

## Your Appetite and Exercise

An exercise workout can leave you feeling hungry, or not. It depends on multiple factors, including your body fat percentage, fitness level and the length and intensity of your workout. Individual responses to exercise are variable and hard to predict. Here are some clues:

**the role of appetite hormones:** When you exercise, your hunger hormone ghrelin, may decrease, while levels of the hunger-suppressing hormone, leptin, increase „ more so when you exercise vigorously (running) than moderately (brisk walking). The effect is greater the longer you exercise. But once your body temperature returns to normal after exercise your hunger will likely kick in.

**Fuel up before your workout** can provide energy needed to exercise and may reduce your post-exercise hunger. What you eat depends on the intensity and length of your activity. Experts recommend eating a small balanced meal before long, strenuous exercise. For light exercise, such as walking, a snack of fruits or vegetables may suffice.

**Nourish after vigorous exercise.** To help your muscles recover and to replace their glycogen supply (energy), eat a meal or snack that contains both carbohydrates (e.g., fruits and vegetables) and lean protein. If you tend to feel famished after exercise, drink a glass of water before your meal and eat slowly „ it may help suppress overeating.

## What's Causing Your Backache?

Because the back bears most of your body weight, it's vulnerable to strain and injury. It's easy to hurt your back when you lift or overdo activities or sit too long, especially if the muscles supporting your back are weak.

The primary risk factors include a sedentary lifestyle, arthritis, obesity and smoking. Back pain may directly result from standing or sitting for long periods, ongoing strenuous labor, twisting, overstretching or overlifting.

The sources of low back (lumbar) pain can be the spinal discs between the vertebrae, the ligaments around the spine and the spinal cord and nerves, and the lower back muscles. Pain in the upper back is often due to spinal inflammation.

Chronic lower back pain, lasting more than 12 weeks, is the leading cause of disability. Fortunately, we're learning more about how to prevent and treat it.

The American College of Physicians (ACP) recently published guidelines for treating low back pain (not due to damaged spinal nerves). The ACP emphasizes replacing prescription drugs with therapies, including:

- Physical therapy.
- Muscle-strengthening exercise.
- Acupuncture.
- Stress reduction.
- Meditation.
- Tai chi and yoga.
- Progressive muscle relaxation and biofeedback.

These interventions have been shown to help patients shift their focus from pain and disability to being more functional despite residual pain. With practice, patients have found that mindfulness treatments such as meditation can produce a non-narcotic, pain-free effect.

one's levels of aspiration

