1 **Supporting File of Effect of the carrier material, drying technology and dissolution media**

2 **on the viability of *Lactobacillus fermentum* K73 during simulated gastrointestinal transit**

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6 **Table 1.** Parameter estimates with the Whiting and Buchanan model for the behaviour of

7 *Lactobacillus fermentum* K73 in the IViDiS *in vitro* digestion system and regression analysis

8 results.

	Beverage	System[a]	Parameter estimates[b]				Regression analysis[c]					
			L (s)	F	b	c	Bf	Af	SS	RMSE	R^2	Adjusted R^2
					log CFU [mL s]$^{-1}$	log CFU [mL s]$^{-1}$						
Stomach	Water	SDWO	859.188	0.006	0.00026	0.004	1.017	1.025	0.011	0.017	0.999	0.999
		SDWM	700.000	3.17E-06	0.000	0.017	0.985	1.021	0.012	0.038	0.999	0.999
		FDWO	995.331	0.030	0.001	0.004	1.062	1.075	0.135	0.029	0.999	0.998
		FDWM	1,000.552	0.059	1.99E-04	1.99E-04	1.188	1.235	0.386	0.165	0.965	0.957
	Milk	SDWO	4,200.000	3.400	0.008	2.00E-04	0.806	1.239	2.276	0.022	0.822	0.643
		SDWM	3,236.210	0.031	0.00017	0.004	0.462	2.162	0.239	0.104	0.941	0.927
		FDWO	3,236.210	0.000	0.001	0.002	1.130	1.334	1.249	0.090	0.971	0.963
		FDWM	1,400.000	0.006	0.001	0.001	1.118	1.118	0.230	0.038	0.997	0.996
Duodenum	Water	SDWO	3,039.660	0.235	9.05E-04	0.0130	1.012	1.152	0.273	0.203	0.726	0.589
		SDWM	-	-	-	-	-	-	-	-	-	-
		FDWO	953.720	221.285	0.002	0.082	1.101	1.186	0.591	0.122	0.978	0.971
		FDWM	1,039.614	21.681	0.0018	0.008	0.848	1.183	0.931	0.629	0.911	0.881
	Milk	SDWO	6,839.000	0.387	−2.30E-04	8.00E-05	0.995	1.025	0.011	0.017	0.871	0.807
		SDWM	10,000.000	0.189	0.002	0.0017	0.415	2.412	19.410	0.357	0.713	0.618
		FDWO	7,604.882	0.000	2.58E-04	6.77E-04	0.965	1.110	0.153	0.018	0.972	0.965
		FDWM	1,397.700	0.150	−3.00E-04	0.000	0.131	7.612	30.475	0.430	0.810	0.763

9 [a] SDWO, spray-dried without carrier material; SDWM, spray-dried with carrier material; FDWO, freeze-dried without carrier material; FDWM,

10 freeze-dried with carrier material.

11 [b] L, lag phase; F, F-statistic; b, inactivation rate of the major population group; c, inactivation rate of the minor population group; -, not examined.

12 [c] Bf, bias factor; Af, accuracy factor; SS, sum of squares; RMSE, root mean square error; R^2, correlation coefficient; -, not examined.