

List of Fibersol-2's Scientific Papers

2006/9/1

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.

《R: Review》

R-1	Development and application of low caloric modified starch 【 <i>Technical Journal on Food Chemistry and Chemicals</i> , 6 (11), 62-67 (1990) 】 < full English translation >
R-2	Fibersol-2: a Soluble, Non-digestible, Starch-derived Dietary Fibre 【 <i>Advanced Dietary Fibre Technology</i> , B.V. McCleary & L. Prosky (Eds), Blackwell Science, Oxford, UK, 2001, pp 509-523 】
R-3	Effects of resistant maltodextrin on metabolism of glucose and lipids 【 <i>Dietary Fibre - bio-active carbohydrates for food and feed</i> , J.W. van der Kamp et al. (Eds), Wageningen Academic Publishers, The Netherlands, 2004, pp 219-230 】

《A: Process, Safety, Energy Value, Analytical Method, etc.》

A-1	Pyrolysis of Starch and Its Digestibility by Enzymes - Characterization of Indigestible Dextrin- 【 <i>Denpun Kagaku</i> , 1990 (37) 107-114 】 <full English translation>
A-2	Indigestible Fractions of Starch Hydrolysates and Their Determination Method 【 <i>J. Appl. Glycosci.</i> , 2002, 49 (4), 479-485 】
A-3	Production of Indigestible Dextrin from Pyrodextrin 【 <i>J. Appl. Glycosci.</i> , 2003, 50, 389-394 】 < full English translation >
A-4	Outline of Pinefibre: Safety Assessment 【 Matsutani's Sales Promotion Material, 1990 】 < full English translation >
A-5	Effects of Dietary Fibers on the Diffusion of Glucose and Metal Ions through Cellulose Membrane 【 <i>J. Jpn. Soc. Clin. Nutri.</i> , 1992 (13)141-147 】 < full English translation >
A-6	Acute Toxicity and Mutagenicity Studies of Indigestible Dextrin, and Its Effect on Bowel Movement of the Rat 【 <i>J. Food Hyg. Soc. Japan (Shokuhin Eiseigaku Zasshi)</i> , 1992 (33) 557-562 】 <English summary>
A-7	Safety of a long-term intake of a tea beverage containing indigestible dextrin 【 <i>J. Nutritional Food</i> , 2001, 4 (2), 19-26 】 < full English translation >
A-8	Nondigestible Oligosaccharides Do Not Increase Accumulation of Lipid Soluble Environmental Contaminants by Mice 【 <i>J. Nutr.</i> 2002, 132, 80-87 】
A-9	Some Dietary Fibers Increase Elimination of Orally Administered Polychlorinated Biphenyls but Not That of Retinol in Mice 【 <i>J. Nutr.</i> 2004, 134, 135-142 】
A-10	Energy Value of a Mixed Glycosidic Linked Dextrin Determined in Rats 【 <i>J. Agric. Food. Chem</i> , 1998 (46) 2253-2259 】
A-11	New Method for Determining Total Dietary Fiber by Liquid Chromatography 【 <i>J. AOAC Int.</i> , 2000, 83, 1013-1019 】
A-12	Determination of Total Dietary Fiber in Selected Foods Containing Resistant Maltodextrin by Enzymatic-Gravimetric Method and Liquid Chromatography: Collaborative Study 【 <i>J. AOAC Int.</i> , 2002, 85, 435-444 】

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》

B-1	Effects of Indigestible Dextrin on Bowel Movements 【 <i>Jpn. J. Nutr.</i> , 1993, 51, 31-37】 <full English translation>
B-2	Effect of Jelly Drink Containing Dietary Fiber on Human Defecation 【 <i>J. Nutritional Food</i> , 1998, 1 (3/4), 12-19】 <full English translation>
B-3	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>
B-4	Effect of drinks supplemented with indigestible-dextrin on fecal amount 【 <i>J. Nutritional Food</i> , 1999, 2 (2), 52-57】 < full English translation>
B-5	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>
B-6	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】
B-7	The Effects of rise crackers containing indigestible dextrin on female defecation 【 <i>J. Nutritional Food</i> , 2000, 3 (2), 37-44】 <full English translation>
B-8	Effect of drinks supplemented with indigestible dextrin on defecation in human 【 <i>J. Nutritional Food</i> , 2000, 3 (4), 31-38】 < full English translation >
B-9	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>
B-10	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>
B-11	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>
B-12	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>
B-13	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>
B-14	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 >
B-15	Effectiveness of Dietary Fiber for Irritable Bowel Syndrome (IBS) 【Not published】

《C: Sugar Metabolism》

C-1	Effects of indigestible dextrin on glucose tolerance in rats 【 <i>J. Endocrinology</i> , 1995, 144, 533-538】
C-2	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>
C-3	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>
C-4	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>
C-5	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>
C-6	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>
C-7	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>
C-8	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>

C-9	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 >
C-10	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>
C-11	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>
C-12	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>
C-13	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>
C-14	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>
C-15	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>

《D: Lipid Metabolism》

D-1	Hypocholesterolemic Effect of Dietary Fiber: Relation to Intestinal Fermentation and Bile Acid Excretion 【 <i>J. Nutr. Sci. Vitaminol.</i> , 1995, 41, 151-161】
D-2	Effect of Indigestible Dextrin on Cholesterol Metabolism in Rat 【 <i>J. Jpn. Soc. Nutr. Food. Sci.</i> , 1991 (44) 471-478】 <full English translation>
D-3	Effects of Intravenous Injection and Intraperitoneal Continual Administration of Sodium Propionate on Serum Cholesterol Levels in Rats 【 <i>J. Nutr. Sci. Vitaminol.</i> , 1995, 41, 73-81】
D-4	Effects of Long-term Administration of Indigestible Dextrin as Soluble Dietary Fiber on Lipid and Glucose Metabolism 【 <i>J. Jpn. Soc. Nutr. Food. Sci.</i> , 1992, 45, 21-25】 <English summary>
D-5	Continuous Administration Tests of Indigestible Dextrin I: Study on the effects of the improvement of fat metabolism in healthy volunteers 【 <i>J. Jpn. Clin. Nutr.</i> 1992, 80 (2) 167-172】 <full English translation>
D-6	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 【 <i>J. Jpn. Clin. Nutr.</i> 1993, 83 (3) 301-305】 <full English translation>
D-7	Product Evaluation: Effect of PET SLIM on Treatment of Obesity 【 <i>CAP</i> 523, 75-77 (1993)】 <English summary>
D-8	Nutritional Management of Cardiovascular Risk Factors 【 <i>Arc. Intern. Med.</i> 1997, 157 169-177】
D-9	Effects of a Food for Specified Health Use (FOSHU) which contains indigestible dextrin as an effective ingredient on glucose and lipid metabolism 【 <i>J. Japan Diab. Soc.</i> , 1999, 42, 61-65】 <full English translation>
D-10	Efficacy of tea drink containing indigestible dextrin 【 <i>J. Nutritional Food</i> , 2000, 3 (1), 65-72】 < full English translation>
D-11	Effects of instant miso-soup containing indigestible dextrin on moderating the rise of postprandial blood glucose levels, and safety of long-term administration 【 <i>J. Nutritional Food</i> , 2000, 3 (2), 19-27】 <full English translation>
D-12	Beneficial effects of a new indigestible dextrin-containing beverage on lipid metabolism and obesity-related parameters 【 <i>J. Nutritional Food</i> , 2000, 3 (3), 47-58】 <English summary>
D-13	Effects of Long-term Administration of Indigestible Dextrin on Visceral Fat Accumulation 【 <i>J. Jpn. Assoc. Dietary Fiber Res.</i> , 2000, 4 (2), 59-65】 <full English translation>
D-14	Effects of a tea beverage containing indigestible dextrin on the serum triglyceride level in subjects with mild hypertriglyceridemia 【 <i>J. Nutritional Food</i> , 2002, 5 (3), 117-130】 <full English translation>

Appendix

《R: Review》

R-4	The effects of resistant maltodextrin on blood glucose, insulin and triacylglyceride levels, and fat accumulation after meal feeding in humans 【 <i>Dietary fibre components and functions</i> , H. Salovaara, F. Gates & M. Tenkanen (Eds), Wageningen Academic Publishers, Wageningen, Netherlands, 2007, pp 305-322】
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《A: Process, Safety, Energy Value, Analytical Method, etc.》

A-13	Evaluation of available energy of several dietary fiber materials based on the fermentability from breath hydrogen excretion in healthy human subjects 【 <i>J. Jpn. Assoc. Dietary Fiber Res.</i> , 2005 (9, No.1) 34-45】 <full English translation>
A-14	Availability, fermentability, and energy value of resistant maltodextrin: modeling of short-term indirect calorimetric measurements in healthy adults 【 <i>Am J Clin Nutr</i> , 2006, 83, 1321-1330】

《B: Intestinal Regularity & Prebiotic Effect》

B-16	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>
B-Ref	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>

《C: Sugar Metabolism》

C-16	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】
C-17	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>

《D: Fat Metabolism》

D-15	Suppressive effect of resistant maltodextrin on postprandial blood triacylglycerol elevation 【 <i>Eur J Nutrition</i> , 2007, 46, 133-138】
D-16	Effect of Indigestible Dextrin on Visceral Fat Accumulation <full English translation> 【 <i>Journal of Japanese Society for the Study of Obesity</i> , 2007, 13, 34-41】