

**HAELAN 951 IMPROVES RESULTS OF
CHEMOTHERAPY/RADIATION TREATMENTS**
NF-kB Activity Abrogation

A clinical study was performed using Haelan's fermented soy beverage with 318 cancer patients, 276 patients receiving chemotherapy and the balance radiation, while consuming Haelan's fermented soy beverages. This study, and numerous reports from doctors and cancer patients since the study's completion, confirms the use of Haelan 951, fermented soy beverage, protects cancer patients from the toxic effects of the chemotherapy and/or radiation treatments. Subsequent research and reports show the use of Haelan 951 fermented soy along with chemotherapy and/or radiation treatments results in greater cancer cell deaths by apoptosis than either chemotherapy and/or radiation produces when used individually. Chemotherapy agents are known to induce NF-kB (Nuclear Factor – Kappa Beta) activity, leading to activation of survival factors and thereby resulting in lower cell killing. A study found that cisplatin, docetaxel, and adriamycin chemotherapy agents significantly increased the cancer cell's protective NF-kB pathway activity within two hours of chemotherapy administration allowing many of the cancer cells to survive the treatments. The NF-kB inducing activity of the chemotherapeutic agents were completely abrogated in cells pre-treated with the soy isoflavone genistein producing greater apoptosis with both chemotherapy and radiation treatments.

Haelan 951 effectively treats the Protein Calorie Malnutrition that kills 40-80% of cancer patients. In addition, Haelan 951 is an anti-oxidant with several anti-cancer, including bio-available genistein, other isoflavones, and soy derived compounds that induce apoptosis, anti-angiogenesis, immune stimulating, and other properties that are beneficial to cancer patients. Many oncologists do not recommend the use of anti-oxidants by patients undergoing chemotherapy and/or radiation treatments because they are concerned that anti-oxidants may protect cancer cells resulting in lower cancer cell death rates. Research and case studies show this is not a valid concern for cancer patients who are considering the use of Haelan 951 along with their chemotherapy and/or radiation treatments

Greater cancer cell death is achieved by cancer patients taking Haelan's 951 fermented soy beverage prior to and during treatments with chemotherapy and/or radiation. Researchers at the Department of Pathology, Karmanos Cancer Institute, Wayne State University School of Medicine have determined that one of the main mechanisms involved with the greater cancer cell killing results are attributed to the fact that the soy isoflavone genistein, together with other cellular effects of genistein completely shuts down the NF-kB activity survival mechanism that cancer cells employ. Cisplatin, docetaxel, and adriamycin were the chemotherapeutic agents used with the soy isoflavones pretreatment resulting in increased cancer cell growth inhibition and increased apoptosis induced by the chemotherapy drugs on prostate, breast, and pancreatic cancer cells. Tumor shrinkage with the soy pretreatment was far above the results normally seen with chemotherapy treatments. The soy isoflavone genestein when used with radiation produced 25% cancer cell death by itself, the radiation treatment by itself killed 70% of the cancer cells and the combination of the soy pretreatment and radiation resulted in 85% cell death.

Haelan 951 fermented beverages are a good source of bio-available soy isoflavones, and other soy compounds and metabolites of soy that are beneficial to cancer patients being treated with chemotherapy and/or radiation. For further information, phone 800-542-3526.