The Northern Herald

FREE EVERY THURSDAY WITH THE SYDNEY MORNING HERALD

THURSDAY, MAY 18, 1995

TELEPHONES: EDITORIAL 413 2155; FAX 412 1461
ADVERTISING 413 2400, FAX 415 3165

THE SOYA DILEMMA

It's been called the protein king, hailed as significant in the fight against cancer and is a staple of the Asian diet. But as AMANDA PHELAN reports, there is strong evidence soya beans may be dangerous...

ONE of the great food trends of the 1990s is soya beans — health food shops recommend them, beautiful people eat tofu made from them, and soya drinks are the non-lactose alternative to milk. There's even tofu ice-cream.

But recent international health studies have found soya bean products can be a serious health risk for adults, and that babies should not be given soy-based infant formulas for long periods.

Investigations by the American Academy of Pediatricians, the

Soy said to put babies at risk

Zealand-based Grayson oratory, the UK-based d Commission and a num- of Australian health norities, including the RO, have found soy prod- may be dangerous for an consumption.

ow, for the first time in tralia, an investigation the effect of soy-based at formulas is to be ied out by the Camper- n Children's Hospital.

owever, a North Sydney ıtist and soy expert, Dr ham Kelly, maintains soy ducts are a huge benefit to itional health, and can ent a number of cancers, ıding those of the breast, tate and colon. Dr Kelly set up a company, Norvet, anufacture soy ingredients a easy-to-take form, similar vitamin supplement.

nd leading nutritionist mary Stanton also dis- es with the warnings nst soy products. In an cle in *New Scientist* maga- , she hailed soya beans as miracle food", citing evi- ce women could substan- y reduce the risk of breast cer by consuming soy ducts.

ut a number of interna- al scientists who have ied soy products are ming increasingly con- ed that phytoestrogen – a nical found in soya beans in stunt growth, damage an reproductive capabili- and even cause infertility women.

tudies from the CSIRO the US Food and Drug ministration have warned babies, pregnant women women wanting to con- may be particularly at One report from the oritative New Zealand- d Grayson Laboratories for prominent warnings e displayed on soy-based at formulas.

More than 25,000 babies in Australia now drink such formulas.

"The composition of soya products should be carefully policed and we strongly endorse the suggestion that warnings about the possible effects of the products should be carried on the packaging," two leading West Australian researchers have warned.

There are two ingredients in soy products which worry scientists: phytoestrogen, a form of the female hormone oestrogen, and trypsin inhibitor, a substance which prevents proteins from being absorbed by the body.

Dr Kelly has received numerous calls from anxious mothers worried about giving their children soy products.

But he dismisses the anti-soy warnings as "scaremongering".

"These are alarmist studies, carried out on animals whose digestive systems are nothing like those of human beings," he said.

"The bottom line is that the level of exposure in children here is no greater than it would be in Asian societies which have maintained a traditional diet based on legumes. Millions of babies have been raised on these products and suffered no ill-effects."

Dr Kelly, who lives in Northbridge, became fascinated with the link between cancer and diet during his term as director of research for the transplant unit at the University of Sydney in the late 1980s.

"I realised there was the capacity, through understanding these plant oestrogens, to have a huge impact on the incidence of cancer in Western societies."

Scientists investigating the positive effects of phytoestrogen have made three important discoveries: it has the ability to protect a wide range of human cells from cancer formation; it can modify how women make oestrogen hormones; and it can reduce calcium loss from the body.

However, a number of experts believe phytoestrogens can be dangerous.

A recent letter from the University of Western Australia's Department of Physiology to the New Zealand Ministry of Health warns that soya flour causes pancreatic cancer in rats.

The letter, a copy of which has been obtained by *The Northern Herald*, is signed by Professors Reginald Morgan and Ken Wormsley, and calls for warnings about toxic effects to be displayed on soya products.

"In a series of studies, we showed that long-term raw soy flour feeding in the rat leads to an increased incidence of 'spontaneous' pancreatic cancers," the letter said.

"We have personally refused to knowingly eat soya products. We have been especially worried about the increasing promotion of soya milk as an alternative to cow's milk."

And a report on the New Zealand study in the British magazine, *The Ecologist*, stated: "The researchers calculated that the biological effects of phytoestrogens typically consumed by a baby drinking soya milk would be 100 times greater than the amount of natural oestrogen the child would receive from breast milk.

"On a weight-for-weight basis, this is equivalent to giving a baby several contraceptive hormone pills a day."

The study carried out by Grayson Laboratories and commissioned by aviculturists Richard and Valerie James has prompted the New Zealand Government to carry out a review of soya-based products for human consumption.

The study was commissioned after the Jameses mysteriously lost 500 birds – all had been fed soy-based ingredients and suffered a range of symptoms from infertility problems, reproductive disorders and death caused by immune system failure.

Other research has shown soy-based stockfeed has caused a number of health problems in a range of animals including sheep, cattle, poultry and rabbits.

Symptoms reported included hemorrhaging, infertility, fits and death.

A CSIRO study in Western Australia found: "Effects of phytoestrogens in domestic animals have been observed in many countries and on all continents. In Australia, plant estrogens cause at least 1,000,000 ewes to fail to lamb each year."

A 1995 report produced for the US Department of Health states: "Studies make it clear that phytoestrogens have some of the same capabilities to induce development toxicity as do other estrogens. Dietary estrogen consumption in humans has become a matter of considerable concern."

However, Dr Kelly said farmers feeding animals soy-based stockfeed are well aware of the potential toxicity.

"Trypsin inhibitors are well known to the stockfeed industry as potential toxins," he said. "The soya included in stockfeed is heated to inactivate these toxins in the same way that soya used in the oriental diet is heated before eating to remove these natural toxic chemicals."

Dr Kelly said he was delighted that the Children's Hospital is to carry out a study on phytoestrogens.

"I'm confident phytoestrogens will soon become a recommended dietary component, along the lines of food vitamins," he said.