

Compositional Study of Fatty Acid in Mare's Milk

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Mare's milk has interesting nutritional characteristics and is much similar to human milk than does cow milk. The lipid fraction is rich in polyunsaturated fatty acids and high in vitamin C content. Fat globules of mare milk are smaller to human milk in size and easier to digest than those of cow milk. A high ratio of polyunsaturated fatty acids in mare milk contributes to a lower melting temperature. Mare's fat content is very low and has less stearic, palmitoleic acid, whereas it has higher linolenic, linolic acids. According to research result, the fatty acids composition of mare milk appeared to differ from that of cow milk and polyunsaturated fatty acid content of mare's milk was much higher than cow's milk in C18;2 and C18;3 but saturated fatty acid of mare's milk is much lower than cow's milk. The aim of this study was to compare the fatty acid composition of mare's milk with cow milk in liquid, powder, cram and oil by gas chromatography. This results showed overall fatty acid concentration of mare's milk is much higher than cow's milk, especially C18;2 and C18;3. Concentration of oleic, linoleic acid, linolenic acid of mare's milk was higher than cow milk in liquid, powder, cream and oil. Indeed, mare's milk is richer in linoleic acid, linolenic acid. ascorbic acid and Cu(0.15~0.26 mg). Fact that mare's milk has high linolenic acid, linoleic acid and ascorbic acid is very useful to preserve it as a good stuff.