

## **Rev up your metabolism**

**Adding lean protein helps you burn fat -- even while you sleep.  
But balance your diet with healthful carbs and fats.**

By Sally Squires, Special to The Times  
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THE weight loss world is full of claims, rarely proven, that some pill or potion can help "burn calories while you sleep." But a recent study reports that this may, in fact, be possible — simply by eating more lean protein.

Dutch researchers have reported for the first time that consuming nearly a third of one's daily calories as lean protein — for example, lean meats or poultry without the skin — revs up a person's metabolism during sleep. And the benefits aren't just nocturnal. The researchers also found that higher protein intake boosted the burning of calories and fat during the day.

Plus, when the study's participants, who were all women of healthy weight, ate more protein, they said they felt fuller, more satisfied and less hungry than when they consumed a diet with the typical amount of protein, about 10% of calories.

The findings suggest that adding lean protein to your daily fare "enables you to reach the same level of satiety that you are used to with about 80% of your normal energy intake," notes the study's lead author, Margriet Westerterp-Plantenga, an associate professor of human biology at the University of Maastricht, the Netherlands. "That means you can eat about 20% less and still have the same satiety.... It's a very easy way to ingest" fewer calories without feeling hungry all the time.

This is not the first study to reveal protein's satiating effects. The same research team found similar results in 1999, but during waking hours. A number of other researchers also report evidence of protein's satiating and calorie-burning properties.

What gives protein its caloric edge? It's more difficult for the body to metabolize protein than fat or carbohydrates.

The body also doesn't store protein as efficiently as it does carbohydrates or fat. So protein is more likely to be burned, a process called thermogenesis. That in turn requires more oxygen and helps you feel satisfied in the hours after eating, Westerterp-Plantenga says.

But the latest findings don't mean it's time to dust off those high-protein, low-carb diet books. The protein-heavy Atkins diet included high fat and in some phases eliminated most fruit and vegetables.

The current study limited fat to about 30% of daily calories, and included 40% of calories as healthy carbohydrates, including fruit and vegetables.

For example, lunch included bread, soy milk, fruit yogurt, tuna in water, tomatoes, cucumbers, feta cheese and salad dressing.

"You can have as much fruit and vegetables as you would like," Westerterp-Plantenga says. "But not too much vinaigrette, since that would add too much fat."

She also notes another important caveat. Current recommendations are to keep protein calories at 25% of total intake; this study used a healthy group of participants to test the effects of a higher level of protein.

If you have diabetes, altered glucose metabolism or kidney problems, don't add protein to your diet without consulting your doctor, Westerterp-Plantenga advises.

That said, here are some ways to add more protein:

- Pick your favorites. Skinless chicken breasts, turkey and Cornish hens without the skin, fish, lean meat, beans and nonfat dairy products all count as lean protein. Eat the ones you like best. The research team first tested participants' taste preferences and then designed menus that contained only foods they enjoyed eating.
- Think outside the cereal box. The study's high-protein breakfast consisted of skim milk, a skinless chicken breast, a slice of whole grain bread, butter and a meringue — a sweet crunchy cookie that also contains protein from egg whites. If that's not your idea of an appealing breakfast, other lean breakfast options include nonfat yogurt, eggs (or egg whites and egg substitutes for those who must limit cholesterol), soy-based meat substitutes and a few high-protein ready-to-eat cereals. Boost protein in oatmeal by making it with skim milk instead of water and adding some nonfat powdered milk.
- Aim for 94 grams. If you want 25% of your 1,500-calorie diet to come from protein, that's how much you'd need to eat every day. Reaching 94 grams could include: a salmon fillet, three cups of skim milk and a skinless chicken breast. On a 2,000-calorie diet, you'll need to eat 125 grams of protein.