

Work out to sleep well

For centuries, a link between physical work and sleep has been noted, mentioned both in the Bible and in Shakespeare's *Macbeth*. Modern researchers are very interested in the effects of exercise on sleep and in the mechanisms at work in the body. There are still many unanswered questions. One challenge is the number of variables that come into play, making it difficult to compare results across studies. Also, much of the laboratory research has been conducted with "good" sleepers and there may be a ceiling beyond which good sleep isn't further improved.

One unexpected finding is that activity within a few hours of sleep does not disrupt sleep in any significant way. This is thought to be due to the raising of body temperature through exercise. Warming the body is one of the best ways to promote sleep. Exercise also stimulates parts of the brain associated with motor activity, but the effect of increased temperature appears to be stronger. This is good news for people who can't

schedule their workouts in the morning or afternoon; you can exercise in the evening without worrying that you will lose sleep as a result.

Longer workouts increase the duration of sleep, but the difference is only about 2 minutes' more sleep with workouts of an hour or less. Exercise need not be intense to improve sleep; in fact, light-intensity activity may decrease wakefulness after sleep onset, which is slightly increased by vigorous exercise. Elite athletes may experience disrupted sleep especially after extended exertion.

Research on "poor" sleepers is limited but very promising. Persons with restless leg syndrome and older adults with insomnia report improved sleep after structured exercise programs.

The conclusion: Exercise and then sleep on it!
from Atkinson and Davenne, Relationships between sleep, physical activity and human health, *Physiology and Behavior* 90 (2007): 229-235 and Youngstedt, Effects of exercise on sleep, *Clinical Sports Medicine* 24 (2005): 355-365.

Recipe of the Week: Whole Wheat Irish Soda Bread

from Tufts Health and Nutrition Letter , March 2011 8 slices

- ½ cup raisins
- ½ cup boiling water or brewed hot black tea
- 2 teaspoons caraway seeds
- 1 cup whole wheat flour
- ¾ cup all-purpose flour plus more for dusting
- ¾ teaspoons baking soda
- ½ teaspoon salt
- ¾ cup low-fat buttermilk
- 2 Tbsp brown sugar
- 1 Tbsp canola oil

1. Preheat oven to 425 degrees. Coat a 9" pie pan or small baking sheet with cooking spray.
2. Put raisins in a medium bowl. Pour boiling water over them. Let sit for 10 minutes. Drain in a sieve, press out excess moisture.
3. Crush caraway seeds with the bottom of a pan to release their fragrance.
4. Whisk together flours, baking soda and salt in a large mixing bowl. Add raisins and caraway seeds. Combine buttermilk, sugar and oil in a glass measuring cup. Gradually add buttermilk

mixture to flour mixture, stirring with a fork till a slightly sticky dough forms.

5. Turn dough onto floured surface. Knead several times. Form into a ball. Place in prepared pan. Flatten dough slightly to a height of 1 ½ to 2 inches. Dust lightly with flour. With a serrated knife, make a criss-cross slash, ½ inch deep, on top of loaf.
6. Bake till loaf is golden brown and sounds hollow when you tap the bottom, 25 to 30 minutes. Transfer to a wire rack; cool slightly before slicing.

Nutrition information: Calories: 160 Total fat: 2g
Saturated fat: 0g Cholesterol: 1mg Sodium: 291 mg
Carbohydrates: 32g Fiber: 3g Protein: 4g

Variations:

Flax Seed: reduce whole wheat flour to ¾ cup. Add 1/3 cup ground flaxseeds to flour mixture. Substitute 1 ½ tsp grated orange zest for caraway seeds.

Oatmeal: reduce whole wheat flour to ¾ cup. Add 1/3 cup old fashioned rolled oats to flour mixture. Replace caraway seeds with 1 ½ tsp freshly grated orange zest.

Tip of the Week: Let meat rest before you cut into it. This allows juices to redistribute through the meat and you'll get juicier results. If you cut it too soon, all the juice runs out on your cutting board. Rest smaller cuts of meat for about 5 to 10 minutes and larger roasts for longer (up to 20 minutes for a whole turkey, for example). --- www.eatingwell.com