

Table S1. Reduction of bile acids at the end of *in vitro* duodenal incubation (120 min) by OBC samples (upper model - bile acid retention).

	Mass of supernatant ¹ (g)	Density of supernatant ² (g/mL)	Volume of supernatant ³ (mL)	Bile acid concentration ⁴ (mmol/L)	Total bile acids in the supernatant ⁵ (μmol)	Total reduction of bile acids ⁶ (μmol)	Reduction of bile acids ⁷ (%)
OBC Control [‡]	9.41	1.01	9.36	5.11	47.81	30.5	39.0
Mix 1	11.76	1.02	11.57	4.86	56.21	22.1	28.3
Mix 5	13.01	1.02	12.74	4.59	58.48	19.9	25.4
Mix 50	13.10	1.02	12.84	4.69	60.23	18.1	23.1
Pure 1	11.77	1.02	11.60	5.00	57.96	21.6	27.2
Pure 5	12.04	1.01	11.91	5.24	62.39	17.2	21.6
Pure 50	12.03	1.01	11.87	4.77	56.61	23.0	28.9
Enzyme blank1*	15.33	1.01	15.24	5.14	78.35	0.0	0.0
Enzyme blank2*	15.16	1.00	15.12	5.27	79.60	0.0	0.0

[‡]Control refers to the OBC treated under the same conditions but without any enzyme

*Enzyme blank1 in series Control, Mix 1, Mix 5 and Mix 50; Enzyme blank2 in series Pure 1, Pure 5 and Pure 50.

¹Mass of supernatant (g): the total amount of supernatant separated after centrifugation was weighted.

²Density of supernatant (g/mL) was measured by weighing the mass of 1 mL of the supernatant.

³Volume of supernatant (mL) was calculated as mass divided by density.

⁴Bile acid concentration (mmol/L) was determined in the supernatant using a kit of Total Bile Acid Assay.

⁵Total bile acids in the supernatant (μmol) was calculated as 'Bile acid concentration' multiplied by 'Volume'.

⁶Total reduction of bile acids (μmol) was calculated as the difference between 'Total bile acids' of the enzyme blank and sample.

⁷Reduction of bile acids (%) was calculated as the relation between the reduction of bile acid in the samples and their corresponding enzyme blank.

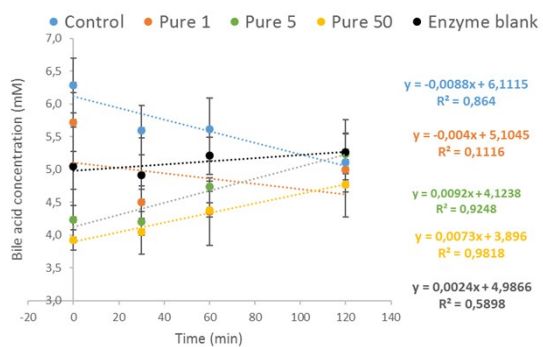


Figure S1. Changes in bile acid concentration (mM) in duodenal incubation *in vitro* in the presence of the OBC enzymatically treated with Pure enzyme (1, 5 or 50 nkat/g).

Equations of the trend lines are expressed as the same colours as the corresponding markers of the curve.

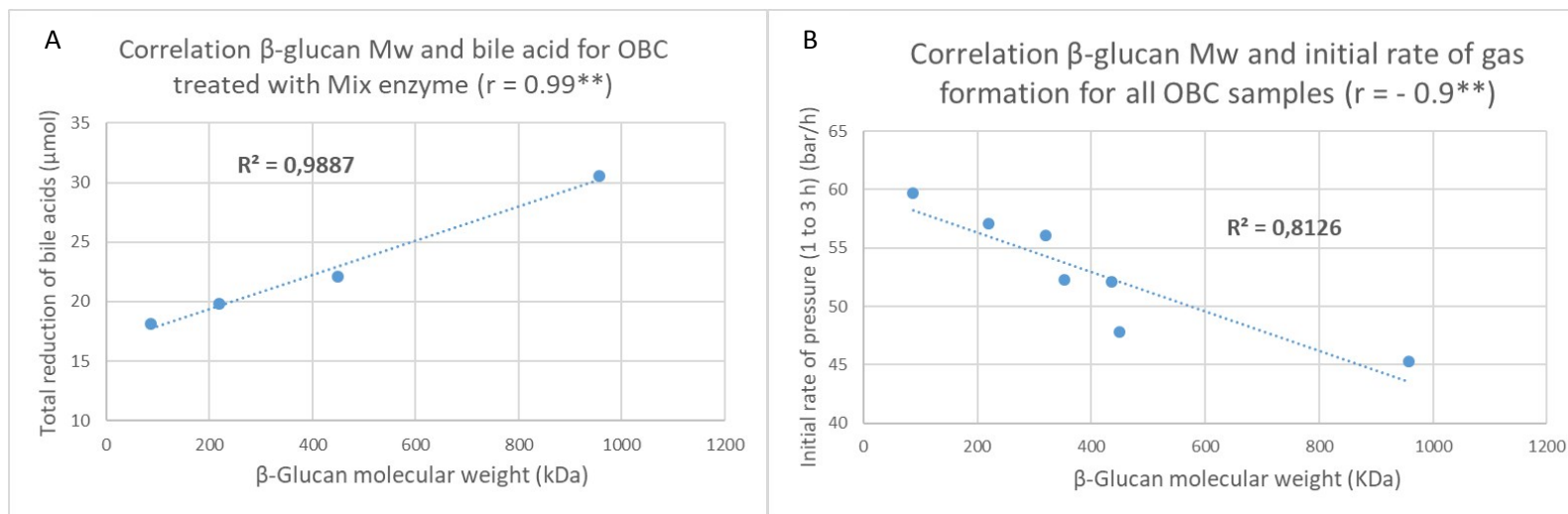


Figure S2. Correlations between the β -glucan molecular weight (Mw) of OBC samples and (A) total reduction of bile acids (μmol) and (B) initial rate of gas formation.