

Foods, herbs and medicine a blurring of the boundaries

For decades, food has been considered the source of nutrients essential to the biochemical processes which sustain life. The concept of recommending minimum levels of each nutrient to prevent deficiency diseases has prevailed.

Whilst this view still holds true, research into other chemical properties of plant foods has revealed that plant foods hold new secrets to health. Such knowledge is providing valuable keys to our understanding of how different cultural dietary practices affects various aspects of health of whole populations.

To pharmacists, the notion of plants having therapeutic effects should not be unfamiliar. Many of the world's most valuable drugs have had their origins in plants.

IS GINGER A FOOD OR A MEDICINE?

Ginger is a common plant for which the boundaries have become blurred. The culinary expert would see ginger simply as a food, the herbalist would see it as a herb and now the pharmacologist, by isolating its content of a *thromboxane synthetase inhibitor* would classify it as a drug. It is now being marketed globally to perform the role of anti-inflammatory agent with supplements as anti-clotting, anti-nauseant and immune enhancers.

Ginger has been widely used throughout history not just for its role in managing pain and inflammation but also for its other properties. Ginger contains a range of volatile oils including *eucalyptol* and *citral* which may account for its role as a decongestant. It also contains esters of *caprylic acid*, now known to be effective in controlling fungal infestations.

Traditionally, it has been employed as a vasodilator and as a carminative in flatulent dyspepsia at dosages achievable through culinary use.



FOOD, HERB, MEDICINE?

SOY – A FOOD OR A MEDICINE?

The soybean is a plant food, the potential of which is becoming more widely recognized in Western cultures. Its content of *phytoestrogens* has captured the imagination of researchers throughout the world. Whilst it has long been known that soy and a number of other leguminous plants contain weak *estrogenic* compounds, until relatively recently it was thought that these compounds lacked therapeutic activity.

Further studies showed that although rather weak as estrogenic agents, phytoestrogens had an affinity for the estrogen receptor and could therefore exhibit either estrogenic or anti-estrogenic effects. Phytoestrogens can be regarded as 'gentle' *modulators of estrogen activity*.

Soy isoflavones are converted to biologically-active forms by the intestinal microflora. The most studied of these are *genestein* and *daidzein*. Similarly, *lignans* found in grains and especially in linseed, undergo the same activation process in the intestine.

HEALTH IS WEALTH

YOUR HEALTH - IN YOUR HANDS

FOOD IS SO MUCH MORE THAN A SOURCE OF PROTEINS, CARBOHYDRATES, FATS, VITAMINS AND MINERALS. FOOD IS A VIRTUAL PHARMACY OF PLANT CHEMICALS CONTINUOUSLY SENDING MESSAGES TO OUR CELLS – MESSAGES WHICH DETERMINE HOW EFFICIENTLY (OR OTHERWISE) OUR CELLS WILL FUNCTION.

The role of the intestinal microflora is critical to the activation of phytoestrogens. Interestingly, legumes such as soy contain the soluble fibre which is essential for the growth and maintenance of desirable colonic microflora.

In Australia, America and the U.K., legumes play a small part in the overall diet, whereas in Japan, soy intake is regular and significant.

Mediterranean countries consume significant quantities of legumes, not as soy but as chick peas, lima beans, lentils and the like. Like the Japanese, the traditional Mediterraneans consume few dairy products and yet are less prone to osteoporosis than the Australians, Americans and the British. Clearly, there is more to understanding osteoporosis than we may have realised.

A decade ago, it may have been considered heretical to accepted nutritional and medical perspectives to say that diet had something to do with the modulation of endocrine physiology and its effects on health outcomes. Today, a whole new world of nutrition research has appeared.

“A huge ‘library’ of plant chemicals is available to us in the food we eat. What we choose to eat largely determines the state of health of each of the 50 trillion cells which make up the human body.”



FRESH GINGER RHIZOME



PART OF THE HUGE 'LIBRARY' OF PLANT MEDICINES

