

Editorial

Inhibition of Inflammation: A Preventive Approach to Cancer and Other Diseases of Old Age

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Cancer is an extremely complex family of related diseases and defies any easy generalizations. Much evidence points to the fact that persistent inflammation within the various organs of the body at the cellular-tissue level is the initial event that leads to a cascade of biochemical transformations that constitute the initiation of not only cancer but also of many other diseases of the old age, such as cardio-vascular diseases, arthritis, Alzheimer's and other neuro-degenerative phenomena. As pointed out recently [1], the connection between cancer and inflammation is strongly suggested by several lines of evidence [2,3] even though, paradoxically, epidemiological evidence tends to contradict such a relationship.

That persistent inflammation at the cellular and tissue level is toxic and can lead to many diseases is generally supported by modern scientific research. Thus it is of some interest to explore here the common causes of inflammation and some strategies to prevent and/or minimize it, thus attenuating or delaying the damage caused by it.

Common Causes of Inflammation

The biggest cause of inflammation is the existence of high rates of infections as in many developing countries or in poorer ghettos of rich societies. Poor hygiene, overcrowding, lack of proper sanitation facilities, poor education, lack of access to medical facilities and unafford-ability of medi-

cines when prescribed. Compounding these assaults from infectious inflammogens are the so-called sterile inflammogens released by smoke from coal-fired power plants, automobiles, cooking fires from burning cow-dung, wood, and coal etc. Dust from unpaved roads, construction sites, parched fields and particulate matter released by cars and trucks adds to this pool of inflammogens. And, worst of all is the smoke from tobacco products.

Prevention of Inflammation

The presence of wide-spread inflammation in the human body and its magnitude can be evaluated by a simple blood test for C-Reactive Protein(CRP) which is widely available in Western countries but can be difficult to find in the rest of the world, especially in rural and poorer areas. In any case some simple strategies to prevent this damaging inflammation can be suggested here, as follows:

1. Minimize exposure to all kinds of smoke and dust.
2. Take precautions to minimize exposure to infections by strategies appropriate to the context, mainly by washing your hands with soap frequently, and, avoiding contact with coughing, sneezing and infected persons.
3. Add-profusely, TURMERIC—the yellow spice in

Indian curries plus black pepper to your cooking and food. TURMERIC contains CURCUMIN which is a biphenol and is a very powerful anti-inflammation and anti-cancer agent; black pepper increases tremendously its bio-availability within the body. TURMERIC can be bought in any Indian/Pakistani/Sri Lankan/West Indian store or can be bought on the internet. These days, it is also sold in North America in COSTCO stores in the form of capsules.

4. Take Omega 3 capsules and/or fish oil capsules since Omega 3 is a strong anti-inflammatory agent. This can be enhanced by eating an oily fish such as salmon, sardines, trout etc. about 2 to 3 times per week.
5. Virgin, cold-pressed olive oil should be the basis of your cooking, salad dressings and for making toasts etc. This is a very strong anti-inflammatory agent.
6. A daily aspirin of at least 80 mg., preferably twice that amount to take care of inflammation.
7. Selenium (200 micro-grams) daily as a supplement to fight inflammation.
8. Fruit and vegetables: fruit which is not too sweet and high in anti-oxidants such as black berries, blue berries and other berries. Vegetables which are strongly coloured such as carrots, eggplants, pumpkins, peas, red cabbage, green and leafy vegetables and salads. Take, especially, broccoli which has sulforaphane—a very powerful anti-cancer agent.
9. Avoid sugary soft drinks, deserts, cakes, doughnuts, and other sugar-containing products which can lead to diabetes which is an inflammatory state implicated as promoting cancer. Foods containing corn-syrup and fruit juices must be avoided because they contain fructose which elevates triglycerides (which promotes cardio-vascular disease), and, causes non-alcoholic fatty liver disease which, again, is an inflammatory state.
10. Calorie reduction is a MUST to achieve a healthy weight and a low body-mass index(BMI). Over-weight and obesity are inflammatory states that promote cancer and cardio-vascular diseases.
11. And, finally, for snacking, take nuts such as pistachio, almonds and walnuts, which are known to improve lipid profile in your body and decrease inflammation.

References

1. Vijh,A.K. Inflammation, Infectious Burden and Cancer: an Epidemiological Paradox. *JJ Epidemiol. Prevent*, 2015, 1(2): 010.
2. I.M Coussens, Z. Werb. Inflammation and cancer. *Nature*.2002, 420(6917): 860-867.
3. C.E. Finch. *The Biology of Human Longevity*. Academic Press. 2007.