

plant-based product are unknown, which is often the case (Loew and Kaszkin, 2002).

Adverse effects and drug interactions

The public are slowly appreciating the fact that complementary medicines are not necessarily safe plant products simply because they are 'natural'. An increasing number of potential and actual adverse effects have been reported.

Synergy. Synergy is enhancement of the activity of one constituent by more than simply adding the two individual activities. The chances of synergy occurring is increasingly likely with these complex products. The degree of synergy will depend on the concentration of the entities involved, therefore product variability has increased consequences.

Drug interactions. Drug interactions with herbal medicines are poorly researched, however there is always the probability that one medicine will react with the activities of another, especially when they have marked pharmacological activity. The most likely plants to be involved are those which are metabolized by the P450 CYP enzyme system. Echinacea, Garlic, Cloves, Evening Primrose oil and Soy constituents are examples of the major herbs responsible for these interactions. St John's Wort is responsible for the largest amount of data on interactions, and it has proven hepatic enzyme inducing properties (Williamson et al, 2009).

Summary

This chapter covers the use of plant products, featuring conventional and complementary medicines, herbal, homoeopathic and aromatherapy products, and their levels of usage and the numerous forms of plants in use.

Production methods used for plant derived conventional pharmaceuticals and complementary medicines are outlined. Formulation techniques and problems specific to plant products have been discussed.

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