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Convenient Detection of Lipolized Milk by Infrared Milk Analyzer

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Summary

We developed a noble method for detection of lipolyzed milk by using infrared milk analyzer (Milko Scan 134A/B, which can determine the content of fat by two wavelength. The contents measured on $5.7\,\mu$ m and $3.5\,\mu$ m are named as Fat A and Fat B, respectively). The method is based on the observations as follows.

1) Treatment of milk with lipase decreased Fat A and slightly increased Fat B. 2) This change was due to the change of spectrogram by lipolysis of milk. 3) The value of Fat B/Fat A on lipolysis-induced milk positively correlated with the content of free fatty acid. 4) The value of Fat B/Fat A on individual milk collected from farms also positively correlated with the content of free fatty acid.

Key words: Lipolysis, Convenient Detection, Milko Scan