inulin and normal bowel function.
- This follows the positive EFSA opinion for chicory-derived oligofructose/inulin and lowering postprandial glucose from 2014.

12th European Nutrition Conference

FENS 2015 – Berlin – Germany – Oct. 20-23

BENEO SYMPOSIUM ABSTRACT BOOK

12th European Nutrition Conference – FENS 2015

ESTREL CONVENTION CENTER | BERLIN | GERMANY | 20 – 23 OCTOBER 2015

SATELLITE SYMPOSIUM
Slow release carbohydrates and prebiotic fibres: smart ingredients for balanced blood sugar levels

Chairs:
Prof. Jeyakumar Henry & Dr. Stephan Theis

Thursday, 22 October 2015
Room 3 – Ground Floor



beneo
institute
connecting nutrition and health



Prof. Jeyakumar Henry

The role of low glycemic diets on physiological and metabolic outcomes

Prof. Andreas Pfeiffer



Metabolic benefits of Palatinose™ related to gut hormone induced metabolic responses



Prof. Patrice D. Cani

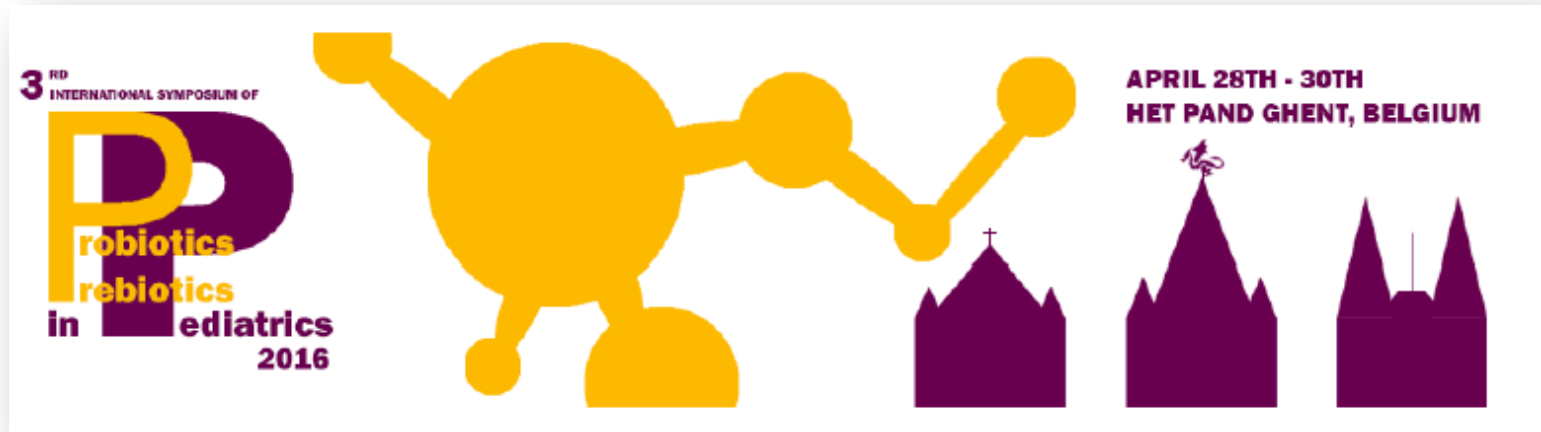
How prebiotic fibres work in gut microbiota, glucose metabolism and metabolic disorders

Dr. Stephan Theis

BENEO-INSTITUTE
Knowledge to connect nutrition and health



PreProPed *, Ghent, 28th-30th April 2016



Sponsored speech given by Dr. Kieran Tuohy,
Edmund Mach Foundation, Italy:

***“Mode of delivery, route of delivery and diet –
all regulate infant microbiota and metabolome”***

Annual Meeting: ESPGHAN*, 25th-28th May, Athens

ESPGHAN 49th ANNUAL MEETING of the European Society for Paediatric Gastroenterology, Hepatology and Nutrition



Effect of prebiotic inulin-type fructans on health parameters and intestinal microbiota composition in children aged 3 to 6 years: a randomized, double-blind, placebo-controlled explorative study

Szimonetta Lohner¹, Nóra Szili¹, Viktória Jakobik¹, Dorottya Soltész¹, Sara Soldi², Sotirios Vasileiadis², Stephan Theis³, Carolin Sieland³, Günther Boehm⁴, Tamás Decsi¹

¹University of Pécs, Department of Paediatrics, Pecs, Hungary

²Advanced Analytical Technologies Srl, Fiorenzuola D'Arda, Italy

³Beneo-Institute, Obrigheim, Germany

⁴Nutritional Science Consulting, Leipzig, Germany

Prof. Dr. T. Decsi, University of Pécs, Hungary presented the results of a study supported by BENEEO



Probiotics and prebiotics, 21.-23.06.2016, Budapest



Bob Rastall - chair, Professor of Food Biotechnology in the Department of Food Biosciences, University of Reading, UK:



"Prebiotic Manipulation of the Human Gut Microbiome for Health"

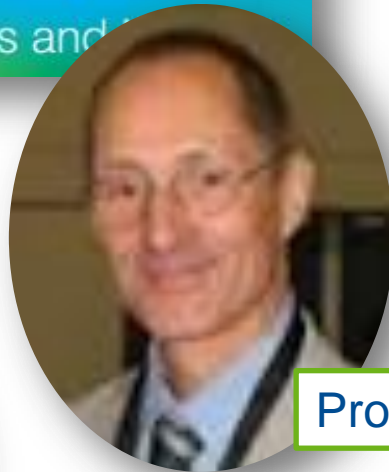
Manuela Sailer, BENEIO-Institute:
"Snapshots on Recent Prebiotic Fiber Research"



34th International Symposium on Diabetes and Nutrition, 29.6.-01.07.2016, Prague



Geoffrey Livesey, PhD (UK)
“Markers of carbohydrate quality”



Prof. Dr. Andreas Pfeiffer (Germany)

Art. 13(5) EU dossier on inulin and normal bowel function: acceptance by EFSA



European Food Safety Authority

EFSA Journal 2015;13(1):3951

SCIENTIFIC OPINION

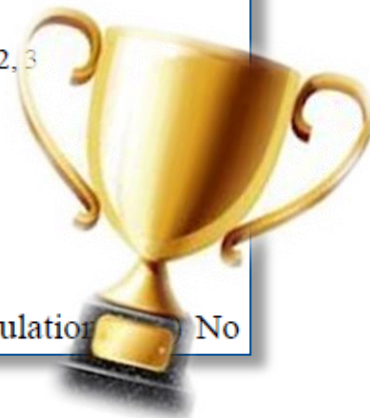
Scientific Opinion on the substantiation of a health claim related to “native chicory inulin” and maintenance of normal defecation by increasing stool frequency pursuant to Article 13.5 of Regulation (EC) No 1924/2006¹

EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA)^{2, 3}

European Food Safety Authority (EFSA), Parma, Italy

ABSTRACT

Following an application from BENEIO-Orafti S.A., submitted pursuant to Article 13.5 of Regulation (EC) No



*“Chicory inulin contributes to
normal bowel function by
increasing stool frequency.”*

EU Register on nutrition and health claims



EU Register on nutrition and health claims

Health claims for which protection of proprietary data has been granted

Claim type	Nutrient, substance, food or food category	Claim	Conditions of use of the claim / Restrictions of use / Reasons for non-authorisation	EFSA opinion reference	Commission regulation	Status	Restriction of use for the benefit of	Expiry date of the restriction of use
Art.13(5)	Native chicory inulin	Chicory inulin contributes to normal bowel function by increasing stool frequency	Information shall be provided to the consumer that the beneficial effect is obtained with a daily intake of 12 g chicory inulin. The claim can be used only for food which provides at least a daily intake of 12 g of native chicory inulin, a non-fractionated mixture of monosaccharides (< 10 %), disaccharides, inulin-type fructans and inulin extracted from chicory, with a mean degree of polymerisation ≥ 9 .	Q-2014-00403	Commission Regulation (EU) 2015/2314 of 07/12/2015	Authorised	BENEIO-Orafti S.A Rue L. Maréchal 1 Oreye 4360 BELGIUM	01/01/2021

Footnotes:

(1) By letter of 31 December 2013, the Commission has been informed that GlaxoSmithKline Services Unlimited (GSK House, 980 Great West Road, Brentford TW89GS, UNITED KINGDOM) has agreed to transfer all rights it has to use (and to permit others to use) the health claim to Lucozade Ribena Suntory Limited (2 Longwalk Road, Stockley Park, Uxbridge UB11 1BA, UNITED KINGDOM), and, from the date of that letter, consents to and authorises the use by Lucozade Ribena Suntory Limited and its affiliates of the health claim based on the proprietary data filed by GlaxoSmithKline Services Unlimited

Report Notes:

Health claims for which protection of proprietary data is granted, are authorised for the restricted use of the applicant for a period of five years after the entry into force of the relevant legal act. At the expiry of the five-year period, this restriction should be removed so that the health claim may be used, in conformity with the conditions applying to it, by any food business operator. Such authorisations of claims for the restricted use of the applicant, do not exclude the authorisation of the same claims in case they are based on data and studies other than those for which protection of proprietary data has been granted in accordance with Article 21 of Regulation (EC) No 1924/2006.



European Food Safety Authority



EFSA Journal 2014;12(1):3513

SCIENTIFIC OPINION

conducted
by BENEEO

Scientific Opinion on the substantiation of a health claim related to non-digestible carbohydrates and a reduction of post-prandial glycaemic responses pursuant to Article 13(5) of Regulation (EC) No 1924/2006¹

EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA)^{2,3}

European Food Safety Authority (EFSA), Parma, Italy



ABSTRACT

Following an application from Beneo-Orafti SA, Sensus BV and Cosucra-Groupe Warcoing SA, submitted for authorisation of a health claim pursuant to Article 13(5) of Regulation (EC) No 1924/2006 via the Competent

The food that is the subject of the health claim is fructo-oligosaccharides (FOS, oligofructose) obtained from chicory (*Cichorium intybus* L.) inulin, which should replace sugars in foods or beverages in order to obtain the claimed effect (i.e. reduction of post-prandial glycaemic responses).



Positive EFSA claims opinion on Oligofructose and Inulin & Lower Blood Glucose Rise

- The original Art. 13(5) application was only related to “**oligofructose from chicory inulin**” whereas EFSA has broadened in its opinion the scope to all “**non-digestible carbohydrates**”, thus the opinion is also relevant for **Orafti®inulin**.
- Suggested claims wording by EFSA (ON 3513):
“Consumption of foods/drinks containing non-digestible carbohydrates instead of sugars induces a lower blood glucose rise after meals compared to sugar-containing foods/drinks”
- The claim could be used on food products of all food categories of the general food supply
- Suggested conditions of use by EFSA:
“At least 30% of the sugars in a food product have to be replaced by Orafti®oligofructose or Orafti®inulin.”

Reducing the blood glucose response of sugar-containing foods with inulin and oligofructose

