

Statements from the President's Cancer Panel

*President's Cancer Panel
Promoting Healthy Lifestyles to Reduce the Risk of Cancer
December 05, 2006*

On December 5, 2006, the President's Cancer Panel held a third meeting in its 2006-2007 series, *Promoting Healthy Lifestyles to Reduce the Risk of Cancer*, in Portland, Oregon. This meeting was the second in the series to address the impact of obesity, physical activity, and nutrition on cancer risk; a related meeting was held September 11, 2006 in Minneapolis, Minnesota. The other two meetings in this series address effects of tobacco use and secondhand tobacco smoke. An overview of this series, with meeting dates and locations, can be found at <http://pcp.cancer.gov>.

Presenters at this meeting emphasized the importance of increased community action to implement interventions known to be effective in promoting better nutrition, increased physical activity, and weight loss, particularly in light of the growing evidence base linking obesity to cancer risk. Policies that have not been widely adopted include providing point-of-purchase nutrition information on fast-food chain and restaurant menus and mandating daily physical activity in schools. Body mass index (BMI) is currently being used as a marker to measure risk of obesity; however, it is not well understood by the public nor uniformly incorporated in annual physical exams or school health assessments.

A representative from the American Cancer Society reported on its recently updated guidelines on nutrition and physical activity¹; *maintaining a healthy weight* is now listed as first priority. Evidence of increased risk across all cancers is strongest relative to weight; as a marker, weight is easier to measure than effects of changes in diet or physical activity.

Research conclusions heard at the previous Panel meeting in Minneapolis were reiterated and supported. The evidence base strongly links obesity to endometrial, breast, and colon cancers and points to increased risk of kidney and esophageal cancers. Added insight on possible biological mechanisms was presented. Body weight is believed to affect circulating levels of peptide and steroid hormones as well as growth factor binding proteins. Scientists are also looking at adipose (fat) tissue as an endocrine organ that both produces hormones and receives signals that may be dysregulated as a result of obesity. More research is needed on the biological mechanisms linking energy balance (variance between calories consumed and calories expended) and cancer. Further, the long-term effects of weight loss in overweight/obese persons on cancer risk are unknown.

New information presented in Portland suggests that excess weight and/or high BMI may affect cancer prognosis, in addition to cancer risk. In both pre- and post-menopausal women, excess weight appears to negatively affect breast tumor characteristics and

treatment outcomes leading to poorer prognosis and decreased long-term survival. Exploring energy balance and its role in cancer survivorship and prognosis is warranted.

Participants speculated on reasons for the dramatic rise in obesity rates since 1980; most agreed it is likely a confluence of factors-introduction of high fructose corn syrup, increase in portion sizes, more sedentary lifestyles, changes in structuring communities-rather than a single defining event. All agreed that obesity is a critical public health problem impacting not just cancer but other chronic diseases. The trend must be reversed, particularly among youth-80% of obese children are likely to become obese adults. The Panel heard once again that this will require collaboration across multiple sectors of society and institutional action on a range of levels. In this regard, there is a need to better learn how to modify and impact the behavior of institutions-schools, businesses, food industries, community planning and development boards, and legislative bodies, among others.

The Panel also heard testimony on novel community programs aimed at increasing physical activity among pre-school and school age children and addressing obesity through changes in our "built environment,"ⁱⁱ i.e., providing better access, particularly in lower income areas, to safe environments that promote active lifestyles and affordable, high quality foods.

The Panel will summarize findings and recommendations from this series of meetings in its 2006-2007 annual report to the President.

i. American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention: Reducing the Risk of Cancer With Healthy Food Choices and Physical Activity (CA: A Cancer Journal for Clinicians, 2006 56: 254-281).

ii. The built environment encompasses all of the buildings, spaces, and products created or modified by people.

The President's Cancer Panel, an advisory group established by Congress to monitor the Nation's efforts to reduce the burden of cancer, reports directly to the President on delays or blockages in that effort. For more information, visit the Panel's web site at <http://deainfo.nci.nih.gov/ADVISORY/pcp/pcp.htm>, call 301-451-9399, or e-mail to pcp-r@mail.nih.gov.