Muscoril (Thiocolchicoside), a muscle relaxant agent with anti-inflammatory and analgesic actions, also is used topically for the treatment of muscular spasms and for rheumatologic, orthopedic, and traumatologic disorders. In this study, thiocolchicoside was formulated to use as foam to avoid contact with the afflicted area during the spreading phase. To enhance drug penetration, various enhancers were added to the base formulation. The tested enhancers were ethoxyethyleneglycol (Transcutol®), highly purified phosphatidylcholine (Lipoid S20), capsaicin, propylene glycol dipelargonate (DPPG), and glycolysed ethoxylated glycerides (Labrafil M1944 CS). The transdermal absorption of the tested formulations containing enhancers, in comparison with base formulation, was evaluated in vitro through rat skin using standard Franz diffusion cells. Base formulation was found to have a higher permeation profile than the simple aqueous and hydroalcoholic solutions of the drug, meaning that the base formulation by itself enhances the drug permeation. Among the tested formulations, only the formulation containing DPPG/ethanol was found to be statistically different, showing an enhancement factor of 3.58. In the same experimental session, Muscoril® ointment, the commercially available pharmaceutical product containing the same thiocolchicoside concentration (0.25%), also was tested. The formulation containing DPPG/ethanol showed a 4.86 times increase of permeability constant in comparison with Muscoril® ointment. The formulation containing DPPG/ethanol as an enhancer could be a good candidate for a new topical foam, considering its good characteristics of permeability and compliance.