Set-style yoghurts made from goat milk bases fortified with whey protein concentrates

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Summary

This research paper addresses the hypothesis that the fortification of goat milk base with whey protein concentrate (WPC) could affect positively both the textural and the biofunctional properties of set-style yoghurt made there from. The effect of fortification of goat milk base with two different WPCs on thermophilic bacteria counts, proteolysis, physical and biofunctional properties of set-style yoghurts was studied throughout a four-week storage period. Fortification and storage did not influence thermophilic counts. Physical properties were affected significantly (P<0.05) by the composition of the protein and the mineral fraction of the WPC but not by the storage. ACE-inhibitory activity was moderate in accordance to low lactobacilli counts and lack of proteolysis. DPPH-radical scavenging activity, Fe$^{2+}$-chelating activity and superoxide scavenging activity were high. At 28 days an anti-inflammatory effect was observed not affected by WPC addition.