

Excess body fat has long-term side effects

Second of two parts
Cigarette smoking is the most destructive thing we can do to our health, but as the incidence of smoking declines, the ever expanding ranks of the obese has catapulted excess body fatness to the forefront as our main public health challenge.

Not only are we getting fatter year by year, we are getting fatter faster. This is because obesity is starting at progressively younger ages.

In last week's column, I supported government intervention to help turn the tide of youthful obesity in the same way it successfully intervened to help discourage youth from smoking by banning the use of alluring mascots like Joe Camel.

With the evidence mounting against obesity, and the fact that obesity is being linked to an increasing array of devastating diseases, the need to intervene for our children's sake takes on even more importance, and the time is now.

Range of risks

Most of us are aware that obesity is a huge risk factor for type 2 diabetes. Experts believe that the incidence of type 2 diabetes will double and possibly triple in the decades ahead, because the disease goes hand in hand with excess body fatness.

Obesity is an established risk factor for heart disease, and most are aware of that fact as well. It also demeans the quality of life, promoting aches and pains, immobility and other conditions like osteoarthritis.

THE BODY SHOP

Bryant Stamford



What most folks are not aware of is the relationship between obesity and cancer. Obesity can contribute to several forms of cancer, including cancers of the colon and rectum, the esophagus, gallbladder, kidney, pancreas, endometrium (the inner membrane of the uterus) and postmenopausal breast cancer.

Obesity and cancer

Cancer risk can be increased by obesity because of the hormonal problems it creates. Two hormones stand out, estrogen and insulin.

Estrogen is important in the female body, but lifelong exposure to estrogen can increase cancer risk. After menopause the ovaries stop producing estrogen, but excess body fat can take over and produce estrogen in large quantities. Too much estrogen production increases the risks of endometrial cancer and postmenopausal breast cancer.

Excess body fatness makes the body less receptive (more resistant) to the effects of insulin to clear sugar (glucose) from the bloodstream after eating. Lingering glucose causes increased insulin production, raising the levels in the blood and leading to a condition called hyperinsulinemia, which is linked to postmenopausal breast cancer.

When insulin resistance reaches an extreme stage, it is diagnosed as type 2 diabetes. Type 2 diabetics are at much higher risk for developing several forms of cancer, including cancer of the liver, pancreas, colon, rectum, bladder and endo-

metrium, and the risk of postmenopausal breast cancer increases even more.

Hormone-like substances also can be produced by body fat, causing chronic low-level inflammation throughout the body, which can lead to cell damage and the start of the cancer process. These substances also may promote the circumstances that encourage the growth and spreading of a cancer. Abdominal fat is particularly dangerous because it produces more of these substances than fat carried on the hips, thighs and buttocks.

Obesity can increase pressure within the stomach, causing "backflow" of contents into the esophagus (acid reflux), irritating and possibly injuring delicate esophageal tissue, increasing the risk of cancer.

The bottom line

Bad food choices, such as fast foods, contribute to obesity, and obesity destroys health in many ways, including diabetes, heart disease, stroke and cancer.

In my last column, I made the case in favor of banning toy giveaways in fast-food meals because of the obesity epidemic among our youngsters. If government intervention is what is required to stem the tide of obesity in our children, then so be it. Let's just hope the campaign is as effective as it was against Joe Camel.

Bryant Stamford is professor and chairman of the department of kinesiology and integrative physiology at Hanover College. To contact him, e-mail stamford@hanover.edu. Or write to "The Body Shop," The Courier-Journal, P.O. Box 740031, Louisville, KY 40201-7431.