**TITLE:** PREPARATION OF *PETIT SUISSE* OF KEFIR WITH STRAWBERRY FLAVOR

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## **ABSTRACT:**

Combining dairy ingredients with probiotic microorganisms can result in symbiotic products with several beneficial effects to the human body. The aim of this work was to elaborate a petit suisse using kefir grains as inoculum and add a strawberry flavor. Petit suisse is a type of cheese with pasty consistency, and kefir results from the symbiosis between lactic acid bacteria and yeasts, producing a probiotic effect. The kefir grains were cultivated in pasteurized cow's milk. For the preparation of quark cheese with kefir, 0.7 mL of milk coagulant dissolved in half a cup of distilled water and 10 g of kefir grains were added to 2 L of milk. The pH value was monitored each 6 h until reach 4.5, and them the whey was removed, leaving 750 g of quark cheese. Subsequently, the quark cheese was homogenized with half a box of table cream and 4 tablespoons of refined sugar until the elimination of the lumps. Then, 12 g of gelatin previously dissolved in water and 600 g of fresh strawberries were added into the mixture. The final petit suisse was stored at 7 °C. Samples (25 g) were collected at time 0 and after 7 days from its preparation for plating and analysis of enterobacteria, psychrotrophic bacteria, filamentous fungi and yeasts, Salmonella sp., Staphylococcus aureus and Listeria monocytogenes. The petit suisse with kefir and strawberry showed absence of Salmonella sp., Staphylococcus aureus and Listeria monocytogenes in both samples. The enterobacteria population was within the Brazilian legislation (RDC 12/2001), showing 2.6x10<sup>3</sup> and 1.5x10<sup>3</sup> CFU/g at the time 0 and after 7 days, respectively. Psychrophilic bacteria population was 1.8x10<sup>4</sup> CFU/g at time 0 and 5.0x10<sup>4</sup> CFU/g after 7 days. Filamentous fungi and yeast population did not show difference between time 0 and after 7 days, both being higher than  $3.0 \times 10^4$  CFU/g. Therefore, these results showed that the petit suisse with kefir and strawberries was appropriated for consumption.

KEYWORDS: Probiotics, Cheese, Quark, Yeasts, Bacteria.

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