Re: Omega−3 is NOT a Cancer or Heart−Disease Preventive

Source: http://sci.tech−archive.net/Archive/sci.med.nutrition/2008−02/msg00172.html

- *From*: "ironjustice@xxxxxxx" <ironjustice@xxxxxxx>
- *Date*: Thu, 14 Feb 2008 04:53:04 −0800 (PST)

On Feb 8, 10:23 pm, Taka <taka0...@xxxxxxxxx> wrote: those studies showing ALA is associated with more invasive prostate cancers while fish oil "prevents" it? <<

Seeing the food sources below are what you seem to be talking about .. vegetables / high ALA .. I would say this study contradicts your .. findings.

Source: Fred Hutchinson Cancer Research Center Released: Wed 13−Feb−2008, 09:00 ET

Newswise −− Men who eat a diet low in fat and red meat but high in vegetables and lean protein and who drink alcohol in moderation may not just be doing their hearts a favor. A new study shows that such a heart−healthy diet may also be good for the prostate.

Specifically, such a diet significantly decreases the risk of symptomatic benign prostatic hyperplasia, or BPH. The bothersome condition is associated with frequent and painful urination that affects about half of all men by the time they reach 50 and nearly all men by age 70. These findings by lead author Alan Kristal, Dr.P.H., and colleagues are published online in the American Journal of Epidemiology.

The researchers found that a high−fat diet increased the risk of benign enlargement of the prostate by 31 percent, and that daily consumption of red meat increased the risk by 38 percent. The study also found that eating four or more servings of vegetables daily was associated with a 32 percent reduction in risk, consuming high amounts of lean protein (about 20 percent of daily calorie intake) was associated with a 15 percent risk reduction, and that regular, moderate alcohol consumption (no more than two drinks a day) was associated with a 38 percent decline in BPH risk.

"It is known that obesity increases the risk of BPH. The dietary pattern that is associated with obesity among men in the United States is high fat consumption. The results of this study clearly show a link between a high−fat diet and increased risk of BPH," said Kristal,

member and associate head of the Cancer Prevention Program in the Public Health Sciences Division at the Hutchinson Center.

Prostate enlargement puts pressure on the urethra, which makes it difficult to empty the bladder completely, which in turn results in the frequent urge to urinate. BPH is also associated with constant contraction of the prostate gland's smooth−muscle tissue, which also puts pressure on the urethra.

The mechanisms behind excess fat intake and increased risk of BPH are not clearly established, but likely factors include chronic inflammation and changes in steroid hormones.

"We don't really know how it's working but it's pretty clear that eating a high amount of fat − and it doesn't appear to matter what kind of fat − increases the risk of BPH," Kristal said.

The study found small, incremental increases in BPH risk as fat intake increased, with the most substantial risk − more than 30 percent − among men who got about 40 percent of their calories from fat.

High fat intake increases the body's overall inflammatory response and it also increases levels of circulating hormones such as estrogens and androgens, he said, both of which may affect prostate tissue. In contrast, a low fat, high vegetable and moderate alcohol consumption pattern is associated with less obesity, lower circulating estrogens and androgens and less stimulation of the sympathetic nervous system.

"It is possible that these physiological effects moderate both the hormonally regulated prostate growth and heightened smooth−muscle tone that cause BPH," the authors wrote.

The mechanism by which moderate alcohol consumption appears to protect against BPH may be due to its effects on the production and metabolism of testosterone, Kristal said. Moderate alcohol use lowers circulating hormones and decreases muscle tone of the prostate.

Few studies to date have examined dietary patterns and BPH risk, and most have been small and have collected very limited data.

For the current study, Kristal and colleagues assessed diet, supplement use and alcohol consumption in 4,770 men for seven years, 876 of whom developed symptomatic BPH. They collected the data in the context of a larger randomized clinical trial that aimed to determine whether finasteride, a drug used to treat BPH, would also prevent prostate cancer. The men involved in this analysis, all 55 and older, participated in the placebo arm of the finasteride trial. All were free of BPH symptoms at the start of the study and received annual screening for signs of prostate enlargement.

"Being able to study men in the placebo arm who weren't taking

finasteride allowed us to look at factors other than finasteride to predict BPH risk," Kristal said.
The study found no evidence that specific supplements, such as antioxidants, zinc or calcium, were associated with reduced risk.

Co−authors on the paper included researchers from the Hutchinson Center, the Keck School of Medicine at the University of Southern California and the University of Texas Health Sciences Center at San Antonio. The National Institutes of Health funded this research.

At Fred Hutchinson Cancer Research Center, our interdisciplinary teams of world−renowned scientists and humanitarians work together to prevent, diagnose and treat cancer, HIV/AIDS and other diseases. Our researchers, including three Nobel laureates, bring a relentless pursuit and passion for health, knowledge and hope to their work and to the world. For more information, please visit fhcrc.org.

−−

Who loves ya.
Tom

Jesus Was A Vegetarian!
http://jesuswasavegetarian.7h.com

Man Is A Herbivore!
http://tinyurl.com/a3cc3

DEAD PEOPLE WALKING
http://tinyurl.com/zk9fk

> On Feb 9, 12:36 pm, ironjustice <teamtan...@xxxxxxxxxxx> wrote:
>
> > On Feb 8, 7:07 pm, Taka <taka0...@xxxxxxxxx> wrote:Do you remember those studies showing ALA is associated with more invasive prostate cancers while fish oil "prevents" it? <<

No actually .. I .. don't ..

J Nutr. 2004 Apr;134(4):919−22.

Dietary alpha−linolenic acid is associated with reduced risk of fatal coronaryheart disease, but increased prostatecancerrisk: a meta−analysis.

Brouwer IA, Katan MB, Zock PL.
Wageningen Centre for Food Sciences, Wageningen, the Netherlands.

The objective of this meta−analysis was to estimate quantitatively the associations between intake of alpha−linolenic acid [ALA, the (n−3) fatty acid in vegetable oils], mortality fromheart disease, and the occurrence of prostatecancerin observational studies. We identified 5 prospective cohort studies that reported intake of ALA and mortality fromheart disease. We also reviewed data from 3 clinical trials on ALA intake andheart disease. In addition, we identified 9 cohort and case−control studies that reported on the association between ALA intake or blood levels and incidence or prevalence of prostatecancer. We combined risk estimates across studies using a random−effects model. High ALA intake was associated with reduced risk of fatalheartdiseasein prospective cohort studies (combined relative risk 0.79, 95% CI 0.60−1.04). Three open−label trials also indicated that ALA may protect againstheart disease. However, epidemiologic studies also showed an increased risk of prostatecancerin men with a high intake or blood level of ALA (combined relative risk 1.70; 95% CI 1.12−2.58). This meta−analysis shows that consumption of ALA might reduceheartdiseasemortality. However, the association between high intake of ALA and prostatecanceris of concern and warrants further study.
PMID: 15051847

Int JCancer. 2007 Oct 1;121(7):1571−8.

Risk factors for prostatecancerincidence and progression in the health professionals follow−up study.

Giovannucci E, Liu Y, Platz EA, Stampfer MJ, Willett WC.
Channing Laboratory, Department of Medicine, Harvard Medical School and Brigham and Women's Hospital, Boston, MA 02115, USA. edward.

Risk factors for prostatecancercould differ for various sub−groups, such as for "aggressive" and "non−aggressive" cancers or by grade or stage. Determinants of mortality could differ from those for incidence. Using data from the Health Professionals Follow−Up Study, we re−examined 10 factors (cigarette smoking history, physical activity, BMI, family history of prostatecancer, race, height, total energy consumption, and intakes of calcium, tomato sauce and alpha−linolenic acid) using multivariable Cox regression in relation to multiple subcategories for prostatecancerrisk. These were factors

that we previously found to be predictors of prostatecancerincidence or advanced prostatecancerin this cohort, and that have some support in the literature. In this analysis, only 4 factors had a clear statistically significant association with overall incident prostatecancer: African−American race, positive family history, higher tomato sauce intake (inversely) and alpha−linolenic acid intake. In contrast, for fatal prostatecancer, recent smoking history, taller height, higher BMI, family history, and high intakes of total energy, calcium and ***** alpha−linolenic acid ***** were associated with a statistically significant increased risk. Higher vigorous physical activity level was associated with lower risk. In relation to these risk factors, advanced stage at diagnosis was a good surrogate for fatal prostatecancer, but high−grade (Gleason >/= 7 or Gleason >/= 8) wasnot. Only for high calcium intake was there a close correspondence for associations among high−gradecancer, advanced and fatal prostatecancer. Tomato sauce (inversely) and alpha−linolenic acid (positively) intakes were strong predictors of advancedcanceramong those with low−grade cancers at diagnosis. Although the proportion of advanced stage cancers was much lower after PSA screening began, risk factors for advanced stage prostate cancers were similar in the pre−PSA and PSA era. The complexity of the clinical and pathologic manifestations of prostatecancermust be considered in the design and interpretation of studies.
PMID: 17450530

BJU Int. 2006 Feb;97(2):270−3.

Prostate tissue and leukocyte levels of n−3 polyunsaturated fatty acids in men with benign prostate hyperplasia or prostatecancer.

Christensen JH, Fabrin K, Borup K, Barber N, Poulsen J.
Department of Nephrology, Aalborg Hospital, Aarhus University Hospital, Aalborg, Denmark.

OBJECTIVE: To compare the levels of n−3 polyunsaturated fatty acids (PUFAs) in leukocytes and prostate tissue in men with prostatecancer or benign prostatic hyperplasia (BPH), as dietary intake of n−3 PUFAs has been linked to the risk of prostatecancer; the prostate−specific antigen (PSA) level was also compared to prostate tissue levels of n−3 PUFAs. PATIENTS AND METHODS: Prostate tissue was obtained and leukocytes isolated from 20 men with prostatecancerand 35 with BPH. The n−3 PUFAs alpha−linolenic acid (ALA), eicosapentanoic acid (EPA) and docosahexaenoic acid (DHA) were measured in prostate tissue and in peripheral blood leukocytes using gas chromatography. PSA levels were measured in all of the men. RESULTS: There was a strong positive correlation between EPA and DHA in leukocytes and in prostate tissue (EPA: r = 0.80, DHA: r = 0.53, both P < 0.001) in all the men, whereas there was no association between the content of ALA in leukocytes and in prostate tissue (r = −0.15). Men with BPH had similar levels of ALA in leukocytes and in prostate tissue, but men with prostatecancerhad more ALA in prostate tissue than in leukocytes. The PSA level was

significantly positively correlated with ALA level in prostate tissue (r = 0.42, P < 0.01) but there was no significant correlation between PSA level and EPA and DHA levels. There were no significant correlations between PSA level and n−3 PUFA levels in leukocytes. CONCLUSION: Dietary intake of the marine n−3 PUFAs reflected in EPA and DHA levels in leukocytes are also reflected in EPA and DHA levels in prostate tissue in men with and without prostatecancer. However, there is a discrepancy between the levels of ALA in leukocytes and in prostate tissue, with higher levels in men with prostatecancer. This is in accordance with the strong positive association between PSA and ALA levels in prostate tissue. This study therefore doesnotsupport the hypothesis that intake of marine n−3 PUFAs might protect against prostatecancer, but lends support to the ***** deleterious role of ALA in the development of prostatecancer*****.
PMID: 16430627

Am J Clin Nutr. 2004 Jul;80(1):204−16.

Dietary intake of n−3 and n−6 fatty acids and the risk of prostatecancer.

Leitzmann MF, Stampfer MJ, Michaud DS, Augustsson K, Colditz GC, Willett WC, Giovannucci EL.
Nutritional Epidemiology Branch, Division ofCancerEpidemiology and Genetics, NationalCancerInstitute, National Institutes of Health, Department of Health and Human Services, Bethesda, MD 20892, USA.

BACKGROUND: Laboratory studies have shown that n−3 fatty acids inhibit and n−6 fatty acids stimulate prostate tumor growth, but whether the dietary intake of these fatty acids affects prostatecancerrisk in humans remains unclear. OBJECTIVE: We prospectively evaluated the association between intakes of alpha−linolenic (ALA; 18:3n−3), eicosapentaenoic (EPA; 20:5n−3), docosahexaenoic (DHA; 22:6n−3), linoleic (LA; 18:2n−6), and arachidonic (AA; 20:4n−6) acids and prostatecancerrisk. DESIGN: A cohort of 47 866 US men aged 40−75 y with nocancerhistory in 1986 was followed for 14 y. RESULTS: During follow−up, 2965 new cases of total prostatecancerwere ascertained, 448 of which were advanced prostatecancer. ALA intake was unrelated to the risk of total prostatecancer. In contrast, the multivariate relative risks (RRs) of advanced prostatecancerfrom comparisons of extreme quintiles of ALA from nonanimal sources and ALA from meat and dairy sources were 2.02 (95% CI: 1.35, 3.03) and 1.53 (0.88, 2.66), respectively. EPA and DHA intakes were related to lower prostatecancerrisk. The multivariate RRs of total and advanced prostatecancerfrom comparisons of extreme quintiles of the combination of EPA
and DHA were 0.89 (0.77, 1.04) and 0.74 (0.49, 1.08), respectively. LA and AA intakes were unrelated to the risk of prostatecancer. The multivariate RR of advanced prostatecancerfrom a comparison of extreme quintiles of the ratio of LA to ALA was 0.62 (0.45, 0.86). CONCLUSIONS: Increased dietary intakes of **** ALA may increase the risk of advanced prostatecancer****. In contrast, EPA and DHA intakes may reduce the risk of total and advanced prostatecancer.

PMID: 15213050

Anticancer Res. 1996 Mar−Apr;16(2):815−20.

The effects ofomega−3and omega−6 fatty acids on in vitro prostatecancergrowth.

Pandalai PK, Pilat MJ, Yamazaki K, Naik H, Pienta KJ.
Michigan Prostate Institute, University of Michigan ComprehensiveCancerCenter, Ann Arbor 48109−0680, USA.

Dietary intake of essential fatty acids (EFA) may play a role in prostatecancercell proliferation. Epidemiological studies have demonstrated that men whose dietary intake is high inomega−3fatty acid (FA) composition have a lower incidence of clinical prostatecancer, suggesting that external factors such as diet may play an important role in development and growth of prostatecancer. Furthermore, in prostatecancercell lines, omega−6 andomega−3FAs have demonstrated promotional and inhibitory effects respectively. To investigate the effects of dietary fats on nontumorigenic prostate cell growth we conducted in vitro studies with human metastatic PC−3, LNCaP and TSU prostate cell lines, the rat metastatic Mat−Ly−Lu cell line and rat non−metastatic epithelial cell lines ...

read more >>

.