

Table S1. Growth of <i>Bacteroides</i> strains on different carbohydrates						
	<i>B. thetaiotaomicron</i> VPI-5482		<i>B. massiliensis</i> DSM17679		<i>B. fragilis</i> NCTC 9343	
	<u>growth</u>	<u>rate</u>	<u>growth</u>	<u>rate</u>	<u>growth</u>	<u>rate</u>
Polysaccharides:						
Pullulan	1.23	0.00215	0.15	0.00006	1.27	0.00096
glycogen	1.17	0.00200	0.24	0.00017	0.69	0.00016
amylopectin (potato)	0.83	0.00128	0.41	0.00011	0.53	0.00036
inulin	0.63	0.00027	0.00	0.00000	0.92	0.00070
levan	0.73	0.00119	0.00	0.00	0.00	0.00000
heparin	0.46	0.00087	0.00	0.00000	0.00	0.00000
hyaluronan	1.20	0.00182	0.00	0.00000	0.00	0.00000
chondroitin sulfate	0.75	0.00170	0.11	0.00003	0.00	0.00000
homogalacturonan	0.89	0.00199	0.00	0.00000	0.00	0.00000
rhamnogalacturonan I	0.64	0.00052	0.00	0.00000	0.15	0.00004
pectic galactan (potato)	1.14	0.00261	0.00	0.00000	0.00	0.00000
pectic galactan (lupin)	0.89	0.00146	0.00	0.00000	0.00	0.00000
arabinogalactan (larch)	0.90	0.00113	0.00	0.00000	0.00	0.00000
arabinan (sugar beet)	0.65	0.00100	0.00	0.00000	0.00	0.00000
xylan (water soluble, oat spelt)	0.00	0.00000	0.00	0.00000	0.00	0.00000
arabinoxylan (wheat)	0.00	0.00000	0.00	0.00000	0.00	0.00000
galactomannan (carob)	0.00	0.00000	0.00	0.00000	0.00	0.00000
glucomannan (konjac)	0.00	0.00000	0.00	0.00000	0.00	0.00000
xyloglucan	0.00	0.00000	0.00	0.00000	0.00	0.00000
β-glucan	0.00	0.00000	0.00	0.00000	0.00	0.00000
cellobiose	0.00	0.00000	0.00	0.00000	0.00	0.00000
laminarin	0.00	0.00000	0.00	0.00000	0.00	0.00000
lichenin	0.00	0.00000	0.00	0.00000	0.00	0.00000
dextran	1.33	0.00255	0.00	0.00000	0.00	0.00000
α-mannan	0.60	0.00070	0.00	0.00000	0.00	0.00000
alginate	0.00	0.00000	0.00	0.00000	0.00	0.00000
κ-carrageenan	0.00	0.00000	0.00	0.00000	0.00	0.00000
porphyran	0.00	0.00000	0.00	0.00000	0.00	0.00000
porcine gastric mucus O-glycans (PMOG)	0.55	0.00020	0.97	0.00118	0.72	0.00043
Monosaccharides:						
arabinose	1.30	0.00261	0.00	0.00000	0.00	0.00000

fructose	1.18	0.00191	0.00	0.00000	0.80	0.00107
fucose	0.38	0.00035	0.00	0.00000	0.00	0.00000
galactose	1.39	0.00259	0.00	0.00000	0.30	0.00031
galacturonic acid	0.78	0.00079	0.00	0.00000	0.00	0.00000
glucuronic acid	0.85	0.00073	0.00	0.00000	0.00	0.00000
glucosamine	0.71	0.00026	0.30	0.00008	0.62	0.00031
glucose	1.28	0.00223	0.00	0.00000	0.94	0.00110
mannose	1.37	0.00239	0.00	0.00000	0.79	0.00096
N-acetyl galactosamine	0.75	0.00071	0.73	0.00101	0.40	0.00016
N-acetyl glucosamine	1.00	0.00140	1.09	0.00108	0.54	0.00051
N-acetyl neuraminic acid	0.00	0.00000	0.71	0.00050	0.23	0.00012
rhamnose	0.67	0.00091	0.00	0.00000	0.00	0.00000
ribose	1.21	0.00143	0.00	0.00000	0.00	0.00000
xylose	0.98	0.00207	0.00	0.00000	0.93	0.00112

Growth is measured as maximum increase in absorbance at 600nm relative to a pre-growth baseline, while rate is measured as the growth value defined above, divided by the time to reach maximum growth, both as previously described (Martens et al. PLoS Biology 2011) .