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# Influence of Surfactant Structure in the Encapsulation and Stability of Amphotericin B in Niosomes

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***SUMMARY*. Bilayer vesicles, such as liposomes and niosomes, are widely known as efficient delivery systems for drugs. Spherical vesicles consisting of amphipatic non-ionic surfactants named niosomes are arranged in one or more concentric bilayers. They can entrap both water and oil soluble substances in the inner aqueous phase and in the vesicular membrane, respectively. Niosomes are studied as an alternative to liposomes because they overcome the disadvantages associated with liposomes. The present study aimed to evaluate noisome formation from different surfactants and the encapsulation of amphotericin B as an amphiphilic model drug. Niosomes of Span 60®, Span 80®, Glyceryl monooleate, Dehydol® LS 2 HN (lauric alcohol 2EO) or Brij ®72 (Polyoxyethylene (2) Stearyl Ether) were prepared with the inclusion of cholesterol (ratio 1:1) by a modified ether injection technique. Two concentrations, 20 and 30 mM were studied. Span 60® and Span 80® 30mM formulations were the most stable and also the ones with higher entrapment capacity.**

*KEY WORDS:* Amphotericin B, Niosomes, Non- ionic surfactant, Vesicular systems.

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