

The American Dietetic Association and Dietitians of Canada recently released their position paper on the nutritional management of people with HIV infection.¹ The importance of food and nutrition security was emphasized for the general health as well as a number of specific therapies for people with chronic HIV infection. Following are some of the important features of this paper:

- Maintenance of adequate nutritional status is important to survival and preservation of body functions.^{2 3 4}
- Protein intake is important to the maintenance and restoration of the body's important muscle and organ tissues.⁵
- Diets high in both calories and protein may be required to improve the body's response to the challenge of symptomatic HIV infection.⁶
- While micronutrients are important to health maintenance, it appears that a more generalized protein-energy malnutrition may play the primary role in malnutrition-related immune deficiency.^{7 8}
- Additional health challenges are now faced by persons surviving due to improved treatment strategies with chronic HIV infection including cardiovascular disease, insulin resistance and diabetes, osteoporosis, oxidative stress, and central obesity. Recommendations for soyfoods as a preferred way to meet protein needs may help to meet the goal to reduce risk factors for disease and treatment-associated complications.^{9 10 11}

Nutritional management is an important feature of effective treatment of chronic HIV infection in any setting and will include maintenance and restoration of body stores, support for adherence to therapy, and decreased numbers of complications associated with disease and therapies. For more information on WISHH activities in HIV/AIDS, visit www.WISHH.org.

¹ Position of the American Dietetic Association and Dietitians of Canada: Nutrition intervention in the care of persons with human immunodeficiency virus. *J Am Diet Assoc.* 2004;104(9):1425-1441. Available at: http://www.adajournal.org/scripts/om.dll/serve?action=get-media&id=as0002822304011861&trueID=pdf_s0002822304011861&location=jjada041049&type=pdf&name=x.pdf

² Melchior JC, Niyongabo T, Henzel D, Durack-Bown I, Henri SC, Boulier A. Malnutrition and wasting, immunodepression, and chronic inflammation as independent predictors of survival in HIV-infected patients. *Nutrition.* 1999;15:865-869.

³ Tang AM, Forrester J, Spiegelman D, Knox TA, Tchetgen E, Gorbach SL. Weight loss and survival in HIV positive patients in the era of highly active antiretroviral therapy. *J Acquir Immune Defic Syndr.* 2002;31:230-236.

⁴ Suttman U, Ockenga J, Selerg O, Hoogestraat L, Deicher H, Muller MJ. Incidence and prognostic value of malnutrition and wasting in human immunodeficiency virus-infected outpatients. *J Acquir Immune Defic Syndr Hum Retrovirol.* 1995;8:239-246.

⁵ Williams SB, Bartsch G, Muurahainen N, Collins G, Raghavan SS, Wheeler D. Protein intake is positively correlated with body cell mass in weight stable HIV infected men. *J Nutr.* 2003;133:1143-1146.

⁶ Stack JA, Bell SJ, Burke PA, Forse RA. High-energy, high-protein, oral liquid nutrition supplementation in patients with HIV infection: effect on weight status in relation to incidence of secondary infection. *J Am Diet Assoc.* 1996;96:337-341.

⁷ Fawzi WW, Msamanga GI, Spiegelman D, Wei R, Kapiga S, Villamor E, Mwakagile D, Mugusi F, Hertzmark E, Essex M, Hunder DJ. A randomized trial of multivitamin supplements of HIV disease progression and mortality. *N Engl J Med.* 2004;351:23-32.

⁸ Woods MN, Spiegelman D, Knox TA, Forrester JE, Connors JL, Skinner SC, Silva M, Kim JH, Gorbach SL. Nutrient intake and body weight in a large HIV cohort that includes women and minorities. *J Am Diet Assoc.* 2002;102:203-211.

⁹ Azadbakht L, Shakerhosseini R, Atabak S, Jamshidian M, Nehrabi Y, Esmaill-Zadeh A. Beneficiary effect of dietary soy protein on lowering plasma levels of lipid and improving kidney function in type II diabetes with neuropathy. *Eur J Clin Nutr.* 2003;57:1292-1294.

¹⁰ Djuric Z, Chen G, Doerge DR, Heilbrun LK, Kucuk O. Effect of soy isoflavone supplementation on markers of oxidative stress in men and women. *Cancer Lett.* 2001;172:1-6.

¹¹ Mondy K, Tebas P. Emerging bone problems in patients infected with human immunodeficiency virus. *Clin Infect Dis.* 2003;35:S101-S105.