

## ART102

general health series

### THE EFFECTS OF EXERCISE ON DEPRESSION

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**ACCORDING TO THE NATIONAL INSTITUTE OF MENTAL HEALTH**, depression strikes more than 19 million Americans each year. Women, children, adolescents and older adults appear to be most at risk however findings at the Cleveland Clinic suggest that men's statistics are often under-reported. Fewer than half affected by depression seek treatment. It is no wonder that depression is on the rise in our society, as the growing complexities and fast pace of modern life, has increased stress. As a health and fitness leaders, it is important to understand depression, its symptoms, and the role that exercise can play in treatment and prevention.

**DEPRESSION** is an affective disorder or abnormal state of physiology characterized by disturbances in moods, feelings of intense sadness, despondency and gloom that last for long periods and interfere with daily ability. Everyone experiences the "blues" or short-lived sadness, which Freud termed "everyday misery". When it becomes unrelenting or impairs daily activity, it becomes a depressive disorder.

**THE GENERAL SYMPTOMS OF DEPRESSION** include physical, mental, and emotional signs:

- Change of sleep patterns, change in eating patterns, digestive problems, decreased sex drive, headache.
- Fatigue, unusual aches and pains, excessive use of alcohol or drugs, difficulty concentrating, persistent.
- Negative thoughts, difficulty making decisions, sadness, apathy, sense of loss, loss of interest, nightmares.
- Prolonged sadness, uncontrolled crying, irritability and anger, anxiety, anxiousness, restlessness, sense of guilt or worthlessness, pessimism or indifference, loss of interest in formerly pleasurable activities.
- Desire to be alone, recurrent thoughts of death or suicide.

**LEFT UNTREATED**, long-term depression reduces the body's ability to fight disease and can lead to other diseases. Serious warning signs of depression that can lead to suicide include talking about suicide, frequently talking about death, comments about hopelessness and worthlessness, switching from sad to happy, putting affairs in order, visiting or calling people cared about.

## **THE MOST COMMON TYPES OF DEPRESSION** are:

- **DYSTHYMIA** or chronic depression, characterized by constant unhappiness that lasts a long time.
- **MAJOR DEPRESSION** characterized by a constant sense of despair.
- **DOUBLE DEPRESSION** a combination of Dysthymia and Major Depression.
- **SEASONAL AFFECTIVE DISORDER (SAD)** affected by the seasons; WINTER SAD - characterized by weight gain, increase sleep, and increased appetite; SUMMER SAD - characterized by weight loss, decreased sleep and decreased appetite);
- **BIPOLAR DEPRESSION** (formerly called manic depression) characterized by high and low moods, often rapid swings or bouts of depression followed by sudden periods of exaggerated elation or MANIA.

**THE CAUSE OF DEPRESSION VARIES.** It is a complicated illness that involves several contributing factors including genes, environment, diet, lifestyle, brain chemistry, biochemistry, hormonal changes, trauma, accident, illness, abuse, psychology, and personality. There is no simple or single cause of depression. There has been no single gene identified as the cause of depression, but people can inherit certain traits that can make them prone to depression. The illness tends to cluster in families. Studies indicate that as many as 86 percent of serious cases of depression were set off by a life crisis such as a death divorce, illness, legal problem, money problem, forced change of job or long-term stress. Other studies suggest that depression is linked to a depleted functioning of the adrenal glands, diets high in white flour, sugar, alcohol and caffeine, vitamin deficiencies and common medications.

Women are more vulnerable to depression because of hormonal changes related to childbirth, puberty, menopause, and stress unique to women because of their general psychological makeup and emotional reactions, plus added stress associated with work demands and family life.

Eighty to ninety percent of people suffering from depression can be helped by treatment; however, in our society, the symptoms of depression often go unnoticed or are ignored. Suicide is the major risk of depression.

**THE TREATMENT OF DEPRESSION VARIES.** Treatment most commonly includes a combination of antidepressants drugs and psychotherapy. However, scientific research is beginning to recognize the benefits of exercise, proper nutrition, relaxation, and meditation for the treatment of depression.

Studies at Duke University, North Carolina, Medical Center suggest that exercise may be just as effective as medication in the treatment of mild to moderate depression. Exercise appears to have beneficial chemical effects on the brain, increasing neurotransmitters, serotonin, and beta-endorphins. Exercise boosts self-confidence increases socialization, improves sleep, burns stress chemicals like adrenaline, and develops a sense of self achievement. Dr Robert Brown, clinical associate professor, at the University of Virginia School Of Medicine, states, "Exercise produces chemical and psychological changes that improves mental health...and improves the functioning of the autonomic nervous system."

Some doctors are using **EXERCISE THERAPY** which consists of monitored physical activity usually combined with antidepressant drugs for treatment of depression. The surgeon general's report concludes that there is evidence that regular exercise can also lessen the odds of developing depression.

**MEDITATION** appears to have a similar effect to exercise in changing hormone related to elevated mood. In studies at the James Cook University, Queensland, Australia, it was concluded that there was no significant difference between exercise and meditation to relieve depression.

Dr. Pricilla, assistant clinical professor at the University of California suggests **NUTRITIONAL THERAPY** to increase serotonin and norepinephrine levels by using a **BALANCED DIET** with foods rich in vitamin B (whole grains, green vegetables, eggs, fish), fruit, nuts seeds and excluding caffeine alcohol, cola, white flour, sugar, food colorings and chemical additives.

**AS A FITNESS LEADER, NEVER ATTEMPT TO DIAGNOSE OR TREAT DEPRESSION.** With the recent terrorist threats and 9-11, the uncertain job market and fluctuating stock market, chances are that you will have clients and participants in your class who are coping with depression. If you recognize signs of depression in a participant, ask how they are feeling or if they are experiencing symptoms. After discussing their situation, you may suggest that they see their personal healthcare provider which may be a physician, physician's assistant, nurse practitioner, psychologist, social worker, nurse specialist or expert at a local community health center. It is important to create awareness and provide information.

**THERE IS NO EVIDENCE THAT ANY ONE KIND OF EXERCISE IS MORE EFFECTIVE THAN ANOTHER IN THE TREATMENT OF DEPRESSION.** It appears that any form of exercise can relieve depression. So, weightlifting will have the same effect as aerobic exercise in treating symptoms. The activity however must be enjoyable exercise and one that will be performed regularly. Accentuate the pleasurable aspects of the activity chosen. It should be non-competitive and moderate exercise because one cycle of depression is typified by an urge to overdue. The exercise should be realistic and practical with reduced anxiety because symptoms of fatigue, worthlessness, and lack of energy can interfere with motivation. Encourage compliance. Provide motivation. Remember that some depressed people will misuse exercise and undertake extreme physical activity; so, encourage moderation, a balanced diet and forms of relaxation.

**INSPIRE YOUR CLIENTS AND PARTICIPANTS.** Fill your class or workout session with positive ideas, thoughts, and actions to think about between sessions. Design all aspects of your class or workout to reflect health, hope and joy.

## **SUGGESTED EXERCISES TO RELIEVE DEPRESSION**

### **CORRECT BASIC POSTURE**

Mental state will change when the body posture changes. Most depressed individuals will “slouch. Practice correct posture in specific exercises throughout the workout.

### **HUMOR THERAPY - SMILE AND LAUGH**

Mental state will change if you place a big smile on your face. Just smile, right now! Include smiling as face exercises anytime during the class or session. Include laughter, tell jokes, or just start laughing.

### **MUSIC**

If music is part of the session, use upbeat music with positive and uplifting messages that encourage healthy self-esteem. Listen to the words. Avoid music that has sad and negative or violent words.

### **BREATHING**

Teach proper, full, breathing from the diaphragm. Focus attention fully on the breath at different parts of the session. Place the body in an open position. Increase the depth of breath gradually to no more than 4 full breath per minute. Visualize the breath coming into various body parts, balancing and cleansing.

### **GENTLE MOVEMENT**

Use the body in more natural unforced ways. Focus on low intensity and low impact movements. Include walking patterns with natural arm swinging patterns within aerobic routines. When conducting personal training sessions include non-stressful walking segments into the program. Try the Tai Chi BIG CIRCLE - Stand tall with your arms relaxed at your sides. Gently and slowly bring the hands palms up to the center of the body. Breath in. Continue bringing the arms overhead. Breath out. Reach all the way up and continue the arms down to the sides circling the body. Breathe in. Lower the arms back to the sides. Breathe out. Repeat.

### **PHOTOTHERAPY - LIGHT THERAPY**

Take the workout outside. Increase the light indoors. Use more lights. Open blinds, curtains and windows.

### **YOGA POSTURES**

Include the following yoga postures which help to alleviate depression: Downward Dog, Inverted Legs, Preparation for Fish and the Bow.

### **SELF MASSAGE**

Take shoes off at the end of the workout. Rejuvenate by rubbing the bottoms of the feet.  
Rub any tight muscles or area of the body that feels stressed.

### **RELAXATION**

Sit and "Just Be" at the end or beginning of the workout. Practice "thought stopping".  
Close your eyes for short periods of time at appropriate places in the workout.

### **PRACTICE POSITIVE AFFIRMATIONS THROUGHOUT THE WORKOUT**

Encourage positive thoughts, "I am strong and healthy", "I am filled with energy and vitality". Send positive messages in your instructional cues. Avoid the phrases "DON'T", "CAN'T" and "TRY".

### **GUIDED IMAGERY**

Create PICTURES in the mind by Storytelling as a part of the workout. Create journeys through rainbows, fields of green, tropical beaches and through the sky. Include successful challenging mental adventures exploring forests and caves. Always create a safe and positive environment. Visualize your body and mind health and strong.  
Imagine HOW it FEELS. See yourself being successful.

### **MEDITATION**

Practice simple meditation. Sit and focus on a theme word of the day (mantra) like health, vigor or fitness. Count breaths. Focus solely on one specific exercise for a period of time (slow abdominal curl up and down). Perform it slowly, in silence with focus without instruction or words or music.

### **AROMATHERAPY**

Lavender, rose, basil, nutmeg and pine alleviate depression. Use room sprays, safe candles or plug in oils.

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## **ART102 QUIZ**

In the body of an email to [askesaoffice@gmail.com](mailto:askesaoffice@gmail.com), place your first and last name on the first line and number the page from 1 to 10. DO NOT SEND AS AN ATTACHMENT. Answer TRUE or FALSE to the accuracy of each of the 10 statement below based on the information in this ESA article. You will be emailed a CEC validation certificate of completion, which you must keep for your records. ESA cannot replace lost forms and the article would need to be resubmitted.

- 1 - Depression strikes more than 5 million Americans each year.
- 2 - The Cleveland Clinic suggests that men's statistics are often under-reported.
- 3 - Fewer than half affected by depression seek treatment.
- 4 - Depression is an affective disorder or abnormal state of physiology.
- 5 - The general symptoms of depression are solely emotional.
- 6 - There is only one cause of depression.
- 7 - Women are more vulnerable to depression because of hormonal changes.
- 8 - People suffering from depression cannot be helped by treatment.
- 9 - In our society, the symptoms of depression often go unnoticed or are ignored.
- 10 - Suicide is the major risk of depression.