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Phenolic compounds, Microbial content and Sensory evaluation of Synbiotic labneh containing Ginger and Probiotic

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Abstract: This study was evaluated the phenolic compounds and antimicrobial activity of dried ginger and fresh ginger extracts a gainst 7 strains of food borne pathogens, 8 strains of lactic acid bacteria and 6 strains of molds & yeasts. Therafter, fresh ginger extract and *Leuconostoc mesenteroides* were used to produce new synbiotic labneh. This study showed the variable antimicrobial activity of the ginger extracts against the all tested bacteria and fungi. Dried ginger extract showed highest zone of inhibition against *Staphylococcus aureus, Yersinia enterocolitica, Escherichia coli, Saccharomyces cerevisia* and *Aspergillus spp.* and lowest zone of inhibition against *Listria monocytogenes*. Low effect on lactic acid bacteria counts were observed. Total phenolic content of labneh samples either in fresh or during the cold storage were evaluated. Addition of ginger extract reduced the pathogens and fungal counts in labneh. Synbiotic labneh gave the highest scores for flavour, body and appearance than control labneh over storage period.

Key words: Synbiotic labneh -Anti microbial- Phenols- Probiotic - Ginger.

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