Electronic Supplementary Material (ESI) for Food & Function. This journal is © The Royal Society of Chemistry 2023

## Supplemental file 4

Overview of bioactivities found with the Milk Bioactive Peptide Database (MBPDB) that match with identified peptide sequences (Nielsen et al., 2017). Colour gradient represents high numbers (green) to low numbers (red) of peptides matching with bioactivities.

Number of times bioactivities were found for peptide sequences identified:

	More	More	More			
Bioactivity	abundant in HMK	abundant in RMK	Uniquely in HMK	Uniquely in RMK		
ACE-inhibitory	328	255	40	63		
Antioxidant	173	119	20	39		
Antimicrobial	143	121	18	34		
DPP-IV inhibitory	92	85	7	23		
Anti-inflammatory	51	15	15	6		
Opioid	48	27	2	9		
Immunomodulatory	37	32	5	12		
Anticancer	26	22	1	7		
Inhibition of cholesterol solubility	20	14	2	4		
Prolyl endopeptidase-inhibitory	20	19	0	6		
Osteoanabolic	18	13	5	2		
Bradykinin-potentiating	17	3	0	0		
Increase MUC4 expression	12	4	1	1		
Growth-promoting	11	4	2	2		
Anxiolytic	10	10	0	4		
Cytomodulatory	10	11	2	3		
Antithrombotic	8	4	2	3		
Ameliorates insulin resistance	6	1	2	0		
Antihypertensive	6	3	0	1		
Increases jejunal mucus secretion	6	8	0	3		
Increases MUC2 expression	6	8	0	3		
Increases MUC3 expression	6	8	0	3		
Increases MUC5a expression	6	8	0	3		
Reduces pancreas MDA level	6	8	0	3		
Satiety	6	8	0	3		
Cathepsin B inhibitory	5	7	0	3		
Antithrombin	4	0	1	0		
Anti-apoptotic effect	3	2	1	0		
Wound healing	3	2	1	0		
Cytotoxic	2	0	0	0		
Non-functional	2	6	0	2		
Cancer	1	3	0	1		
Improves learning and memory	1	3	0	1		

Increases intestinal motility	1	3	0	
Promote neurite outgrowth	1	3	0	
Stimulates proliferation	1	0	0	
Increase small intestinal goblet cell density	0	1	0	
Promote calcium uptake Protective effects in indomethacin-induced enteritis through preservation of goblet cells and	0	2	0	
improvement in wound healing	0	1	0	