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STUDI LITERATUR PERBANDINGAN KADAR KALSIMUM PADA SUSU SAPI MURNI DAN SUSU OLAHAN DENGAN METODE SPEKTROFOTOMETRI SERAPAN ATOM

(xvi + 89 halaman + 2 gambar)

ABSTRAK

Latar Belakang : Kalsium berperan untuk pertumbuhan serta perkembangan gigi dan tulang, pembekuan darah dan kontraksi otot. Salah satu pangan yang mengandung kalsium adalah susu. Ada berbagai macam susu, yaitu susu murni, olahan seperti mentega, keju, yoghurt, susu krim atau susu tanpa lemak. Tujuan dari penelitian ini untuk mengetahui perbedaan kadar kalsium yang terkandung pada susu sapi murni dan susu olahan dengan menggunakan metode spektrofotometri serapan atom.

Metode : Penelitian ini dilakukan dengan metode studi literatur menggunakan lima artikel referensi nasional maupun internasional yang berkaitan dengan judul dan permasalahan yang akan diteliti.

Hasil : Hasil dari artikel 1 susu sapi murni terendah $5,7576 \pm 0,0078$ ppm dan tertinggi $5,7854 \pm 0,0027$ ppm dan susu sapi di pasaran terendah $5,0625 \pm 0,0137$ ppm dan tertinggi $5,1396 \pm 0,0137$ ppm, artikel 2 terendah Village sample (umerkot) 20,6 ppm dan tertinggi City sample (hyd) 40,36 ppm, artikel 3 (DD HCl dan DD HNO₃) susu sapi 1.164 dan 1.186 ppm, *khoa* 6.300 dan 7.170 ppm, dan *paneer* 4.975 ppm dan 4.867 ppm, artikel 4 terendah Milk Pak 2,02 ppm dan tertinggi Dairy Queen 2,80 ppm, dan artikel 5 terendah susu yang telah diproses 1.228 ppm dan tertinggi susu bubuk 3.092 ppm.

Kesimpulan : Kandungan kadar kalsium dalam susu sapi murni terendah 5,7576 ppm dan tertinggi 1.333 ppm, sedangkan dalam susu olahan terendah 2,02 ppm dan tertinggi 7.530 ppm.

Kata Kunci : susu, kalsium, spektrofotometri serapan atom

Kepustakaan : 40 (1985 - 2018)

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**LITERATURE STUDY OF COMPARATIVE OF CALCIUM CONDITIONS
IN PURE COW'S MILK AND PROCESSED MILK USING ATOMIC
ABSORPTION SPECTROPHOTOMETRY METHOD**

(xvi + 89 pages + 2 images)

ABSTRACT

Background : Calcium plays a role in the growth and development of teeth and bones, blood clotting and muscle contraction. One of the foods that contain calcium is milk. There are various kinds of milk, namely whole milk, processed like butter, cheese, yogurt, cream milk or nonfat milk. The purpose of this study was to determine the differences in calcium levels contained in pure cow's milk and processed milk using atomic absorption spectrophotometric methods.

Method : This research was conducted with a literature study method using five national or international reference articles relating to the title and debate to be discussed.

Results : The results of article 1, the lowest pure cow's milk is 5.7576 ± 0.0078 ppm and the highest is 5.7854 ± 0.0027 ppm and the lowest is 5.0625 ± 0.0137 ppm and the highest is 5.13996 ± 0.0137 ppm, article 2 is the lowest Village sample (umerkot) 20.6ppm and the highest City sample (hyd) 40.36ppm, article 3 (DD HCl and DD HNO₃) cow's milk 1,164 and 1,186ppm, khoa 6,300 and 7,170ppm, and paner 4,975ppm and 4,867ppm, articles The lowest 4 is Milk Pak 2.02ppm and the highest is Dairy Queen 2.80ppm, and the lowest is article 5 is processed milk of 1,228 ppm and the highest is powdered milk of 3,092ppm.

Conclusion : The lowest calcium content in pure cow's milk is 5.7576 ppm and the highest is 1.333ppm, while in processed milk the lowest is 2.02ppm and the highest is 7.530ppm.

Keywords : milk, calcium, atomic absorption spectrophotometry

Literature : 40 (1985 - 2018)