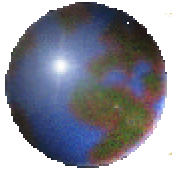


## INTRODUCTION

A number of compounds in our diet have been identified that exert estrogen-like actions in human and other biologic systems.

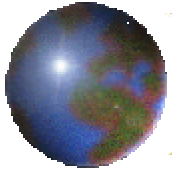
These phytoestrogens are plant derived compounds that mimic the effects of estrogens and may be consumed as a part of a normal diet.



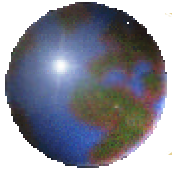
Because of dietary differences, the circulating concentrations of isoflavones are several fold greater in those consuming an Asian diet than seen in those eating the typical Western diet.

Isoflavones mimic some estradiol actions, fail to influence some processes and appear to antagonize others.

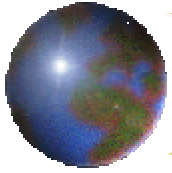
In addition, depending upon diet, such modulation may begin during any stage of a female's life and could last for any length of time.



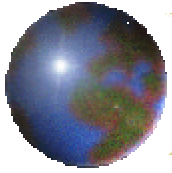
In response to the growing interest in soy, soy products, and isoflavones, numerous products have appeared on the shelves at supermarkets and health food stores and there is a burgeoning public use of phytoestrogen-containing products.



It is reasonable to suppose that in the present minimally regulated setting of the United States, some of these products will either contain what is claimed, will contain only what is claimed, will deliver (have phytoestrogens in a bioavailable form) what is claimed or will be demonstrably effective for what is claimed (indications).



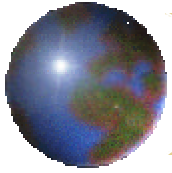
A very small, minority have a well characterized dose-response relationship so that optimal dosing can be selected and appropriate duration of use can be estimated for each indication, have clearly identified safety and toxicity profiles and have specified absolute and relative contraindications.



## **SUMMARY REMARKS**

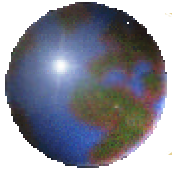
In contrast to the reasonably substantial and growing evidence that dietary isoflavones in foods can have beneficial health effects, we know little about efficacy and safety of most nutritional supplements that are already in the marketplace.

There are no FDA-approved phytoestrogen products and no FDA-approved indications for administration of phytoestrogen supplements in the marketplace.



It is reasonable to suppose that phytoestrogens offer a profile of hormonal actions that have the potential to produce beneficial long term health consequences.

Appropriate phytoestrogen intake can be achieved via dietary modification.



The problem with this recommendation is that many individuals are unwilling to make the concerted, long term changes to their dietary habits that are likely to be necessary for beneficial effects.

Hence, the alternative is the use of supplements for which little data exists about efficacy and safety.