

## Editorial

# What to do to Prevent Cancer—The Evidence Is In

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The World Cancer Research Fund published in November 2007 *Food, Nutrition, Physical Activity and the Prevention of Cancer. . . . A Global Perspective*. The expert report took six years to produce, and examined all available research on cancer prevention. An initial 500,000 studies were screened, with 7,000 of these studies reviewed for inclusion in the report.

This literature review process was done by nine independent universities, with a panel review by 21 world-renowned experts who reviewed the comprehensive collection of evidence and drew conclusions and made recommendations. This study is purported to be the most comprehensive report on cancer prevention ever produced and heralded as the most reliable and comprehensive information available on cancer prevention. A recent *Financial Times* editorial (November 1, 2007) stated, “The report is praiseworthy as a model of clear communication.” They contrast this to other studies that have been “mealy mouthed conclusions that provided little more than a recipe for procrastination and a cure for insomnia.”

The report has 10 simple key principles with three themes: (1) aim to be a healthy weight throughout life; (2) be physically active every day in any way for 30 minutes or more; and (3) choose mostly plant foods and limit red meat, and avoid processed meat ([http://www.wcrf-uk.org/research\\_science/recommendations.lasso](http://www.wcrf-uk.org/research_science/recommendations.lasso)). There also was a clear recommendation that smoking or using tobacco in any form increases the risk of cancer and other serious diseases. There were eight recommendations to best prevent cancer that were applicable across all populations:

- 1. Be as lean as possible without becoming underweight.**
- 2. Be physically active for at least 30 minutes every day.**
- 3. Avoid sugary drinks. Limit consumption of energy-dense foods (particularly processed foods high in added sugar, or low in fiber, or high in fat).**
- 4. Eat more of a variety of vegetables, fruits, whole grains, and pulses such as beans.**
- 5. Limit consumption of red meats (such as beef, pork, and lamb) and avoid processed meats.**
- 6. If consumed at all, limit alcoholic drinks to two for men and one for women per day.**
- 7. Limit consumption of salty foods and food processed with salt (sodium).**
- 8. Don't use supplements to protect against cancer.**

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Two recommendations were for specific groups:

9. **It's best for mothers to breastfeed exclusively for up to 6 months and then add other liquids and foods to their children's diet.**
10. **After treatment, cancer survivors should follow the recommendations for cancer prevention.**

While this report is laudatory in that it does, in fact, review the evidence and confirm much that is already known, and was repackaged in a study that garnered global media coverage, it does not necessarily advance cancer prevention. This report does not address the uptake and concordance with individual behavior changes necessary to apply the first eight recommendations. Further, the suggestions leave few ways that society could adapt to help to offer opportunities for people actually to practice such behaviors. Environmental changes supporting bicycling and walking, packaging and limitations on packaged foods, limited access to tobacco, and other actions have prevented cancer *de facto*. Furthermore, the recommendations do not remind people to lessen exposure to sunlight, an increasing risk factor and cause of death from skin cancer exacerbated by climate change.

More importantly, if we all are attempting to develop a cancer literacy—e.g., knowing what causes cancer, how to prevent it, detect it, and treat it appropriately (evidence – based), and in some cases live with cancer and its treatment—we would be taking steps in the right direction.

For example, the report recommendations and press coverage miss the important secondary prevention mantra to detect and treat cancer early. Cervical, prostate, breast, and colorectal cancers all have evidence-based and scientifically proven modalities for detection at key intervals along with positive opportunities for successful treatment interventions. The report also misses recent advances in vaccination as cancer prevention of human papilloma virus, a virus linked to cervical cancer, and other physician mediated interventions. Further research is of course necessary in some cancer prevention such as genetic screening.

Nonetheless, the overall communication creates opportunities for dialogue and messages that suggest prevention of illness is a *sine qua non* of a healthy society. This cannot be done at the individual level alone, but will require a commitment by all levels of society to market health in a way that advances health literacy so that people are equipped to make better health care decisions. In the case of cancer, if we all attempted to apply the recommendations proclaimed above and were screened appropriately for cancers—all of us over certain ages for colorectal, prostate, breast, or cervical cancer—we would be on the path to a healthier society. Yet, it is incumbent upon us in health communication to diffuse such recommendations and ideas so that the broader society and health polity create such conditions to enhance health with prevention of a fear evident across the life continuum—cancer.