Water, Skim Milk May Improve Gout Control

BY AMY ROTHMAN SCHONFELD

PHILADELPHIA — Drinking water or skim milk can improve gout control, according to findings from two studies that highlight the important contribution of lifestyle factors on gout prevention and management.

"Our results show that drinking water is a simple, safe, and effective means of trying to reduce recurrent gout attacks," Dr. Tuhina Neogi said at the annual meeting of the American College of Rheumatology.

The study included 535 people who had had a gout attack within the past year (78% male; mean age, 53 years) and who provided information via the Internet about food, drink, medications, physical activity, and other possible gout risk factors during periods preceding the attack and during attack-free periods. By using a case-crossover study design, the



Drinking five to eight glasses of water a day reduced gout risk by 40%.

participants acted as their own controls. Medical records were accessed to verify gout diagnosis, explained Dr. Neogi of Boston University.

The findings showed that increasing water intake was associated with decreased risk for recurrent gout attacks. Compared with those who drank no or one 8-ounce glass of water per day, those who drank five to eight glasses had a 40% lower chance of a gout attack and those who drank more than eight glasses had a 46% lower chance.

In the second study, researchers from New Zealand measured the acute effects of skim milk consumption on serum urate concentrations in 16 healthy male volunteers, in light of reports that skim milk was beneficial in gout prevention. The randomized controlled crossover study was designed to assess the effects of skim milk that was from the early season and the late season, as well as MPC85, a milk protein concentrate that contains 85% protein. The effects of soy milk consumption also were assessed, and it was considered the control.

"Late-season" skim milk, which is primarily available from countries where milking is seasonal and cows are grass fed, is high in orotic acid, a substance

known to promote uric acid removal by the kidneys, explained Dr. Nicola Dalbeth, a senior lecturer in clinical medicine at the University of Auckland (New Zealand). MPC85 skim milk is ultrafiltered and contains very low concentrations of orotic acid, purines, and lactose.

Each participant received a single dose of each product in a random order, with each study visit separated by a week. The amount consumed was equal to about 3.5

8-ounce glasses of milk in one sitting (80 g of protein in 800 mL). Serum and urine were obtained immediately before ingestion and then hourly for the next 3 hours.

Drinking soy milk led to a 10% increase in serum urate. In contrast, all skim milks decreased serum urate by about 10% (*P* less than .0001). All products, including soy, led to an increase in the fractional excretion of uric acid (FEUA).

Interestingly, late-season skim milk led

to a greater increase in FEUA, compared with either ultrafiltered skim milk or early-season skim milk, suggesting that the acute urate-lowering effect of orotic acid may explain these effects.

Dr. Neogi reported having no conflicts of interest. Dr. Dalbeth said that her study was funded in part by the Fonterra Dairy Cooperative, and that one of the study authors was an employee of Fonterra.



Humalog® KwikPen™, part of the Humalog® approach, is designed to help fit mealtime therapy into your patient's life. It's small, doesn't need refrigeration after the first use, and can be used almost anywhere. To find out more, go to www.Humalog.com or see your Lilly sales representative.

Humalog is for use in patients with diabetes mellitus for the control of hyperglycemia. Hypoglycemia is the most common adverse effect associated with insulins, including Humalog.

For complete safety profile, please see Important Safety Information and Brief Summary of full Prescribing Information on adjacent pages.

Please see full user manual that accompanies the pen.

