Sent: Tuesday, December 01
Subject: Cancer and my research of articles on Resveratrol

My Mom's cancer is back so I have been doing all I can to find info for her and her doctor's.

I stumbled across this website tonight.

PubMed comprises more than 19 million citations for biomedical articles from MEDLINE and life science journals. Citations may include links to full-text articles from PubMed Central or publisher web sites.

http://www.ncbi.nlm.nih.gov/pubmed

(excellent article on Resveratrol!

This is one of the articles I came across. I didn't know what apoptosis meant so I looked it up and find it so fitting to what we have been told about Resveratrol. *(WHICH IS IN THE VIVIX)*

Apoptosis - necessary death of cells - a form of cell death necessary to make way for new cells and to remove cells whose DNA has been damaged to the point at which cancerous change is liable to occur

Genes Nutr. 2007 Dec;2(3):295-305. Epub 2007 Oct 18.

trans-Resveratrol induces apoptosis in human breast cancer cells MCF-7 by the activation of MAP kinases pathways.
Filomeni G, Graziani I, Rotilio G, Ciriolo MR.

Department of Biology, University of Rome "Tor Vergata", via della Ricerca Scientifica, 00133, Rome, Italy.

Polyphenols represent a large class of plant-derived molecules with a general chemical structure that act as potent free radical scavengers. They have long been recognized to possess several therapeutic activities ranging from anti-thrombotic to antioxidant. Moreover, the capability of polyphenols to act as reducing or oxidizing molecules depends on the presence of environmental metals and on the concentrations used. In this work we demonstrated that the stilbene trans-resveratrol was able to commit human breast cancer MCF-7 cells to apoptosis. Mainly, we evidenced a pivotal role of the mitochondria in this phenomenon as cytochrome c release into the cytosol was found after the treatment. We further showed that trans-resveratrol was able to affect cellular redox state. In particular, it induced an early production of ROS and lipid oxidation, and only later compromised the GSH/GSSG ratio. This mode of action was mirrored by a temporally different activation of JNK and p38(MAPK), with the former rapidly induced and the latter weakly activated at long intervals. The results obtained demonstrate a pro-apoptotic activity for trans-resveratrol, and suggest a preferential activation of different classes of MAP kinases in response to different oxidative stimuli (ROS versus GSH/GSSG alteration).

PMID: 18850184 [PubMed - in process]

Hugh Koehler

++++++++++++++++++++++++++++++++++

Cancer Treat Rev. 2010 Feb;36(1):43-53. Epub 2009 Nov 11.

Resveratrol in the chemoprevention and treatment of hepatocellular carcinoma.

Bishayee A, Politis T, Darvesh AS.

Department of Pharmaceutical Sciences, Northeastern Ohio Universities Colleges of Medicine and Pharmacy, Rootstown, 44272, USA.

Hepatocellular carcinoma (HCC) is one of the most common cancers and lethal diseases in the world. Although the majority of HCC cases occur in developing countries of Asia and Africa, the prevalence of liver cancer has risen considerably in Japan, Western Europe as well as the United States. HCC most commonly develops in patients with chronic liver disease, the etiology of which includes viral hepatitis (B and C), alcohol, obesity, iron overload and dietary carcinogens, including aflatoxins and nitrosamines. The current treatment modalities, including surgical resection and liver transplantation, have been found to be mostly ineffective. Hence, there is an obvious critical need to develop alternative strategies for the chemoprevention and treatment of HCC. Oxidative stress as well as inflammation has been implicated in the development and progression of hepatic neoplasia. Using naturally occurring phytochemicals and dietary compounds endowed with potent antioxidant and antiinflammatory properties is a novel approach to prevent and control HCC. One such compound, resveratrol, present in grapes, berries, peanuts as well as red wine, has emerged as a promising molecule that inhibits carcinogenesis with a pleiotropic mode of action. This review examines the current knowledge on mechanism-based in vitro and in vivo studies on the chemopreventive and chemotherapeutic potential of resveratrol in liver cancer. Pre-clinical and clinical toxicity studies as well as pharmacokinetic data of resveratrol have also been highlighted in this review. Future directions and challenges involved in the use of resveratrol for the prevention and treatment of HCC are also discussed.

PMID: 19910122 [PubMed - in process]

++++++++++++++++++++++++++++++++