Exercise for
Enhanced Mood and Well-Being
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Exercise is good for you! Everyone knows this, yet many people never exercise. Why should you? One good reason is the growing scientific evidence indicating that exercise enhances mood and overall well-being. In this handout, the benefits of exercise will be discussed in relation to two common problems: anxiety and depression. In addition, the concept of exercise abuse will be addressed. First, here are some terms that will be referred to throughout this handout:

1. **Aerobic exercise**: This is continuous exercise *without* intermittent rest periods, such as going for a jog, swimming laps at a pool, and riding an exercise bike.
2. **Resistance exercise** (or **Anaerobic exercise**): This is exercise that has intermittent rest periods, such as lifting weights.
3. **Regular exercise**: This denotes a consistent exercise regimen, as opposed to inconsistent exercise or single bouts of exercise.

### Exercise and Anxiety

Exercise has long been regarded in popular culture as a good way to relax when a person is feeling anxious or nervous. However, the manner in which exercise and anxiety reduction are related is not simple or necessarily obvious. How does a person maximize the anxiety-reducing benefits of exercise? Should a person jog, lift weights, or swim? How hard should he or she exercise? Some information might help to clarify some of these questions, though it must be noted that some disagreement remains in research about these issues.

1. Single bouts of aerobic exercise have been shown to reduce anxiety for several hours afterwards. This appears true whether the intensity of the workout is low or high, although it seems that with high intensity workouts there may be a “lag time” immediately following exercise (some research would indicate around 20 minutes) before the reduction of anxiety is felt.
2. Bouts of resistance exercise have not been shown to reduce anxiety in the short term. While it cannot be conclusively said that no such benefit exists, present research has failed to show such benefits.
3. Regular aerobic exercise has been shown to decrease the amount of anxiety a person typically experiences in his/her daily life. It appears that low to moderate intensity exercise is best for such a benefit, while an exercise intensity level that is too high may not be of as much (if any) benefit. Such an impact on anxiety has not been demonstrated for resistance exercise.
4. The impact of regular aerobic exercise on the amount of anxiety a person typically experiences in his/her daily life is even greater for those who have a diagnosable anxiety disorder. This appears to be true regardless of whether or not a person experiences any increases in physical fitness. It also appears that this benefit is noted when the intensity of exercise is low to moderate.

### Exercise and Depression

Exercise has also often been considered to be a good way to help a person get out of a depressed state. Although this section addresses depression and dysthymic disorder, bipolar disorder is *not* included. As many people feel unmotivated, sluggish, tired, and lethargic when they are experiencing a depressed mood, it would seem to make logical sense that exercise could help them “get going”. While research does show benefits related to exercise, it is important to realize that not all types of exercise are equal in terms of providing benefit. The following information can help to clarify what research has demonstrated about the impact of exercise on depression.

1. Aerobic and anaerobic exercise have both been found to lead to improvements in mood. This seems to be true in the short term, although immediate reductions of depressive symptoms following a single bout of exercise do not seem to be as apparent as they are in the case of anxiety reduction. It does not appear that an increase in physical fitness level is necessary to achieve a reduction in depressive symptoms. These results have been found across different types of people who differ in physical fitness level.
2. Regular exercise does seem to be somewhat effective in reducing the likelihood of a relapse into a depressive episode when a person with a diagnosis of a depressive disorder is not experiencing symptoms.
3. Research regarding the effectiveness of exercise amount or intensity has been less clear. However, research does seem to indicate that mild to moderate intensity exercise may be more effective in reducing depressive symptoms than more intense exercise.

4. Exercise has been shown to have antidepressant effects for those diagnosed with mild to moderate levels of depression. However, those without such diagnoses do not seem to experience the same effects for the occasional depressed mood that everyone experiences in their lifetime.

Exercise Abuse

While exercise can have helpful effects related to mood, anxiety, and overall physical fitness level, it can also lead to problems for some individuals. When performed in excess, exercise can lead to health, relationship, or even financial problems for the individual. The concept of exercise abuse is discussed commonly in the fitness world, and is often misunderstood by the population at large. It should be noted that people can enjoy regular exercise and NOT be abusing exercise. Exercise abuse is a difficult concept for which to provide a concise definition. It has previously been known by other names such as “exercise addiction”, “exercise dependency syndrome”, and “activity anorexia”. It was first identified in runners who were experiencing a variety of physical and psychological difficulties that related to their running program, but can occur in other types of exercise. It is perhaps best defined through its symptoms, which include the following.

1. Excessive reliance on exercise, usually daily, as the primary means of coping. For the exercise abuser, exercise may be the only means of coping with stress. It often leads to a state in which the person is continually increasing the amount of exercise s/he performs, as one builds a “tolerance” to exercise. This may result in the individual beginning to make other daily activities and responsibilities secondary to exercise (i.e. work, family, and/or social obligations become secondary in importance).

2. Exercising even while injured. Since the exercise abuser exercises often and at a high intensity level, s/he is at high risk for injury. Despite being injured, such individuals often refuse to stop exercising even long enough to let injuries heal (even serious injuries such as broken bones). The potential reasons for this include exercise being the only means of coping, a fear of not staying “in shape” or gaining weight, or a fear of loss of identity as someone who is “into exercise”. Exercising while injured can result in more serious injuries.

3. Experience of withdrawal symptoms. First, it should be noted that it often takes an external event to get an exercise abuser to stop exercising (e.g. an injury that absolutely prevents exercise). When such an individual does stop, commonly reported symptoms are similar to those in substance abuse. These include altered sleep patterns, difficulty concentrating, mood swings, physical symptoms (muscle stiffness and soreness), and distorted self-image (i.e. thinking one looks “fat” or “small”). Symptoms such as these can have a rapid onset (i.e. within a few days).

Conclusions

Exercise can provide many benefits for people experiencing difficulties with mood and anxiety. However, relying solely on exercise as a means of coping is not recommended. While exercise can have many positive effects, it should be used as a complement to therapy for mood or anxiety problems. If you are experiencing significant depressive or anxiety symptoms, you should consult a mental health professional.

As is also readily apparent, exercising to excess and sole reliance on exercise as a coping mechanism can lead to serious problems. As such, it is important to consult a physical fitness professional if one is uncertain about the amount or intensity of exercise s/he is presently doing or would like to do. Exercise can be dangerous if one does not receive proper supervision or training. Further, proper training can ensure that a person gets the maximum results and enjoyment from their exercise regimen.

UCSC Counseling & Psychological Services provides confidential services including individual, group, couples and family counseling. In addition, CPS’s Stress Reduction Clinic provides a supportive environment to learn stress reduction techniques and create an individualized plan to manage stress and promote enhanced mood and well-being. For more information, call 459-2628 or view CPS’s website: http://www2.ucsc.edu/counsel/index.html

Other Campus Resources:
The UCSC Wellness Center offers personal fitness training, fitness testing, and exercise classes (e.g. weight training, yoga). For more information, call 459-2995 or view the Wellness Center’s website: http://www2.ucsc.edu/opers/wellness/.

UCSC Online Wellness Center offers articles and information about exercise, as well as wellness assessments:
http://owcucsc.wellsource.com/dh/default.asp

Acknowledgement:
This fact sheet was adapted from material originally developed by the University of Cincinnati Psychological Services Center and Division of Student Affairs and Services.