Exercise is N.E.A.T.

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Exercise is N.E.A.T., but why should I care? ...

Benefits of Physical Activity

- Reduced Risk of CVD
- Weight Management
- Lowers blood pressure
- Increases HDL “good” cholesterol in blood
- Reduces risk of diabetes
- Keeps bones and joints strong
- Keeps muscles strong
- Attenuates the aging process
- Prevents falls
- Cuts down on stress
- Sleep better
- Improves Mood
- May reduce cancer risk

“Most Americans do not get enough physical activity to reap health benefits, and less than 25 percent of adults report getting any leisure time physical activity.”

--- CDC, 2010
"I don’t have the energy."
"Exercise is boring."
"I always get sore."
"I’ve got too many other things to worry about."
"I’ve tried it before, but I never stick with it."

It’s too much work to get in shape...

I don’t have the right clothes or equipment...
NEAT is the energy expended (calories burned) as you go about living your life...
- Climbing stairs
- Folding laundry
- Running errands

**EXAMPLES OF N.E.A.T. ACTIVITIES AND CALORIES BURNED**
- Grocery shopping with a cart
  - 52 calories
- Pushing a baby stroller
  - 57 calories
- Painting the living room
  - 68 calories
- Mowing the lawn
  - 125 calories
- Making copies at the office
  - 52 calories
- Walking the dog
  - 68 calories

Source: caloriesperhour.com; based on a 150–pound person and 20 minutes of activity
How does the body produce and use energy?

- Calories we consume from food are converted into energy by mitochondria
- Some of this energy is in the form of ATP
- Food calories that do not end up as ATP are converted to heat
- Ideally food intake = ATP + Heat

If there is an imbalance:
- Weight gain will occur (food intake > ATP + Heat)
- Weight loss will occur (food intake < ATP + Heat)
PA causes muscles to work harder. Thus ATP production is increased.

This energy demand also generates more heat.

Heat produced during PA has an important role in managing body weight and maintaining balance between caloric intake and energy expenditure.

Heat generated by mitochondria during PA can be divided into two categories:

Heat generated by exercise:
- Exercise Activity Thermogenesis
- Planned and structured
- What we do for fitness
- Aerobic, Muscular Fitness, Flexibility

Heat generated by N.E.A.T.:
- Activities of Daily Living
- Tends to be incidental

To E.A.T. or to N.E.A.T. ... Which is better?
History of Physical Activity and CVD Research

- Framingham heart study
  - Objective was to identify common factors or characteristics that contribute to CVD

- N.E.A.T. Jobs
  - London bus workers
  - Postal Workers
  - Occupational Physical Activity reduces risk of Overweight and Obesity, CVD risk factors and some types of cancer
In a study, sedentary lean and overweight subjects were fitted with “magical” underwear to monitor every movement of the body. Subjects were fed 1000 calories above their weight maintenance levels. N.E.A.T. accounted for differences in weight gain. Ambulation movement seemed to be the big difference maker. Most of the subjects had desk jobs. Those who were obese moved 2 ½ hours less than lean people. About 30% of a person’s daily energy expenditure comes from N.E.A.T. N.E.A.T. burns more calories than exercise in non-athletes.
By incorporating a variety of household activities into a circuit, a person can burn 200 to 350 calories per chore circuit session.

- Start with a 5-10 minute warm up
- Each work station should be 6-10 minutes in length.
- Start with simple tasks, and insert more difficult tasks in the middle of the circuit

**Work station 1**

**Work station 2**

**Work station 8**

**Work station 7**

**Work station 6**

**Work station 5**

**Work station 3**

**Work station 4**

Begin with a 5-10 minute warm up
Let’s Do Something N.E.A.T.

10 GREAT AT-YOUR-DESK EXERCISES*

1. Knee Kiss. Pull one leg to your chest, grasp with both hands, and hold for a count of five. Repeat with opposite leg.

2. Windmill. Place your feet apart on the floor. Bend over and touch your right hand to your left foot, with your left arm extended up. Repeat with opposite arm.

3. Back Relaxer. Bend down between your knees as far as you can. Return to upright position, straighten, and relax.

4. Pectoral Stretch. Grasp your hands behind your neck and press your elbows back as far as you can. Return to starting position, then drop your arms and relax. Repeat.

5. Middle-Upper Back Stretch. Raise your right arm and grasp it below the elbow with your left hand. Gently pull your right elbow toward your left shoulder as you feel the stretch. Hold for five seconds. Do both sides.

6. Side Stretch. Interlace your fingers. Lift your arms over your head, keeping your elbows straight. Press your arms backward as far as you can. Then slowly lean to the left, and then to the right, until you can feel stretching.

7. Fingers. With palms down, spread your fingers apart as far as you can. Hold for the count of five. Relax. Repeat.

8. Shoulder Roll. Slowly roll your shoulders forward five times in a circular motion, using your full range of motion. Then roll your shoulders backward five times with the same circular motion.

9. Neck. Let your head drop slowly to the left, then to the right. Slowly drop your chin to your chest, and then raise your chin as high as you can. Turn your head to the left, return it to the normal position, and then turn it to the right.

10. Quadriceps. Bring your legs straight out in front of your body, and then hold them in that position for five seconds. Make sure you are sitting up straight. Relax. Repeat.

* If your desk chair has wheels, exercise caution!
Go for the Gold!!!
Learn to read food labels

Read the Label Before You Buy

1. Serving Size
   Serving size is how much you’re supposed to eat. All the facts on the label are based on the serving size. Servings for different brands of the same food are the same size. For example, all brands of macaroni and cheese list a serving as “1 cup.” This makes it easier to compare brands.

2. Servings Per Container
   Servings per container tells you how many servings are in this box. Note: If you eat this whole box of macaroni and cheese, you’ll be eating 4 servings!

3. Amount Per Serving
   This shows the calories in one serving, and how many of these calories come from fat. One serving of this macaroni and cheese has 330 calories. Almost one-third (100) of those calories come from fat.

4. Fat, Cholesterol, Sodium, Carbohydrate, Protein
   This list tells you what nutrients and how much of each you get from this food. It gives you these facts by weight (g or mg) and by percent (%).
   - Total Fat, Saturated Fat, Trans Fat: Three grams (3g) or less Total Fat is best. To learn more about fats, see the other side of this brochure.
   - Cholesterol: This amount is not as important as Saturated Fat. But less is better.
   - Sodium: Salt. 480mg or less is best.
   - Total Carbohydrate: It’s important to track this number if you have diabetes. A dietitian (dye-uh-TISH-in) can tell you more and even help you plan meals. Talk to your doctor.
   - Dietary Fiber: In general, more fiber is better. Different types of fiber can help prevent diabetes, heart disease, and some cancers. Fiber can also help you lose weight.
   - Sugars: Less is better.

5. Percent (%) Daily Value
   This helps you decide if this food gives you too much or too little of something. Use these numbers to help decide if the food is healthy for you. They are based on eating 2,000 calories a day. Ask your doctor how many calories are right for you.

   A daily value of 5% or less is low and 20% or more is high. In general, you want foods with low fat and high fiber. This macaroni and cheese is a bit high in fat (16%) and low in fiber (8%).

6. Vitamin A, Vitamin C, Calcium, Iron
   This part lists how much of these vitamins and minerals are in one serving of this food.

7. General Information
   This last box is the same on all food labels. It shows how much of each nutrient you should have each day.
Visit MyPyramid.gov
<table>
<thead>
<tr>
<th>GRAINS</th>
<th>VEGETABLES</th>
<th>FRUITS</th>
<th>MILK</th>
<th>MEAT &amp; BEANS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make half your grains whole</td>
<td>Vary your veggies</td>
<td>Focus on fruits</td>
<td>Get your calcium-rich foods</td>
<td>Go lean with protein</td>
</tr>
<tr>
<td>Eat at least 3 oz. of whole-grain cereals, breads, crackers, rice, or pasta every day</td>
<td>Eat more dark-green veggies like broccoli, spinach, and other dark leafy greens</td>
<td>Eat a variety of fruit</td>
<td>Go low-fat or fat-free when you choose milk, yogurt, and other milk products</td>
<td>Choose low-fat or lean meats and poultry</td>
</tr>
<tr>
<td>1 oz. is about 1 slice of bread, about 1 cup of breakfast cereal, or ½ cup of cooked rice, cereal, or pasta</td>
<td>Eat more orange vegetables like carrots and sweetpotatoes</td>
<td>Choose fresh, frozen, canned, or dried fruit</td>
<td>If you don’t or can’t consume milk, choose lactose-free products or other calcium sources such as fortified foods and beverages</td>
<td>Bake it, broil it, or grill it</td>
</tr>
<tr>
<td></td>
<td>Eat more dry beans and peas like pinto beans, kidney beans, and lentils</td>
<td>Go easy on fruit juices</td>
<td></td>
<td>Vary your protein routine – choose more fish, beans, peas, nuts, and seeds</td>
</tr>
</tbody>
</table>

For a 2,000-calorie diet, you need the amounts below from each food group. To find the amounts that are right for you, go to MyPyramid.gov.

- Eat 6 oz. every day
- Eat 2½ cups every day
- Eat 2 cups every day
- Get 3 cups every day; for kids aged 2 to 8, it’s 2
- Eat 5½ oz. every day

Find your balance between food and physical activity
- Be sure to stay within your daily calorie needs.
- Be physically active for at least 30 minutes most days of the week.
- About 60 minutes a day of physical activity may be needed to prevent weight gain.
- For sustaining weight loss, at least 60 to 90 minutes a day of physical activity may be required.
- Children and teenagers should be physically active for 60 minutes every day, or most days.

Know the limits on fats, sugars, and salt (sodium)
- Make most of your fat sources from fish, nuts, and vegetable oils.
- Limit solid fats like butter, stick margarine, shortening, and lard, as well as foods that contain these.
- Check the Nutrition Facts label to keep saturated fats, trans fats, and sodium low.
- Choose food and beverages low in added sugars. Added sugars contribute calories with few, if any, nutrients.

U.S. Department of Agriculture
Center for Nutrition Policy and Promotion
April 2005
CNPP-15

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www.mypyramid.gov