

Goat milk yogurt fortified with industrial tomato waste extract

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Goat milk has a promising source of protein, vitamins, minerals and fatty acids. Goat milk has better digestibility, reduced allergenicity, due to the low content of lactose. Fermented dairy products have delicious sensory properties, fine consistency and pleasant specific taste. Especially fermented goat milk products have significant commercial potential, large destination and multiple health benefits for population. Considering the importance of fermented dairy products from goat milk, which are in demand on internal and external markets, elaboration of the technological process for manufacturing of the products is necessary. In this study, the antioxidant activity of the tomato waste extract was determined, which was 87.5%. The interaction between the extract and the free radical DPPH was also analyzed. The chemical composition of the goat milk sample was determined, namely, the protein content is 3.35 g / 100 g, the fat content is 1.5 g / 100 g, the lactose content is 4.52 g / 100 g and the ash is 0.8 g / 100 g. Formulations and technology of goat milk yoghurt production with the introduction of tomato waste extract and flavoring food ingredients such as apple paste, prunes, cinnamon, vanilla, sugar have been developed. The organoleptic properties of the obtained yoghurt samples were evaluated, which showed that yoghurt from goat milk with addition of sugar and vanilla, apple paste and prunes possesses the most pleasant flavor properties. The chemical composition of the yogurt was determined, namely the protein content was 2.5 g / 100 g, fat 1.5 g / 100 g and ash 0.7 g / 100 g. In this study goat milk was analyzed for chemical composition. The research also includes recipes and technological schemes developed for the production of yoghurts from goat milk with increased nutritional value due to the introduction of industrial tomato waste CO₂ - extract containing such antioxidants as beta-carotene, lycopene and tocopherol. The antioxidant activity of the extract was determined by the DPPH free radical method. The obtained yoghurts were analyzed in terms of chemical composition and organoleptical properties.