BeFitLifestyle
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Importance of Resistance (strength) Training

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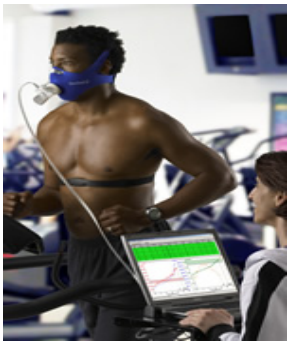
In order to have a well-rounded fitness program you will have to include some form of resistance training. Some of the benefits of resistance training include: prevent and/or rehabilitate injury, control body weight, prevent or treat osteoporosis, enhance athletic performance, and manage stress. Though there are a multitude of programs to guide you through a workout, we must find one that is safe and effective to suit your goals.

Assessment of Individual

Before starting a resistance program an assessment must be done in order find the needs of the individual. There are several factors to determine what type of program is suitable for each individual, these include: status of health and fitness, goals of participant, application of principles of training, and training environment.

- Status of Health and Fitness – this can be found by a medical exam administered by your primary care physician. A less evasive way is to fill out a medical and health questionnaire. A physical activity readiness questionnaire (PAR-Q) is a commonly used questionnaire in the fitness industry. Assessments administered at BeFitLifestyle include New Leaf VO2 Fitness assessment and Resting Metabolic Rate assessment. VO2- measures the volume of oxygen consumed and the volume of carbon dioxide produced to determine the type of fuels your body is using, termed “metabolic profile”. RMR- measures the amount of energy used at rest. This amount can be used to determine the amount of calories one should intake to produce a weight loss/gain.



- Goals of Participant – a simple questionnaire can help determine the goals of an individual. A development of realistic goals is important. Unrealistic goals can lead to discouragement, poor adherence, and injury. A certified professional can help in the development of these goals.

- Application of Principles of Training - a progressive overload is required for continued improvement. An overload occurs when a greater than normal physical demand is placed on the muscles or group of muscles.

- Environment- the type of equipment that will be used to effectively produce an overload to meet training goals. Different types of equipment that can be used are: free weights, cable weights, machine weights, elastic bands, and body weight.

Resistance Program

Once we have established these guidelines the next step is to figure out the **mode**, **intensity**, **duration**, **and frequency of training**. For generally healthy individuals a moderate intensity, 45-60 minutes, and twice a week program will be sufficient enough to produce positive results.

- **Mode** – there are three basic modes of resistance training: Isometric, Isokinetic, and Dynamic.
    1. **Isometric training** maintains a constant length of resistance and has no change in the joint position. This mode of training produces strength gains limited to the angles held by the joint. The advantage to this type of training is it plays a positive role in rehabilitation. Due to the acute elevation of blood pressure it is not advised to train in this mode if you have hypertension or those who require functional training.

    2. **Isokinetic training** requires a constant-speed movement of the working joints and muscles. Strength gains at faster speeds carry over to all slower speeds than the original working speed. This type of training is geared toward a more sport specific movements. Whenever there is speed involved the risk of injury is always greater.
    3. **Dynamic training** is recommended for most adults who want basic resistance training results. Dynamic training allows the joint to move in a full range of motion at a controlled constant speed, generally 1-2 seconds per repetition, allowing for a concentric phase (shortening of muscle) and an eccentric phase (lengthening of muscle).

- **Intensity-** A moderate intensity is recommended for most adults looking to reap the benefits of resistance training.

- **Duration-** Benefits can be gained by working 8-10 major muscle exercises with 2-3 sets each for about 45-60 minutes. The amounts of weight, repetitions, sets, and rest are based according to each individual's goals.

- **Frequency-** Twice-a-week resistance training for most adults should be done to attain goals.

Frequently Asked Questions

- **How can resistance training help me lose weight?**

  Muscle is the most active metabolic tissue in the body, thus when you create lean muscle tissue by resistance training you producing a fat burning machine. Also the primary function of skeletal muscle is to produce force, which generates work, work in turn burns calories. www.shapefit.com

- **How does resistance training help prevent osteoporosis?**

  Progressive bone loss occurs due to mineral loss caused by aging in women starting at the age of 30 and in men at the age of 40 years. Resistance Training can stabilize those losses and increase bone density strengthening weakened bones. www.acsm.org

- **Can I be pregnant and still train?**

  Yes, if you have been in training before pregnancy. Training can enhance your pregnancy and delivery. Certain guidelines and recommendations must be followed to ensure a safe program. www.befitmom.com

- **When should I eat before and after training?**

  It is best to have a sound meal 1 ½ - 2 hours before your training allowing digestion to occur. During a longer training session light carb intake is suggested. At the end of a session it is best to consume some type of protein/carb meal preferably less than 30 minutes after training to help in the recovery and rebuilding of worked muscles. www.acsm.org

- **How can I manage stress through resistance training?**

  Resistance training is a natural means to cope with stress of our daily lives. Physical Activity can be a catharsis for our emotional frustrations. www.lookgreatnaked.com