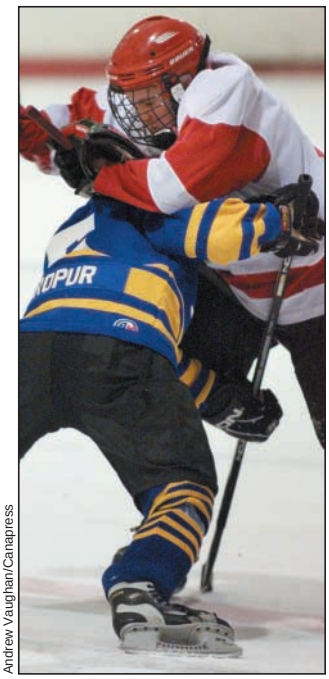

Andrew Vaughan/Canapress

## Heavily into the boards: bodychecking and Canada's game

Ice hockey, many would argue, is a collision sport. Effective bodychecking is a skill as integral to the game as stickhandling at the professional level, but the rising incidence of traumatic brain injury has caused parents and hockey authorities to re-evaluate its role among the sport's younger players. Impassioned public debate caused Hockey Canada to reverse its recent decision to lower the age limit at which bodychecking is allowed from 11 to 9 years. Anthony Marchie and Michael Cusimano summarize the available literature on bodychecking and related injury to determine whether our youth are paying an unfortunate price when playing Canada's game by going too heavily into the boards.

**See page 124**

## The effect of an algae supplement on the immune system

*Chlorella* are unicellular, microscopic algae used commonly as a food supplement in Japan. Claims for health benefits include an improvement in immune function, and some experiments have shown some immunomodulating potential. To test this hypothesis in healthy volunteers, Scott Halperin and colleagues performed a randomized, double-blind, placebo-controlled trial in which they measured the antibody response to influenza vaccine in adults who had been taking the supplement for 28 days and in those who had been taking an inactive placebo. The *Chlorella*-derived supplement did not increase the antibody response to the influenza vaccine in the overall study population, although some increase was seen in participants aged 55 years or younger.

**See page 111**

## The changing costs of treating HIV/AIDS in Alberta

In southern Alberta, a centralized system for the care of patients with HIV/AIDS allows for very specific tracking of their use of health services and medications and, because of this, specific estimates for the total cost of their health care. Hartmut Krentz and colleagues measured the direct health costs from 1995 to 2001 for all patients over 15 years of age who received any HIV care in southern Alberta. They found that direct per patient costs increased over this period and that the increase was primarily due to the implementation of highly active antiretroviral therapy (HAART), with only part of these costs being offset by savings associated with inpatient care and home care.

In a related commentary, Pedram Sendi and Amiram Gafni point out that health care costs are only one part of the equation. They note that, in similar studies, productivity gains from more expensive and effective treatment showed HAART to be cost-effective. Regardless, with finite health budgets and increasingly expensive programs, estimates of the cost-effectiveness of health services need to be refined to ensure fair allocation of resources.

**See pages 106 and 120**

## Excessive zinc supplementation and cytopenia

Zinc supplementation is common, and the first case of anemia secondary to zinc excess was described in 1977. Several reports of severe cytopenia associated with zinc toxicity have been reported, most involving overzealous self-medication. Julie Irving and colleagues describe a case of severe neutropenia and anemia in a 19-year-old woman with Hallervorden–Spatz syndrome, who had been receiving excessive zinc supplementation through a feeding tube for 5 years. After the zinc therapy was stopped, the patient's blood and trace metal counts returned to normal. The pathophysiology of the anemia is discussed by the authors and appears to be secondary to an associated copper deficiency.

**See page 129**