IN VITRO DERMAL PERMEATION OF HIDROGEL CONTAINING CAFFEINE

Santos, T.C.(1); Oliveira, M.J.A.(1); Azoubel, R.(2); Varca, G.H.C.(1); Lugão, A.B.(1); (1) IPEN; (2) UESB;

Caffeine is a methylxanthine, used as an active dermatological. Your action in subcutaneous adipose tissue leads to lipolysis of the adipocyte, due to the inhibition of phosphodiesterase, being commonly used in the commerce in concentrations of 1 to 3%. Based on these considerations, the objective of this study was to investigate the in vitro permeation of caffeine in a polymeric hydrogel matrix through a natural membrane (Boa constrictor ecdise). The hydrogels were cross-linked and sterilized by colbate-60 gamma-gamma irradiation at 25 kGy, and caffeine was quantified in the assays employing the ultraviolet spectrophotometry methodology at wavelength of 272 nm from aliquots collected from the cell compartment of diffusion type Franz. The experiment showed a satisfactory permeation in period by the two hour in the Franz cell, which is a favorable result for future investigations that certify and the benefits of yours dermal application.