Ancient Chinese and Egyptian papyrus writings describe medicinal uses for plants as early as 3000 BC. In many cases, scientists aren’t sure what specific ingredient in a particular herb works to treat a condition or illness. Whole herbs contain many ingredients, and they may work together to produce a beneficial effect. This is particularly true for the multi-component herbal preparation, STW 5 (Iberogast®; Steigerwald Arzneimittelwerk GmbH, Darmstadt, Germany), which consists of a mixture of 9 standardized extracts: Bitter candytuft (Iberis amara), lemon balm (Melissa officinalis), chamomile (Matricaria recutita), caraway fruit (Carum carvi), peppermint leaf (Mentha piperita), Angelica root (Angelica archangelica), milk thistle (Silybum marianum), celandine herb (Chelidonium majus), and liquorice root (Glycyrrhiza glabra). The anti-ulcerogenic effect of each constituent and their combination was tested in experimentally induced ulcers. Each had a certain anti-ulcerogenic activity but the combination was best. Since the preparation was shown effective clinically in relieving symptoms of functional dyspepsia and irritable bowel syndrome, models of FD were devised in an attempt to establish underlying mechanisms of therapeutic usefulness. STW5 restored the delay in gastric motility and autonomic nerve sensitivity induced by FD. Further experimental models showed that it exerts potent anti-oxidant and anti-inflammatory properties, advocating its efficacy in experimental ulcerative colitis and in reflux esophagitis. Such experimental evidence is of crucial importance both for the manufacturing company as well as for the treating physician. The continuing interaction between academia and industry proves once more to be vital in better understanding of our use of herbal medicines.

Biography

Mohamed T Khayyal graduated from the Faculty of Pharmacy, Alexandria University, Egypt in 1958 and later obtained his PhD from London University (UK) in 1964. He joined the staff of the Faculty of Pharmacy, Cairo University, in 1965. He is a devoted scientist with nearly 100 publications in national and international journals, mainly in the field of Inflammation and Gastro-intestinal Pharmacology. He has received fellowships from the Fulbright and the Alexander von Humboldt Foundations and is a member of many international scientific societies. He is presently President of the Egyptian Society of Pharmacology and Experimental Therapeutics.

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