# Depression

By: Heather Wilson and Mason Payne

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#### 1-Definition and introduction to the population or specific disability

#### **Definition**:

Depression is a mood disorder that causes a persistent feeling of sadness and loss of interest. Also called major depression, major depressive disorder or clinical depression, it affects how you feel, think and behave and can lead to a variety of emotional and physical problems. You may have trouble doing normal day-to-day activities, and depression may make you feel as if life isn't worth living. --Mayo Clinic

Clinical depression is more than just the "blues," being "down in the dumps," or experiencing temporary feelings of sadness we all have from time to time in our lives. It is a serious condition that affects a person's mind and body. It impacts all aspects of everyday life including eating, sleeping, working, relationships, and how a person thinks about himself/herself. People who are clinically depressed cannot simply will themselves to feel better or just "snap out of it." If they do not receive appropriate treatment their symptoms can continue for weeks, months, or years. (http://www.allaboutdepression.com/gen\_01.html)

<u>Prevalence:</u> Depression affects approximately 19 million Americans, or 9.5% of the population in any given one-year period. At some point in their lives, 10%-25% of women and 5%-12% of men will likely become clinically depressed. In fact, it affects so many people that it is often referred to as the "common cold" of mental illness. It is estimated that depression exacts an economic cost of over \$30 billion each year, but the cost of human suffering cannot be measured. Depression not only causes suffering to those who are depressed, but it also causes great difficulty for their family and friends who often do not know how to help.(<a href="http://www.allaboutdepression.com/gen\_01.html">http://www.allaboutdepression.com/gen\_01.html</a>)

#### **Different types of Depression (Simplified)**

1. **Major depression** involves at least five of these <u>symptoms</u> (listed below in the DSM-5 MDD chart) for a two-week period. Such an episode is disabling and will interfere with the ability to work, study, eat, and sleep. Major depressive episodes may occur once or twice in a lifetime, or

- they may re-occur frequently. They may also take place spontaneously, during or after the death of a loved one, a romantic breakup, a medical illness, or other life event.
- 2. **Persistent depressive disorder, or PDD,** (formerly called dysthymia) is a form of depression that usually continues for at least two years. Although it is less severe than major depression, It involves the same <a href="majority symptoms">symptoms</a> (listed in the graphic below) as major depression, mainly low energy, poor appetite or overeating, and insomnia or oversleeping. It can manifest as stress, irritability, and mild anhedonia, which is the inability to derive pleasure from most activities. (<a href="http://www.adaa.org/understanding-anxiety/depression">http://www.adaa.org/understanding-anxiety/depression</a>)

# Types of depression, Expanded:

There are different types of depressive disorders. Symptoms can range from relatively minor (but still disabling) through to very severe, so it is helpful to be aware of the range of disorders and their specific symptoms.

#### **Major depression**

Major depression is sometimes called major depressive disorder, clinical depression, unipolar depression or simply depression. It involves low mood and/or loss of interest and pleasure in usual activities, as well as other symptoms. The symptoms are experienced most days and last for at least two weeks. Symptoms of depression interfere with all areas of a person's life, including work and social relationships. Depression can be described as mild, moderate or severe; melancholic or psychotic (see below).

#### Melancholia

This is the term used to describe a severe form of depression where many of the physical symptoms of depression are present. One of the major changes is that the person can be observed to move more slowly. The person is also more likely to have a depressed mood that is characterised by complete loss of pleasure in everything, or almost everything.

#### **Psychotic depression**

Sometimes people with a depressive disorder can lose touch with reality and experience psychosis. This can involve hallucinations (seeing or hearing things that are not there) or delusions (false beliefs that are not shared by others), such as believing they are bad or evil, or that they are being watched or followed. They can also be paranoid, feeling as though everyone is against them or that they are the

cause of illness or bad events occurring around them.

#### Antenatal and postnatal depression

Women are at an increased risk of depression during pregnancy (known as the antenatal or prenatal period) and in the year following childbirth (known as the postnatal period). You may also come across the term 'perinatal', which describes the period covered by pregnancy and the first year after the baby's birth.

The causes of depression at this time can be complex and are often the result of a combination of factors. In the days immediately following birth, many women experience the 'baby blues' which is a common condition related to hormonal changes, affecting up to 80 per cent of women. The 'baby blues', or general stress adjusting to pregnancy and/or a new baby, are common experiences, but are different from depression. Depression is longer lasting and can affect not only the mother, but her relationship with her baby, the child's development, the mother's relationship with her partner and with other members of the family.

Almost 10 per cent of women will experience depression during pregnancy. This increases to 16 per cent in the first three months after having a baby.

# Bipolar disorder

Bipolar disorder used to be known as 'manic depression' because the person experiences periods of depression and periods of mania, with periods of normal mood in between.

Mania is like the opposite of depression and can vary in intensity – symptoms include feeling great, having lots of energy, having racing thoughts and little need for sleep, talking fast, having difficulty focusing on tasks, and feeling frustrated and irritable. This is not just a fleeting experience. Sometimes the person loses touch with reality and has episodes of psychosis. Experiencing psychosis involves hallucinations (seeing or hearing something that is not there) or having delusions (e.g. the person believing he or she has superpowers).

Bipolar disorder seems to be most closely linked to family history. Stress and conflict can trigger episodes for people with this condition and it's not uncommon for bipolar disorder to be misdiagnosed as depression, alcohol or drug abuse, Attention Deficit Hyperactivity Disorder (ADHD) or schizophrenia.

Diagnosis depends on the person having had an episode of mania and, unless observed, this can be hard to pick. It is not uncommon for people to go for years before receiving an accurate diagnosis of bipolar

disorder. It can be helpful for the person to make it clear to the doctor or treating health professional that he or she is experiencing highs and lows. Bipolar disorder affects approximately 2 per cent of the population.

#### **Cyclothymic disorder**

Cyclothymic disorder is often described as a milder form of bipolar disorder. The person experiences chronic fluctuating moods over at least two years, involving periods of hypomania (a mild to moderate level of mania) and periods of depressive symptoms, with very short periods (no more than two months) of normality between. The duration of the symptoms are shorter, less severe and not as regular, and therefore don't fit the criteria of bipolar disorder or major depression.

#### **Dysthymic disorder**

The symptoms of dysthymia are similar to those of major depression but are less severe. However, in the case of dysthymia, symptoms last longer. A person has to have this milder depression for more than two years to be diagnosed with dysthymia.

#### **Seasonal Affective Disorder (SAD)**

SAD is a mood disorder that has a seasonal pattern. The cause of the disorder is unclear; however it is thought to be related to the variation in light exposure in different seasons. It's characterised by mood disturbances (either periods of depression or mania) that begin and end in a particular season. Depression which starts in winter and subsides when the season ends is the most common. It's usually diagnosed after the person has had the same symptoms during winter for a couple of years. People with Seasonal Affective Disorder depression are more likely to experience lack of energy, sleep too much, overeat, gain weight and crave for carbohydrates. SAD is very rare in Australia and more likely to be found in countries with shorter days and longer periods of darkness, such as in the cold climate areas of the Northern Hemisphere.

# Specific population: Depression in college students

• In 2011, the American College Health Association—National College Health Assessment (ACHA—NCHA—a nationwide survey of college students at 2- and 4-year institutions—found

- that about 30 percent of college students reported feeling "so depressed that it was difficult to function" at some time in the past year.
- Depression is also a major risk factor for suicide.8 Better diagnosis and treatment of depression can help reduce suicide rates among college students. In the Fall 2011 ACHA–NCHA survey, more than 6 percent of college students reported seriously considering suicide, and about 1 percent reported attempting suicide in the previous year.2 Suicide is the third leading cause of death for teens and young adults ages 15 to 24.9 Students should also be aware that the warning signs can be different in men vs. women.
- Causes for depression in college students include stresses such as:
  - o Living away from family for the first time
  - o Missing family or friends
  - o Feeling alone or isolated
  - o Experiencing conflict in relationships
  - o Facing new and sometimes difficult school work
  - o Worrying about finances
- (<a href="http://www.nimh.nih.gov/health/publications/depression-and-college-students/index.shtml">http://www.nimh.nih.gov/health/publications/depression-and-college-students/index.shtml</a>)

A lack of sleep, poor eating habits, and not enough exercise make up a recipe for depression among college students. The stress that comes with academia — including pressure to get good grades, financial worries, failed relationships and conflicts with roommates — are enough to force some students to leave college or worse.

In fact, depression is the number one reason students drop out of school or die by suicide.

Depression Among College Students Statistics

Depression is an epidemic among college students. Some of the more alarming statistics:

- 1 out of every 4 college students suffers from some form of mental illness, including depression
- 44 percent of American college students report having symptoms of depression
- 75 percent of college students do not seek help for mental health problems
- suicide is the third leading cause of death among college students
- young people diagnosed with depression are five times more likely to attempt suicide than adults

- 19 percent of young people in the United States either contemplate or attempt suicide every year
- 4 out of every 5 college students who either contemplate or attempt suicide show clear warning signs

# (<a href="http://www.healthline.com/health/depression/college-students">http://www.healthline.com/health/depression/college-students</a>)

UNIVERSITY students are four times more likely to be anxious and depressed than other people their age, a study of almost 1000 students has found. (<a href="http://depressionet.org.au/research/d-uni-students/">http://depressionet.org.au/research/d-uni-students/</a>)



# **TABLE 7.1** Criteria for Major Depressive Episode

A. Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.

*Note:* Do not include symptoms that are clearly due to a general medical condition or mood-incongruent delusions or hallucinations.

- Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad or empty) or observation made by others (e.g., appears tearful). Note: in children and adolescents can be irritable mood.
- Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation made by others)
- 3. Significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. *Note:* in children, consider failure to make expected weight gains
- 4. Insomnia or hypersomnia nearly every day
- Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down)
- 6. Fatigue or loss of energy nearly every day
- Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick)
- Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others)
- Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide
- B. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- C. The symptoms are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hypothyroidism).

2-Diagnosis, including specific characteristics, symptoms, prognosis, progression, etc.

# **Diagnosis**

How is depression diagnosed? We've become accustomed to doctors using specialized blood tests or other expensive laboratory tests to help them make a conclusive diagnosis. However, most laboratory tests are not very helpful when it comes to diagnosing depression. In fact, talking with the patient may be the most important diagnostic tool the doctor has.

To effectively diagnose and treat depression, the doctor must hear about specific <u>symptoms of depression</u>. While a physical examination will reveal a patient's overall state of health, by talking with a patient, a doctor can learn about other things that are relevant to making a depression diagnosis. A patient, for example, can report on such things as daily moods, behaviors, and lifestyle habits.

A depression diagnosis is often difficult to make because clinical depression can manifest in so many different ways. For example, some clinically depressed individuals seem to withdraw into a state of apathy. Others may become irritable or even agitated. Eating and sleeping patterns can be exaggerated. Clinical depression may cause a person either to sleep or eat to excess or almost eliminate those activities.

Observable or behavioral symptoms of clinical depression also may sometimes be minimal despite a person experiencing profound inner turmoil. Depression can be an all-encompassing disorder, and it affects a person's body, feelings, thoughts, and behaviors in varying ways.

#### Specific characteristics to help with Diagnosis.

A doctor can rule out other conditions that may cause depression with a physical examination, personal interview, and lab tests. The doctor will also conduct a complete diagnostic evaluation, discussing any family history of depression or other mental illness. Your doctor will evaluate your symptoms, including how long you've had them, when they started, and how they were treated. Your doctor will ask questions about the way you feel, including whether you have any symptoms of depression such as the following:

- -Sadness or depressed mood most of the day or almost every day
- -Loss of enjoyment in things that were once pleasurable

- -Major change in weight (gain or loss of more than 5% of weight within a month) or appetite
- -Insomnia or excessive sleep almost every day
- -Physical restlessness or sense of being rundown that is noticeable by others
- -Fatigue or loss of energy almost every day
- -Feelings of hopelessness or worthlessness or excessive guilt almost every day
- -Problems with concentration or making decisions almost every day
- -Recurring thoughts of death or suicide, suicide plan, or suicide attempt

To be diagnosed with major depression, you must have at least five of the symptoms listed above with at least one of the first two nearly daily for at least two weeks.

#### **Symptoms to help with diagnosis**

- -Difficulty concentrating, remembering details, and making decisions
- -Fatigue and decreased energy
- -Feelings of guilt, worthlessness, and/or helplessness
- -Feelings of hopelessness and/or pessimism
- -Insomnia, early-morning wakefulness, or excessive sleeping
- -Irritability, restlessness
- -Loss of interest in activities or hobbies once pleasurable, including sex
- -Overeating or appetite loss
- -Persistent aches or pains, <u>headaches</u>, cramps, or digestive problems that do not ease even with treatment
  - -Persistent sad, anxious, or "empty" feelings
  - -Thoughts of suicide, suicide attempts

#### **How long does depression last?**

Depression symptoms can last for weeks, months or sometimes even years. They can affect personality, interfere with social relationships, and work habits, potentially making it difficult for others to have empathy for you. Some symptoms are so disabling that they interfere significantly with your ability to function. In very severe cases, people with depression may be unable to eat, maintain their hygiene, or even get out of bed.

Episodes may occur only once in a lifetime or may be recurrent, chronic, or longstanding. In some cases, they seem to last forever. Symptoms may appear to be precipitated by life crises. At other times, they may seem to occur at random.

Clinical depression commonly occurs along with other medical illnesses such as heart disease or cancer and worsens the prognosis for these illnesses.

#### Are there physical signs of depression?

There are no inevitable physical signs of depression, though some manifestations may be seen quite often. Signs of depression may include the following:

- -Appearance of preoccupation
- -Lack of eye contact
- -Memory loss, poor concentration, and poor abstract reasoning
- -Pacing, hand wringing, and pulling on hair
- -Psychomotor retardation or agitation, such as slowed speech, sighs, and long pauses
- -Self-deprecatory manner, or belligerence and defiance (especially in adolescents)
- -Slowed body movements, even to the extent of being motionlessness or catatonic
- -Tearfulness or sad countenance

# **Depression Course & Prognosis**

#### Course of Depression

Depressive symptoms typically **develop over 2 or 3 weeks** before the onset of a major depressive

episode, during which time a person becomes anxious at the loss of concentration and energy. Untreated depressive episodes can last from 6 to 18 months, but average is about 8 months. Treated episodes typically last from 6 weeks to 3 months. In treated depression, episodes tend to return prematurely when antidepressants are not taken for the full indication.

Depression often is a **chronic disease** that relents periodically; depressed people may experience 1 to 2 years of mental health, without symptoms, between episodes. Approximately 60 percent of depressed people experience a second episode, and there is a 20 percent chance for chronic depression. Depressed people suffer an average of five or six episodes during a 20-year period, with an increased risk for recurrence in men. Given the average duration of an episode, chronic depression can affect about one-quarter of a person's lifetime.

Some people with depression develop episodes of mania as well as depression. This happens in roughly 7 percent of cases—usually between the ages of 30 and 3—commonly after four or five depressive episodes. It results in a diagnosis of bipolar disorder, rather than depression because the diagnostic criteria for recurrent major depression dictate the absence of mania.

Bipolar disorder may develop as a reaction to antidepressant medication, as the symptoms of people with bipolar behavior are similar to the side effects of antidepressant medication. These similarities include oversleeping and psychomotor retardation. A family history of bipolar disorder may also play a role.

#### 3-Specific needs

For treating college students:

#### **Diagnosing and Treating Depression in College Students**

College is a stressful environment for most young people, therefore it's especially important for parents, friends, faculty, and counselors to get involved if they suspect a student is suffering from depression.

Students themselves are often reluctant to seek help due to social stigmas related to depression. A mental health evaluation that encompasses a student's developmental and family history, school

performance, and any self-injurious behaviors should be performed to evaluate at-risk students before a treatment plan is made.

The best treatments for college-aged students suffering from depression are usually a combination of antidepressant medications and talk therapies such as cognitive behavioral therapy and ?interpersonal psychotherapy. Depressed students are also more likely to benefit from exercise, eating a healthy diet, and getting enough rest than many other groups. (Healthline.com)

#### **More University Funding and Openness/Awareness about Disorders:**

#### Innovative treatment models

The insufficient funding for college mental health services also means inadequate access to care and treatment. Colleges and universities are addressing this challenge by developing quick screening tools and brief consultations to rapidly determine the needs of each new student who visits the counseling center. The University of Texas at Austin's Counseling and Mental Health Center, for example, created a Brief Assessment and Referral Team (BART), which replaces a lengthy initial consultation with a brief assessment with a trained counselor, who then refers the student to the appropriate level of care.

"For some students, a single session with a mental health professional is all they need, perhaps to help them problem-solve a situation or talk about a personal concern," says Chris Brownson, PhD, associate vice president for student affairs and director of UT-Austin's Counseling Center. "Other students are in need of more intermediate or even extended care. This is a way of getting students in front of a counselor more quickly and then ultimately getting them connected to the type of treatment that they need in a much faster way."

In another effort to connect students with mental health services faster, the University of Florida's Counseling and Wellness Center launched its <u>Therapist Assisted Online (TAO)</u> program to deliver therapy to students with anxiety disorders — all over a computer or smartphone screen. The seven-week program consists of several modules that teach students to observe their anxiety, live one day at a time and face fears. Students also have weekly 10- to 12-minute video conferences with counselors, as well as homework that they do via an app. They even get text message reminders to prompt them to complete their assignments, says

Sherry Benton, PhD, the former director of the UF counseling center who led TAO's development.

The idea for TAO emerged after the center got funding to hire three more counselors, which Benton thought would help them eliminate their waiting list. Instead, it only bought them two weeks without a waiting list.

"It just seemed like every time we got an increase in funding and got more staff, we just had more students who wanted services," she recalls. The realization forced her to rethink how the center delivered care. TAO's success has been beyond Benton's expectations: When she compared the outcomes of the center's traditional face-to-face services with TAO's outcomes, the online clients' improvement in well-being and anxiety symptoms was significantly better than those receiving face-to-face therapy.

"It was phenomenal," says Benton, whose study on the results was submitted for journal publication in June. She thinks the program's success is due to how it's integrated into each student's life via smartphones — the technology allows students to do their therapy homework easily, and their counselors can monitor what students do during the week.

"Let's face it, we would all floss our teeth more often if our dentist could check up on us every few days and see if we were flossing," says Benton. She is now working with the school's office of technology and licensing to develop TAO into a commercial product and is investigating a similar prototype to treat substance abuse and depression among college students.

#### Education and awareness

Counseling centers are also reaching out beyond the therapist's walls in another way: working with faculty to include wellness awareness in their interactions with students.

"Certainly the bread and butter of what counseling centers do is seeing and treating individuals, but there's a significant amount of campus policy, faculty and staff training, consultation, outreach/prevention, and crisis work they provide as well," Douce says.

Data from the AUCCCD survey confirm that counseling centers are getting involved in more and more aspects of the university, says David Reetz, PhD, director of counseling services at Aurora University in the suburbs of Chicago, and one of the survey's lead authors.

The association's data show that a typical counseling center staffer spends about 65 percent of his or her time in direct clinical service, and another 20 percent to 25 percent of time on outreach initiatives, such as training students, faculty and other staff in mental health issues, as

well as offering suicide, sexual violence, and drug and alcohol prevention programs, Reetz says.

At Aurora University, for example, in addition to delivering presentations to faculty on ways to detect early signs of student distress, strategies to intervene and techniques for referring them to the appropriate mental health services, Reetz instructs faculty on the best ways to increase student motivation, pulling in concepts from the psychological literature on resilience, growth mindsets and grit. "We're taking psychological concepts that we ... have been using in one form or another in the clinical setting and helping faculty think about how they can ... infuse these concepts into their curriculum or into creating their classroom climate," Reetz says. Some counseling centers are beefing up their efforts to help all students understand the importance of mental health. That's essential, since 78 percent of students with mental health problems first receive counseling or support from friends, family or other nonprofessionals, suggests a 2011 study led by Eisenberg (*Journal of Nervous and Mental Disease*). One popular alliance among counseling centers and students is <u>Active Minds</u>. The organization's more than 400 student-run chapters throughout the United States support efforts to remove the stigma around mental health issues. For example, the Active Minds' "Send Silence Packing" is a traveling exhibition of 1,100 donated backpacks that represent the number of college students who die by suicide each year. "The backpacks are spread out in a high-traffic area on campus, like the quad, and it's impossible to walk by without taking notice," says Sara Abelson, senior director of programs at Active Minds. "It helps students recognize the need to pay attention, because we all have a role to play in preventing suicide." Abelson says the organization is also dedicated to championing the idea that student mental health and well-being are central to the mission, purpose and outcomes of every school — and that they need to be a priority.

"I think we're beginning to see more and more universities recognizing that creating a healthy climate and an open dialogue about mental health needs to be a priority," she says. "They're also realizing that it can't just be the responsibility of the counseling center, but that this is relevant across the university, and that everyone from the students to the administration needs to be playing a role."

-- American Psychological Association

#### Students under pressure

College and university mental health trends by school year among students already receiving services at counseling centers

Percentage of students	2010-11	2011-12	2012-13*
Attended counseling for mental health concerns	45.2%	47.6%	48.7%
Taken a medication for mental health concerns	31.0%	31.8%	32.9%
Been hospitalized for mental health concerns	7.0%	7.8%	10.3%
Purposely injured yourself without suicidal intent			
(e.g., cutting, hitting, burning, hair pulling, etc.)	21.8%	22.5%	23.2%
Seriously considered attempting suicide	23.8%	25.5%	30.3%
Made a suicide attempt	7.9%	8.0%	8.8%
Considered seriously hurting another person	7.8%	7.9%	11.2%
Intentionally caused serious injury to another person	2.4%	2.2%	3.3%

Source: Center for Collegiate Mental Health

# **Specific Treatment of Residual Fatigue in Depressed Patients**

THE VAST MAJORITY OF PATIENTS WITH DEPRESSION WHO respond to treatment continue to show significant symptoms. The standard approach to this situation is switching or adding antidepressants or augmenting with other types of agents. This article ascribes to a nontraditional paradigm for the management of residual depression. In a previous publication, it has been proposed that the treatment of residual depression addresses specific symptoms. Here that proposal is applied to the management of fatigue as a residual symptom in treated depressives. Due to the scarcity of studies regarding the treatment of fatigue *per se* in depression, we use information from the basic sciences and sports medicine, psychopharmacology, and the experience in the treatment of fatigue in related illnesses, e.g., somatoform disorders, chronic fatigue syndrome (CFS), fibromyalgia, or multiple sclerosis (MS). The following information helps shape some practical guidelines for the management of this significant and impairing symptom in depressive patients with a partial response to antidepressant treatment.

<sup>\*</sup>In 2012–13 the answer format was changed for all items except prior counseling/medication. This change may have partially accounted for some of the increases, but because rates changed differentially, it's clearly more than that. For a more detailed explanation of changes, see the Center for Collegiate Mental Health 2013 Annual Report.

Fatigue is a common complaint, not only from medical and psychiatric patients but also in the community. In the mid 20th century, a study seeking cancer-predicting signs interviewed over one million people in the US and found that 45.7 percent of women and 33.0 percent of men reported fatigue. National mental health surveys in several countries agree on its high prevalence rate. The 1984 Epidemiological Catchment Area (ECA) study of the National Institutes of Health (NIH) reflected a current fatigue prevalence of 6.7 percent and a lifetime prevalence of 24.4 percent; in a study of the Australian Bureau of Statistics, 13.29 percent reported fatigue; in a survey conducted in Great Britain by the Office of Population Censuses and Surveys, fatigue was the most common neurotic symptom with a prevalence of 27 percent. Most of these people associate their fatigue with a psychological component. In a British study of over 15,000 people in the community, almost 60 percent attributed their fatigue to psychosocial or psychological causes. 6

Fatigue is also a common complaint in primary care. Studies in primary care in North America and Europe show that 10 to 20 percent of men and 10 to 30 percent of women report significant fatigue. 7–9 The World Health Organization Multinational Primary Care Study, which was conducted in industrialized and underdeveloped countries, shows a weighted prevalence of eight percent for substantial unexplained fatigue vs. 1.7 percent for CFS. 10

Fatigue is a common presenting symptom in depression and dysthymia. In the Depression Research in European Society (DEPRES) study, which spanned six European countries, 73 percent of people with depression reported tiredness. 11 In an Italian study of 512 patients with dysthymia without major depression, investigators found that fatigue was the most common symptom accompanying depressed mood (96% of cases). 12 Fatigue shows a strong association with the depressive syndrome. An American study, comparing depressed and nondepressed women, found that fatigue had a sensitivity of 77 percent and specificity of 84 percent for the diagnosis of major depressive disorder. 13 Fatigue is a predictor of future depression. From a study of ECA subjects, it has been estimated that the presence of fatigue increases the chances of developing depression over the next year by 2.6 times in women and 6.8 times in men. 14 In another 13-year follow-up to the ECA from 1981 to 1994, it was found that subjects with fatigue in the 1981 interview but not in the 1994 interview had an incidence of depression 4.1 times higher than controls, and subjects with fatigue in both interviews had an incidence of depression 23.6 times higher. 15

Fatigue is a common symptom in treated, depressive patients, even in responders. In the DEPRES European study, 72.3 percent of men and 77.7 percent of women reported fatigue after receiving pharmacotherapy or psychotherapy for their depression. 16 In an American study, 38 percent of subjects who met criteria for response to fluoxetine still reported fatigue. 17

## **Possible Mechanisms of Fatigue**

Fatigue is a complex concept involving both somatic information and the cognition that the intellectual or physical activity requires a higher share of the individual's energy or that the individual is less productive than usual. Probably a multiplicity of pathways and substances are related to this complex feeling, especially serotonin, dopamine, the HPA axis, and inflammatory cascades involving substances like cytokines.

Information from basic sciences and sports medicine indicates that increased serotonin in certain areas of the brain, like the lateral hypothalamus, plays a role in the genesis of central fatigue. Serotonin agonists increase fatigue, and general serotonin antagonists reduce fatigue in animal models. It has been hypothesized that serotonin may induce fatigue through inhibition of the dopaminergic system and/or through the HPA axis.18,19

Dopamine has long been associated with fatigue, and the most potent stimulant agents currently available are dopaminergic. Central dopamine seems to be related to fatigue in an inverse way to serotonin. Dopamine metabolism is enhanced during exercise in the hypothalamus and other areas of the brain, and exercise endurance is impaired after destruction of dopaminergic neurons in animal models. Clinically, fatigue, a prominent symptom in Parkinson's disease, improves with both L-dopa and bilateral deep brain stimulation. 20,21

The association between adrenal hormones and depression has been known for decades. Though elevated cortisol secretion in depression has been an accepted truth, recent evidence seems to contradict this. 22 In any case, cortisol apparently may induce the main enzyme metabolizing tryptophan, tryptophan pyrrolase. Some inflammatory reactions involving immunologic cascades may also induce central fatigue. Fatigue is a common feature of MS, and substances associated with clinical depression and fatigue include some cytokines widely used in clinical practice (e.g., interferon).

# **Management of Residual Fatigue in Depression**

The management of residual fatigue in depression may be summarized in five steps:

- 1 list-behavior=enumerated prefix-word= mark-type=decimal
- 2 Make a definitive diagnosis that it is residual fatigue.
- 3 Deal with contributing factors.
- Acknowledge the importance of fatigue, establish a clear attribution, and collaboratively design a treatment plan.

- 5 Start graded exercise.
- 6 If necessary, start specific medication.
- **1. Differential diagnosis.** *Excessive daytime sleepiness (EDS)*. EDS may be due to insufficient or unsatisfactory sleep (including sleep apnea). Asking about sleep quality and amount (initial, middle, or late insomnia) must be part of the interview with any depressed patient. It is important also to consider hangover from hypnotics, be it over the counter (antihistaminics) or prescribed (especially zolpidem). Finally, we must remember that many psychotropics, besides hypnotics and anxiolytics, may induce EDS. Causes of EDS are listed in <u>Table 1</u>. table ft1table-wrap mode=article t1

Fatigue from medical causes. Most physical illnesses may cause fatigue. However, here we are dealing with a mental healthcare population or a primary care population that is supposed to have regular medical check-ups. Thus, we only mention those medical causes of new fatigue that could be at work in an apparently healthy or stable patient. It is important to consider medications for physical conditions, like beta-blockers, antithyroid drugs, cytokines (interferon), immunosuppressants, and anti-cancer medications. Medical causes of fatigue are listed in

Antidepressant- and psychotropic-induced fatigue. Serotonergic agents should be suspected of causing fatigue, especially if the fatigue was not present or was less marked at the beginning of treatment. It is important to keep in mind that besides SSRIs, all tricyclic antidepressants (TCAs), venlafaxine, and now duloxetine have serotonin reuptake inhibiting action. Fatigue is not an unusual complaint with anticonvulsants and is a widely known response to antipsychotics and likely related in that case to decreased dopaminergic drive but also to other mechanisms

#### ANTIDEPRESSANT-PSYCHOTROPIC-INDUCED FATIGUE

**2. Lifestyle factors contributing to fatigue.** A sedentary lifestyle with physical deconditioning is a common cause of fatigue; this will not improve easily with interventions other than exercise. Overwork also needs to be taken into account, and we must differentiate fatigue from the exhaustion caused by overwork or a hectic lifestyle that will only improve with rest. Drug and alcohol abuse are causes patients often do not volunteer, and this needs to be actively addressed. Withdrawal from nicotine, caffeine, and stimulants like cocaine needs to be considered. Finally, it is indispensable to ask patients

in detail about their eating habits for the assessment of residual fatigue.

#### LIFESTYLE CONTRIBUTING FACTORS TO FATIGUE

**3. Cognitive intervention.** Structured cognitive behavioral therapy (CBT) is always an option for residual depression; 24–26 however, here we are discussing a cognitive intervention to be performed by the medication prescriber and directed specifically to fatigue. This intervention in residual fatigue is, to a large extent, modeled on those for somatoform disorders, CFS, and fibromyalgia. 27–29 We acknowledge the importance of the fatigue and the impairment it causes and address patient's anxiety by establishing a causal attribution. We reassure the patient but also let him exteriorize his complaints. Jointly we design a treatment plan and recruit the patient's collaboration to change contributing factors and to follow the exercise plan

#### COGNITIVE INTERVENTION

**4. Graded exercise.** Besides improving physical condition, sustained exercise may improve mood itself. Exercise is usually part of CBT protocols modified for patients with somatoform disorders, CFS, or fibromyalgia. <u>30,31</u> It is important to start with a comfortable intensity and warn patients against going over schedule, because if they get sore they are more likely to stop exercising.

#### **GRADED EXERCISE**

**5. Pharmacological interventions**. There are practically no prospective studies addressing the specific effects of medications on residual fatigue. However, the experience in treatment-resistant depression with medications like stimulants, thyroid preparations, and more recently with selegiline and modafinil, plus the increasing knowledge of the treatment of fatigue in conditions like CFS, MS, fibromyalgia, or human immunodeficiency virus (HIV) infection, allows us to extract some suggestions in this regard. Possible medication management are discussed next and are listed in

MEDICATION MANAGEMENT *Bupropion*. This antidepressant has a unique mechanism of action that involves dopaminergic and noradrenergic actions. Clinically, it has an alerting effect and interferes with sleep if taken close to bedtime. It has also proved useful in attention deficit disorders. In depression, bupropion does not seem to affect the psychomotor performance. <u>32</u> Though we do not know of prospective studies that address its specific effect on energy in depressed patients, bupropion seems to be effective in fluoxetine-resistant CFS. <u>33</u>

SSRIs. Compatible with the proposed role for serotonin in central fatigue, these antidepressants at best

seem to have no positive effect on fatigue *per se*. Paroxetine in depressed cancer patients improved depression but not fatigue. 34 Citalopram, in idiopathic chronic fatigue, showed no difference with placebo. 35 As mentioned above, one third of depressed patients who responded to fluoxetine had fatigue as a residual symptom. In a comparison with exercise in CFS, fluoxetine improved depression only, while graded exercise improved fatigue. 36 A double-blind study did not show difference among fluoxetine, paroxetine, and sertraline regarding fatigue. 37

If an SSRI is considered indispensable in patients with marked fatigue (e.g., because of significant anxiety), some suggest that the best choice is sertraline, because of its mild dopaminergic action. Sertraline improved fatigue in depressed patients with MS, though fatigue improvement seemed to be due primarily to changes in mood.38

Stimulants. Stimulants have a questionable intrinsic antidepressant effect; however, they have been used as augmenting agents in depression. There is a growing body of experience with stimulants to improve fatigue in medical conditions like stroke, MS, cancer, HIV infection, and in elderly patients. Recent studies include D-amphetamine in HIV and CFS and patient-controlled methylphenidate administration in cancer. 39,40 Stimulants seem better indicated for patients with medical contributors to fatigue or with significant psychomotor retardation.

*Modafinil*. This agent, approved for the treatment of narcolepsy, is widely used to improve alertness in other conditions. There are reports of augmentation with modafinil in partial response in depression<u>41</u> and in the treatment of fatigue in MS.<u>42</u> A relatively large placebo-controlled study of modafinil for fatigue in depression showed modafinil separating from placebo at Week 2 but not at Week 6.<u>43</u> In another study, modafinil was comparable to caffeine on alertness and performance during sleep deprivation.<u>44</u>

Amantadine and dopaminergic agents. Amantadine, an anti-Parkinsonian medication with unclear mechanism of action, has shown positive results in the fatigue of MS, but there is debate regarding the clinical significance of these findings. 45 The dopamine agonists, pergolide and cabergolide, seem to be useful as adjunct to treatment-resistant depression; pergolide, a D1 and D2 agonist, improved fatigue in Parkinson's disease patients while bromocriptine, a D2 agonist, did not. 46 Selegiline, a MAO inhibitor used in Parkinson's disease, improved vigor in CFS without showing an antidepressant effect. 47 Thyroid hormones. Thyroid preparations have long been used as augmentation in depression treatment. There also has been permanent debate within and outside of psychiatry regarding the usefulness of giving thyroid hormones to individuals with TSH levels within the laboratory normal range. Now there is new information suggesting that hypothyroidism is a relative state. Variation of thyroid function tests within an individual over time seems to be small and much narrower than laboratory range; thus,

clinically important disease might be present in individuals with normal or raised TSH concentrations. 48 In at least one study, giving l-thyroxine (50mcg) to euthyroid individuals improved depression and fatigue, especially in women, without drug-induced hyperthyroidism. 49 Serotonin-3 receptor antagonists. These medications are mainly used as antiemetic in chemotherapy. 5-HT3 receptors are ubiquitous and present in areas that relate to depression, with high concentrations in area postrema, tractus solitarius, caudatus, nucleus accumbens, amygdala, and hippocampus. Ondansetron and tropisetron have been reportedly beneficial and well tolerated in CFS and fibromyalgia; however, a significant barrier to gaining more clinical experience is their high price.

#### Summary

Residual fatigue in depression not only contributes significantly to quality-of-life deterioration, but also appears to be a major risk factor for chronicity and relapse. Thus, though prospective studies on the specific treatment of residual fatigue in depressed patients are urgently needed, we should not remain passive in the interim. With a pragmatic and integral approach, our patients will benefit greatly.

4-Specific tests, equipment, medication, etc.

#### **Treatment:**

A number of very effective treatments for depression are available. The most common treatments are **antidepressants** and **psychotherapy**. Some people find that a combination of antidepressants and psychotherapy works best. A doctor or mental health care provider can help you find the treatment that's right for you.

- 1. Antidepressants work on brain chemicals called neurotransmitters, especially serotonin and norepinephrine. Other antidepressants work on the neurotransmitter dopamine. Scientists have found that these particular chemicals are involved in regulating mood, but they are unsure of the exact ways that they work.
- **2. Psychotherapy** involves talking with a mental health care professional to treat a mental illness. Types of psychotherapy that have been shown to be effective in treating depression include:
- **Cognitive-behavioral therapy (CBT)**, which helps people change negative styles of thinking and behavior that may contribute to depression
- Interpersonal therapy (IPT), which helps people understand and work through troubled personal relationships that may cause or worsen depression.

Depending on the type and severity of your depression, a mental health professional may recommend short-term therapy, lasting 10 to 20 weeks, or longer-term therapy.

http://www.nimh.nih.gov/health/publications/depression-and-college-students/index.shtml

#### Exercise as a form of treatment

- Each volunteer exercised for four months, while continuing to take an antidepressant. At the end of that time, according to the study <u>published recently in The Journal of Clinical Psychiatry</u>, 29.5 percent had achieved remission, "which is a very robust result," Dr. Trivedi said, equal to or better than the remission rates achieved using drugs as a back-up treatment. "I think that our results indicate that exercise is a very valid treatment option" for people whose depression hasn't yielded to S.S.R.I.'s, he said. --NY Times
- Physical activity has been shown to be associated with decreased symptoms of depression and anxiety. Physical activity has been consistently shown to be associated with improved physical health, life satisfaction, cognitive functioning, and psychological well-being. Conversely,

physical inactivity appears to be associated with the development of psychological disorders. Specific studies support the use of exercise as a treatment for depression. Exercise compares favorably to antidepressant medications as a first-line treatment for mild to moderate depression and has also been shown to improve depressive symptoms when used as an adjunct to medications. While not as extensively studied, exercise has been shown to be an effective and cost-efficient treatment alternative for a variety of anxiety disorders. --PubMed

#### Promoting a Healthy Lifestyle as a form of Treatment

- Eat healthy. There is no magic diet that fixes depression. It's a good idea to watch what you eat, though. If depression tends to make you overeat, getting in control of your eating will help you feel better.
- Although nothing is definitive, Cook says there's evidence that foods with omega-3 fatty acids (such as salmon and tuna) and folic acid (such as spinach and avocado) could help ease depression.

Here is a list of 10 foods that provide the nutrients the body needs to fight off inflammation in the brain, which leads to depression.

#### 1. Dark Leafy Greens

If you were to choose the healthiest food of all, the most nutrient-dense item available to us to eat, it would be dark, leafy greens, no contest. Spinach. Kale. Swiss chard. Greens are the first of the G-BOMBS (Greens, Beans, Onions, Mushrooms, Berries, Seeds) that Dr. Fuhrman describes in his book, The End of Dieting, the foods with the most powerful immune-boosting and anticancer effect.

"These foods help to prevent the cancerous transformation of normal cells and keep the body armed and ready to attack any precancerous or cancerous cells that may arise," he writes. They fight against all kinds of inflammation, and according to a new study published in <u>JAMA Psychiatry</u>, severe depression has been linked with brain inflammation. Leafy greens are especially important because they contain oodles of vitamins A, C, E, and K, minerals and phytochemicals.

#### 2. Walnuts

Walnuts are one of the richest plant-based sources of omega-3 fatty acids, and numerous studies have demonstrated how omega-3 fatty acids support brain function and reduce depression symptoms. A study published in the <a href="British Journal of Psychiatry">British Journal of Psychiatry</a> is especially interesting. The lead authors ask the

question, Why is the vast biological research — from genetics to psychopharmacology — concentrated on neurotransmitters, when the mammalian brain is approximately 80 percent fat (lipids), and there is a growing body of research demonstrating the critical role of lipids to help brain functioning? What's more, the shift in the Western diet away from these necessary omega-3 fatty acids over the last century parallels the large rise in psychiatric disorders in that time.

#### 3. Avocado

I eat a whole one every day in my salad for lunch. Avocados are power foods because, again, they contain healthy fat that your brain needs in order to run smoothly. Three-fourths of the calories of an avocado are from fat, mostly monosaturated fat, in the form of oleic acid. An average avocado also contains 4 grams of protein, higher than other fruits, and is filled with vitamin K, different kinds of vitamin B (B-9, B-6, and B-5), vitamin C, and vitamin E-12. Finally, they are low in sugar and high in dietary fiber, containing about 11 grams each.

#### 4. Berries

Blueberries, raspberries, strawberries, and blackberries are some of the highest antioxidant foods available to us. I try to have a variety for breakfast in the morning. In a study published in the <u>Journal of Nutritional and Environmental Medicine</u>, patients were treated for two years with antioxidants or placebos. After two years those who were treated with antioxidants had a significantly lower depression score. They are like DNA repairmen. They go around fixing your cells and preventing them from getting cancer and other illnesses.

#### 5. Mushrooms

Here are two good reasons mushrooms are good for your mental health. First, their chemical properties oppose insulin, which helps lower blood sugar levels, evening out your mood. They also are like a probiotic in that they promote healthy gut bacteria. And since the nerve cells in our gut manufacture 80 percent to 90 percent of our body's serotonin — the critical neurotransmitter that keeps us sane — we can't afford to not pay attention to our intestinal health.

#### 6. Onions

You won't find this item on most lists of <u>mood foods</u>. However, it's included in Fuhrman's G-BOMBS because onions and all allium vegetables (garlic, leeks, chives, shallots, and spring onions) have been associated with a decreased risk of several cancers.

"Eating onions and garlic frequently is associated with a reduced risk of cancers of the digestive tract," explains Fuhrman. "These vegetables also contain high concentrations of anti-inflammatory flavonoid antioxidants that contribute to their anti-cancer properties." Again, if you consider the relationship between your digestive tract and your brain, it is understandable why a food that can prevent cancers of the gut would also benefit your mood.

#### 7. Tomatoes

I try to eat at least six baby tomatoes in my salad each day for lunch because tomatoes contain lots of folic acid and alpha-lipoic acid, both of which are good for fighting depression. According to research published in the <u>Journal of Psychiatry and Neuroscience</u>, many studies show an elevated incidence of folate deficiency in patients with depression. In most of the studies, about one-third of depression patients were deficient in folate.

Folic acid can prevent an excess of homocysteine — which restricts the production of important neurotransmitters like serotonin, dopamine, and norepinephrine — from forming in the body.

Alpha-lipoic acid keeps coming up as I read more about nutrition and the brain, so I have begun to take it as a <u>supplement</u>, as well. It helps the body convert glucose into energy, and therefore stabilizes mood.

#### 8. Beans

"Beans, beans, good for the heart. The more you eat, the more you ... smile." They make the G-BOMB list because they can act as anti-diabetes and weight-loss foods. They are good for my mood because my body (and every body) digests them slowly, which stabilizes blood sugar levels. Any food that assists me in evening out my blood sugar levels is my friend. They are the one starch that I allow myself, so on top of a salad, they help mitigate my craving for bread and other processed grains.

#### 9. Seeds

When I'm close to reaching for potato chips — or anything else that is yelling "I will take away your pain!" — I allow myself a few handfuls of sunflower seeds or any other kind of seed I can find in our kitchen. Seeds are the last food on Fuhrman's G-BOMBS list.

Flaxseeds, hemp seeds, and chia seeds are especially good for your mood because they are rich in omega-3 fatty acids. Fuhrman writes, "Not only do seeds add their own spectrum of unique

disease-fighting substances to the dietary landscape, but the fat in seeds increases the absorption of protective nutrients in vegetables eaten at the same meal."

#### 10. Apples

An apple a day could — if eaten with the rest of these foods — keep the psychiatrist away, at least for stretches of time. Like berries, apples are high in antioxidants, which can help to prevent and repair oxidation damage and inflammation on the cellular level. They are also full of soluble fiber, which balances blood sugar swings. A snack I have grown to love is almond butter on apple slices. I get my omega-3 fatty acid along with some fiber.

# Recognizing and Treating Depression

## **Antidepressants to Treat Depression**

There are several types of depression medications (antidepressants) used to treat depression and conditions that have depression as a component of the disease, such as bipolar disorder. These drugs improve symptoms of depression by increasing the availability of certain brain chemicals called neurotransmitters. It is believed that these brain chemicals can help regulate brain circuits that affect emotions.

Major types of antidepressants include:

Tricyclic antidepressants (TCAs) are some of the first antidepressants used to treat depression. They primarily affect the levels of two chemical messengers (neurotransmitters), norepinephrine and serotonin, in the brain. Although these drugs are effective in treating depression, they have more side effects, so they usually aren't the first drugs used.

Monoamine oxidase inhibitors (MAOIs) are another early form of antidepressant. These drugs are most effective in people with depression who do not respond to other treatments. Substances in certain foods, like cheese, beverages like tap beer or certain wines, and some cough syrups and other medications can interact with an MAOI, so people taking an MAOI must adhere to strict dietary restrictions (see below). For this reason these antidepressants also aren't usually the first drugs used.

Selective serotonin reuptake inhibitors (SSRIs) are a newer form of antidepressant. These drugs work by altering the amount of a chemical in the brain called serotonin

# Serotonin and norepinephrine reuptake inhibitors (SNRIs) are another

newer form of antidepressant medicine. They treat depression by increasing availability of the brain chemicals serotonin and norepinephrine.

Examples of effective medications commonly prescribed for depression or depression-related problems are listed in the chart below.

Drug Name	Type of	Potential Side Effects
	Medication	
Anafranil	These medicines	Dry mouth, blurred vision, increased fatigue and
	are tricyclic	sleepiness, weight gain, muscle twitching
Adapin	antidepressants	(tremors), constipation, bladder problems such
	(TCAs) which	as urine retention, dizziness, daytime
Aventyl	work by	drowsiness, increased heart rate, sexual
Elavil	increasing the	problems.
Endep	available amount	
шиср	of serotonin	
Norpramin	and/or	
	norepinephrine in	
Pamelor	the brain.	
Pertofrane		
Sinequan		
Surmontil		
Tofranil		

Vivactil		
Zonalon		
Emsam	Monoamine	Must avoid certain foods and medications to avoid
Eldepryl		dangerous interactions.*
	(MAOIs) increase	Serious side effects may include: headache, heart
	the amount of	racing, chest pain, neck stiffness, nausea and
Nardil	norepinephrine	vomiting. If you experience any of these symptoms,
	and serotonin in	seek medical care immediately.
Marplan	the brain	
Parnate		
Zelapar		
Celexa	Selective	Sexual problems including low sex drive or
	serotonin	inability to have an orgasm are common but
Lexapro	reuptake	reversible, dizziness, headaches, nausea right
	inhibitors, or	after a dose, insomnia, feeling jittery.
Luvox	SSRIs, work by	
	increasing the	
Paxil	functioning of	
Pexeva	serotonin, a	
Prozac	neurotransmitter	
Sarafem	found in the	
Sararem	brain.	
Zoloft		
Aplenzin	These contain	Weight loss, decreased appetite, restlessness,
Budeprion	bupropion, which	insomnia, anxiety, tremor, constipation, dry mouth,
Buproban Forfivo	may increase the	diarrhea, dizziness, seizures.
Wellbutrin	amounts of the	

	neurotransmitters	
	norepinephrine	
	and dopamine in	
	the brain.	
Cymbalta	These drugs	Drowsiness, blurred vision, lightheadedness,
Effexor	increase the levels	strange dreams, constipation, fever/chills, headache,
Fetzima	of the	increased or decreased appetite, tremor, dry mouth,
Khedezla	neurotransmitters	nausea.
Pristiq	serotonin and	Remeron can be sedating and cause weight gain.
	norepinephrine in	Cymbalta may increase sweating and blood
	1 2	pressure and also cause fatigue and reduced energy.
Desyrel Ludiomil	These drugs block	Desyrel and Oleptro may cause drowsiness, fatigue,
Oleptro	various	tremor, headache, dry mouth, nausea, and vomiting.
	neurotransmitter	Ludiomil may cause headache, dizziness, dry
	chemicals	mouth, fatigue, daytime sleepiness, and sweating.
	including	
	serotonin or	
	dopamine.	

#### 5-TR implications

There are many implications of TR in treating depression. Being physically active has been shown to be the most effective treatment of depression.

#### **Exercise**

Improved self-esteem is a key psychological benefit of regular physical activity. When you exercise, your body releases chemicals called endorphins. These endorphins interact with the receptors in your brain that reduce your perception of pain.

Endorphins also trigger a positive feeling in the body, similar to that of morphine. For example, the feeling that follows a run or workout is often described as "euphoric." That feeling, known as a "runner's high," can be accompanied by a positive and energizing outlook on life.

Endorphins act as analgesics, which means they diminish the perception of pain. They also act as sedatives. They are manufactured in your brain, spinal cord, and many other parts of your body and are released in response to brain chemicals called neurotransmitters. The neuron receptors endorphins bind to are the same ones that bind some pain medicines. However, unlike with morphine, the activation of these receptors by the body's endorphins does not lead to addiction or dependence.

Regular exercise has been proven to:

- -Reduce stress
- -Ward off anxiety and feelings of depression
- -Boost self-esteem

-Improve sleep

Exercise also has these added health benefits:

- -It strengthens your heart.
- -It increases energy levels.
- -It lowers blood pressure.
- -It improves muscle tone and strength.
- -It strengthens and builds bones.
- -It helps reduce body fat.
- -It makes you look fit and healthy.

#### Forms of Recreation to treat depression

It appears that any form of exercise can help depression. Some examples of moderate exercise include:

- -Biking
- -Dancing
- -Gardening
- -Golf (walking instead of using the cart)
- -Housework, especially sweeping, mopping, or vacuuming
- -Jogging at a moderate pace
- -Low-impact aerobics
- -Playing tennis
- -Swimming

- -Walking
- -Yard work, especially mowing or raking
- -Yoga

Because strong social support is important for those with depression, joining a group exercise class may be beneficial. Or you can exercise with a close friend or your partner. In doing so, you will benefit from the physical activity and emotional comfort, knowing that others are supportive of you.

#### <u>List of questions for TR's to ask to help with choosing recreational activities.</u>

Before you begin an exercise program for depression, here are some questions you should consider:

- -What physical activities do I enjoy?
- -Do I prefer group or individual activities?
- -What programs best fit my schedule?
- -Do I have physical conditions that limit my choice of exercise?
- -What goals do I have in mind? (For example: weight loss, strengthening muscles, improving flexibility, or mood enhancement)

#### Tips for starting exercise as treatment for depression.

Here are some tips to help you get started:

- -Choose an activity you enjoy. Exercising should be fun.
- -Put your exercise routine into your schedule. If you need reminding, put it on your calendar.
- -Variety is the spice of life. Make sure you vary your exercises so that you don't get bored. Check your local gymnasium or community center for an assortment of exercise programs.
- -Don't let exercise programs break the bank. Unless you are going to be using them regularly, avoid buying health club memberships or expensive equipment.

-Stick with it. If you exercise regularly, it will soon become part of your lifestyle and will help reduce your depression.

#### 6-Resources (local, state, national, & international)--make sure you include the

#### Where to Get Help

If unsure where to go for help, check the Yellow Pages under "mental health," "health," "social services," "suicide prevention," "crisis intervention services," "hotlines," "hospitals," or "physicians" for phone numbers and addresses. In times of crisis, the emergency room doctor at a hospital may be able to provide temporary help for an emotional problem, and will be able to tell you where and how to get further help.

Listed below are the types of people and places that will make a referral to, or provide, diagnostic and treatment services.

- -Family doctors
- -Mental health specialists, such as psychiatrists, psychologists, social workers, or mental health counselors
- -Health maintenance organizations
- -Community mental health centers
- -Hospital psychiatry departments and outpatient clinics
- -University- or medical school-affiliated programs
- -State hospital outpatient clinics
- -Family service/social agencies

- -Private clinics and facilities
- -Employee assistance programs
- -Local medical and/or psychiatric societies

#### Suicide prevention help as a result of depression

Depression carries a high risk of suicide. Anybody who expresses suicidal thoughts or intentions should be taken very, very seriously. Do not hesitate to call your local suicide hotline immediately. Call 1-800-SUICIDE (1-800-784-2433) or 1-800-273-TALK (1-800-273-8255) -- or the deaf hotline at 1-800-799-4TTY (1-800-799-4889).

Warning signs of suicide with depression include:

- -A sudden switch from being very sad to being very calm or appearing to be happy
- -Always talking or thinking about death
- -Clinical depression (deep sadness, loss of interest, trouble sleeping and eating) that gets worse
- -Having a "death wish," tempting fate by taking risks that could lead to death, such as driving through red lights
  - -Losing interest in things one used to care about
  - -Making comments about being hopeless, helpless, or worthless
  - -Putting affairs in order, tying up loose ends, changing a will
  - -Saying things like "It would be better if I wasn't here" or "I want out"
  - -Talking about suicide (killing one's self)
  - -Visiting or calling people one cares about

Remember, if you or someone you know is demonstrating any of the above warning signs of suicide with depression, either call your local suicide hot line, contact a mental health professional right away, or go to the emergency room of your local hospital for immediate evaluation and treatment.

# BECK INVENTORY Name: \_\_\_\_\_\_ Date: \_\_\_\_\_ On this questionnaire are a group of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling the past week, including today. Circle the number beside the statement you picked. Be sure to read all the statements in each group before making your choice. 1. 0-I do not feel sad

1-I feel sad

2.

2-I am sad all the time and I can't snap out of it

0-I am not particularly discouraged about the future

3-I am so sad or unhappy that I can't stand it

- 1-I feel discouraged about the future
- 2-I feel like I have nothing to look forward to
- 3-I feel like the future is hopeless and that things cannot improve
- 3. 0-I do not feel like a failure
  - 1-I feel like I have failed more than the average person
  - 2-As I look back in my life, all I can see is a lot of failures
  - 3-I feel like I am a complete failure as a person
- 4. 0-I get as much satisfaction out of things as I used to
  - 1-I don't enjoy things the way I used to
  - 2-I don't get real satisfaction out of anything anymore
  - 3-I am dissatisfied or bored with everything
- 5 0-I don't feel particularly guilty
  - 1-I feel guilty a good part of the time
  - 2-I feel guilty most of the time
  - 3-I feel guilty all of the time
- 6. 0-I don't feel I am being punished
  - 1-I feel I may be punished
  - 2-I expect to be punished
  - 3-I feel I am being punished
- 7. 0-I don't feel disappointed in myself
  - 1-I am disappointed in myself
  - 2-I am disgusted with myself
  - 3-I hate myself
- 8. 0-I don't feel I am any worse than anybody else
  - 1-I am critical of myself for my weakness or mistakes
  - 2-I blame myself all the time for my faults

- 3-I blame myself for everything bad that happens
- 9. 0-I don't have thoughts of killing myself
  - 1-I have thoughts of killing myself, but would not carry them out
  - 2-I would like to kill myself
  - 3-I would kill myself if I had the chance
- 10. 0-I don't cry any more than usual
  - 1-I cry more now than I used to
  - 2-I cry all the time now
  - 3-I used to be able to cry, but now I can't cry even though I want to
- 11. 0-I am no more irritated now than I ever am
  - 1-I get annoyed or irritated more easily than I used to
  - 2-I feel irritated all the time now
  - 3-I don't get irritated at all by the things that used to irritate me
- 12. 0-I have not lost interest in other people
  - 1-I am less interested in other people than I used to be
  - 2-I have lost most of my interest in other people
  - 3-I have lost all my interest in other people
- 13. 0-I make decisions about as well as I ever could
  - 1-I put off making decisions more than I used to
  - 2-I have greater difficulty in making decisions than before
  - 3-I can't make decisions at all anymore
- 14. 0-I don't feel I look any worse than I used to
  - 1-I am worried that I am looking old or unattractive
  - 2-I feel that there are permanent changes in my appearance that make me look unattractive
  - 3-I believe that I look ugly

13.	U-1 can work as well as before
	1-It takes an extra effort to get started at doing something
	2-I have to push myself very hard to do something
	3-I can't do any work at all
16.	0-I can sleep as well as usual
	1-I don't sleep as well as I used to
	2-I wake up 1-2 hours earlier than usual and find it hard to get back to sleep
	3-I wake up several hours earlier than I used to and cannot get back to sleep
17.	0-I don't get more tired than usual
	1-I get tired more easily than I used to
	2-I get tired from doing almost anything
	3-I am too tired to do anything
18.	0-My appetite is no worse than usual
	1-My appetite is not as good as it used to be
	2-My appetite is much worse now
	3-I have no appetite at all anymore
19.	0-I haven't lost much weight, if any, lately
	1-I have lost more than 5 pounds
	2-I have lost more than 10 pounds
	3-I have lost more than 15 pounds
	I am purposely trying to lose weight by eating less
	Yes No
20.	0-I am no more worried about my health than usual
	1-I am worried about physical problems such as aches and pains; or upset stomach; or
const	ipation

- 2-I am very worried about physical problems and it's hard to think of much else
- 3-I am so worried about my physical problems that I cannot think about anything else
- 21. 0-I have not noticed any recent change in my interest in sex
  - 1-I am less interested in sex than I used to be
  - 2-I am much less interested in sex now
  - 3-I have lost interest in sex completely

\* \* \* \* \*

Interpreting the Beck Depression Inventory		
Total Score	Levels of Depression	
1-10	These ups and downs are considered normal	
11-16	Mild mood disturbance	
17-20	Borderline clinical depression	
21-30	Moderate depression	
31-40	Severe depression	
over 40	Extreme depression	
*A persistent s	score of 17 or above indicates you may need professional treatment	

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