

Iodine concentration in raw sheep milk from Slovak farms – Preliminary results

Šimon Mikáš, Vladimír Tančín, Róbert Toman, Ivan Imrich, Jan Trávníček

References

- Bednář, J. et al. (1964). Příspěvek ke stanovení proteinového jodu v krevním séru. *Československá farmacie*, 13(1), 203-209. In Czech.
- Flachowsky, G. (2007). Iodine in animal nutrition and iodine transfer from feed into food of animal origin. *Lohmann Information*, 42(2), 47-59.
- Flachowsky, G. et al. (2014). Influencing factors on iodine content of cow milk. *European Journal of Nutrition*, 53(2), 351-365. <https://doi.org/10.1007/s00394-013-0597-4>
- Franke, K. et al. (2009). Influence of various iodine supplementation levels and two different iodine species on the iodine content of the milk of cows fed rapeseed meal or distillers dried grains with solubles as the protein source. *Journal of Dairy Science*, 92(9), 4514-4523. <https://doi.org/10.3168/jds.2009-2027>
- Grace, N. D. et al. (2001). Effect of pre-mating iodine supplementation of ewes fed pasture or a brassica crop pre-lambing on the incidence of goitre in newborn lambs. *Proceedings of the New Zealand Society of Animal Production*, 61(1), 164–167.
- Grau, G. et al. (2015). Normal intellectual development in children born from women with hypothyroxinemia during their pregnancy. *Journal of Trace Elements in Medicine and Biology*, 31, 18-24. <https://doi.org/10.1016/j.jtemb.2015.02.004>
- Paulíková, I. et al. (2008). Milk Iodine Content in Slovakia. *Acta Veterinaria Brno*. 77, 533-538. <https://doi.org/10.2754/avb200877040533>
- Rezaei Ahvanooei, M. R. et al. (2020). Effect of potassium iodide supplementation and teat-dipping on iodine status in dairy cows and milk iodine levels. *Domestic Animal Endocrinology*, 74, 106504. <https://doi.org/10.1016/j.domaniend.2020.106504>
- Sandell, E. B. and Kolthoff, I. M. (1937). Micro Determination of Iodine by a Catalytic Method. *Microchimica Acta*, 1(1), 9-25.
- Scientific Committee on Food. (2002). *Opinion of the Scientific Committee on Food on the Tolerable Upper Intake Level of Iodine*. Brussels: European Commission – Health and consumer protection Directorate-General.
- Schöne, F. and Rajendram, R. (2009). Iodine in Farm Animals. In Preedy, V. R. et al. (eds.) *Comprehensive Handbook of Iodine: Nutritional, Biochemical, Pathological and Therapeutic Aspects*. Amsterdam: Academic Press (pp. 151-170).
- Trávníček, J. and Kursá, J. (2001). Iodine concentration in milk of sheep and goats from farms in South Bohemia. *Acta Veterinaria Brno*, 70(1), 35-42. <https://doi.org/10.2754/avb200170010035>
- Trávníček, J. et al. (2010). Iodine status in ewes with the intake of iodine enriched alga Chlorella. *Czech Journal of Animal Science*, 55(2), 58-65. <https://doi.org/10.17221/40/2009-CJAS>
- Van der Reijden, O. L. et al. (2017). Iodine in dairy milk: Sources, concentrations and importance to human health. *Best Practice & Research Clinical Endocrinology & Metabolism*, 31(4), 385-395. <https://doi.org/10.1016/j.beem.2017.10.004>
- Van der Reijden, O. L. et al. (2019). Effects of feed iodine concentrations and milk processing on iodine concentrations of cows' milk and dairy products, and potential impact on iodine intake in Swiss adults. *British Journal of Nutrition*, 122(2), 172-185. <https://doi.org/10.1017/S0007114519001041>
- Walther, B. et al. (2018). Iodine in Swiss milk depending on production (conventional versus organic) and on processing (raw versus UHT) and the contribution of milk to the human iodine supply. *Journal of Trace Elements in Medicine and Biology*, 46, 138-143. <https://doi.org/10.1016/j.jtemb.2017.12.004>
- World Health Organization. (2007). *Assessment of iodine deficiency disorders and monitoring their elimination*. Geneva: World Health Organization.
- Mikláš, Š. et al. (2021). Iodine concentration in milk and human nutrition: A review. *Czech Journal of Animal Science*, 66(6), 189-199. <https://doi.org/10.17221/167/2020-CJAS>
- Hanuš, O. et al. (2008). A comparison of selected milk indicators in organic herds with conventional herd as reference. *Folia Veterinaria*, 52(3-4), 155-159.
- Konečný, R. et al. (2019). Iodine content development in raw cow's milk in three regions of the Czech Republic between the years 2008 and 2018. *Acta Veterinaria Brno*, 88(3), 265-270. <https://doi.org/10.2754/avb201988030265>

Vorlová, L. et al. (2014). Iodine content in bulk tank milk samples in relation to dairy farm size. *Acta Veterinaria Brno*, 83(10), 9-13. <https://doi.org/10.2754/avb201483S10S9>

European Commission Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91.