

**AEROBIC
HEART RATE**

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(2008)

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IMPORTANT

The health information contained herein is not meant as a substitute for advice from your physician, or other health professional. The following material is intended for general interest only; and it should not be used to diagnose, treat, or cure any condition whatever. If you are concerned about any health issue, symptom, or other indication, you should consult your regular physician, or other health professional. Consequently, the Author cannot accept responsibility for any individual who misuses the information contained in this material. Thus, the reader is solely responsible for all of the health information contained herein. However, every effort is made to ensure that the information in this material is accurate; but, the Author is not liable for any errors in content or presentation, which may appear herein.

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Contents

| | |
|---|---|
| Heart Rate For Aerobic Exercise..... | 2 |
| General Exercise Guidelines | 2 |
| Aerobic Exercise Benefits..... | 3 |
| The Body's Response to Aerobic Exercise | 3 |

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Heart Rate for Aerobic Exercise

Optimal intensity for Aerobic exercise is a training heart rate range (bpm - beats per minutes), for at least 20 minutes, of:

$(220 - \text{your age}) \times 0.65$ (bpm) for burning fat

$(220 - \text{your age}) \times 0.75$ (bpm) for a good general balance

$(220 - \text{your age}) \times 0.85$ (bpm) for cardiovascular conditioning

The average aerobic pulse ranges for various ages are:

| <u>Age</u> | <u>Pulse (Heart) Rate</u> |
|------------|---------------------------|
| 20-29 | 145-164 |
| 30-39 | 138-156 |
| 40-49 | 130-148 |
| 50-59 | 122-140 |
| 60-69 | 116-132 |

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General Exercise Guidelines

- Approach exercise gradually. Set limited goals at the outset and sensibly work up.
- Give yourself a 1 month trial period.

Benefits of aerobic exercise are noticeable after 3 weeks.

And system changes are developed after 3 months.

The effects of aerobic exercising begin to fade after 40 hours of inactivity.

- Keep a record of your daily exercise activities.
- Expect some initial discomfort. There will be some aches and pains, especially if you have been out of shape. However, these will pass.
- Try to focus on the process of exercise rather than the product. Get into the inherently enjoyable aspects of the exercise itself.
- Reward yourself for maintaining a commitment to your exercise program.
- It is important to warm up with stretching exercises before starting your main exercise routine.
- Always cool down after completing your exercise program.
- Avoid exercising within 90 minutes of a meal.
- Avoid eating within 1 hour of exercising.
- Avoid exercising when you feel ill or over-stressed (use a deep relaxation technique instead).
- Stop exercising if you experience any sudden, unexplained bodily symptoms.
- If you find yourself getting bored with your exercise program, change it.
- Use every opportunity to exercise. Use stairs in buildings rather than lifts or escalators. When using car parks, do not park close to the building's entrance, and enjoy the walk.

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Aerobic Exercise Benefits

Aerobic exercise is relatively low-intensity exercise, which undertaken for a long duration (e.g. brisk walking for 30 mins). Aerobic means 'with oxygen', and it specifically refers to the use of oxygen in the body's muscle energy-generating process.

Thus aerobics is system of physical conditioning designed to enhance circulatory and respiratory efficiency that involves vigorous sustained exercise, such as jogging, swimming, or cycling.

Regular aerobic exercise has a direct effect upon both psychological and physiological factors. This includes:

- Reduced skeletal muscle tension, resulting in reduced feelings of tension or feeling 'uptight'.
- More rapid metabolism of excess adrenaline and thyroxin, resulting reduced negative arousal and vigilance.
- Discharges pent-up frustration, resulting in reduced phobic or panic reactions.
- Increased subjective feelings of well being.
- Reduced dependence upon alcohol and drugs.
- Reduced insomnia.
- Improved concentration and memory.
- Reduced depression.
- Increased self-esteem.
- Greater sense of control over anxiety.
- Enhanced oxygenation of the blood and brain, resulting in increased alertness and concentration.
- Stimulation of the production of endorphins, natural substances which resemble morphine, resulting in an increased sense of wellbeing.
- Lowered pH (increased acidity) of the blood, resulting in increased energy level.
- Improved circulation.
- Improved lung capacity and action.
- Improved digestion and utilization of food.
- Improved elimination from skin, lungs, lymphatics, kidneys, and bowels.
- Decreased cholesterol levels.
- Decreased blood pressure.
- Weight loss as well as possible appetite suppression.
- Improved blood sugar regulation (important in the case of hypoglycaemia - low blood sugar).

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The Body's Response to Aerobic Exercise

Within about three months of aerobic exercise, positive changes have taken place within the body, which collectively produce the 'Training Effect'.

These changes include:

- Increased heart size and capacity.
- Increased stroke volume of the heart.
- Lower resting heart rate.
- The body uses oxygen more efficiently by developing its aerobic (oxygen) metabolism capability.
- Decrease in use of lactic acid system.
- The body increases its stores of ATP (Adenosine triphosphate) and phosphagens.
- Increased number of capillaries.
- Increased volume of blood.
- The ratio of fat to muscle shifts in a positive direction.
- The body burns calories more efficiently.
- Exercise can help with psychological and emotional coping.

IMPORTANT

BEFORE EMBARKING UPON ANY NEW DIET OR EXERCISE PROGRAM, IT IS IMPORTANT TO CONSULT YOUR DOCTOR REGARDING YOUR PERSONAL HEALTH CONCERNS. THIS IS ESPECIALLY TRUE FOR PERSONS 40 YEARS OR OLDER

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