

AUTHOR	DESIGN	INTERVENTION	FINDINGS
HUMAN STUDIES			
Daniloski et al., 2021 [178]	A combination of human (n=13) and animal (n=6) in vivo studies.	Systematic review.	A2 β -casein milk may improve gastrointestinal symptoms compared to A1 β -casein milk. However, the exact mechanism for this effect is poorly understood.
Bohn et al., 2015; Sweden [58]	Multi-centre, randomised, parallel, single-blind study – LFD vs traditional (NICE) advice.	Randomised, double-blind, cross-over trial comparing the effects of regular, Jersey milk (A1/A2 milk), lactose free milk and A2 milk during a single-meal sitting.	Lactose intolerant subjects experienced less abdominal pain after A2 milk compared to A1/A2 milk. No effects on other symptoms.
Milan et al., 2020 [180]	Adults with lactose intolerance, non-lactose dairy intolerance or dairy tolerance.	Double-blind, randomised sequence comparing the effects of: -lactose containing A1/A2 milk -lactose containing A2 milk -lactose-free (A1/A2 containing) milk [1]	Lactose intolerant subjects experienced less nausea and faecal urgency with lactose containing A2 milk and lactose free milk, compared to regular lactose containing A1/A2 milk.
Brooke-Taylor S et al., 2017 [181]	Systematic review (n=39) including in vitro, in vivo and human studies		Extensive evidence from in vitro and in vivo studies, and limited evidence from human studies shows that BCM-7 is released following consumption of A1 (but not A2) B-casein. BCM-7 is associated with delayed gastrointestinal transit times and may be pro-inflammatory.
Jianqin et al., 2016 [125]	Self-reported milk intolerant Chinese adults (n=45).	Randomised, double blind crossover study comparing A1/A2 milk Vs A2 milk.	A1/A2 milk associated with more digestive discomfort; slower GI transit; increased production of inflammatory markers and BCM-7.
Ho et al., 2014 [183]	Australian adults (n=41).	Double-blinded, randomised 8-week cross-over study comparing the GI effects of A1 Vs A2 milk.	<ul style="list-style-type: none"> Positive association between abdominal pain and stool consistency on A1 milk, but not A2 milk. A1 milk associated with looser stools than A2 milk. Looser stools strongly associated with more abdominal pain.
Crowley et al., 2013 [126]	Children with chronic functional constipation (n=39).	Non-randomised cross-over study comparing A1 Vs A2 β -casein milk.	Symptom resolution observed in 81% in the milk-free washout, 79% on A2 milk and 57% on A1 milk. No between group differences so no advantage of the A2 milk (possibly due to under-powering).
ANIMAL STUDIES			
Barnett et al., 2014 [127]	Rodents.	Non-randomised controlled trial – GI effects of A1 Vs A2 β -casein rich diet.	A1 β -casein slowed GI transit compared to A2 β -casein.
UI Haq et al., 2014 [130]	Rodents (in vivo).	Mice administered control vs casein isolated from A1/ A1, A1/A2 or A2/A2 cow's milk.	Greater increases in markers of gut inflammation on A1/A1 and A1/A2 compared to A2/A2 or control.