THE DO'S AND DON'TS OF EXERCISE

SHOULD I SEE A DOCTOR BEFORE I START EXERCISING?

Most people do not need to see a doctor before they start exercise since a gradual, sensible exercise program will have minimal health risks. However, there are some people who should seek medical advice.

To find out if you should talk with a doctor before you start, use the following check list:

☐ Your doctor said you have heart trouble, a heart murmur, or you have had a heart attack.
☐ You often have pains or pressure in the left mid-chest area, left neck, shoulder, or arm during or right after you exercise.
☐ You often feel faint or have spells of severe dizziness.
☐ You have extreme breathlessness after mild exertion.
☐ Your doctor said your blood pressure was too high or is not under control, or you do not know whether or not your blood pressure is normal.
☐ Your doctor said you have bone or joint problems such as arthritis.
☐ You are over age 60 and not used to vigorous exercise.
☐ You have a family history of coronary artery disease at early ages.
☐ You have a medical condition which might need special attention in an exercise program. For example, insulin dependent diabetes.
☐ You are pregnant or have given birth less than 3 months ago.

If you have checked one or more items above, talk to your doctor before you start. If you have not checked items, you can start on a gradual, sensible exercise program tailored to your needs.

WHICH EXERCISES HELP CONDITION MY HEART AND LUNGS?

Exercises that improve the condition of your heart and lungs must have three key characteristics. These activities must be:

☐ Brisk: Raising heart and breathing rates
☐ Sustained: Done at least 15 to 30 minutes without interruption
☐ Regular: Repeated at least three times per week

These exercises are called aerobic and they use the large muscles of your legs and arms. They need to be done for at least 30 minutes, three times a week. Then they will condition your heart and lungs, burn off a lot of calories, and give you many other benefits of exercise.

*If you have any questions about these guidelines – or the appropriateness of any other activities – please call Orthopaedic Specialists of North Carolina at (919) 497-0118.
EXAMPLES OF AEROBIC EXERCISES ARE:

- Bicycling
- Cross-country Skiing
- Hiking (Uphill)
- Ice Hockey
- Jogging
- Jumping Rope
- Rowing
- Running in Place
- Stationary Cycling
- Swimming
- Tennis (Singles)
- Walking

HOW DO I BEGIN?

The key to a successful exercise program is choosing activities that you will enjoy. Here are some questions that can help you choose the right kind of exercise for you:

- **HOW PHYSICALLY FIT ARE YOU?**
  
  If you have been inactive for a while, you may want to start with walking or swimming rather than jogging or jumping rope. Beginning with less strenuous activities will allow you to become more fit without straining your body. Once you have gotten into better shape, you can change to a more vigorous activity if you wish.

- **HOW OLD ARE YOU?**
  
  If you are over 40 and have not been active, avoid strenuous programs such as jogging when you first start. For the first few months, build up the length and intensity of your exercise gradually. If you are over 60, walking and swimming are especially good forms of exercise.

- **WHAT GOALS DO YOU WANT FROM EXERCISING?**
  
  Set short term goals for yourself. Think about your long term goals you want to achieve from exercise.

- **DO YOU LIKE TO EXERCISE ALONE OR WITH OTHER PEOPLE?**
  
  Do you like individual activities such as swimming, team sports such as soccer, or two-person activities such as racquetball? Companionship can help you get started and keep you going. If you would like to exercise with someone else, can you find a partner easily and quickly? If not, consider choosing another activity, at least until you can find a partner.

- **DO YOU PREFER TO EXERCISE OUTDOORS OR IN YOUR HOME?**
  
  Outdoor exercise offers variety in scenery and weather. Indoor activities offer shelter from the weather and can offer the convenience of exercising at home as with stationary cycling. Some activities, such as running in place or jumping rope, can be done indoors or outdoors. If your activity can be seriously affected by the weather, consider choosing an alternate activity also. You can switch activities then and still stay on your regular schedule.

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HOW MUCH MONEY ARE YOU WILLING TO SPEND FOR SPORTS EQUIPMENT OR FACILITIES?
Many activities require little or no equipment. For example, brisk walking only requires a comfortable pair of walking shoes. Also, many communities offer free or inexpensive recreation facilities and physical activity classes.

WHEN CAN YOU BEST FIT THE ACTIVITY INTO YOUR SCHEDULE?
Do you feel more like exercising in the morning, afternoon or evening? Consider moving other activities around. Schedule your exercise as a regular part of your activities. Remember that exercise sessions are spread out over the week and need not take more than about 25 or 40 minutes at a time.

By choosing activities you like, you will be much more likely to exercise regularly, keep on exercising and enjoy its many benefits.

HOW DO I PACE MYSELF?

- Build up slowly. If you have been inactive for a long while, remember it will take time to get into shape. But no matter where you begin, you will be able to build up your exercise time or pace as your body becomes more fit. Just remember that you will feel more fit after a few weeks than when you first started.

HOW HARD SHOULD I EXERCISE?

- You can find out how hard to exercise by keeping track of your heart rate. Your maximum heart rate is the fastest your heart can beat. Your activity level should result in a heart rate of 60 to 85 percent of this maximum rate. This is called your target zone.

- Your maximum heart rate is usually 220 minus your age. For example, if you are 50 years old, your maximum heart rate is on an average 170 beats per minute. Your target zone will be 102 - 144 beats per minute (60 to 85% of 170).

- To see if you are within your target zone, take your pulse during or immediately after you stop exercising. If your pulse is below your target zone, exercise a little harder the next time. If you are above your target zone, exercise a little easier. And if it falls within the target zone, you are doing fine.

- If you are on blood pressure medicines, you should not use the target heart rate. Instead, use a scale where you are exercising at a rate that is fairly light to somewhat hard.

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HOW LONG SHOULD I EXERCISE?
Each exercise session should last about 25 to 40 minutes and include:

<table>
<thead>
<tr>
<th>Duration</th>
<th>Activity</th>
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<tbody>
<tr>
<td>5 min.</td>
<td>Warm Up</td>
</tr>
<tr>
<td>30 min.</td>
<td>Exercise in target zone</td>
</tr>
<tr>
<td>5 min.</td>
<td>Cool Down</td>
</tr>
<tr>
<td>40 min.</td>
<td>Total</td>
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</tbody>
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☐ WARM UP (5 MINUTES)
Begin exercising slowly to give your body a chance to warm up and get ready for more vigorous exercise. Start at a medium pace and gradually increase it by the end of the 5-minute warm-up period.

☐ EXERCISING WITHIN YOUR TARGET ZONE (30 MINUTES)
Your goal is a minimum of 30 minutes. Build up your exercising time gradually over the weeks until you reach your goal of 30 minutes. Start out by doing this 3 days each week and build up to 5 days per week.

☐ COOL DOWN (5 MINUTES)
After exercising within your target zone, slow down gradually. For example, swim more slowly or change to a more leisurely stroke. You can also cool down by changing from jumping rope to walking. This allows your body to relax gradually. Abrupt stopping can cause dizziness. If you have been running, walking briskly or jumping rope, repeat your stretching and limbering exercises to loosen up your muscles.

HOW OFTEN SHOULD I EXERCISE?
Exercising regularly is one of the most important aspects of your exercise program. If you do not exercise at least three times a week, you will not get as many of the benefits of regular, vigorous physical activity as you could, or make as much progress. Try to spread your exercise sessions throughout the week to maximize the benefits.

WHAT IF I MISS A FEW SESSIONS?
Whenever you miss a few sessions (more than a week), you will need to resume exercising at a lower level than before. Whatever the reason for missing sessions, do not worry about making up the missed days. Just get back into your routine and renew your commitment to health every day.

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WHAT PRECAUTIONS SHOULD I TAKE TO AVOID INJURIES?
The most powerful medicine for injuries is prevention. Here are some effective ways to avoid injuries:

- **BUILD UP YOUR LEVEL OF ACTIVITY GRADUALLY OVER WEEKS.**
  - Try not to set your goals too high, otherwise you will be tempted to push yourself too far too quickly.
  - For activities such as jogging, walking briskly and jumping rope, limber up gently and slowly before and after exercising.
  - For other activities, build up slowly to your target zone and cool down slowly afterwards.

- **LISTEN TO YOUR BODY FOR EARLY WARNING PAINS.**
  - Exercising too much can cause injuries to joints, feet, ankle and legs. Do not make the mistake of exercising beyond early warning pains in these areas, or more serious injuries may result. Fortunately, minor muscle and joint injuries can be readily treated by rest and aspirin.

- **BE AWARE OF POSSIBLE SIGNS OF HEART PROBLEMS SUCH AS:**
  - Pain or pressure in the left mid-chest area, left neck, shoulder, or arm during or just after exercising. Vigorous exercise may cause a side stitch while exercising, a pain below your bottom ribs, which is not the result of a heart problem.
  - Sudden dizziness, cold sweat, pallor or fainting.
  - Ignoring these signals and continuing to exercise may lead to serious heart problems. Should any of these signs occur, stop exercising and call your doctor.

- **For outdoor activities, take appropriate precautions under special weather conditions.**
  - On hot, humid days:
    - Exercise during cooler parts of the day such as early morning or early evening after the sun has gone down.
    - Exercise less than normal for a week until you become adapted to the heat.
    - Drink lots of fluids, particularly water. You do not need extra salt because you get enough salt in your diet. Also, a well conditioned body learns to conserve salt so that most of the sweat is water.
    - Watch out for signs of heat stroke, such as feeling dizzy, weak, lightheaded, and/or excessively tired; sweating stops; or body temperature becomes dangerously high.
    - Wear a minimum of light, loose-fit clothing.
    - Avoid rubberized or plastic suits, sweatshirts and sweat pants. Such clothing will not actually help you lose weight any faster by making you sweat more. The weight you lose in fluids by sweating will be quickly replaced as soon as you begin drinking fluids again. This type of clothing can also cause dangerous high temperatures, possible resulting in heat stroke.

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**On cold days:**

- Wear one layer less of clothing than you would wear if you were outside but not exercising. It is also better to wear several layers of clothing rather than one heavy layer.
- Use old mittens, gloves, or cotton socks to protect your hands.
- Wear a hat, since up to 40 percent of your body's heat is lost through your neck and head.
- On rainy, icy or snowy days, be aware of reduced visibility for yourself and for drivers, and reduced traction on pathways.

**OTHER TIPS ARE:**

- If you have eaten a meal, avoid strenuous exercise for at least 2 hours. If you exercise vigorously first, wait about 20 minutes before eating.
- Use proper equipment such as goggles to protect your eyes for handball or racquetball, or good running shoes with adequate cushioning in the soles.
- Hard or uneven surfaces such as cement or rough fields are more likely to cause injuries. Soft, even surfaces such as a level grass field, a dirt path or a track for running are better for your feet and joints.
- If you run or jog, land on your heels rather than the balls of your feet. This will minimize the strain on your feet and lower legs.
- Joggers or walkers should also watch for cars and wear light colored clothes or a reflecting band during darkness so that drivers can see you. Face oncoming traffic and do not assume that drivers will notice you on the roadway.
- If you bicycle, you can help prevent injuries by wearing a helmet and using a light and reflectors on the wheels at night. Also, ride in the direction of traffic and try to avoid busy streets.

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