

BODY AND MIND



ISSUE - 1/ 2021

Express Yourself

For A *NEW* Beginning...

Page 03

Insight Section

- Understanding mental disorder
- All about depression and its impact on the body

Page 12

Wellness

- Ways to Improve Mental Wellbeing
- Mindfulness for a Healthy Mind and Healthy Life
- Physical activities to combat depression

Page 21

Nutrition

- Food and Mood: Impact of food on mental health



Dr. Sumeet Gupta

MBBS, DPM, FIPS, Consultant Psychiatrist
Jalandhar

In Major Depressive Disorder

NEWCITA



Escitalopram Oxalate 5/10/20 mg Tab.

In Comorbid
Depression & Anxiety



NEWCITA PLUS

Escitalopram Oxalate 10mg + Clonazepam 0.5 mg Tab.

In Prominent Depression & Mild Anxiety

NEWCITA *Lite*

Escitalopram Oxalate 10 mg + Clonazepam 0.25 mg Tab.

In Prominent Anxiety & Mild Depression

NEWCITA *Mini*

Escitalopram Oxalate 5 mg + Clonazepam 0.5 mg Tab.

Brings Back Life to Normal

FORWORD

Dear Doctor

Alkem is an indian pharmaceutical company with rich experience of different therapeutic segments providing solution for patient wellness.

DIVISION OBJECTIVE/MOTIVE

With the increasing stress in modern day life, addressing the mental health crisis becomes the need of the hour.

DR PERSONALISED MAGAZINE + PATIENT EDUCATION

We're on a mission to create to healthier, happier, more sustainable society. Our aim is to provide informative, inspiring and stories about mental health and wellbeing. We want to break the stigma of mental health in our society and to shine a light on the positivity and support that should be available for everyone, no matter their situation.

To Strengthen the Bond between the you and the Patient, the magazine will have a dedicated page for the Doctors to givne details about the

On the cover page of magazine the photo of you along with further more details:

- 1) Your Credentials
- 2) Facilities available in your clinic
- 3) Advanced techniques with latest technology available in your clinic

This information will help your patient to visit you again in future.

We would like to invite you and participate in this initiative of personalized magazine plus patient education.

Kind Regards,
Team ALKEM

BODY AND
MIND



INSIGHT SECTION

03 Understanding mental disorder

08 All about depression and its impact on the body

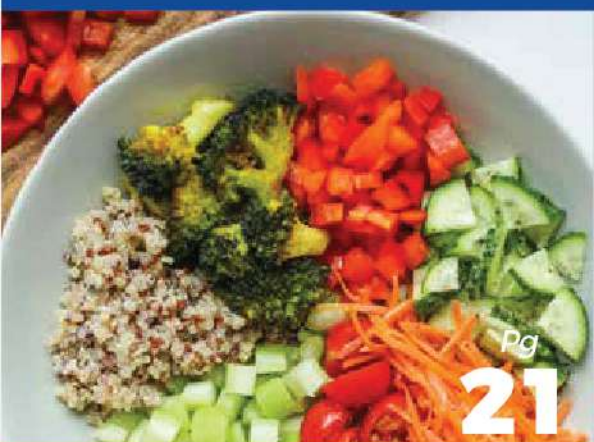


WELLNESS

12 Ways to Improve Mental Wellbeing

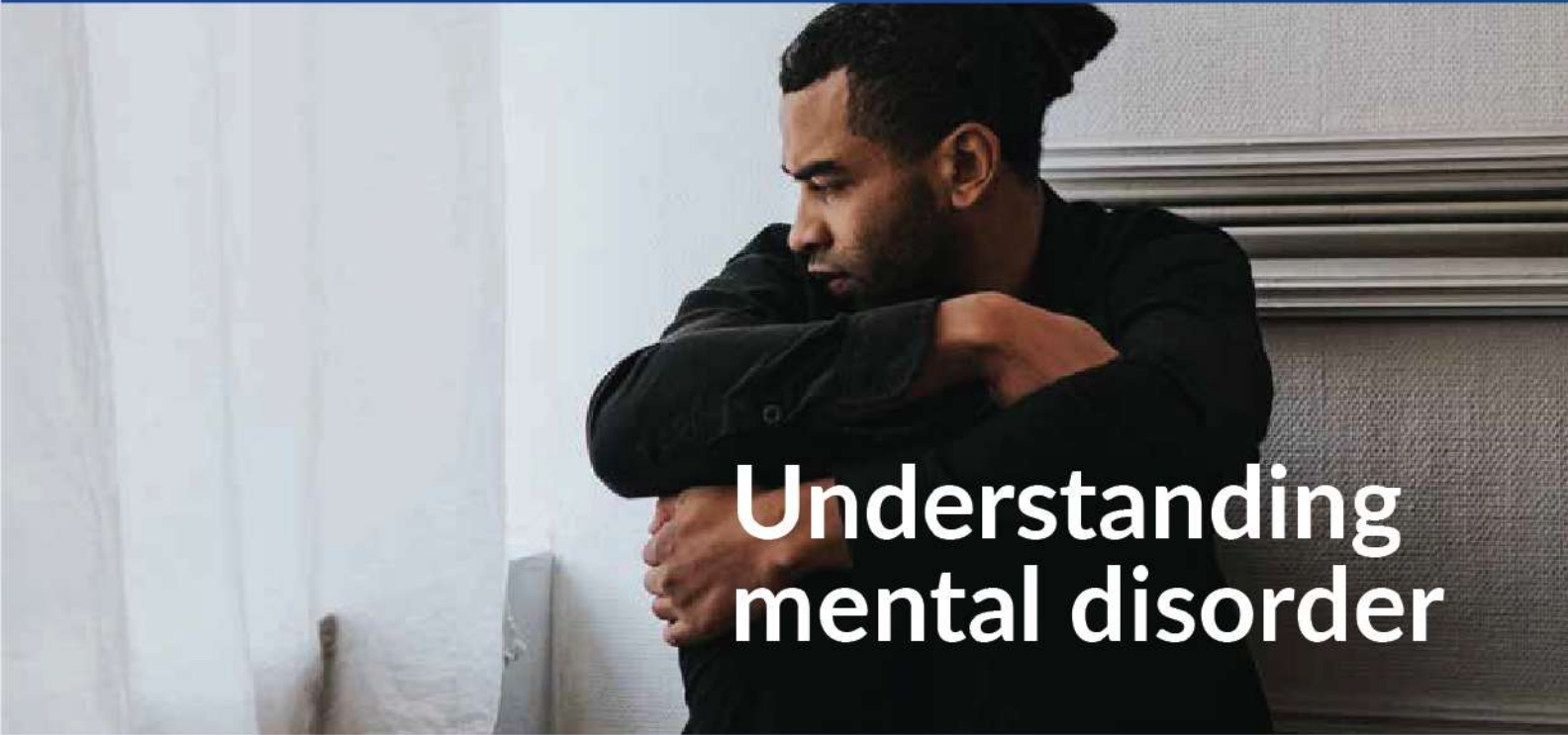
15 Mindfulness for a Healthy Mind and Healthy Life

18 Physical activities to combat depression



NUTRITION

21 Food and Mood: Impact of food on mental health



Understanding mental disorder

Mental health involves cognitive, behavioral, and emotional well-being. It is a vital component of overall health. As per WHO, “Mental health is a state of well-being in which an individual realizes his or her abilities, can cope with the normal stresses of life, can work productively and can make a contribution to his or her community.”¹

Just like being physically fit helps a person to stay strong, mental fitness is important to achieve and sustain a state of good mental health. A mentally fit person enjoys life, environment, and surrounding to the fullest. They can be creative, learn and try new things and take risks.²

THE BURDEN OF MENTAL HEALTH

Mental disorders are one of the leading causes of non-fatal disease burden in India. However, exact data regarding their burden and risk factors are not readily available for different states of the country. An earlier study showed that one in seven Indians were affected by mental disorders of varying severity in the year 2017. The same study reported that the contribution of mental disorders to the total disease burden in India has almost doubled since 1990. Around 197.3 million people had mental disorders in India in the year 2017, among these patients 45.7 million had depressive disorders and 44.9 million had anxiety disorders. The study reported a significant, but modest,

correlation between the prevalence of depressive disorders and the suicide death rate at the state level.³



Mental disorders occur mainly during adulthood, and the prevalence of these disorders is reported to be higher in the more developed southern states as compared to the less developed northern states. However, the prevalence of mental disorders with onset in childhood and adolescence was generally higher in the less developed northern states than in the more developed southern states. The higher prevalence of depressive and anxiety disorders in southern states could be related to the higher levels of modernization and urbanization in these states and to many other factors that are not yet well understood.³

In the year 1982, India launched its National Mental Health Programme, which was relaunched in 1996 as the District Mental Health program. In 2014, the government launched the National Mental Health Policy, and a rights-based Mental Healthcare Act in 2017, which replaced the Mental Healthcare Act of 1987. Despite the efforts by the government, India still reports the poor implementation of mental health services, high treatment gap for mental disorders, poor evidence-based treatment, and gender differentials in treatment.³

COMMON MENTAL HEALTH DISORDERS

Common mental health disorders in adults are depression and anxiety disorders including generalized anxiety disorder (GAD), panic disorder, phobias, social anxiety disorder, obsessive-compulsive disorder (OCD), and post-traumatic stress disorder (PTSD).⁴

Depression

Depression is a broad range of mental health problems characterized by



low mood and several emotional, cognitive, physical, and behavioral symptoms. Behavioral and physical symptoms typically include tearfulness, irritability, social withdrawal, an exacerbation of pre-existing pains, and pains secondary to increased muscle tension.⁴

Anxiety disorders

Generalized anxiety disorder (GAD)

GAD is characterized by excessive anxiety and worry which is uncontrollable and often accompanied by restlessness, being easily fatigued, having difficulty concentrating, irritability, muscle tension, and disturbed sleep.⁴

Panic disorder

Panic disorder is associated with intermittent anxiety, and panic attacks (sudden short-lived anxiety) concerning particular situations or spontaneous panic attacks, with no apparent cause. They often take action to avoid being in particular situations to prevent those feelings, which may develop into agoraphobia.⁴

Obsessive-compulsive disorder (OCD)

OCD is a mental disorder characterized by the presence of obsessions or compulsions, but commonly both. An obsession is an unwanted intrusive thought, image, or urge that frequently comes into the patient's mind. Some of the frequently reported OCD are contamination from dirt, germs, viruses, body fluids, and so on, fear of harm (for example, that door locks are not safe), excessive concern with order or symmetry, obsessions with the body or physical symptoms, religious, sacrilegious or blasphemous thoughts, sexual thoughts, an urge to hoard useless or worn-out possessions or violent or aggressive thoughts.⁴

Post-traumatic stress disorder (PTSD)

PTSD generally develops after one or more traumatic events such as deliberate acts of interpersonal violence, severe accidents, disasters, or military action. PTSD is generally reported in the survivors of war and torture, accidents and disasters, and of violent crime (e.g., physical

and sexual assault, riots survivors), also refugees and patients of life-threatening illness are also at risk of developing the condition.⁴

Social anxiety disorder

Social anxiety, also known as social phobia, is defined by strong fear in a social situation resulting in substantial distress and affects a person's day-to-day life. The disorder involves fear of being judged by others and of being embarrassed or humiliated, further leading to avoidance of several social situations and often impacts educational and vocational performance. The disorder often begins in early adolescence, and although an individual may recognize the problem as outside of normal experience, many do not seek help.⁴

Phobias

A phobia is an unjustified, strong, and long-lasting fear of a specific object or situation that is out of proportion to the actual danger or threat. The fear and anxiety occur instantly after encountering the feared object or situation. This condition impacts a person's day-to-day activities. Phobias are usually grouped under several subtypes including animal, natural environment, blood-injection-injury, and situational.⁴

ASSESSMENT

There are several potentially useful tools used for the assessment of common mental disorders. The NICE Depression guideline, for example, recommends the use of the nine-item Patient Health Questionnaire (PHQ-9), the depression scale of the Hospital Anxiety and Depression Scale (HADS), and the Beck Depression Inventory, 2nd edition (BDI-II).⁴

These tools are used because the doctors' global assessments of severity do not agree well with valid and reliable self-report measures of severity in terms of cut-off levels for case identification, which can result in over-treatment of mild cases and under-treatment of moderate to severe cases. However, the Quality and Outcomes Framework

Guidance for GMS Contract (QOF) guidance, again in line with NICE guidance, also recommends that clinicians consider the degree of associated disability, previous history, and patient preference when assessing the need for treatment rather than relying completely on the questionnaire score.⁴



TREATMENT

Communities and families play a crucial role in addressing mental health by reducing stigma and discrimination, raising awareness, and promoting inclusion. Several community-based programs can potentially reduce the gap for mental disorders in India. School-based mental health programs can help improve mental health in children. Yoga is known to be potentially beneficial for depressive disorders.⁴ Also managing stress is very important for maintaining good mental health.²

Managing stress

Stress is a part of life. No matter how much we want a stress-free life, stress is necessary. Individual response toward stress is what negatively affects lives. People get stress when they have to adapt to any change, this might include difficult life events (grief, illness) and positive ones. Getting a new job or going on vacation are certainly perceived to be happy occurrences, but they, too, are

changes, also known as stress, that require some adaptation.

Learning to get over stress can comfort the body and mind. Meditation and other relaxation methods, exercise, visualization are all helpful techniques for reducing the negative impact of stress. Stress, in moderation, can be beneficial in life. This is because short episodes of stress trigger chemicals that improve memory, increase

energy levels and enhance alertness and productivity. But chronic stress has debilitating effects on our overall health. Physically, it can contribute to migraines, ulcers, muscle tension, and fatigue. Canadian researchers found

that chronic stress more than doubled the risk of heart attacks.

The link between stress and mental illness has yet to be fully understood, but it is known that stress can

negatively affect an episode of mental illness. Long-term stress can impact a person emotionally and intellectually, and can cause:



Decreased concentration and memory



Confusion



Loss of sense of humor



Anxiety



Anger



Irritability



Fear

Managing Stress

To manage stress, it is important to identify the source of stress. Events such as the death of a loved one, starting a new job, or moving house are certainly stressful. Most of the time stress comes within us. Interpret things differently – a conversation, a performance review, even a look – determines whether something becomes a stressor. Negative self-talk, where we focus on self-criticism and pessimistic over-analysis, can turn an innocent remark into a major source of stress.²

Understanding the origin of stress can help in deciding a course of action. External stressors, like bereavement or career changes, can be managed over time and with the support of family and friends. Internal stressors, caused by our negative interpretation, require changes in attitude and behavior.



The main aim of managing stress is to provide relaxation. This is the physiological and psychological calming process our body goes through when we perceive that the danger, or stressful event, has passed. Here are a few techniques one can adapt to overcome stress:²



Practicing relaxation techniques such as meditation or breathing awareness every day can relieve chronic stress and helps you have a positive outlook. Good breathing habits alone can improve both psychological and physical well-being.

Learn to say no. Evaluate your schedule and recognize tasks or activities that you can be avoided. Don't automatically volunteer to do something until you've considered whether it is feasible and healthy for you to do so.

Have regular and moderate exercise, helps to ease tension, improves sleep and self-esteem. Making exercise a habit is key.

Taking the time for a favorite hobby is a great way of connecting with and nurturing your creative self.

Visualize yourself succeeding. Athletes achieve results by picturing themselves crossing the finish line first. Practice the same technique and picture yourself succeeding in whatever situation is uppermost in your mind.

Have a healthy lifestyle. A good diet is often the most important thing when we're feeling stressed. One might find it challenging to prepare a meal instead of buying it ready-made; however, it is way cheaper and certainly, a better and simple way of doing something good for yourself can soothe stressful feelings.

Talk to someone about the problem. Sharing your troubles with a friend may help you to put things in perspective and to feel that you're not alone. You may also learn some other ways to manage stress effectively

Mental disorders affect an individual's daily functioning, relationships, work, school, and other important aspects of life. Appropriate diagnosis, treatment, and mental support can help the affected individual to cope up with the condition without causing much distress.^{3,4}

References

1. **World Health Organization (WHO). Mental health: strengthening our response.** <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>. Updated March 30, 2018. Accessed February 10, 2021.
2. **Canadian Mental Health Association: Mental Health for All. Benefits of Good Mental Health.** <https://toronto.cmha.ca/documents/benefits-of-good-mental-health/>. Accessed February 10, 2021.
3. **India State-Level Disease Burden Initiative Mental Disorders Collaborators*.** The burden of mental disorders across the states of India: the Global Burden of Disease Study 1990–2017. *Lancet Psychiatry*. 2020;7: 148–61.
4. **Common Mental Health Disorders: Identification and Pathways to Care.** COMMON MENTAL HEALTH DISORDERS [Internet]. <https://www.ncbi.nlm.nih.gov/books/NBK92254/>. Accessed February 10, 2021.



All about depression and its impact ON THE BODY

Depression (major depressive disorder) is a common and serious medical disorder that harms emotion, actions, and cognition. A person with depression may feel sadness and loss of interest. The condition may lead to several physical problems and can decrease one's ability to function at work and home.¹

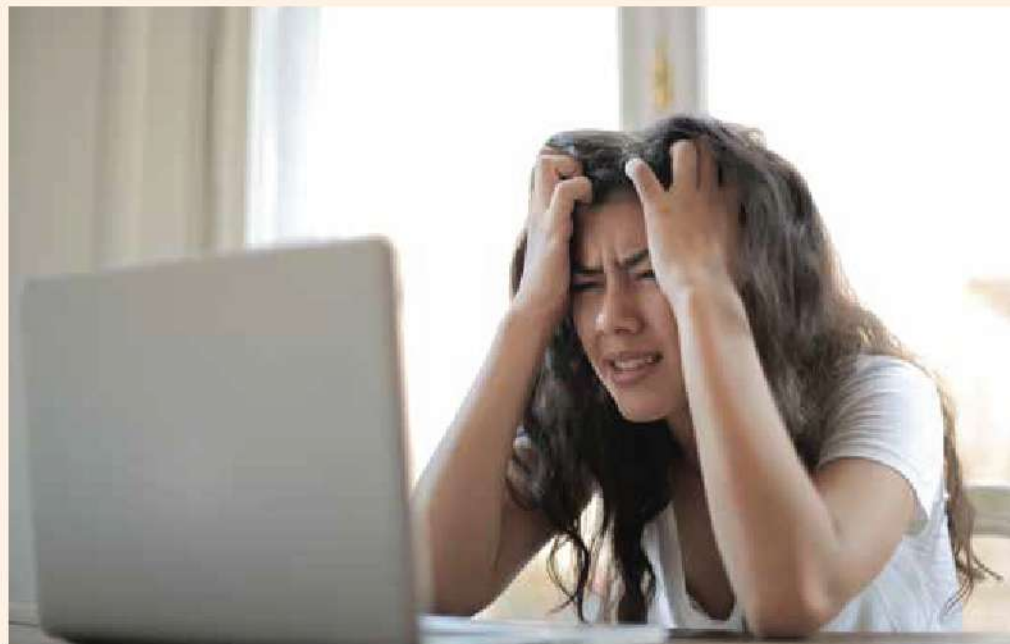
BURDEN

Depression is a globally prevalent condition with more than 264 million people affected. Untreated depression leads to suicidal thoughts, and suicides are one of the leading causes of death globally. Globally, around eight lakhs people suicide every year. Despite effective treatments, mental disorders are left untreated in 76% and 85% of people in low- and middle-income countries.²

Some of the treatment barriers include lack of resources, lack of

trained health-care providers, and social stigma associated with mental disorders. Another barrier to effective care is an inaccurate assessment. In countries of all income levels,

people who are depressed are not diagnosed properly, and individuals who do not have depression are often misdiagnosed and prescribed medication.²



SYMPTOMS OF DEPRESSION

A person with depression may feel the following symptoms and these symptoms may vary from mild to serious:¹

- Feeling low
- Loss of interest in activities once enjoyed
- Changes in appetite
- Change in weight (loss or gain) unrelated to dieting
- Increase in purposeless physical activity (e.g., inability to sit still, pacing, hand-wringing) or slowed movements or speech (these actions must be severe enough to be observable by others)
- Feeling worthless or guilty
- Difficulty thinking, concentrating, or making decisions
- Suicidal thoughts.

IMPACT OF DEPRESSION ON BODY

Fatigue

Lack of energy or fatigue is one of the major symptoms of depression. An individual not only experiences mental fuzziness but is also unable to gather the mental energy required to complete small tasks like writing an email. They may also experience physical tiredness. The exact reason



of what triggers fatigue in depression is not known. Vitamin D has been implicated in depression, therefore, getting a brisk walk in the sunshine may help in overcoming the tiredness due to this condition.³

Unexplained Pain

People with depression may also experience chronic headaches and unexplained back pain. The condition may cause pain because the chemical in the brain (neurotransmitters) responsible for pain sensations are the same substance that regulates mood.³



Gastrointestinal Upset

Individuals with depression are reported to experience gastrointestinal symptoms like nausea or diarrhea. It is possible that a person with depression experiencing a nervous stomach may be facing the effects of depression on the intestinal tract. When episodes of diarrhea strike, it's important to stay hydrated by drinking water. It is important to have a balanced diet that includes plenty of fiber, with fresh fruits and vegetables.³

Sleep Disturbance

Sleeping might be the most natural thing an individual can do, but it is a significantly complex process that involves several chemicals acting on the brain. In depression, an imbalance of these chemicals can make it difficult for an individual to get proper sleep. To get proper sleep, an individual should go to bed and wake-up at the same time every day. Also, avoid

the computer or television for an hour before bed, and create a restful bedroom environment.³



Weakened Immune System

It has been reported that depression can cause immune system dysfunction. People with depression often have increased levels of stress hormones in their system. These stress hormones cause inflammation, thereby activating an immune system response. When the body's immune system is chronically responding to excessive levels of stress hormones, it may become less equipped to deal with threats from bacteria and viruses. People with depression should take precautions against getting sick, such as washing hands frequently or getting a flu shot.⁹



RISK FACTORS FOR DEPRESSION

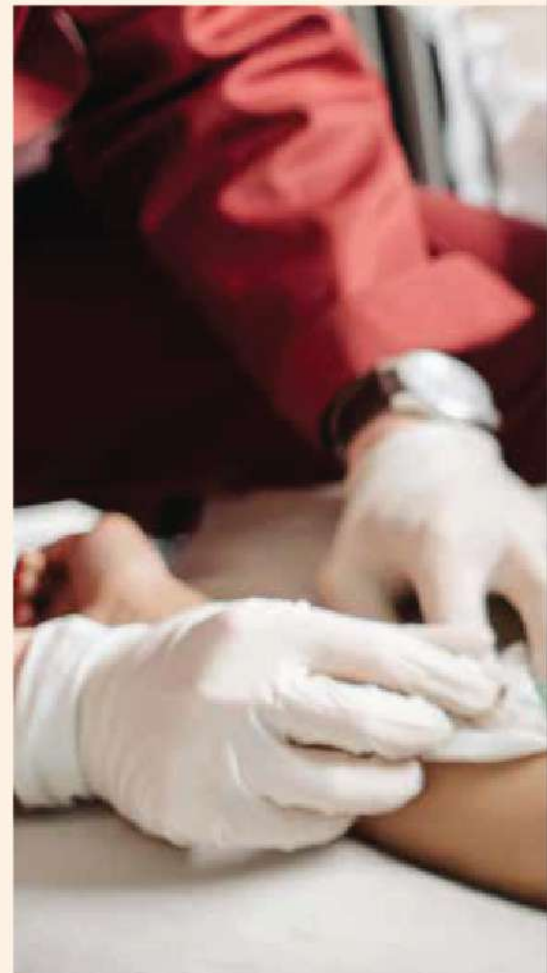
Depression can be reported by anyone, even a person who appears to have an ideal life. Here are a few factors that can play a role in depression:¹

- **Biochemistry:** Alterations in certain substances in the brain can contribute to depression.
- **Genetics:** It is a disorder that can be passed down through the family. For example, if one identical twin has depression, the other has a 70 percent chance of having the illness sometime in life.
- **Personality:** People who have low self-esteem, and are easily stressed, or who are generally pessimistic are at risk of experiencing depression.
- **Environmental factors:** Continuous exposure to violence, neglect, abuse or poverty may make some people more vulnerable to depression.

TREATMENT

Moderate and severe depression can be treated effectively. An individual with depression generally receives psychological treatments such as behavioral activation, cognitive behavioral therapy (CBT) and interpersonal psychotherapy (IPT), or antidepressant medication such as selective serotonin reuptake inhibitors (SSRIs) and tricyclic antidepressants (TCAs).²

Healthcare providers need to take into account the possible adverse effects associated with antidepressant medication, the ability to deliver either intervention (in terms of expertise, and/or treatment availability), and individual preferences. Different psychological treatment formats for consideration include individual and/or group face-to-face psychological treatments delivered by professionals and supervised lay therapists. Psychosocial treatments are also effective for mild depression. For moderate-severe depression,



antidepressants can be effective, however, these are not the first-line of treatment for cases of mild depression. Antidepressants are not used in children and are not the first line of treatment in adolescents, among whom they should be used with extra caution.²

CONCLUSION

Depression is treatable. Making people aware of the fact that depression can lead to physical health problems can provoke them to seek treatment and make changes to help manage symptoms associated with the disorder. Depression can be treated with a combined approach may be used, using a medication,

therapy, and lifestyle changes. With the right support, a person can manage both the physical and mental health effects of depression.

Reference

1. American Psychiatric Association. What Is Depression? <https://www.psychiatry.org/patients-families/depression/what-is-depression>. Accessed February 11, 2021.
2. World Health Organization. Depression. <https://www.who.int/news-room/fact-sheets/detail/depression>. Updated January 30, 2021. Accessed February 11, 2021.
3. Healthgrades. How Depression Affects Your Body. <https://www.healthgrades.com/right-care/depression/how-depression-affects-your-body>. Updated February 14, 2020. Accessed February 11, 2021.



WELLNESS

Ways to Improve Mental Wellbeing

Mental wellbeing is about the tendency of an individual to cope with the ups and downs of everyday life. A person who experiences low mental well-being for a long time can develop anxiety or depression. Individuals with mental health conditions may experience low mental wellbeing frequently.¹



WHAT IS GOOD MENTAL WELLBEING?

Good mental wellbeing does not mean the absence of negative thoughts and feelings. Difficulty and challenges are a common aspect of every individual's life. All human beings may face difficult and challenging situations that cause a feeling of anger, sadness, overwhelm. Mental wellbeing is about being able to understand and manage those feelings, to be able to:¹

- feel confident
- build and maintain positive relationships
- have a sense of purpose
- live and work productively
- cope with the normal stresses of day-to-day life
- manage when things change



A lot of things can be done to build stronger and closer connections, such as:²

- take time each day to be with your family, for example, arranging a fixed time to eat dinner together
- arrange get-togethers with friends that have not been in touch
- giving time to kids, family, and friends. For example, switch off the digital devices and talk to the family and friends when together.
- have lunch with a colleague
- meeting friend or family member who needs support or company
- volunteer at a local school, hospital, or community group.
- make the most of technology to stay in touch with friends and family. Video-chat apps like Skype and FaceTime are useful, especially if you live far apart
- do not depend on technology or social media alone to build relationships.

Be physically active

Physical activity is not only good for health and fitness but also improves mental wellbeing. There are several benefits of physical activity on mental health:²

- Improves self-esteem
- helps in achieving life goals
- Improves brain function and brings the positive mood

Here are a few ways to improve physical activity

- Aim for taking 10,000 steps every day³



MANAGE MENTAL WELLBEING WITH THE FOLLOWING STEPS

Several steps potentially improve mental health and wellbeing. These things could help an individual to feel more positive and able to get the most out of life.²

Connect with other people

Having a good network can be beneficial for good mental wellbeing. Here are few advantages of connecting with people:²

- It can build a sense of belonging and self-worth
- Allow sharing positive experiences
- Provide emotional support

- Avoid elevator and take the stairs³
- Park car farther away from the front door³
- Stand more often instead of sitting, this burns more calories³
- Take a walk on your lunch break³
- Prefer walking or cycling to reach the destination instead of driving³
- Sit on an exercise ball at your desk instead of a chair (this builds core strength)³
- Playing outside with kids³
- Do not aim to spend hours in a gym. Instead, find activities of interest and follow them daily²

Learn new skills

One can improve mental wellbeing by learning new skills, it can:

- boost self-confidence and raise self-esteem
- help in building a sense of purpose
- improves connection with people

Even if it seems unnecessary, there are several ways to learn something new:

- learn to cook new recipes
- Take new responsibility at work, such as mentoring a junior staff member or improving presentation skills



- Work on a DIY project, such as fixing a broken bike, etc. There are lots of free video tutorials online
- Sign up for a course at a local college. Learn a new language or a skill
- Develop new hobbies to challenge yourself, such as blog writing, participating in a new sport, or learning to paint.
- It is suggested to find activities you enjoy and make them a part of your life.

Become kind and generous

Kindness and generosity can help improve mental wellbeing by:

- developing positive feelings and a sense of reward
- Providing a purpose and self-worth
- helping to connect with other people



Here are a few things that one can do to bring positive changes in life

- ask friends, family, or colleagues how they are and listen to their answer
- spend time with friends or relatives who need support or company
- offer help to someone in their work

- take volunteering in the community, such as helping at a school, hospital, or care homes

Pay attention to the present moment (Mindfulness)

Focusing on the present can improve mental wellbeing. Focus on the feeling, thoughts, body, and the world around.



Reference

1. CABA with you for life. What is Mental Wellbeing? <https://www.caba.org.uk/help-and-guides/information/what-mental-wellbeing#:~:text=Share,two%20can%20influence%20each%20other>. Accessed February 12, 2021.
2. NHS. 5 steps to mental wellbeing. <https://www.nhs.uk/conditions/stress-anxiety-depression/improve-mental-wellbeing/>. Accessed February 12, 2021.
3. ACE. Fit Facts. Small steps to increase physical activity. <https://www.acefitness.org/education-and-resources/lifestyle/blog/6765/small-steps-to-increase-physical-activity/>. Accessed February 12, 2021.



Mindfulness for a Healthy Mind and Healthy Life

UNDERSTANDING MINDFULNESS

Mindfulness is the ability of the human brain to be present at the moment and become aware of the surrounding; however, not too responsive to what's going on around. Even though, mindfulness is something that human naturally possess; it is more readily available when practiced every day. When someone becomes aware of what they are directly experiencing through their senses, or of their state of mind through their thoughts and emotions they become mindful. Research shows that training the brain to be mindful remodels its physical structure.¹

As per Professor Mark Williams, former director of the Oxford Mindfulness Centre, "mindfulness means knowing directly what is going on inside and outside ourselves, moment by moment." Mindfulness is

reconnecting with bodies and sense, this means waking up to the sights, sounds, smells, and tastes of the present moment. This could be as simple as the feel of a handrail while walking upstairs. Mindfulness helps

an individual to enjoy the world more and understand themselves better. It helps people to become grateful for small things that we were taking for granted.²



WHAT ARE THE BENEFITS OF MINDFULNESS?

Mindfulness is a technique that comes from Buddhism; however, many religions include some types of prayers or meditation techniques that help in taking the mind away from usual concerns.³

Improves well-being

Mindfulness supports many attitudes that contribute to a satisfying life. A mindful person can savor the pleasures in life, they can get engaged in activities and creates a greater capacity to deal with adverse events. People who practice mindfulness are less likely to worry about the future or regrets the past and are less preoccupied with concerns about success and self-esteem. They can form deep connections with others.³

Improves physical health

Mindfulness techniques help improve physical health in several ways. It can relieve stress, treat heart disease, lower blood pressure, reduce chronic pain, improve sleep, and alleviate gastrointestinal difficulties.³



Improves mental health

Recently, psychotherapists have turned to mindfulness meditation as an important element in the treatment

of many problems, like depression, substance abuse, eating disorders, couples' conflicts, anxiety disorders, and obsessive-compulsive disorder.³



MINDFULNESS TECHNIQUES

There are several techniques to practice mindfulness, however, the goal is the same- to achieve a state of alert, improve focused relaxation by paying attention to thoughts and sensations without judgment. This allows them to refocus on the present moment. All mindfulness techniques are a form of meditation.³



Basic mindfulness meditation

Sit and focus on breathing or on a word or “mantra” that you repeat silently. Let the thoughts enter the mind and go, and return the focus to breathe or mantra.³



Body sensations

Focus on delicate body sensations such as an itch or tingling without judgment and let them go. Notice each part of the body in sequence from head to toe.³



Sensory

Notice sights, sounds, smells, tastes, and touches. Name them “sight,” “sound,” “smell,” “taste,” or “touch” without judgment and let them go.³

Emotions

Feel the emotion without judgment. Accept the presence of the emotions such as joy and anger, and let them go.³



Urge surfing

Deal with your cravings (for addictive substances or behaviors) and allow them to leave the mind. Notice how the body feels when the craving enters. Replace the wish for the craving to go away with the certain knowledge that it will subside.³

Important Tips

- If the mind strolls into planning, daydreaming, or criticism, notice where it has gone and gently redirect it to sensations in the present.³
- If the intended meditation session is missed, simply start again.³



Reference

1. mindful: healthy mind, healthy life. Getting Started with Mindfulness. <https://www.mindful.org/meditation/mindfulness-getting-started/>. Accessed February 12, 2021.
2. NHS. Mindfulness. <https://www.nhs.uk/conditions/stress-anxiety-depression/mindfulness/>. Accessed February 12, 2021.
3. HealthGuide. A Harvard Health Article. Benefits of Mindfulness. [https://www.helpguide.org/harvard/benefits-of-mindfulness.htm#:~:text=Mindfulness%20improves%20physical%20health.&text=Mindfulness%20can%3A%20help%20relieve%20stress,sleep%2C%20and%20alleviate%20gastrointestinal%20difficulties](https://www.helpguide.org/harvard/benefits-of-mindfulness.htm#:~:text=Mindfulness%20improves%20physical%20health.&text=Mindfulness%20can%3A%20help%20relieve%20stress,sleep%2C%20and%20alleviate%20gastrointestinal%20difficulties.). Accessed February 12, 2021.



Physical activities to

COMBAT DEPRESSION

Introduction

Patients with depression treated in a primary care setting receive pharmacologic therapy alone. As per the evidence, the addition of cognitive-behavioral therapies, especially exercise, to pharmacologic therapy can improve treatment outcomes in many patients. The mechanism behind the antidepressant effects of exercise continues to be under discussion; however, well-established data show the efficacy of exercise in reducing the symptoms of depression.



In a study published today in *Depression and Anxiety*, researchers from Massachusetts General Hospital (MGH) found that incorporating more physical activity, whether high-intensity dance, aerobic or machines to more low-intensity yoga or walks, for 4 hours per week (or approximately 35 minutes per day) can decrease the frequency of depressive episodes by 17 percent.²

The positive effect of exercise on mood is independent of fitness gain, therefore, the intervention should focus on the frequency of exercise rather than duration or intensity until the behavior has been well established.¹

A person with anxiety and depression may not like to perform any physical activity, however, exercise can play a very important role in managing symptoms. Along with proper treatment, one should also get a standard amount of weekly exercise. The agency suggests 150 minutes (2 hours and 30 minutes) to 300 minutes (5 hours) of moderate-intensity exercise a week. When that exercise ramps up to vigorous-intensity exercise, those recommendations lower to 75 minutes (1 hour and 15 minutes) to 150 minutes (2 hours and 30 minutes). Incorporating any kind of exercise into a routine is very important, however, a few exercises have reported a beneficial impact on mental health. Research suggests that these three activities in particular could help alleviate symptoms of depression or anxiety.³



RUNNING

Running is one of the best exercises as it can burn calories, reduce food cravings, and lower the risk for heart disease. Running for just five minutes a day might increase life expectancy. Running has been reported to improve mood in several ways. It stimulates the release of ‘feel-good’ neurotransmitters serotonin and norepinephrine, both during and after exercise. The repetitive motions of running have a meditative effect on the brain. These mental benefits can be prevailing in people with depression. A review published in the *Journal of Psychiatry & Neuroscience* (2006) reported that exercise can have a similar effect as antidepressants in alleviating major depressive disorder by promoting the growth of new neurons in the brain. Running may make it easier to fall asleep at night, which benefits the overall mental health by improving memory, lowering stress levels, and protecting against depression.³



HIKING IN THE WOODS

To make the most of the mental health benefits of physical activity, one can consider hiking. Nature has a soothing effect on the mind. Evidence shows that plants, trees, and especially decaying trees can help reduce anxiety as these plants emit chemicals to slow down the process of their decay, which appears to have a calming effect.³



In a study published in *Environmental Health and Preventive Medicine*, researchers sent participants to either a wooded or urban area. Outcomes revealed that people who took 20 minutes walk in the woods

had lower stress-hormone levels than participants who have been in a city. Another study published in the journal *Landscape and Urban Planning* (2015) reported that when young adults went on a 50-minute nature walk, they felt less anxious and had improved memory function.³

YOGA

A study published in *Evidence-Based Complementary and Alternative Medicine* (2007) demonstrated the positive impact of yoga on mental health. It was reported that study subjects who took yoga classes experienced significant reductions in depression, anger, anxiety, and neurotic symptoms. The findings led the researcher to recommend yoga as a complementary treatment for depression. Another study published in the year 2012, in *Alternative Medicine Review*, examined the

effects of yoga on anxiety and stress. Results reported that in 25 out of the 35 studies, subjects experienced a significant decrease in stress and anxiety symptoms after starting yoga.³

Besides the stretching and core strengthening, yoga has a tremendous focus on breathing, which has a calming effect on the mind. This focus on the breath is especially beneficial for mental health because it's difficult to feel anxiety when you're focused on calmly breathing deeply, he says.³




IMPORTANT TIP

Depression may be an additional risk factor for exercise non-compliance, therefore, do not exaggerate and enjoy the physical activity.^{1,3}

Reference

1. Craft LL, Perna FM. The Benefits of Exercise for the Clinically Depressed. *Prim Care Companion J Clin Psychiatry*. 2004; 6(3): 104-111.
2. Benitez T. Healthline News. Yoga, Running, and Other Workouts Can Combat Depressive Episodes. <https://www.healthline.com/health-news/physical-activity-can-help-stop-depressive-episodes>. Published November 5, 2019. Accessed February 12, 2021.
3. Health. The 3 Best Exercises for Anxiety and Depression, According to Experts. <https://www.health.com/condition/depression/these-are-the-best-exercises-for-anxiety-and-depression>. Updated June 1, 2020. Accessed February 13, 2021.

NUTRITION



Food and Mood: IMPACT OF FOOD ON MENTAL HEALTH

INTRODUCTION

The subclinical symptoms of depression and anxiety affect the wellbeing and functioning of a large proportion of the population. Hence, there is a need for new approaches to managing both clinically diagnosed and subclinical depression.¹

The link between nutrition and mental health have gained considerable interest recently. Epidemiological research has reported that adherence to a healthy or Mediterranean diet including high consumption of fruits, vegetables, nuts, and legumes; moderate consumption of poultry, eggs, and dairy products; and only occasional consumption of red meat reduce the risk of depression. However, the nature of these relations is complicated by the reverse causality between diet and mental health (Figure 1).¹



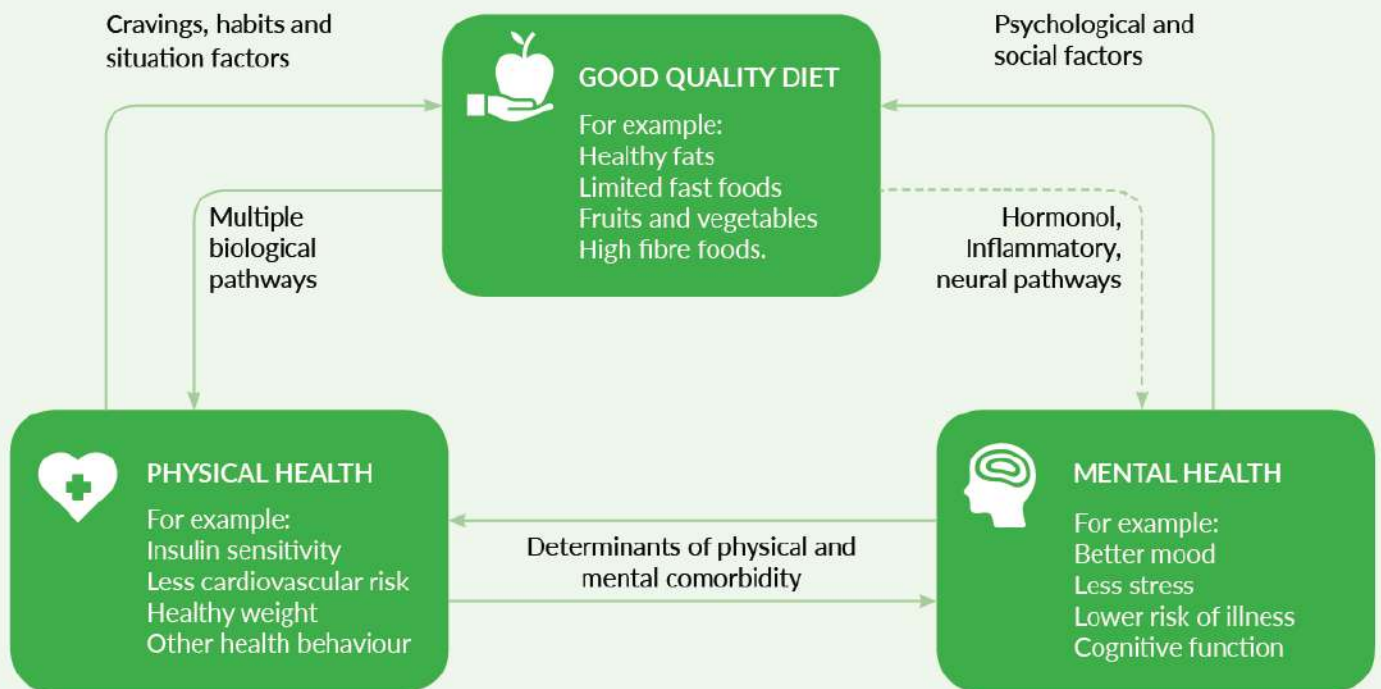


Fig1 | Hypothesised relationship between diet, physical health, and mental health. the dashed line in the focus on the article.

For example, when we look at common food preference in response to the temporary psychological state—such as “comfort foods” in times of low mood, or changes in appetite from stress—are common human experiences. Moreover, relationships between nutrition and longstanding mental illness are compounded by barriers to maintaining a healthy diet.

THERE ARE MULTIPLE WAYS IN WHICH CERTAIN FOODS AND DIETARY PATTERNS COULD AFFECT MENTAL HEALTH.¹

Mood and carbohydrates

Higher consumption of refined carbohydrates is associated with an increased risk of obesity and

diabetes. Carbohydrates generally have a high glycemic index. Diets with a high glycaemic index and load (e.g., diets containing high amounts of refined carbohydrates and sugars) can harm psychological wellbeing; data from longitudinal research show an association between the progressively higher dietary glycaemic index and the incidence of depressive symptoms. Clinical studies have also shown potential causal effects of refined carbohydrates on mood; experimental exposure to diets with a high glycaemic load in controlled settings increases depressive symptoms in healthy volunteers, with a moderately large effect. Studies have reported an association between the higher dietary glycaemic

index and the incidence of depressive symptoms. Clinical studies have also shown potential causal effects of refined carbohydrates on mood; experimental exposure to diets with a high glycaemic load in controlled settings increases depressive symptoms in healthy volunteers, with a moderately large effect.¹



Diet, immune activation, and depression

As per the evidence, long-term adherence to a Mediterranean diet can reduce markers of inflammation in humans. Conversely, high caloric meals rich in saturated fat stimulate immune activation. The inflammatory effects of a high caloric diet and saturated fat have detrimental effects on brain health, including cognitive decline, hippocampal dysfunction, and damage to the blood-brain barrier. Since various mental health conditions, including mood disorders, have been linked to heightened inflammation, this mechanism also presents a pathway through which poor diet could increase the risk of depression. Observational studies have shown that people with depression score significantly higher on measures of “dietary inflammation,” characterized by greater consumption of foods that are associated with inflammation (e.g., trans fats and refined carbohydrates) and lower intakes of nutritional foods, which are thought to have anti-inflammatory properties (e.g., omega-3 fats).¹



Randomized controlled trials have reported that anti-inflammatory agents (e.g., cytokine inhibitors and non-steroidal anti-inflammatory drugs) can significantly reduce depressive symptoms. Certain nutritional components (e.g.,

polyphenols and polyunsaturated fats) and general specific dietary patterns (e.g., consumption of a Mediterranean diet) may also have anti-inflammatory effects, which raises the possibility that certain foods could relieve or prevent depressive symptoms associated with heightened inflammatory status.¹

Brain, gut microbiome, and mood

The trillions of microbial organisms, including bacteria, viruses, and archaea, live in the human gut. This microbiome interacts with the brain through inflammatory, and hormonal signaling pathways. Studies showing interactions between the brain and the gut microbiome on mental health have reported: emotion-like behavior in rodents changes with altered gut microbiome; major depressive disorder in humans is associated with changes in the gut microbiome. These findings suggest a role of altered neuroactive microbial metabolites in depressive symptoms.¹



Healthy Eating for mental wellbeing

Studies have reported up to 60% of reduction in depression by incorporating a healthy diet, this is a better outcome than most of the drugs. The brain and nervous









system require nutrition to build new proteins, cells, and tissues. To function effectively, the body needs a variety of carbohydrates, proteins, and minerals. In order to get all nutrients, it is suggested to eat meals that include a variety of foods, instead, eating the same meals each day.²

A healthy mental diet should contain:²

- **Complex carbohydrates** – such as brown rice and starchy vegetables that provide energy. Quinoa, millet, beets, and sweet potatoes have more nutritional value and will keep you satisfied longer than the simple carbohydrates found in sugar and candy.
- **Lean proteins** – They also provide energy that enables quick thinking and reaction. Good sources of protein include chicken, meat, fish, eggs, soybeans, nuts, and seeds.
- **Fatty acids** – These are crucial for the proper functioning of the brain and nervous system. Fish, meat, eggs, nuts, and flaxseeds are good of fatty acids.



Table: Food to Improve Mental Health and Wellness³

FOOD ITEM	COMPONENT(S)	FUNCTION
OILY FISH 	Omega-3 fatty acid (DHA)	<ul style="list-style-type: none"> Improve brain health, and both short and long-term memory reduces anxiety
BERRIES 	Antioxidants polyphenolics	<ul style="list-style-type: none"> Improve brain function by <ul style="list-style-type: none"> Repairing cells, Treating inflammation by free radicals (found in pollutants)
YOGURT 	Probiotics	<ul style="list-style-type: none"> Lower the stress levels, anxiety, and depression by maintaining a good brain-gut connection.
WHOLEGRAINS 	Amino acid (tryptophan)	<ul style="list-style-type: none"> Produce serotonin (the 'feel-good hormone'), which calms the mind and improves mood.
WALNUTS 	Antioxidants	<ul style="list-style-type: none"> Inhibit oxidation in the brain and body Promote the growth of new brain cells.
BEANS 	Antioxidants, vitamin (Thiamine)	<ul style="list-style-type: none"> Maintain blood sugar and helps in burning more calories. Thiamine promotes the production of neurotransmitter essential for memory.

HEALTHY EATING TIPS²

- Avoid processed snack foods (such as potato chips) and sugar-filled snacks (such as candy and soft drinks) as they can impair your ability to concentrate and lead to ups and downs in energy levels.
- Increase the consumption of healthy fats, such as olive oil, coconut oil, and avocado as they support brain function.
- Munch on healthy snacks when hunger strikes, such as fruit, nuts, hard-boiled eggs, baked sweet potatoes. They provide more energy than packaged products.
- Develop a healthy shopping list and stick to it.
- Avoid shopping when hungry, as this situation can provoke unhealthy food purchases.
- Avoid eating while watching television, which can be distracting and cause you to overeat. Instead, eat mindfully. Find a place to sit, relax and notice what you're eating. Chew slowly. Savor the taste and texture.

Reference

1. Firth J, et al. Food and mood: how do diet and nutrition affect mental wellbeing? *BMJ* 2020;369:m2382. doi: <https://doi.org/10.1136/bmj.m2382>.
2. Sutter Health. Eating Well for Mental Health. <https://www.sutterhealth.org/health/nutrition/eating-well-for-mental-health#:~:text=To%20boost%20your%20mental%20health,are%20also%20excellent%20brain%20foods>. Accessed February 13, 2021.
3. Australian & New Zealand Mental Health Association. 7 Foods to Improve Your Mental Health and Wellness. <https://anzmh.asn.au/mental-health/foods-mental-health-wellness/>. Published April 19, 2019. Accessed February 13, 2021.

Express Yourself



For A **NEW** Beginning...

Developed and Designed by

MEDNEO

Copyright: All rights reserved. No part of this print publication may be reproduced, stored in retrieval system, tapes, discs, microfilms etc., or transmitted in any form or by any means electronic, mechanical, photocopies, recording or otherwise, without the written permission of MEDNEO, Mumbai.

Disclaimer: The views, opinions, ideas etc., expressed therein are solely those of the author. **Alkem Laboratories Ltd.** does not certify the accuracy, completeness, currency of any information and shall not be responsible or in anyway liable for any errors, omissions or inaccuracies in such information. **Alkem Laboratories Ltd.** is not liable to you in any manner whatsoever for any decision made or action or non-action taken by you in reliance upon the information provided. **Alkem Laboratories Ltd.** does not recommend the use of its products in unapproved indications and recommends to refer to complete prescribing information prior to using any of the **Alkem Laboratories Ltd.** products.