

micelle surface and the core. Solubilisates may also be found in the palisade layer of non-ionic surfactant micelles. The maximum amount of solubilisate which can be incorporated into a given system at a fixed concentration is known as the maximum additive concentration (MAC).

The aqueous solubility of a wide range of drugs has been increased by surfactants, especially for oral and parenteral administrations. For example, solubilization of steroids with polysorbates has allowed their formulation in aqueous ophthalmic preparations, while solubilization of the water-insoluble vitamins A, D, E and K has enabled the preparation of aqueous injections. The surfactant chosen for a particular drug must solubilize the drug and be compatible with it, and all the other components of the solution. For example, the surfactant should not adversely influence the drug's stability. The surfactant must also be non-toxic at the concentration used for the particular route of administration.

The different means of enhancing drug solubility are often used in combination, as one approach is often insufficient to achieve the target drug

concentration in a pharmaceutical solution. For example, pH adjustment and co-solvents are often used in combination.

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