

2nd World Congress on **Breast Cancer**

September 19-21, 2016 Phoenix, USA



William Nelson

Naturopathic Medical Doctors of Arizona, USA

Biochemical effects of pomegranate on cancer

Pomegranates have been shown to contain over 100 different phytochemicals, including ellagitannins, punical acid, flavonoids, anthocyanidins, estrogenic flavonols, and flavones. The highest concentration of ellagitannins is in the freshly prepared juice. Recent research shows remarkable results in reducing atherosclerosis, obesity, insulin resistance, intestinal inflammation and cancer. Pomegranate has been shown to have breast cancer preventive effects through modulation of endogenous sex hormone levels. Ellagitannins prevents estrogen-responsive breast cancer by inhibiting the growth of cultured breast cancer cells. Ellagic acid also inhibits the enzyme known as aromatase that converts androgen to estrogen hormones. The anti-cancer effect is also expressed through inhibition of vascular endothelial growth factor (VEGF) that promotes new vasculature and tumor growth and metastasis. Pomegranate juice lowers the risk of cancer through inhibiting several of the cytochrome P450 enzymes that can activate carcinogen metabolites. Pomegranates are rich in fatty acids (80%) specifically conjugated linolenic acids (cLNA) which constitute anti-inflammatory and anti-cancer effects. Research shows pomegranate is anti-proliferative, anti-invasive, and anti-metastatic by inducing apoptosis and blocking the activation of inflammatory pathways. These mechanisms of anti-inflammatory, anti-cancer and anti-angiogenesis are expressed through inhibition of cyclooxygenase (COX), lipoxygenase (LOX), cytochrome P450 (CYP450) and last but not least the master inflammatory switch in the body NF-kB.

Biography

William Nelson has a BS in Engineering and attended National College of Naturopathic Medical School in Portland, OR. He has 20 years of experience in private practice and specializes in the metabolic treatment of cancer. Currently, he is on staff at Naturopathic Medical Doctors of Arizona which is the largest Naturopathic Cancer Clinic.

wdnelson@gmail.com

Notes: