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Anaerobic Bacteria from the Human Colon

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Table 1. *Species of intestinal bacteria* unit (from 7.0 to 6.0) as compared with uninoculated

Table 2. *Number of strains of bacterial species from the human colon which ferment monosaccharides and plant polysaccharides*

bstrate	*B. adolescentis* (11)[a]	*B. breve* (5)	*B. infantis* (11)	*B. longum* (10)	*E. aerofaciens* (15)	*E. eligens* (5)	*E. rectale* (20)	*P. productus* (8)	*R. albus* (5)	*R. bromii* (8)
›nosaccharides										
glucosamine[c]	–[b]	–	–	–	7	–	1	4	–	–
L-fucose[d]	–	3	–	–	–	2	1	6	–	–
lysaccharides										
amylose	7	5	2	–	2	–	–	1	–	6
amylopectin	10	5	9	–	3	–	12	1	–	8
xylan	8	–	8	–	–	–	–	1	–	–
larch arabinogalactan	–	–	–	10	–	–	–	–	–	–
gum guar	1	–	–	–	–	–	–	–	5	–
gum locust bean	1	–	–	–	–	–	–	–	5	–
gum arabic	–	–	–	3	–	–	–	–	–	–
gum ghatti	–	–	–	3	–	–	–	–	–	–
gum tragacanth	–	–	–	6	–	–	–	–	–	–
pectin	–	–	–	–	–	3	–	–	–	–
polygalacturonate	–	–	–	–	–	2	–	–	–	–
laminarin	–	–	–	–	–	–	–	1	–	–

umber of strains tested.

– , substrate not fermented by any of strains tested.

lso fermented by one of four strains of *B. bifidum*, by 4 of 5 strains of *L. acidophilus*, and by 4 of 5 strains of *E. biforme*.

lso fermented by all 5 strains of *R. gnavus*, by 10 of 12 strains of anaerobic cocci, and by 1 of 5 strains of *E. biforme*.

all strains of *R. albus* (Table 2). Unlike *R. albus* strains from the bovine rumen (5), these *R. albus* strains did not ferment xylan. Human *R.* [redacted] strains in their ability to ferment cellulose and [redacted] may actually belong to different species (1). Pectin and polygalacturonate were fermented by fermented as wide a range of complex carbohydrates as the *Bacteroides* species reported previously (18). Some substances, such as alginate, ovomucoid, which were fermented by several *Bacteroides* species, were not fermented by any of the species tested in this survey. All of these

of human mucin, such as fucose and hexosa-

mode of action. Adv. Carbohydr. Chem. Biochem.