



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: A61K 35/78, 47/36, 35/74, 35/72, A23L 1/0522	A1	(11) International Publication Number: WO 97/34615 (43) International Publication Date: 25 September 1997 (25.09.97)
(21) International Application Number: PCT/AU97/00176 (22) International Filing Date: 20 March 1997 (20.03.97) (30) Priority Data: PN 8813 20 March 1996 (20.03.96) AU (71) Applicants (for all designated States except US): THE UNIVERSITY OF NEW SOUTH WALES [AU/AU]; Anzac Parade, Kensington, NSW 2033 (AU). BURNS PHILP & COMPANY LIMITED [AU/AU]; 7 Bridge Street, Sydney, NSW 2000 (AU). BURNS PHILP RESEARCH & DEVELOPMENT PTY. LTD. [AU/AU]; 7 Bridge Street, Sydney, NSW 2000 (AU). COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION [AU/AU]; Limestone Avenue, Campbell, ACT 2601 (AU). ⑤ ARNOTT'S BISCUITS LIMITED [AU/AU]; 11 George Street, Homebush, NSW 2140 (AU). GIST-BROCADES AUSTRALIA PTY. LIMITED [AU/AU]; 9 Moorebank Avenue, Moorebank, NSW 2170 (AU). GOODMAN FIELDER INGREDIENTS LIMITED [AU/AU]; Level 4, 230 Victoria Road, Gladesville, NSW 2111 (AU). (72) Inventors; and (75) Inventors/Applicants (for US only): BROWN, Ian, Lewis [AU/AU]; 18 Valley Way, Gympie Bay, NSW 2227 (AU).		CONWAY, Patricia, Lynne [AU/AU]; 22 Goorawahl Avenue, La Perouse, NSW 2036 (AU). TOPPING, David, Lloyd [AU/AU]; 5 Fisher Terrace, Glenside, S.A. 5045 (AU). WANG, Xin [CNAU]; 4/121 Avoca Street, Randwick, NSW 2032 (AU). (74) Agent: F.B. RICE & CO.; 28A Montague Street, Balmain, NSW 2041 (AU). (81) Designated States: AU, CA, JP, KR, NZ, <u>SG</u> , US, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published With international search report.

(54) Title: ENHANCEMENT OF MICROBIAL COLONISATION OF THE GASTROINTESTINAL TRACT**(57) Abstract**

Probiotic composition comprising one or more probiotic microorganisms, a carrier which will function to transport the one or more probiotic microorganisms to the large bowel or other regions of the gastrointestinal tract of an animal, the carrier comprising a modified or unmodified resistant starch or mixtures thereof, which carrier acts as a growth or maintenance medium for microorganisms in the large bowel or other regions of the gastrointestinal tract, and an oligosaccharide. Method of increasing the number of probiotic or resident microorganisms in the gastrointestinal tract of an animal comprising providing to the animal the probiotic composition.