

## Effect of Different Model Drugs on the Properties of Model Membranes from Fishes

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**Abstract :** A suitable model membrane to study the pharmacological effect of pharmaceutical products is *human stratum corneum* because this layer of human skin is the outermost layer and it is an important barrier to be passed through. Other model membranes which were also used are for example skins from pig, mouse, reptile or fish. We are interested in fish skins in this project. The advantages of the fish skins are, that they can be obtained from the supermarket or fish shop. However, the fish skins should be freshly prepared and used directly without storage. In order to understand the effect of different model drugs e.g. lidocaine HCl, resveratrol, paracetamol, ibuprofen, acetyl salicylic acid on the properties of the model membrane from various types of fishes e.g. trout, salmon, cod, plaice permeation tests were performed and differential scanning calorimetry was applied.

**Keywords :** fish skin, model membrane, permeation, DSC, lidocaine HCl, resveratrol, paracetamol, ibuprofen, acetyl salicylic acid

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