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Short Communication

Calcium chloride in the processing of cheese made from pasteurised

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The milk salts, Ca and P04, have an important role in the rennet coagulation of milk and in the structure and buffering of cheese. Addition of Ca reduces the rennet coagulation time of milk that is due to the neutralization of negatively charged residues on milk protein, which increases the group of renneted micelles. Addition of low concentrations of Ca also increases gel firmness. The rate of acid production and the pH of the whey at draining are the very important factors that decide/figure out the mineral content of cheese. Both pH and the proportion of undissolved milk salts have important effects on cheese texture. An important role is suggested for colloidal Ca phosphate in buffering during the (turning something more acid) of milk and cheese. The consumption of Cheddar cheese in USA is increasing continuously over the years. Cheddar cheese is used as an ingredient in different prepared foods to improve its color, flavor, taste, texture and (related to vitamins, protein, etc., in food) qualities. The protein network structure inside the Cheddar cheese changes continuously during ripening and affects the texture and rheological properties

Sudanese white cheese is a (like nothing else in the world) among cheese varieties in that high concentration of salt is added to milk before processing (Ak & Gunasekaran, 2014). (heating something enough to kill harmful germs) of milk for cheese making may be thought of as extremely important for control of disease-causing (living things) and uniform product quality. Insulting/worsening of and milk protein was worse in (heated to kill harmful germs) milk cheese than in raw milk cheese (Turner & Thomas, 2011). Fresh cheese made from heat treated milk was superior to that made from raw milk relating to/connected to body and texture. However, higher (heating something enough to kill harmful germs) temperature or longer holding time caused more heat caused interactions of milk proteins and whey proteins (Venugopal & Muthukumarappan, 2012). Addition of sodium chloride to milk cheese holds down and stops the growth of undesirable bacteria, helps the physio-chemical properties in the curd giving flavour to cheese and increases yield (Joshi et al., 2013). Addition of (silvery metal/important nutrient) chloride to the milk had a little or no effect on the composition and quality of white soft cheese. However, some researches pointed to/showed that addition of (silvery metal/important nutrient) chloride to milk cheese increased the fat, fat in dry matter (DM) and (how much acid something has) of cheese and reduced water (able to be dissolved in something) protein and powder left over after burning contents significantly (Upreti et al., 2016).

Viscoelasticity of cheese is related to composition, manufacturing methods and storage conditions and can be used as a tool for description of different cheeses. During Cheddar cheese manufacturing, differences/different versions in (silvery metal/important nutrient) (Ca) & phosphorus (P), leftover/extra milk sugar, and S/M ratio can happen due to source of milk and cheese making rules of conduct adopted

(Pastorino et al., 2013). The stage of (breast-milk making), (changes depending on the season) and concentration way of doing things used significantly affect the buffering salt like Ca & P content, leftover/extra milk sugar content and S/M ratio in the cheese. Much research has been carried out on the individual effect of Ca and P content, leftover/extra milk sugar content, and S/M ratio on the Cheddar cheese quality, but no work has been done on the combined effect of changing the levels of Ca and P content, leftover/extra milk sugar content, and S/M ratio level on the viscoelastic properties of Cheddar cheese. Because of this, this study was tried to study the effect of different levels of Ca and P content, leftover/extra milk sugar content, and S/M ratio during cheddar cheese manufacturing on the viscoelastic properties Cheddar cheese during ripening up to 8 months.

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