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# Cheddar Cheese Made from Cholesterol Removed Cream by β-cyclodextrin

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This study was carried out to determine the cholesterol removal rate and resulting changes in flavor and fatty acid and bitter amino acid production in reduced-cholesterol Cheddar cheese, made by cream separation followed by 10% β-cyclodextrin(β-CD) treatment. The cholesterol removal from the cheese was 92.1%. The production of short-chain free fatty acids (FFA) increased the ripening time in control and cream-treated cheese. The quantity of short-chain FFAs released between treatments during ripening was different, while not much difference was found in the production of neutral volatile compounds in samples. Reduced-cholesterol cheese produced much higher levels of bitter amino acids than the control. In sensory analysis, the texture score of control Cheddar cheese increased significantly with ripending time; however, that of the cream treatment group decreased dramatically with ripening time. On the basis of our results, we conclude that the cheese made from β-CD-treated cream had a higher rate of cholesterol removal and ripened rapidly.