PCRM
PHYSICIANS COMMITTEE FOR RESPONSIBLE MEDICINE
5100 WISCONSIN AVENUE, NW • SUITE 404
WASHINGTON, DC 20016
(202) 686-2210 FAX: (202) 686-2216
WWW.PCRM.ORG

April 2, 2002

The Honorable Charles Schumer
U.S. Senate
313 Hart Senate Building
Washington, DC 20510-3201
via facsimile: 202-228-3027

Dear Senator Schumer:

I am writing to express the Physicians Committee for Responsible Medicine's (PCRM) deep concern over your proposal to put milk vending machines in school hallways. PCRM is a public interest health advocacy organization supported by more than 5,000 physicians and 100,000 laypersons. One of PCRM's primary missions is to educate others about the use of diet as a means of preventive medicine. While we truly appreciate your concern for children's health, you should be aware that an extensive body of research shows that consuming cow's milk is associated with several significant health risks, and efforts aimed at encouraging children to consume more of this product are definitely not in their best interests.

Children are weaned from their mothers–usually by age three–because they no longer need milk as a food source. And they definitely do not need nor should they consume cow's milk. Both clinical and epidemiological evidence show the significant harmful effects caused by the consumption of cow's milk before and after weaning and into adulthood. The following health issues are especially noteworthy:

Diabetes mellitus. A 1994 *American Academy of Pediatrics* review reported that at least 90 studies had examined the links between cow's milk consumption and type 1 diabetes and that avoidance of early dairy exposure might reduce the risk of this disease. Cow's milk proteins can cause the human body to produce antibodies, which are believed to damage the pancreas, leading to the development of type 1 diabetes. Clinical studies have borne this out, as have epidemiological studies of various countries, which show a strong correlation between the use of dairy products and the incidence of insulin-dependent diabetes.

Obesity. As recently reported by former Surgeon General David Satcher, unprecedented numbers of children are overweight and obese, increasing their long-term risk of heart disease, type 2 diabetes, hypertension, certain forms of

cancer, and other illnesses. Whole milk derives 49 percent of its calories from fat, most of which is saturated fat, and milk is the principal source of dietary saturated fat for children. Moreover, flavored milks–the most common type of milk that kids drink today–have large quantities of added sugar, in addition to the lactose sugar that is a major constituent of unmodified cow's milk.

Anemia. Milk can elicit the loss of red blood cells from the digestive tracts of small children and can interfere with iron absorption in children or adults of any age. It also is iron-poor. As a result, milk consumption can contribute to anemia. Rather than milk vending machines, investigations of the adverse hematologic effects of frequent milk consumption and of the aggressive promotion of milk in schools may be in order.

Constipation. Evidence indicates that milk can contribute to constipation and that a change to nondairy milks (e.g., soymilk, ricemilk) can eliminate this problem. Further investigations into the scope of this problem as well as the safety and efficacy of dietary interventions, compared to pharmaceutical treatments, would be valuable.

Allergies, ear infections, and asthma. Milk is a common cause of food allergy, and ear infections and asthma have also been linked to dairy consumption, among other contributing factors.

Prostate cancer. Substantial research attention has been placed on the links between milk consumption during adulthood and prostate cancer. A U.S. Department of Agriculture expert panel recently concluded that whole milk consumption is indeed a potential contributor to prostate cancer risk, and at least 16 independent studies support such a link. Mechanistic explanations for this association relate to milk fat's effect on hormones, the ability of any type of milk (including skim) to elevate serum concentrations of insulin-like growth factor I, and milk's tendency to flood the body with calcium, triggering a down-regulation of vitamin D activation pathways.

Lactose intolerance. Lactose intolerance, the natural reduction after weaning of the enzyme lactase needed to digest the milk sugar lactose, which is present in both human and cow's milk, manifests in many children. This is a normal condition, not a disease. Seventy percent of African Americans, 73 percent of Native Americans, 95 percent of Asian Americans, and 53 percent of Hispanic Americans are lactose intolerant. However, lactose-intolerant children who heed advice to drink cow's milk may develop painful intestinal symptoms.

Bone health. It is vital to understand the true nature of the relationship of milk ingestion to childhood bone health, since this is a matter of intense commercial and public interest. Many factors affect bone health, and the best means of ensuring life-long skeletal health remains a matter of worthwhile investigation. The idea that calcium ingested in childhood is retained in later adult life is known to be false, as the bone structure is entirely remodeled several times during life. Although milk contains calcium, it also causes significantly greater renal calcium losses than other beverages, including sodas, presumably because of the calcium-depleting effects of animal proteins and sodium. While the dairy industry has suggested a beneficial role of milk for bone development, many of the studies on which it has relied are confounded by the use of calcium supplements (which omit milk's calcium-draining sodium and animal protein) and by supplementation with vitamin D, which has bone-protecting effects of its own. A recent study published in the journal *Pediatrics* showed that exercise patterns are associated with bone density, but variations in calcium intake are not.

I hope this information will cause you to reconsider your pursuit of putting milk vending machines in schools across the country. As it is likely the dairy industry will attempt to challenge the points raised in this letter, we strongly urge you to look into these matters further. Also, if possible, we would appreciate the opportunity to provide supporting materials, including scientific studies, and to meet with you personally. I can be reached at 202-686-2210, ext. 303, and *nbarnard@pcrm.org*.

Sincerely,

Neal Barnard, M.D.
President