

## Cholesterol and Cancer Risk Prevention

Cancer statistics throughout the world are very high for cancer. According to Turner et. al., “The morbidity and mortality associated with cancer are a major health concern around the world (813)” There is a longstanding epidemiological known risk between eating red meat which causes inflammation and contracting cancer (Samraj 542). And from a large study over 14 year follow up .Kitahara find, “...evidence that high cholesterol, or factors correlated with it, may be positively associated with the risk of several malignancies, including cancers of the prostate breast and colon” (1597).

“Cholesterol is a fundamental structural component of mammalian cell membranes and is essential for Cellular proliferation (Neilsen 1793)” “Cancer cell proliferation is seen clinically as cancer growth and mustache this is, and ultimately results in the death of a patient. A reduction in the availability of cholesterol could lead to decreased proliferation and migration of cancer cells” Neilsen 1793).

Chronic inflammation must be present for tumor development (Todoric 895). When inflammation goes unmonitored, it can become chronic, causing tumor growth. To Samraj, “Chronic inflammation in the context of carcinogenesis and tumor progression has been studied extensively. Although the adaptive immune system can restrict cancer development, it can also paradoxically assist the tumor by promoting chronic inflammation via antibodies directed against

tumor cell epitope (345). Sanja et. al. discovered that inflammation is associated with red meat consumption by creating inflammation thereby facilitating carcinogenesis (542-547). Samraj et.al. find that their "...data provides an unusual mechanistic explanation for the epidemiological association between red meat consumption and carcinoma risk" (542). Nelson says "a reduction in the availability of cholesterol May limit the cellular proliferation required for cancer growth and mustache disease. We tested the hypotheses that statmuse began before a cancer diagnosis is associated with reduced cancer-related disease" (1792).

In 2017, Turner & Lloyd performed an analysis of the literature on 40 studies regarding meat and cancer. They found there was insufficient evidence to support that red meat causes cancer because of problems with these studies. Most research in this area relies on self-reported meat consumption which has inaccuracies due to data collection processes, there's a lack of biomarkers for the red meat intake, and they depend on the reliability of the nutrient composition databases used to interpret dietary intake. They did find that processed meat was carcinogenic but even that evidence was weak and inadequate (813).

One of the most common factors of cancer is that as people age they are more likely to be diagnosed with cancers. "Consequently, a policy of managing the burden of cancer in the population based entirely on screening for early detection and management of detected cancers is unlikely to make a marked impact at population level except for a few types of cancer, and is also likely to be increasingly, and unsustainably, expensive. (Wiseman 2008)"

"By exerting anti-inflammatory and other effects, statins also reduce the risk of development of several cancers including colorectal cancer, HCC, and breast cancer." Todoric, 899. Metformin, a drug to reduce diabetes, was found to be associated with decreasing the

incidence of cancer in the colon, breast, lung, prostate, ovarian, and pancreatic cancers. It reduces glucose concentration in cells and has an anti-inflammatory property in that respect (Tudoric 899). Nelson et. al find, "Statin use in patients with cancer is associated with reduced cancer-related mortality." "Statins inhibit the production of endogenous cholesterol and block protein for annihilation, and Statin you stay there for influence cell proliferation and migration. (1793)"

One way that Health Systems expand intervention coverage is through selected platforms that deliver interventions that require similar Logistics but deliver interventions from different packages of conceptually related interventions, for example against cardiovascular disease with reference to functional food ( Aghajanjpour et. al. 756) This is also a natural inexpensive platform to help people get the vitamins and nutrients they need. Kim Et. al find, "...undeniably, diet has an effect on the inflammatory process" (208)..They discover food components like luteolin, CLA, Butyrate, CLA, methionine, resveratrol, curcumin quercetin, EGCG, are all found in foods or supplements and are anti-inflammatories (204) " Aghajanjpour et. al. Find many foods that are antioxidant. All the yellow orange and dark green vegetables, gray feeling vegetables orange and yellow fruits, Tomatoes watermelon apricots peaches, dark green leafy vegetables, orange fruits, green algae salmon trout all the plant group synthesized flavonoids yogurt and fermented foods are out anti-allergy soy and phytoestrogen foods are anti-cancer and the cancers are breast and prostate. Fiber in most foods and cereals lowers cholesterol and fish and fish oil also lowers cholesterol (769). Sure foods that need to be consumed for an appropriate diet. "

Notes to peer:

-organization of essay

-places for more commentary

### Works Cited

“Statin Use and Reduced Cancer-Related Mortality” by Sune F. Nielsen, Ph.D., Nordestgaard

“The Second World Cancer Research Fund/American Institute for Cancer Research/American Institute for Cancer Research Expert. *Food, Nutrition, Physical Activity, and the Prevention of Cancer: A Global Perspective*” by Martin Wiseman

“A red meat-derived glycan promotes inflammation and cancer progression” by Annie N. Samraj, Oliver M. T. Pearce, Heinz Laubli

“Targeting Inflammation in Cancer Prevention and Therapy” by Jelena Todoric, Laura Antonucci, and Michael Karin

“Bioactive Food Components, Inflammatory Targets, and Cancer Prevention” by Young S. Kim, Matthew R. Young, Gerd Bobe

“Functional foods and their role in cancer prevention and health promotion: a comprehensive review” by MOhammad Aghanjanpour