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(54) Title: DIETARY COMPOSITIONS AND RELATED METHODS OF USE



(57) Abstract: The present invention provides dietary compositions for mammalian consumption. In particular, the present invention provides compositions comprising pectin, a component comprising electrolytes, thickening agents, a sweetening agent, and water, and methods for making such compositions. In some embodiments, the dietary compositions are used for preventing and/or treating malabsorption dysfunction and associated disorders (e.g., short bowel syndrome, Crohn's disease). In some embodiments, the dietary compositions are used for preventing and/or treating colonic disorders (e.g., ulcerative colitis). The dietary compositions further find use in subjects with diarrhea, regardless of cause, subject suffering from gastric dumping syndrome, and obese patients or patients seeking to lose weight, as the composition delays gastric emptying (e.g., creating feeling of early satiety). In some embodiments, the dietary composition is a prebiotic food supplement.



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C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 07-118162 A(KYODO SHIRYO KK et al.) 09 May 1995 see claim 1, abstract	1-20
A	US 6541047 B1(Robert M. Claycamp et al.) 1 April 2003 see claim 1	1-20
A	US 2003-0203048 A1(Robert Nelson et al.) 30 October 2003 see claims 1-2, abstract	1-20
A	US 2005-0095271 A1(Michael S. Mathewson) 5 May 2005 see claim 1	1-20
A	US 2005-0260322 A1(Akihisa Takaichi et al.) 24 November 2005 see claims 1, 5	1-20
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2005-0260322 A1	24.11.2005	AT 326149 T	15.06.2006
		CA 2489566 A1	05.02.2004
		CN 1671300 A	21.09.2005
		CN 1326477 C	18.07.2007
		CN 1671300 C0	21.09.2005
		DE 60305331 D1	22.06.2006
		DE 60305331 T2	01.02.2007
		EP 1541042 A4	10.08.2005
		EP 1541042 B1	17.05.2006
		EP 1541042 A1	15.06.2005
		ES 2261983 T3	16.11.2006
		WO 2004-010796 A1	05.02.2004
		KR 10-2005-0033635 A	12.04.2005
		WO 2004-010796 A1	05.02.2004
		US 6541047 B1	01.04.2003
US 2005-095271 A1	05.05.2005	None	
US 2003-203048 A1	30.10.2003	AT 355068 T	15.03.2006
		AU 1999-49923 A1	13.07.1999
		AU 4992399 A	12.12.2000
		CA 2373473 A1	30.11.2000
		CA 2373473 C	12.02.2008
		DE 69935352 D1	12.04.2007
		DE 69935352 T2	29.11.2007
		EP 1178811 A1	13.02.2002
		EP 1178811 B1	28.02.2007
		ES 2283123 T3	16.10.2007
		JP 2003-500361 A	07.01.2003
		JP 2003-500361 T	07.01.2003
		KR 10-2002-0011991 A	09.02.2002
		PA 99006864 A	31.08.2004
		US 06572898 B2	03.06.2003
		US 06770305 B2	03.08.2004
		US 2002-0009502 A1	24.01.2002
WO 2000-071137 A1	30.11.2000		
JP 07-118162 A	09.05.1995	None	