The Silver Bullet
For Immune System
Building In The 21st Century!


Includes statements & Research from the following institutions:

BOMB SHELL STUDY REVEALS: A new flax hull extraction process unlocks this super-food's disease-fighting prowess. Stage 4 cancer patients are cancer free within two months. Lung tumor metastasis reduced by 82%. Breast cancer cells driven to mass suicide with Flax Lignans. A human study in which 31% of cancer cells were flat out killed in 30 days. Type 2 diabetes patients have stopped needing shots of insulin. - HSI Health Sciences Institute

Flax Hull Lignans
(Available In Health food Stores Or From A List Of Approved Online Retailers HERE)

What Exactly Is The Buzz? Lignans are phytonutrients widely distributed in the plant kingdom. Lignans can be found in most unrefined grains, legumes, vegetables, and fruits. Whole flax seed (with the shell - very important) has been recognized as the richest source of dietary plant lignans and contains from 75 to 800 times more than any other plant source. Lignans are well known in studies to boost immunity and support immune system function. The founding company that extracts Lignans from flax uses an all natural, cold milled process using no chemicals, so there are no chemical residues and all of the enzymes are left intact. The Flax Hull Lignans that we study are 100% natural with nothing added. WARNING:
There are copycat companies from other countries who are attempting to fabricate the secret to successful extraction utilizing unproven chemical processes which we do not recommend. See our certified requirements HERE.

Can I grind my own flaxseed to get lignans into my diet? You can get a small amount of lignans from doing that, but not nearly enough to make an impacting difference in your body. Concentrated Flax Hull Lignans are far superior because 1 teaspoon is equal to consuming several gallons of whole ground flax seed. You need this quantity of Lignans to boost/super charge your immune system. Scientists have known for 25+ years that successful extraction of concentrated Flax Hull Lignans would result in a complete renovation of the human immune system function. In the past, Lignans could not be extracted successfully because extraction would heat the oils inside the seed and turn the product rancid. However the new “MCP Process™” natural cold milled extraction has given mankind a new opportunity to safely and naturally benefit from the power of Flax Hull Lignans. It’s a 21st century miracle! Once the Flax Hull Lignans have been MCP Process extracted, they still believe they are inside the whole seed shell. Therefore their shelf life seems to be indefinite and they can be stored on a shelf with no refrigeration. The oils are locked inside the Lignans as if they were still inside the virgin seed.

Now that you know a little bit about Flax Hull Lignans, let’s see what our U.S. institutions are saying about Flax Hull Lignans . . . . .

The FDA:
“Flax seed lignans have anti-tumor, anti-mittic, antioxidant and weak estrogenic activity, are potentially the richest source of phytoestrogens in the human diet and may be linked to a low incidence of breast and colon cancer. Their significant ability to prevent cancer is recognized by the National Cancer Institute. In addition to having anti-cancer properties lignans also have anti-viral, anti-bacterial and anti-fungus properties.”


The Mayo Clinic:
“Phytoestrogens are naturally occurring compounds that lower circulating estrogens in your body. Flaxseed is particularly high in one phytoestrogen, lignan, which appears to decrease estrogen production and which may inhibit the growth of some breast cancers.” - The Mayo Clinic http://www.mayoclinic.com/print/breast-cancer-prevention/WO00091/METHOD=print

The American Cancer Society:
“One study of 25 men with prostate cancer found that a low-fat diet along with ground flaxseed reduced serum testosterone, slowed the growth rate of cancer cells, and increased the death rate of cancer cells.” - The American Cancer Society. www.cancer.org/docroot/ETO/content/ETO_5_3X_Flaxseed.asp?sitearea=ETO
**HSI Health Sciences Institute:**
A new process unlocks this superfood’s disease-fighting prowess. Stage 4 cancer patience are cancer free within two months. Lung tumor metastasis reduced by 82%. Breast cancer cells driven to mass suicide with Flax Lignans. A human study in which 31% of cancer cells were flat out killed in 30 days. Type 2 diabetes patients have stopped needing shots of insulin. *(This Full Report Available HERE)*

**AIDS Research & Assistance Institute:**
AIDS Research & Assistance Institute, a non-profit organization has been involved in an ongoing study and implementation campaign with Flax Hull Lignans since 2002. The organizational goals with this program are twofold:

1. To find all natural foods, supplements and substances that can be used to strengthen the immune system and help battle the physical ramifications of AIDS/HIV and the associated diseases that come from a lowered or non existent auto-immune system.
2. To make provision of these all-natural products so that the poor, needy and destitute in 3rd world nations can be given hope, higher quality of life and better physical health during their battle against AIDS/HIV and associated disease. Our main focus is HIV+ children and orphans in the 3rd world in a project that is called *"Project New A.F.R.I.C.A."*, which stands for ‘New Answers For Rural Indigent Communities with AIDS’.

A.R.A.I. has completed 3 anecdotal studies with 100 people in each study taking FHL Flax Hull Lignans the for a 90 day period. Round 1 and 2 were performed in the U.S. in 2003, with round 3 performed in South Africa and Swaziland in 2004. Through the gracious donation process of the founding Flax Hull Lignans flax hull producers *(with the MCP extraction process)* A.R.A.I. was able to supply the studies with adequate lignans free of charge. Due to the complex nature and astronomical expenses associated with clinical studies, as well as the huge gap between normalized clinical studies and 3rd world availabilities, A.R.A.I. uses anecdotal studies. This brings a general understanding of capability, as perceived by those receiving the lignans and those administering the lignans. The anecdotal studies are produced with complete doctor and nurse oversight and with stringent reporting methods.

**Study Results:**
Rounds 1 and 2 were held in the U.S.A., held for 90 days, with 100 volunteers with various diseases and ailments including HIV/AIDS, various cancers including breast cancer, prostate cancer, Lymphoma, bone cancer, arthritis, diabetes, hepatitis C, athlete's foot and more. The study consisted of implementing 2 scoops of Flax Hull Lignans *(equivalent to 3 tsp.)* per day in water, mixed with cereal, foods, etc. Volunteers filled out a full health survey concerning their current ailments, physical and mental condition, pain levels and hopes for what Flax Hull Lignans could help accomplish by strengthening their immune systems. Volunteers agreed to not change medications or lifestyle during the 90 day process. They delivered 30, 60 and 90 day reports giving any noticed changes in health, condition of ailments, etc. During round 1, we realized that 15% of the patients were experiencing constipation with the fibrous content of Flax Hull Lignans. Those 15% either found a way to increase daily water consumption or they backed down to 1 scoop of product per day. 76% of patients studied found
some type of positive response to the product study within 30 days. Many responses were dramatic. 52% of patients had a positive response within the first 60 days, and 91% of patients studied had a positive response within 90 days. Responses included dramatic reduction in size of cancers, reduction in insulin needs with diabetics and blood sugar levels coming into order, HIV/AIDS symptoms decreasing or disappearing, general feeling of vitality, immune CD4 counts strengthening and viral loads diminishing. 9% of patients noticed no change in health during the 90 day study.

**Round 2** brought about 1 change. During round 1, we had noticed that 15% of the participants who had backed down their intake to 1 scoop per day because of constipation issues, those participants still had very positive responses to the product. Therefore, the second 100 participants on Round 2 received only 1 scoop of product (equivalent to 1.5 tsp) per day for 90 days. The results came in the same with 55% of patients having a positive response within the first 30 days, and 90% having a positive response within 90 days, and 0% constipation issues in the group. It was further realized between Round 1 and 2, that those whom had dramatic changes in health during the first 30 days maintained those changes in health through the entire 90 day period, and most of the impact occurred within the first 30 days of the study. Those with dramatic 30 day results had only minimal continued change through the 60 and 90 day period, but maintained the result gained within the first 30 days. Most changes that occurred within the 90 day period - occur primarily within the first 30 days.

**Round 3** was performed in Durban, South Africa, Piet Retief, South Africa and Mbabane, Swaziland (highest AIDS pandemic areas globally). The 90 day study included 1 scoop of product per day for adults and 1/2 scoop of product per day for children 12 and under. All 100 patients were HIV Positive and 75% experienced AIDS symptoms including (cancer, thrush, mental fatigue and lack of focus, diminished strength, swelling of glands and other various AIDS related symptoms). The African people responded more quickly to the study, with 64% having a health change within the first 30 days, and 97% noticing a positive health change within the 90 day study.

The higher levels of response were very interesting, and our group could only assume that the malnutritioned condition of the African people responded more quickly to the powerful nutritional values of the flax lignan product, helping them to increase weight and height, as well as recover from many symptoms of HIV/AIDS.

We are pleased to announce that after 3 rounds of anecdotal studies, we are absolutely confident in the power of Flax Hull Lignans, and their ability to do what we had assumed in the beginning. ARAI has continued to ship Flax Hull Lignans into the hardest hit rural areas of South Africa and Swaziland with future plans for distribution in other areas of the world as supply and funding permits. ARAI has donated approximately $1,000,000 worth of Flax Hull Lignans as of late 2009.

Additional research has been provided by scientists, doctors and other organizations on the benefits of FHL Flax Hull Lignans. At any time you can search “Flax Lignans” on Pubmed.com to see the current studies being done. Here are a few samples of important studies that have been performed in the past:

Karen, one of our first volunteers who tried the Flax Hull Lignans and was dying of AIDS/HIV when we found her. She regained full health with zero (0%) viral load, and her testimony can be read at www.aidsshivawareness.org. Click on “Flax Hull” and then “testimonials”.
LETTER FROM THE NURSE WHO OVERSAW THE A.R.A.I. FLAX LIGNAN STUDY

Personal Note From M.J. Whaley, RN: Thank you for allowing me the opportunity to run this study. I hope to see flax lignans being used in the near future in third world countries in an effort to help those afflicted with HIV/AIDS. I feel this would be an excellent adjunct therapy in the fight of these diseases.

To Whom It May Concern,

My name is Margaret Whaley and I am the RN that worked on the Flax Lignan Study for ARAI. Let me start by saying Dr. Daves had approached me several times to ask me if I would "check out" different products that claimed to have healing properties for HIV/AIDS and cancer. He wanted my professional opinion before starting a study of any product on AIDS/HIV patients. Regarding various products, I returned to him with the answer, "I cannot verify the claims of these products and I am unable to find any research they claim that has been done. Therefore, I would not be willing to ask anyone to try this product."

When he asked me to research the Flax Hull Lignans, I found the amount of research that has been done on flax to be extensive. It is well known that the lignans were the "super chargers" in the flax. I read about the effects on hypertension, high cholesterol, heart disease, diabetes, prostate problems and other hormone specific tumors as in breast cancer, endometrial, colon cancer, and menopausal issues. I was fascinated by what I read. I contacted Dr. Daves and said I would work on this project to check out the flax lignan product. The reason I am telling you this is that I am very particular about what and where my signature is associated. I won't do anything I feel is harmful to anyone. In the past, I had also gone through a life threatening illness and found myself being a "guinea pig" for various medical methods so to speak, and I refused to be a part of that with others.

The studies we performed were totally reliant on the participants and their willingness to provide 30, 60 and 90 day reports. The only problem I had with this study was having to rely on others to share this information with me. Many would tell me of the different powerful changes in their lives, and some wouldn't write the report to make it official. Of course, I was really excited by the written reports that did come in and all of the positive response that the participants were telling me. It made sense that this natural fiber worked so well on so many problems after reading all the research and what participants were telling me. Why wouldn't it work on HIV/AIDS, cancer and other diseases that destroyed the immune system? There were times I could do nothing but jump up and down and praise God when I received the reports. I truly believe in this product, I take the product, I have two siblings and a niece taking the product, and my in laws and many friends from church and in the community take the product.

One of the most remarkable things they see is, that when they stop taking the flax lignans, their cholesterol goes back up, prostate problems return with rising PSA's, blood glucose is not as easily controlled, or breast lumps return. In one participant, her malignant breast tumors went away when she was taking the flax and then they returned when she stopped taking the lignans. Her doctor compared it to Tamoxifen. She is once again taking the flax.

Karen R., with AIDS was the most remarkable participant. She was dying and on hospice care. Three weeks after starting the flax lignan product, she was cooking a chili dinner for ten people! Her viral load went from 360,000 to non-detectable shortly thereafter. She stopped taking the flax lignans faithfully after the study, and her viral loads re-appeared. She has had to return to maintenance doses of her anti-virals, but laughs because her doctor is telling her to walk more as she is gaining too much weight. She did get married about a year after starting the flax lignan program.
I would gladly tell anyone my views on the flax lignans. I have seen it perform "miracles" in the U.S., and the reports from Africa verify what I have seen in this nation. The cost of the flax is so small compared to pharmaceuticals and it helps with so many disease processes. I feel it would help everyone - even healthy individuals could benefit from the flax. The only side effects I have noted were slight flu-like symptoms for the first few days when beginning the flax. I also noticed some constipation or diarrhea that remedied after making adjustments with fluid intake or increasing or lowering flax doses. I found that in severely ill people, one half (1/2) scoop every other day and then a gradual increase to one full scoop (one teaspoon) a day was just as effective as one or two scoops daily and caused less problems than asking them to just take 1 scoop per day from the start. This product also helps with nutritional stabilization by helping to stop the diarrhea and helps increase appetite for extremely ill people. When nutritional support is high quality, the patient naturally gets better. It all works together to improve the immune system.

Sincerely,
Margaret Whaley, RN

__________________________________________________________________________

LETTER FROM THE NURSE WHO OVERSAW THE A.R.A.I. FLAX LIGNAN STUDY IN SWAZILAND

My name is Emma Fishlock; I have been a qualified nurse for 5 years, graduating in the United Kingdom. I have been working with orphans and AIDS stricken children within Swaziland and for Teen Challenge for one year; I started the Flax Lignan programme in November 2005.

Within this period I have monitored the children’s height and weight, rate of sickness and temperament changes. I have also obtained CD4 and Viral Load results from our HIV positive children. I have found that for over half our children there has been a dramatic gain in height and weight. Previous results have shown small growth in the children over a six month period, however over the same amount of time with the flax there has been significant improvement.

Health wise I have found generally the children are not having as many complaints as they had when I first arrived. The children live in a close living environment, sharing rooms and facilities with others. Despite these circumstances, sickness incidents have been surprisingly low. I have also found that the children respond positively to treatment when they are sick, even the HIV positive children recover at a fast rate from serious infections, which some of them get from time to time.

Recent blood results have been encouraging. All of the HIV positive children showed an improvement in their CD4 counts in the last 6 month period. One of the children had a count of 1908 in Feb. 06 after 4 months of Flax Lignans. In Aug. 06 his count was 2077, a haematologist stated that if we retested the child now the results would show him to be HIV negative as his CD4 count is so high!

There has been a dramatic improvement in the children’s temperament and behaviour. Many of our children come from homes and environments of abuse and rejection, which produces negative attitudes and hostile responses. Within many of the children there has been a dramatic improvement. Children who would have normally lashed out and been argumentative, we have found that these children have been submissive and gentle in many situations which normally they would have responded in a negative way. Children who were withdrawn have come out of themselves, and gained confidence and are more settled in their environment.

All these changes have happened since commencing the Flax Lignans. As a health professional, based on the results I have obtained I would recommend this nutritional supplement not only to those in Swaziland but to other nations which suffer from poor nutritional intake and have a poor health status.
Within Swaziland we find ourselves rapidly progressing to an orphan state country as the older generations are dying due to the HIV epidemic. As a result, the number of child-led homesteads is increasing. Poverty levels as a result are severe and this is evident in the physical appearance of many of the children in the communities.

Much of the African diet is based on carbohydrates. There are very few vitamins and minerals in the majority of the food they eat. Because of the levels of nutrients within the Flax Lignans, using this to supplement a very poor diet is having amazing results.

We have found that many people don’t have access to health facilities, and if they do have access, they are unable to pay the large fees associated with healthcare. I feel that the Flax Lignans will reduce the incidence of sickness and increase rates of recovery, thus reducing the need (in some cases) for people to visit medical facilities.

Within our HIV children I have noticed an increase in their CD4 counts, improved health generally, and positive demeanour changes, not only this they have gained in both height and weight. For Aids patients throughout Africa, I believe these kinds of benefits will have a positive effect on the future for many people.

Yours Sincerely,

Miss Emma Fishlock

---

**BREAST CANCER**

_The Lancet, Volume 350, Issue 9083, Pages 990-994, 4 October 1997_

**Case-control study of phyto-oestrogens and breast cancer**

Dr. David Ingram, Katherine Sanders, Marlene Kolybaba, Derrick Lopez

**Background:** Phyto-oestrogens are a group of naturally occurring chemicals derived from plants; they have a structure similar to oestrogen, and form part of our diet. They also have potentially anticarcinogenic biological activity. We did a case-control study to assess the association between phyto-oestrogen intake (as measured by urinary excretion) and the risk of breast cancer.

**Findings/Interpretation:** There is a substantial reduction in breast-cancer risk among women with a high intake (as measured by urinary excretion) of phyto-oestrogens - particularly the isoflavonic phyto-oestrogen equol and the lignan enterolactone. These findings could be important in the prevention of breast cancer.

---

**ANTIOXIDANT**

_Pubmed Report_

Hu C, Yuan YV, Kitts DD.

Food, Nutrition and Health, University of British Columbia, 2205 East Mall, Vancouver, BC, Canada V6T 1Z4

“The flaxseed lignan secoisolariciresinol diglucoside (SDG) and mammalian lignans enterodiol (ED) and enterolactone (EL) were previously shown to be effective antioxidants against DNA damage and lipid peroxidation.”
ENDOMETRIAL CANCER
JNCI Journal of the National Cancer Institute 2003
Pameloa L. Horn-Ross, Esther M. John, Alison J. Canchola, Susan L. Stewart, Marion M. Lee
From the Article, “Phytoestrogen Intake and Endometrial Cancer Risk”

**Background:** The development of endometrial cancer is largely related to prolonged exposure to unopposed estrogens. Phytoestrogens may have antiestrogenic effects. We evaluated the associations between dietary intake of seven specific compounds representing three classes of phytoestrogens (isoflavones, coumestans, and lignans) and the risk of endometrial cancer.

**Methods** involved a case-control study from the greater San Francisco Bay Area. They collected dietary info from 500 African American, Latina, and white women age 35-79 years who were diagnosed with endometrial cancer. Unconditional logistic regression analyses were used to estimate odds ratios and lignan consumptions were inversely related to risk of endometrial cancer.

**Results:** Obese postmenopausal women consuming relatively low amounts of phytoestrogens had the highest risk of endometrial cancer.

**Conclusion:** Some phytoestrogenic compounds, at the levels consumed in the typical American-style diet, are associated with reduced risk of endometrial cancer.

LIGNANS PROTECTIVE AGAINST ATHEROSCLEROSIS

*Pubmed Article*
Spence JD, Thornton T, Muir AD, Westcott ND
Stroke Prevention and Atherosclerosis Research Centre, Siebens-Drake/Robarts Research Institute, 1400 Western Road, London, Ontario N6G 2V2, Canada.

**Background:** Phytoestrogens offer a possible alternative to hormone replacement therapy. Flax seed contains large quantities of a phytoestrogen precursor, secoisolariciresinol diglucoside (SDG), as well as large quantities of alpha-linolenic acid; these factors may be protective against vascular disease. We have previously shown that the rise in blood pressure during mental stress is a strong predictor of atherosclerosis progressions.

**METHODS:** 35 postmenopausal women with vascular disease were treated in a random-sequence double-blind Latin square crossover study comparing three strains of flax seed. **RESULTS:** Compared to the pre-treatment baseline diet, all three strains of flax significantly reduced blood pressure during mental stress induced by a frustrating cognitive task. The strain highest in lignan and lowest in alpha-linolenic acid was associated with the least increase in peripheral resistance during stress, the greatest reduction in plasma cortisol during stress and the smallest increase in plasma fibrinogen during mental stress.

**CONCLUSION:** Flax phytoestrogens ameliorate certain responses to stress and thus may afford protection against atherosclerosis; this hypothesis should be tested in clinical trials.

FLAXSEED MAY PREVENT CANCER AND STUNT CANCER GROWTH

*Article from NDRI.com*

“According to a study led by Duke University Medical Center researchers shown that flaxseed, an edible seed which is similar to a sesame seed, may be able to interrupt the chain of events that leads cells to divide irregularly and become cancerous. One reason could be that as a source of omega-3 fatty acids, flaxseed can alter how cancer cells lump together or cling to other body cells, both factors in how fast cancer cells proliferate. Another could be, lignans may have antiangiogenic properties, meaning they are able to block off a tumor’s blood supply, stunting it’s growth.”
**LIGNANS SUPPRESSED COLON CANCER**  
*Pubmed Article*

Danbara N, Yuri T, Tsujita-Kyutoku M, Tsukamoto R, Uehara N, Tsubura A.  
Department of Pathology II, Kansai Medical University, Moriguchi, Osaka 570-8506, Japan.

**Background:** The mammalian lignan enterolactone (ENL) is produced from plant lignans which are present in large amounts of flaxseed. The effect of ENL on colon cancer cell growth in vitro and in vivo and its mechanisms of action haven't been studied in detail.

**MATERIALS AND METHODS:** The growth of the colo 201 human colon cancer cell line was examined by colorimetric 3-(4,5-dimethylthiazol-2-yl)-5-(3-carboxymethoxyphenyl)-2-(4-sulphophenyl)-2H-tetrazolium (MTS) assay, while the expression of apoptosis and proliferation-related proteins (p53, Bax, Bcl-xL and S, Bcl-2, Caspase-8, Caspase-3 and proliferating cell nuclear antigen (PCNA)) were examined by Western blotting. In vivo tumor growth was examined by transplanting colo 201 cells into ENL-treated and placebo-treated athymic mice. RESULTS: The MTS assay showed that ENL suppressed colo 201 cell growth (IC50 for 72 h: 118.4 microM) in vitro. On flow cytometry, induction of apoptosis was confirmed by the appearance of subG1 populations, while cell cycle progression was not affected. The expression of an apoptosis-suppressing protein (Bcl-2) was down-regulated, an apoptosis-enhancing protein (cleaved form of Caspase-3) was up-regulated, proliferation-related PCNA protein was downregulated and p53, Bax, Bcl-xL and S and Caspase-8 levels were unchanged. ENL, at a dose of 10 mg/kg given 3 times per week by subcutaneous injection, significantly inhibited the growth of colo 201 cells transplanted into athymic mice without any adverse effects.

**CONCLUSION:** ENL suppressed colo 201 human colon cancer cell growth both in vitro and in vivo. The tumor-suppressing mechanisms included apoptosis and decreased cell proliferation.

**LIGNANS KILL CERVICAL CANCER CELLS**  
*OhioLink ETD*

Author: Awad, Keytarn Salem, PHD, Kent State University, College of Biomedical Sciences, 2007

**Inhibiton of Human Papilloma Virus E6 Oncogene Function by Mammalian Lignans Activates the P53 Tumor Suppressor Protein and Induces Apoptosis (Cell Death) in Cervical Cancer Cells**

Invasive uterine cervical cancer represents a major disease burden in women worldwide. Persistent Human Papillomavirus (HPV) infection is the primary risk factor for the development of cervical carcinoma. My research project involves exploring the mechanisms by which natural lignans may suppress viral oncogene function, as a novel approach to inhibit HPV induced precancerous and cancerous lesions. HPV is a small double-stranded DNA virus that contains two viral oncogenes, E6 and E7, that block the actions of the tumor suppressor proteins p53 and Rb, respectively. Our laboratory discovered that the mammalian lignans enterolactone and enterodiol increase the stability of the p53 protein and restore its functions, leading to the expression of downstream targets of p53. These mammalian lignans are derived from the parent plant lignans, secoisolariciresinol and matairesinol, via intestinal modifications of the compounds. My work has demonstrated that treatment with enterolactone represses E6 mRNA levels and E6 and E7 protein levels, with unchanging mRNA levels of p53 in HPV positive HeLa and CaSki cells. These results suggest that the ability of this lignan to induce stability of p53 occurs at a post-translational level. In addition, the functionality of p53 was examined. Induction of downstream targets of p53, such as p21 and Bax protein indicates that the p53 pathway is intact. Detection of apoptosis in cervical cancer cells was measured with a clonogenic survival assay, by activation of caspase 3, by DNA fragmentation using the TUNEL assay, as well as by repression of the anti-apoptotic protein Bcl-2. To test for the genotoxic potential of enterolactone, the comet assay was
performed. The results failed to show formation of comet tails, indicating that no DNA damage was induced by the lignan. Taken together, these data unfold the mechanism by which enterolactone overcomes HPV mediated cell cycle dysregulation. More importantly, my data strongly suggests that a natural product may be useful in treating cervical cancer.

Human papilloma virus, mammalian lignans, p53, E6 oncogene

LIGNANS LOWERS PLASMA CHOLESTEROL & GLUCOSE CONCENTRATIONS IN HYPERCHOLESTEROLAEMIC SUBJECTS

Tumor Hospital and Institute, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China. Lignans, derived from flaxseed, are phyto-oestrogens being increasingly studied for their health benefits. An 8-week, randomised, double-blind, placebo-controlled study was conducted in fifty-five hypercholesterolaemic subjects, using treatments of 0 (placebo), 300 or 600 mg/d of dietary secoisolariciresinol diglucoside (SDG) from flaxseed extract to determine the effect on plasma lipids and fasting glucose levels. Significant treatment effects were achieved (P < 0.05 to < 0.001) for the decrease of total cholesterol (TC), LDL-cholesterol (LDL-C) and glucose concentrations, as well as their percentage decrease from baseline. At weeks 6 and 8 in the 600 mg SDG group, the decreases of TC and LDL-C concentrations were in the range from 22.0 to 24.38 % respectively (all P < 0.005 compared with placebo). For the 300 mg SDG group, only significant differences from baseline were observed for decreases of TC and LDL-C. A substantial effect on lowering concentrations of fasting plasma glucose was also noted in the 600 mg SDG group at weeks 6 and 8, especially in the subjects with baseline glucose concentrations >/= 5.83 mmol/l (lowered 25.56 and 24.96 %; P = 0.015 and P = 0.012 compared with placebo, respectively). Plasma concentrations of secoisolariciresinol (SECO), enterodiol (ED) and enterolactone were all significantly raised in the groups supplemented with flaxseed lignan. The observed cholesterol-lowering values were correlated with the concentrations of plasma SECO and ED (r 0.128-0.302; P < 0.05 to < 0.001). In conclusion, dietary flaxseed lignan extract decreased plasma cholesterol and glucose concentrations in a dose dependent manner.

PMID: 18053310 [PubMed - as supplied by publisher]

LIGNANS FOR INFLUENZA INFECTIONS INCLUDING BIRD FLU

From Grouppe Kurosawa Natural Medicines Public Blog
Dr. Stephen Martin, PHD Immunology, Berkley

TUESDAY, OCTOBER 30, 2007

Can Flax Lignans Control Influenza Infections Including Bird Flu

This essay is republished from our subscription blog in the public interest.

A few years ago, a number of studies were conducted showing that flu shots were much less effective in preventing the flu in the elderly than previously anticipated. This isn't surprising since elderly people have relatively poor immune systems.

In addition, it was determined that two major flu drugs, Symmetrel and Flumadine, are increasingly ineffective against flu infections. In 2005, 14.5% of flu viruses were resistant to these two drugs...up from 1.9% in 2004. In China, 74% of flu viruses are resistant to the drugs. Future prospects for controlling flu virus infections via vaccines and drugs are not promising.
Tamiflu, a new flu virus drug, blocks the uptake of viral particles into cells. Once the virus enters the cell, Tamiflu and other drugs of this nature are useless. They have a VERY short period of effectiveness. And they are very expensive. I believe that flax lignans can both prevent flu virus infections AND effectively treat current infections. This is how it works.

In the last blog, I showed that flax lignans, such as enterolactone, produced in the intestines by bacteria breaking down flax prelignans, can inhibit AKT signaling while increasing the number of p53 molecules in the cells. I firmly believe that these bacterial produced lignans can also block many viral infections, including HIV, hepatitis B/C and influenza.

When viruses enter cells, they stimulate the synthesis of alpha and beta interferon, two immune hormones which control the spread of viruses. A few years ago, scientists found that these interferons activated the gene for p53, a major tumor suppressor. When p53 is activated, it induces apoptosis in the virally infected cells, thereby preventing further viral synthesis. If this biochemical pathway is activated shortly after viral infections, further viral replication is completely inhibited. The following articles can be read online.


Based upon the literature, influenza virus infections can be controlled by BOTH a reduction in AKT activation and an increase in p53 synthesis. P53 deficient cells promote the synthesis of influenza virus. This confirms that p53, induced by alpha and beta interferons, does indeed control the spread of the influenza virus.

Further, influenza virus NS1 protein stimulates the activity of the PI-3k/AKT pathway. This results in the suppression of virally induced cell death while promoting further viral synthesis.

The NS1 structural protein is common to all influenza viruses, including the Bird Flu strain H5N1. However this deadly strain does not induce the synthesis of alpha and beta interferon. In fact, it may act as an antagonist. This means that this deadly virus does NOT induce the synthesis of p53, thereby allowing the continued synthesis of virus from infected cells.

A mutation in the H5N1 Bird Flu NS1 structural protein is responsible for its virulence. This virus is incapable of stimulating the synthesis of alpha and beta interferon, and, correspondingly, the synthesis of p53. Therefore, once infected the virus continues to replicate without constraint. Maybe.

Although alpha and beta interferons can stimulate p53 synthesis, these proteins are not the only factors that can stimulate p53 synthesis. In general, DNA damage and oxidative stress can both stimulate P53 synthesis in the absence of interferon synthesis. Flax lignans can increase the level of p53 in cells by inhibiting the degradation of this molecule. Flax lignans can inhibit AKT activation and promote p53 synthesis.
accumulation in the absence of interferon synthesis. This makes flax lignans an ideal treatment protocol for BOTH the prevention of influenza infections and the control of pre-established influenza viral infections.

**CAN LIGNANS CONTROL HEPATITIS C INFECTIONS?**

*From Groupe Kurosawa Natural Medicines Public Blog*

Dr. Stephen Martin, PHD Immunology, Berkley

This essay is republished from our subscription blog in the public interest. Hepatitis C is more prevalent throughout the world than HIV. However, unlike HIV, most people with HepC infections have no symptoms. The following CDC fact sheet is very informative. [http://www.cdc.gov/ncidod/diseases/hepatitis/c/cfact.pdf](http://www.cdc.gov/ncidod/diseases/hepatitis/c/cfact.pdf) Contrary to popular belief, you do not have to inject drugs with dirty needles to get hepatitis C. Sharing a razor or toothbrush with someone with hepatitis C can transmit the virus. Its all about blood to blood exchange. According to the World Health Organization, 180 million people are affected by HepC worldwide. 130 million are chronic carriers of the virus who will eventually develop hepatitis and possibly liver cancer. 3 million people a year become infected with HepC with 70% becoming chronically infected. 76% of all liver cancers are caused by chronic hepatitis C infections. Interferon alpha2b and ribavirin are two drugs approved to treat HepC infections. If treated early, these drugs can inhibit viral synthesis, but probably not forever. These drugs are also VERY expensive which makes them available only to a select few.

I have already written essays on the use of flax lignans as a treatment for HIV and influenza virus infections. I believe these powerful lignans can also be used to treat both early and late HepC infections. As cited previously, flax lignans, produced in the intestines by the bacteria mediated conversion of pre-lignans to lignans, inhibit the activation of the survival enzyme AKT while promoting the increased synthesis of p53, the major apoptosis or cell death protein in the cell.

Since interferon alpha2b, the current treatment for HepC infections, also increases the level of p53, it is noteworthy that flax lignans do the same. And flax lignans are dirt cheap compared to incredibly expensive drugs like alpha interferon.

As discussed in previous essays, both alpha and beta interferons stimulate the synthesis of p53 in cells. This response protects cells against viral infections and the development of cancer.

In the latter, hepatitis phases of HepC infections, various viral proteins bind and inactivate the p53 protein. However, this response does not occur in the non-inflammatory (most dominant) earlier phases of the infection.

A number of HepC proteins, including NSSA, bind to the PI-3k enzyme and activate it. This enzyme activates the kinase AKT, which promotes the survival of cancer and virally infected cells. AKT promotes the survival of HepC infected cells and promotes a steady state level of HepC replication. The activation of AKT further promotes the development of hepatitis and eventually liver cancer.

In summary, HepC activates AKT which promotes the survival of infected cells, AND their transition to liver cancer. Alpha interferon drugs increase p53 which kills virally infected cells. Flax lignans can accomplish both of these goals inexpensively. First, they inhibit the activation of AKT. Second, they increase the level of p53 in cells. Flax lignans could be a very powerful natural medicine for the treatment of 130 million chronic HepC carriers.
LIGNANS INHIBIT GROWTH AND DEVELOPMENT OF PROSTATE CANCER BY TRIGGERING APOPTOSIS

Chen LH, Fang J, Li H, Demark-Wahnefried W, Lin
Institute for Nutritional Sciences, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, and Graduate School Chinese Academy of Sciences, Shanghai, China.

The mammalian lignan enterolactone is a major metabolite of plant-based lignans that has been shown to inhibit the growth and development of prostate cancer. However, little is known about the mechanistic basis for its anticancer activity. In this study, we report that enterolactone selectively suppresses the growth of LNCaP prostate cancer cells by triggering apoptosis. Mechanistic studies showed that enterolactone-induced apoptosis was characterized by a dose-dependent loss of mitochondrial membrane potential, release of cytochrome c and cleavage of procaspase-3 and poly(ADP-ribose)-polymerase (PARP). Caspase dependence was indicated by the ability of the pan-caspase inhibitor z-VAD-fmk to attenuate enterolactone-mediated apoptosis. Mechanistic studies suggested roles for Akt, GSK-3beta, MDM2, and p53 in enterolactone-dependent apoptosis. Our findings encourage further studies of enterolactone as a promising chemopreventive agent against prostate cancer.

PMID: 17876055 [PubMed - indexed for MEDLINE]

LIGNANS MAY HAVE A THERAPEUTIC ROLE IN LUPUS

Clark WF, Muir AD, Westcott ND, Parbtani A. Department of Medicine, London Health Sciences Centre and The University of Western Ontario, Canada. william.clark@lhsc.on.ca

BACKGROUND: Flaxseed has renoprotective effects in animal and human lupus nephritis. We have recently extracted the lignan precursor (secoisolariresinol diglucoside) (SDG) to determine if this more palatable derivative of flaxseed would exert renoprotection similar to the whole flaxseed in the aggressive MRL/lpr lupus mouse model.

METHODS: 131 MRL/lpr mice were randomly assigned to saline gavage, 600, 1,200 and 4,800 microg lignan gavage groups. At 7 weeks, 6 animals underwent platelet aggregating factor (PAF) lethal challenge and 40 were studied with urine collection to determine the levels of secoisolariresinol, enterodiol and enterolactone in the gavaged animals. A baseline study of 10 saline gavaged animals took place at 6 weeks. 25 animals in the saline gavage, 600 and 1200 microg lignan groups were studied at 14 and 22 weeks for GFR, spleen lymphocyte S-phase and organ weight studies.

RESULTS:
Metabolic studies indicated that secoisolariresinol is the major metabolite absorbed and the lowest lignan dose provides a lengthening in survival for the PAF lethal challenge. Body weight, fluid and water intake studies demonstrated that the lignan was well tolerated. Changes in proteinuria, GFR and renal size showed a time and dose-dependent protection for the lignan precursor. Cervical lymph node size and spleen lymphocyte cells in the S-phase demonstrated modest dose-dependent reductions in the lignan gavaged groups.

CONCLUSION: SDG was converted in the gut to secoisolariresinol, which was absorbed and well tolerated by the MRL/lpr mice. Renoprotection was evidenced, in a dose-dependent fashion, by a significant delay in the onset of proteinuria with preservation in GFR and renal size. This study suggests that SDG may have a therapeutic role in lupus nephritis.

A novel treatment for lupus nephritis: lignan precursor derived from flax.
PMID: 10981647 [PubMed - indexed for MEDLINE]
DIETARY SUPPLEMENTATION WITH LIGNANS REDUCES EXPERIMENTAL METASTASIS OF MELANOMA CELLS IN MICE

*Pubmed Article*

Li D, Yee JA, Thompson LU, Yan L.
Department of Biomedical Sciences, Creighton University School of Medicine, Omaha, NE 68124-0405, USA.

We investigated the effect of dietary supplementation with secoisolariciresinol diglycoside (SDG), a lignan precursor isolated from flaxseed, on experimental metastasis of B16BL6 murine melanoma cells in C57BL/6 mice. Four diets were compared: a basal diet (control group) and the basal diet supplemented with SDG at 73, 147 or 293 micromol/kg (equivalent to SDG provided in the 2.5, 5 or 10% flaxseed diet). Mice were fed the diet for 2 weeks before and after an intravenous injection of 0.6 x 10^5 tumor cells. At necropsy, the number and size of tumors that formed in the lungs were determined. The median number of tumors in the control group was 62, and those in the SDG-supplemented groups were 38, 36 and 29, respectively. The last was significantly different from the control (P < 0.01). Dietary supplementation with SDG at 73, 147 and 293 micromol/kg also decreased tumor size (tumor cross-sectional area and volume) in a dose-dependent manner compared with the control values. These results show that SDG reduced pulmonary metastasis of melanoma cells and inhibited the growth of metastatic tumors that formed in the lungs. It is concluded that dietary supplementation with SDG reduces experimental metastasis of melanoma cells in mice.

FLAXSEED LIGNANS INHIBIT METASTASIS AND DECREASES EXTRACELLULAR VASCULAR ENDOTHELIAL GROWTH FACTOR IN HUMAN BREAST CANCER XENOGRAFTS

*Pubmed Article*

Dabrosin C, Chen J, Wang L, Thompson LU.
Department of Nutritional Sciences, Faculty of Medicine, University of Toronto, 150 College Street, ON, M5S 3E2, Toronto, Canada.

Angiogenesis is important in tumor growth, progression and metastatic dissemination. Vascular endothelial growth factor (VEGF) is one key factor in promotion of breast cancer angiogenesis. VEGFs are bioactive in the extracellular space where they become available to the endothelial cells. Phytoestrogens such as lignans have been shown to alter breast cancer incidence and be cancer-protective in rats. We show that supplementation of 10% flaxseed, the richest source of mammalian lignans, to nude mice with established human breast tumors reduced tumor growth and metastasis. Moreover, flaxseed decreased extracellular levels of VEGF, which may be one mechanistic explanation to the decreased tumor growth and metastasis.

TESTIMONIALS:

Charles, Ohio  **Hepatitis C**

Flax Hull Lignans have helped me immensely. I am 61 yrs. old and suffer from chronic Hepatitis C, diagnosed at Cleveland Clinic in 1970, as “Chronic Active Non-A / Non-B” and finally as HCV some years later when this type became a known strain. Taking the good Dr's advice I have been on Flax Hull Lignans for some time. I just saw the Doctor and my liver battery tests were all normal. This included almost a 10% drop in my viral load as well. That's just short of amazing isn't it!! I can't thank you enough for your product. I hope to see a further reduction in my viral load again next year! Here's to better health. Best Regards.
Albert, California, Cancer

“For 10 to 12 years I have had re-occurrences of basal cell skin cancer. dermatologists have used many different methods to remove the skin cancer. About 3 years ago I began to have to have basal cell cancers 1 to 3 at a time, removed every 2 months. I began taking the Flax Hull Lignans in May of 2008 & I have not had to have a basal cell cancer removed in the last year. So I was taking it almost a year & the cancers have stopped. I personally believe it is because I am taking the Flax Hull Lignans.”

Murray, Toronto, Canada, Lymphoma Cancer

“About 5 years ago, I developed a lump in my groin and was diagnosed with lymphoma. This was removed surgically and treated with radiation. The following year a lump developed in the other groin and was treated in a similar fashion. A third lump was treated with radiation. When a fourth one appeared the following year, my oncologist suggested non treatment, as he advised that I would continue to have these tumors for the rest of my life. The lump continued to grow in size. In the Summer of 2008, I read about your lignans and decided to give them a try. In December I noticed that the lump was shrinking and within 2 weeks disappeared completely. My doctor was impressed but assured me that the condition would return. I check each day and so far it has not. I have recommended lignans to several other friends and family members and continue to feel that they are a miracle.”

Ruth, Canada, Cancer

“I give out 1 container free to friends that are ill and then ask them to order their own supply. Friends with cancer have been improving greatly. One lad in Alberta is telling everyone her diabetes is pretty well gone. A great product!”

Renee, Texas, Shingles

“I've had a viral problem much like shingles, though one of my doctors does believe that it is shingles. Since taking the Flax Hull Lignans, I feel they are helping me control the virus. My spots are dropping off and I feel more energy now.”

Dianne W., Bipolar

“My husband is bipolar and I've had serious trouble with electrolyte imbalance for years. We've learned to manage his bipolar and heal our bodies with diet therapy, but nothing has benefited us as strongly and quickly and steadily as the flax hull lignans!” - Dianne Wandruff

M, Colorado, Brain Cancer

“Last January I got some flax hull lignans for a friend who had a brain tumor. She is a young mom and was devastated to be told that it would keep growing back and that she could expect only about 5 more years of life. She started taking the FHL in December and a recent MRI showed that the brain tumor has actually shrunk in size, much to her doctor's surprise. Not only that, she hasn't been sick a day since she started taking it!”

Musa, AIDS Testimony - Tanzania

We have a new orphanage in Tanzania just trying the flax hull lignans. Here is an email report that came into our office this week! This shows the amazing, explosive nutritional benefits of FHL.

Subj: Amazing Flax Report from Tanzania!
Musa, is only one year old and has HIV. He was given the flax lignans and they documented his case well. At the start he weighed only 3.5 kgs, which is only 7.7 pounds! After just 30 days he grew to 6.5 kgs, which is 14.3 pounds, which means his weight almost doubled in only 30 days! It also means he is now only 2 pounds behind what a normal one year only should weigh!

C.S., Prostate Cancer

Hello to all. Here is what Flax Hull Lignans produced in my life.

I have Prostate cancer, with metastases in my bones, knees, hips, shoulders & several other places in my back. It’s too late for chemo or radiation. I did receive radiation in my leg to relieve some pain. In May 2008 my doc decided to give me four chemo treatments to lower my p.s.a. count. Nothing was working to bring it down at the time it was fifty some, chemo would (hopefully ) bring it back to a more acceptable level. After 4 treatments it was now in the month of July a reading revealed 94.7, so the doc stopped everything. At that time The good Lord provided for me to receive info about Flax Hull Lignans He even sent some cans. I started immediately on it. In Sept. my p.s.a. was 46.2 ....from 94.7. In Oct. .....43.1 Still going down. By provision from the good Lord again we got info. from the doc. on Budwig diet. So now I am taking flax lignans & Budwig diet plan every day.

Back to the doctor in January 2009. My P.S.A. now is 26.3 Also my night trips to the bathroom are reduced to one. Am still taking morphine. This is a great forest fire ( the doctor said ) so flax lignans & Budwig protocol have a big job to do with the help of the Lord. First I was given 18 months, to live. It will be 3 years as of Feb. 2009

Tone L., Eagle Point, OR Used For Dog

Last night I added 1/20 th of a scoop to Zuesie's food, and poured pan gravy over it. Today, the mucus discharge in his eyes was 70% less. He pranced during our walk, smiling all the way, and had a restful sleep last night, with no allergy symptoms. "NEXT DAY": 85% less mucus discharge. Easier breathing, better appetite!

James L., Oakland, MD, Post Cancer Health

I have used FHL for about a month and a half. I do not have AIDS. I only have one lung. The other was removed for cancer. I was on two inhalers. These were taken about three times a day. In the past month I have not used any of these. My oxygen for my lung is about 92%. I still have a little trouble going up the 14 steps in my basement. I recover very fast and can do my every day things. I am 69 years old and have not felt this good in many years.

Herald, by wife Shirlee in Ohio, Prostate Cancer

When my husband first started taking the Flax Hull Lignans 5 months ago, his PSA dangerously high. After taking the lignans for a month, his PSA had dropped by 40%. Then having it checked another time, it was only slightly above normal levels for his age. The last check showed PSA levels at normal levels. Our doctor initially mentioned that there were some discrepancies. Basically, he was questioning what was making my husband better, the doctor’s prescription for increased appetite or the Flax Hull Lignans. However, his is doing so well at this time he no longer needs the appetite medication. Also, the nurses in the office have been following right along with my husband's case and they told me that they'd never seen such a drastic drop in PSAs. The doctor has recently told my husband to stop taking what he was giving him and only continue on the flax. My husband has a lot less pain and is starting to gain back his weight!
Pastor Len Weston -- Director of South African Orphanage In Piet Retief, South Africa

I called Frans yesterday in regard to the whole flax situation. As we are running out of supplies. We have had some breakthroughs & some of our AIDS orphans are being maintained. The one young AIDS child, Lindiwe- who turned five on Sunday- should not be living, but with prayer & the flax- she is still here. Another AIDS orphan that came in with a pot belly is now looking much better since being on flax. We now have 21 orphans & we are hoping to have over 40 by the end of the year.

Several other good reports- one man with sugar diabetes has been able to reduce his insulin. Another man has been able to build up his immune system. Another lady who was continuously on blood pressure & sinus tablets, plus she had a growth in her uterus, has the following to say:

... Flax was given to me in January 2004. I feel like a different person health wise. I'm not taking any medication at this point. Thank you!

In Swaziland, we have several on the flax & so you can see from the reports, we are in need of getting a regular supply. The problem being, the majority of the orphans- there is no funding available. So whatever you can do over there would be a great blessing. The sooner we can get a constant supply, the better.

More Testimonies Available At A.R.A.I. Web Site HERE

----------------------------------

Will you consider donating to help us provide Flax Hull Lignans to AIDS orphans in the third world who would otherwise die with no hope? Your donations are tax deductible. DONATE HERE . With your help, we will send Flax Hull Lignans around the world!

AIDS Research & Assistance Institute

501(c)3 Non Profit #43-1926762
P.O. Box 179
Mansfield, TX 76063
Will you help kids with HIV & AIDS?

Sponsor a Bucket for only $995 (Plus Shipping)

- Naturally boost their immune systems
- Get missing Omega 3’s in their diets
- Beat malnourishment
- Have hope and health after the diagnosis of AIDS/HIV
- One Bucket supplies 15 orphans a year!

Shipped more than $1 million worth so far!

Donate here
Flax Hull Lignans Are Available In The U.S. & Abroad

FHL Flax Hull Lignans are available in the U.S. through your local health food store or through online health companies.

**WARNING:** Attempts have been made to fabricate the FHL Flax Lignans through chemical extraction processes or through non traditional mill extraction in other countries, rather than the official "MCP Process" for cold milled extraction. As a result, they are only extracting 1 lignan rather than the 17 Lignans that are extracted through the MCP Process.

Make sure that your Flax Hull Lignans are cold milled extracted using the MCP Process in the U.S.A. A.R.A.I. has certified that these companies sell the original Flax Hull Lignans with the MCP Process in a 30 day or 90 day supply.

www.naturalhealthnation.com
www.LU-17.com
www.flaxlignanhealth.com

Alternatively, you may do an internet search for “FLAX HULL LIGNANS” or “FHL”. Please be sure that the Flax Hull Lignans that you order state that they use the MCP Process.
Links To Further FHL Flax Hull Lignan Studies:

Health Science Institute Article

AIDS Research & Assistance Institute Study Results On Flax Hull Lignans

A.R.A.I. Nurse (Emma Fishlock) Update Report From Swaziland

The Power Of Lignans

Mayo Clinic Breast Cancer Study

National Cancer Institute Study On Lignans #1

National Cancer Institute Study On Lignans #2

Flax Lignans Cancer Research References, Abstracts & Summaries

AIDS Update Video (A.R.A.I.) In Africa

From H.S.I. Newsletter:

Flax Lignans & Cancer
Flax Lignans & Breast Cancer
Flax Lignans & Endometrial Cancer
Flax Lignans & HIV/AIDS
Flax Lignans & Atherosclerosis
Flax Lignans & Bird Flu
Flax Lignans & Bone Cancer
Flax Lignans & Cardiovascular Disease
Flax Lignans & Cholesterol Lowering Capabilities
Flax Lignans & Colon Cancer
Flax Lignans & Colorectal Cancer
Flax Lignans & Diabetes
Flax Lignans & The FDA
Flax Lignans & Hair Loss & Thinning
Flax Lignans & Influenza
Flax Lignans & Irregular Heartbeat
Flax Lignans & Liver Protection
Flax Lignans & Lung Cancer
Flax Lignans & Malnutrition, Weight & Height Gain
Flax Lignans & Ovarian Cancer
Flax Lignans & Uterine Cancer
Flax Lignans & Prostate Health
Flax Lignans & Lupus
Flax Lignans & Swine Flu