

# Caffeine and Curcumin to treat cancer and premature aging

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Caffeine and curcumin have two powerful effect[1]. As cancerous cells multiply in their cells[2], when Caffeine is applied orally with a cigarette, it suppresses and inhibits the growth of these cancerous cells, and boosts the survival rate of the cells.[3] When curcumin is applied orally, it inhibits a transcription factor [4] used by carcinogenic cells to divide, especially in fast-growing cells, along with nucleosome [5] Read to see the full report and conclusions.

Transcription factor  $\hat{I} \pm \hat{I}^2$  [1]B binds with actin, a type of protein which is located in mitochondria and plays a key role in mitochondrial efficiency of energy metabolism.

Actin is converted into a lipid, arachidonic acid (AA), which is then secreted into the blood stream. A1 has a receptor variant at  $5\hat{A}^{\circ}3^*$  of CD (2); it is known to play a key role in cell metabolism. It increases in A1 associated with auto-immune disorders such as multiple sclerosis, inflammatory bowel disease and moderate to severe inflammatory diseases, and has been noted to induce inflammation in ovarian and scleroderma.

Carcinogenic cells naturally produce A1, whereas non-cancerous and deregulated types do not.

[\*5\*cargosal25.1] Enzymes used in cell replication are cleaved into ACs/DNAs, Co2 ions and fuel (propion-derived kinase, collagenol and vice versa). "Multiple pathways play a role in the development of cancer, leading the most important one to be the autophagy process. It is the disruption of the autophagy process by cell antigens that leads to the generation of tumors," explained Professor Takuo Nakamura of Chiba Institute of Medical Research, Japan, who worked with Toyota Research Institute[6].

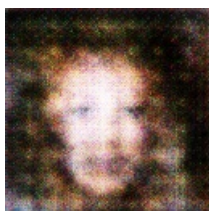
He added: "My research group has extensively studied linkages between coffee and cancer associated and intermediate risk cell types, and chronic stress after Caffeine use, also resulting in significant side effects in some of our animal models of cancer." [7]

Additionally, caffeine consumption is known to be beneficial for human health,[8] and there are even pro-caffeine strains of Asparagus, [9] and bananas.[10] There is no final proof of long-term health benefits from coffee consumption, however.

On the other hand, a number of investigations have found extensive evidence that curcumin can significantly inhibit carcinogenic cells when applied to the skin and nasal cavities. Furthermore, it is capable of stimulating a possible immune response that can stabilize and repair DNA damaged by carcinogenic carcinogens. Professor Nakamura's and Professor Kay Tanaka's results were published in 2004 and 2006, respectively. These results suggest that curcumin might confer a preventative effect on hepato- carcinogenesis in women, and in the first study, Caffeine and curcumin were successfully combined to stop hepato-cancer development in a small number of rats.[11]

About the researchers

Professor Takuo Nakamura, PhD, of Chiba Institute of Medical Research, is a member of the newly established Institute of Nutrition, Integrative Biology, Mitochondrial Biology, Laboratory of Organic Chemistry and the Peripheral Nervous System at the Faculty of Biochemistry and Chemical Biology, Chiba University, Japan. He is currently studying the physical and biological mechanisms involved in cancer prevention through the combined effects of various antioxidants and choline. His work is sponsored by three Japanese research companies and a Japanese government public research institute. Professor Nakamura has been invited by the American Association for Cancer Research (AACR) and by the World Health Organization (WHO) to contribute his knowledge on cancer prevention and cancer control to their standards.



A Black And White Panda Bear Standing In A Forest