

List of Fibersol®-2's Scientific Paper

2009/10/13

Pine Fibre-C (PF-C) is the trade name for Fibersol®-2 in the Japanese market.

Pine Fibre (PF) is a product for the Japanese market, which contains 65% Fibersol®-2 & 35% maltodextrin.

Indigestible Dextrin is the chemical name used in Japan for Fibersol®-2.

[A: Process, Safety, Energy Value, Analytical Method, etc.]

Pyrolysis of Starch and Its Digestibility by Enzymes - Characterization of Indigestible Dextrin-

【*Denpun Kagaku*, 1990 (37) 107-114】 <full English translation>

Indigestible Fractions of Starch Hydrolysates and Their Determination Method

【*J. Appl. Glycosci.*, 2002, 49 (4), 479-485】

Production of Indigestible Dextrin from Pyrodextrin

【*J. Appl. Glycosci.*, 2003, 50, 389-394】 < full English translation >

Outline of Pinefibre: Safety Assessment

【Matsutani's Sales Promotion Material, 1990】 < full English translation >

Effects of Dietary Fibers on the Diffusion of Glucose and Metal Ions through Cellulose Membrane

【*J. Jpn. Soc. Clin. Nutri.*, 1992 (13)141-147】 < full English translation >

Acute Toxicity and Mutagenicity Studies of Indigestible Dextrin, and Its Effect on Bowel Movement of the Rat

【*J. Food Hyg. Soc. Japan (Shokuhin Eiseigaku Zasshi)*, 1992 (33) 557-562】 <English summary>

Safety of a long-term intake of a tea beverage containing indigestible dextrin

【*J. Nutritional Food*, 2001, 4 (2), 19-26】 < full English translation >

Nondigestible Oligosaccharides Do Not Increase Accumulation of Lipid Soluble Environmental Contaminants by Mice

【*J. Nutr.* 2002, 132, 80-87】

Some Dietary Fibers Increase Elimination of Orally Administered Polychlorinated Biphenyls but Not That of Retinol in Mice

【*J. Nutr.* 2004, 134, 135-142】

Energy Value of a Mixed Glycosidic Linked Dextrin Determined in Rats

【*J. Agric. Food. Chem.*, 1998 (46) 2253-2259】

New Method for Determining Total Dietary Fiber by Liquid Chromatography

【*J. AOAC Int.*, 2000, 83, 1013-1019】

Determination of Total Dietary Fiber in Selected Foods Containing Resistant Maltodextrin by Enzymatic-Gravimetric Method and Liquid Chromatography: Collaborative Study

【*J. AOAC Int.*, 2002, 85, 435-444】

Evaluation of available energy of several dietary fiber materials based on the fermentability from breath hydrogen excretion in healthy human subjects

【*J. Jpn. Assoc. Dietary Fiber Res.*, 2005 (9, No.1) 34-45】 <full English translation>

Availability, fermentability, and energy value of resistant maltodextrin: modeling of short-term indirect calorimetric measurements in healthy adults

【*Am J Clin Nutr.*, 2006, 83, 1321-1330】

Comprehensive measurement of total nondigestible carbohydrates in foods by enzymatic-gravimetric method and liquid chromatography.

【*J. Agric. Food Chem.*, 2009, 57 (17), 7659-7665】

Note: Safety assessments (single dose, long term) were also reported in papers listed as [B: Intestinal Regularity & Prebiotic Effect] to [D: Lipid Metabolism].

[B: Intestinal Regularity & Prebiotic Effect]

Effects of Indigestible Dextrin on Bowel Movements 【 <i>Jpn. J. Nutr.</i> , 1993, 51, 31-37】 <full English translation>
Effect of Jelly Drink Containing Dietary Fiber on Human Defecation 【 <i>J. Nutritional Food</i> , 1998, 1 (3/4), 12-19】 <full English translation>
Effects of the administration of soft drink containing indigestible dextrin on defecation frequency and fecal characteristics of Japanese healthy female volunteers 【 <i>J. Nutritional Food</i> , 1999, 2 (1), 44-51】 <full English translation>
Effect of drinks supplemented with indigestible-dextrin on fecal amount 【 <i>J. Nutritional Food</i> , 1999, 2 (2), 52-57】 < full English translation>
Effects of Cookies Containing Indigestible Dextrin on Defecation and Fecal Condition in Human Subjects. 【 <i>J. Jpn. Assoc. Dietary Fiber Res.</i> , 1999, 3 (2), 79-83】 <full English translation>
Glucose-Based Oligosaccharides Exhibit Different In Vitro Fermentation Patterns and Affect In Vivo Apparent Nutrient Digestibility and Microbial Populations in Dogs 【 <i>J. Nutr.</i> , 2000, 130, 1267-1273】
The Effects of rise crackers containing indigestible dextrin on female defecation 【 <i>J. Nutritional Food</i> , 2000, 3 (2), 37-44】 <full English translation>
Effect of drinks supplemented with indigestible dextrin on defecation in human 【 <i>J. Nutritional Food</i> , 2000, 3 (4), 31-38】 < full English translation >
Beneficial effect of a vegetable drink containing indigestible dextrin on defecation in women with constipation 【 <i>J. Nutritional Food</i> , 2000, 3 (4), 39-46】 <full translation>
Effect of cooked and cured loin-roll ham containing indigestible dextrin on fecal amount and defecation frequency 【 <i>J. Nutritional Food</i> , 2000, 3 (4), 47-54】 <full English translation>
Effect of sausage containing indigestible dextrin on fecal amount and defecation frequency 【 <i>J. Nutritional Food</i> , 2000, 3 (4), 55-62】 <full English translation>
The effect of ingestion of beverage supplemented with indigestible dextrin on human defecation 【 <i>J. Nutritional Food</i> , 2000, 3 (2), 29-36】 <full English translation>
Effect of a vegetable drink supplemented with indigestible dextrin on defecation in females 【 <i>J. Nutritional Food</i> , 2001, 4 (4), 21-27】 <full English translation>
The effect of AOJIRU drink powder containing indigestible dextrin on defecation frequency and fecal characteristics 【 <i>J. Nutritional Food</i> , 2001, 4 (4), 29-35】 < full English translation >
Effectiveness of Dietary Fiber for Irritable Bowel Syndrome (IBS) 【Not published】
Effects Prepared Cocoa Powder Containing Indigestible Dextrin on Human Defecation 【 <i>J. Jpn. Council for Advanced Food Ingredients Res.</i> , 2004, 7 (1), 55-62】 <English summary>
Effects of Young Barley Leaf Powder on Fecal Weight and Fecal Microflora in Healthy Women 【 <i>J. Jpn. Assoc. Dietary Fiber Res.</i> , 2004, 8 (2), 93-103】 <Partial English translation>
A Novel Resistant Maltodextrin Alters Gastrointestinal Tolerance Factors, Fecal Characteristics, and Fecal Microbiota in Healthy Adult Humans 【 <i>J Am Coll Nutr</i> , 2008, 2, 356-366 93-103】

[C: Sugar Metabolism]

Effects of indigestible dextrin on glucose tolerance in rats 【 <i>J. Endocrinology</i> , 1995, 144, 533-538】
The Effects of Indigestible Dextrin on Sugar Tolerance: I. Studies on Digestion - Absorption and Sugar Tolerance 【 <i>Folia Endocrinol.</i> , 1992, 68, 623-635】 <full English translation>
Effects of Indigestible Dextrin on Sugar Tolerance: II. Effect of Continuous Administration in Rats Fed on a High Sucrose Diet 【 <i>J. Japan Diab. Soc.</i> , 1992, 35, 873-880】 < full English translation>
The Effects of Indigestible Dextrin on Sugar Tolerance: III. Improvement in Sugar Tolerance by Indigestible Dextrin on the Impaired Glucose Tolerance Model 【 <i>Folia Endocrinol.</i> , 1993, 69, 594-608】 <full English translation>
Effects of Indigestible Dextrin on Blood Glucose and Insulin Levels after Various Sugar Loads in Rats 【 <i>J. Jpn. Soc. Nutr. Food Sci.</i> , 1993, 46, 131-137】 < full English translation>
Effect of administration of indigestible dextrin prepared from corn starch on glucose tolerance in streptozotocin-diabetic rats 【 <i>J. Jpn. Soc. Nutr. Food Sci.</i> , 1999, 52, 21-29】 <full English translation>
Effects of Indigestible Dextrin on Blood Glucose and Urine C-peptide Levels Following Sucrose Loading 【 <i>J. Japan Diab. Soc.</i> , 1993, 36,715-723】 < full English translation>
Effects of indigestible dextrin-containing green tea on blood glucose level in healthy human subjects 【 <i>J. Nutritional Food</i> , 1999, 2 (1), 52-56】 <full English translation>
Effect of indigestible dextrin-containing soft drinks on blood glucose level in healthy human subjects 【 <i>J. Nutritional Food</i> , 1999, 2 (4), 17-23】 <full English translation >
Effect of indigestible dextrin-containing tofu on blood glucose level in healthy human subjects 【 <i>J. Nutritional Food</i> , 1999, 2 (4), 25-31】 <full English translation>
Effect of indigestible dextrin on postprandial rise in blood glucose levels in man 【 <i>J. Jpn. Assoc. Dietary Fiber Res.</i> , 1999, 3 (1), 13-19】 <full English translation>
Effect of long-term ingestion of indigestible dextrin-containing soft drinks on safety and blood glucose levels 【 <i>J. Nutritional Food</i> , 2000, 3 (3), 75-82】 <full English translation>
Effects of yogurt drink containing indigestible dextrin on postprandial blood glucose levels in Japanese healthy volunteers 【 <i>J. Nutritional Food</i> , 2001, 4 (2), 7-18】 <English abstract>
Effects of indigestible dextrin-containing soft drinks on postprandial blood glucose levels in healthy human subjects 【 <i>J. Nutritional Food</i> , 2001, 4 (3), 73-79】 <English abstract>
Efficacy of packed boiled rice containing indigestible dextrin on moderating the rise of postprandial blood glucose levels, and safety of long-term administration 【 <i>J. Nutritional Food</i> , 2001, 4 (3), 81-88】 <English abstract>
Glycemic response to a rapidly digested starch is not affected by the addition of an indigestible dextrin in humans 【 <i>Nutrition Research</i> , 2001, 21, 1099-1106】
Effects of green tea supplemented with indigestible dextrin on postprandial levels of blood glucose and insulin in human subjects 【 <i>J. Nutr. Food</i> , 2002, 5(2), 31-39】 <full English translation>
Interventions to lower the glycemic response to carbohydrate foods with a low-viscosity fiber (resistant maltodextrin): meta-analysis of randomized controlled trials 【 <i>Am J Clin Nutr</i> , 2009, 89: 114-125】

Effects of Dietary Fiber Enriched Liquid Formula on Postprandial Glycemic Parameters
【*ILSI Japan*, 2008, **95**, 10-17】

[D: Lipid Metabolism]

Hypocholesterolemic Effect of Dietary Fiber: Relation to Intestinal Fermentation and Bile Acid Excretion
【*J. Nutr. Sci. Vitaminol.*, 1995, 41, 151-161】

Effect of Indigestible Dextrin on Cholesterol Metabolism in Rat
【*J. Jpn. Soc. Nutr. Food. Sci.*, 1991 (44) 471-478】 <full English translation>

Effects of Intravenous Injection and Intraperitoneal Continual Administration of Sodium Propionate on Serum Cholesterol Levels in Rats
【*J. Nutr. Sci. Vitaminol.*, 1995, 41, 73-81】

Effects of Long-term Administration of Indigestible Dextrin as Soluble Dietary Fiber on Lipid and Glucose Metabolism
【*J. Jpn. Soc. Nutr. Food. Sci.*, 1992, 45, 21-25】 <English summary>

Continuous Administration Tests of Indigestible Dextrin I: Study on the effects of the improvement of fat metabolism in healthy volunteers
【*J. Jpn. Clin. Nutr.* 1992, 80 (2) 167-172】 <full English translation>

Continuous Administration Tests of Indigestible Dextrin II: Study on the effects of the improvement of fat metabolism in patients with non-insulin-dependent diabetes mellitus
【*J. Jpn. Clin. Nutr.* 1993, 83 (3) 301-305】 <full English translation>

Product Evaluation: Effect of PET SLIM on Treatment of Obesity
【*CAP 523*, 75-77 (1993)】 <English summary>

Nutritional Management of Cardiovascular Risk Factors
【*Arc. Intern. Med.* 1997, 157 169-177】

Effects of a Food for Specified Health Use (FOSHU) which contains indigestible dextrin as an effective ingredient on glucose and lipid metabolism
【*J. Japan Diab. Soc.*, 1999, 42, 61-65】 <full English translation>

Efficacy of tea drink containing indigestible dextrin
【*J. Nutritional Food*, 2000, 3 (1), 65-72】 < full English translation>

Effects of instant miso-soup containing indigestible dextrin on moderating the rise of postprandial blood glucose levels, and safety of long-term administration
【*J. Nutritional Food*, 2000, 3 (2), 19-27】 <full English translation>

Beneficial effects of a new indigestible dextrin-containing beverage on lipid metabolism and obesity-related parameters
【*J. Nutritional Food*, 2000, 3 (3), 47-58】 <English summary>

Effects of Long-term Administration of Indigestible Dextrin on Visceral Fat Accumulation
【*J. Jpn. Assoc. Dietary Fiber Res.*, 2000, 4 (2), 59-65】 <full English translation>

Effects of a tea beverage containing indigestible dextrin on the serum triglyceride level in subjects with mild hypertriglyceridemia
【*J. Nutritional Food*, 2002, 5 (3), 117-130】 <full English translation>

Suppressive effect of resistant maltodextrin on postprandial blood triacylglycerol elevation
【*Eur J Nutrition*, 2007, **46**, 133-138】

Effect of Indigestible Dextrin on Visceral Fat Accumulation <full English translation>
【*Journal of Japanese Society for the Study of Obesity*, 2007, **13**, 34-41】

Effect of Resistant Maltodextrin on Digestion and Absorption of Lipids
【*Journal of Health Science*, 2009, **55(5)**, 838-844】

[R: Review]

Development and application of low caloric modified starch

【*Technical Journal on Food Chemistry and Chemicals*, 6 (11), 62-67 (1990)】 < full English translation >

Fibersol®-2: a Soluble, Non-digestible, Starch-derived Dietary Fibre

【*Advanced Dietary Fibre Technology*, B.V. McCleary & L. Prosky (Eds), Blackwell Science, Oxford, UK, 2001, pp 509-523】

Effects of resistant maltodextrin on metabolism of glucose and lipids

【*Dietary Fibre - bio-active carbohydrates for food and feed*, J.W. van der Kamp et al. (Eds), Wageningen Academic Publishers, The Netherlands, 2004, pp 219-230】

The effects of resistant maltodextrin on blood glucose, insulin and triacylglyceride levels, and fat accumulation after meal feeding in humans

【*Dietary fibre components and functions*, H. Salovaara, F. Gates & M. Tenkanen (Eds), Wageningen Academic Publishers, Wageningen, Netherlands, 2007, pp 305-322】

2004 DF Symposium Book

【*Dietary Fiber: An international perspective for harmonization of health benefits and energy values*】
D.T. Gordon & T. Goda (Eds), AACC International, Inc. Minnesota, USA, 2008