Supplementary Information

Targeted Release of Live Probiotics from Alginate-based

Nanofibers in a Simulated Gastrointestinal Tract

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Figure S1. Thermogravimetric analysis was conducted on as-received samples of alginate, polyethylene oxide (PEO), polysorbate 80 (PS80), and glycerol. The temperature 300°C is shown by a dashed grey line for reference. Thermograms of alginate, PEO, and PS80 are replotted with permissions from ref 1. Copyright 2023 American Chemical Society.

Sample	CaCO₃ concentration	Core/Shell flow rate (mL/hr)	<i>L. lacti</i> s loading (CFU/g)
As-spun	2%	0.35/0.070	1.35 × 10 ⁹
		0.70/0.70	1.03 × 10 ⁹
CLNF-G	2%	0.35/0.070	2.09 × 10 ⁸
		0.70/0.70	1.33 × 10 ⁸
CLNF-W	2%	0.35/0.070	3.79 × 10 ⁸
		0.70/0.70	3.48 × 10 ⁸

Table S1: *L. lactis* loading in electrospun alginate-based nanofibers containing antacid and after crosslinking. All values are statistically equivalent.

REFERENCE

(1) Diep, E.; Schiffman, J. D. Ethanol-Free Cross-Linking of Alginate Nanofibers Enables Controlled Release into a Simulated Gastrointestinal Tract Model. *Biomacromolecules* 2023, 24 (6), 2908–2917. https://doi.org/10.1021/acs.biomac.3c00274.