#### UNIT 5 | TOPIC 7

#### BE THE BEST VERSION OF YOURSELF: KEY PROTECTIVE APPROACHES FOR TAKING CARE OF YOUR WELLBEING

#### TOPIC



# PHYSICAL ACTIVITIES & TIME IN NATURE

Discover how combining physical activity with time spent in nature can revolutionize your well-being. Learn how integrating daily exercise and outdoor moments into your routine, can enhance your health, lift your mood, and conquer stress, paving the way for a more vibrant and balanced life.



The contents herein are for informational and educational purposes only and are not intended as medical advice, diagnosis, or treatment. Always consult a qualified healthcare professional for any medical concerns or decisions.

# LEARNING OBJECTIVES

THIS TOPIC IS DESIGNED AROUND THE FOLLOWING MAIN LEARNING OBJECTIVES:

### 01

#### Understand the Impact of Physical Activity

Comprehend how physical activities affect the human body on a physiological level, including cardiovascular health, muscle strength, and respiratory function. Learn to recognize the role of physical activity in improving energy management and overall physical well-being.

### 02

#### Implement Effective Strategies for stress relief

Acquire practical skills to integrate physical activities and nature into daily routines, including desk exercises, movement breaks, and nature immersion. Learn how you can develop strategies for setting and achieving personal fitness and step count goals. 03

#### Recognize the Mental Health Benefits

Learn how physical activity and time in nature influence mental health by improving mood. reducing symptoms of anxiety and depression, and enhancing overall emotional well-being. Understand connection between the neurotransmitters released during physical activity mood and enhancement.

### 04

#### Utilizing Nature for Stress Relief

Understand how spending time in natural environments can reduce stress, shift attention from negative thoughts, and promote relaxation. Learn to use nature as a tool for enhancing mindfulness and emotional balance.

#### Developing Long-Term Wellness Habits

Develop the ability to establish and sustain habits that incorporate physical activity and time in nature to prevent and manage workrelated stress and burnout. Learn to adapt routines to maintain engagement and effectiveness over time.

### 07

#### Mastering Self-Regulation Techniques

Learn to use physical activities and regulate emotional nature to responses and manage stress effectively. Acquire skills for self-discipline maintaining and consistency in health-promoting behaviors

### 06

#### Enhancing Energy Management Skills

Understand how physical activity and nature impact energy levels and learn techniques to optimize personal energy throughout the day. Develop strategies for integrating energy management practices into daily routines.

### 80

#### Exploring and Integrating Interests

Develop the ability to explore and incorporate various physical activities and nature experiences to keep routines engaging and effective. Learn to adapt activities personal preferences and to interests to sustain long-term motivation and benefits.

# COMPETENCES

#### THIS TRAINING CONTENT IS DESIGNED TO HELP YOU ACQUIRE THE FOLLOWING COMPETENCES:

- 01 **Energy management:** Ability to approach your working day with the mindset that you are managing your energy, not only your time.
- O2 Self-regulation: Ability to understand and manage your behaviour and your reactions to feelings and things happening around you.
- O3 Wide range of interests: Show a wide range of personal and professional interests. Show interest and motivation for many different aspects of personal and professional life and cultural, social, scientific, artistic, technical knowledge, etc.

### INTRODUCTION TO PHYSICAL ACTIVITIES & TIME IN NATURE

#### The basics

Welcome to our exploration of the transformative power of physical activities and time spent in nature!

Looking back in human history, for about 99,9% of our existence we've lived in such natural environments. It is easy to ignore and forget this important fact in today's fast-paced world. Finding balance and maintaining well-beina can be challenging. Yet, the answer to managing stress and enhancing our overall health might be simpler than we think. Imagine stepping outside into a lush green park, feeling the fresh air fill your lungs, and hearing the gentle rustle of leaves. Now, combine that serene setting with the invigorating rush of endorphins from a brisk walk or a jog. This combination of physical activity and nature can profoundly impact both your body and mind.

Our modern lifestyles often confine us to desks and screens, leading to physical and mental fatigue. The pressures of work can accumulate, manifesting as stress, burnout, and a decline in mental health. However,

incorporating regular physical activity and immersing ourselves in nature can be powerful antidotes. Physical activities not only strengthen our bodies but also the release of trigger neurotransmitters like endorphins. which act as natural mood lifters. Simultaneously, time spent in nature offers a respite from daily worries, shifting our focus to the natural beauty around us and promoting a state of relaxation and tranquility.

As we navigate through this topic, you will learn how even small changes can make a significant difference. Consider the simplicity of a morning jog through a local park or a weekend hike with friends. These activities not only enhance physical health by improving cardiovascular function and building muscle strength but also provide a boost mental by reducing symptoms of anxiety and depression. The connection between physical movement and mental clarity is profound—each step you take helps clear your mind, allowing for greater focus and creativity in your daily tasks.

Moreover, spending time in nature can reset your attention span, helping you break free from the cycle of constant worry and negative thoughts.

In this training, we will delve into how elements-physical these activity and time in nature-affect you on а physiological level. influencina everything from our cardiovascular health to our cognitive functions. We'll explore the science behind how exercise boosts our energy levels and sharpens our minds, and how nature provides a sanctuary that calms our nerves and rejuvenates our spirit. Through reallife examples, scientific insights, and practical exercises, we'll equip you with the knowledge and tools to make physical activity and time in nature integral parts of your routine,

paving the way for a more vibrant and fulfilling life. We hope that by the end of this topic, you will have a deeper understanding of how to harness these natural tools to improve your well-being, manage stress, and prevent burnout.

Whether you're a seasoned fitness enthusiast or someone looking to incorporate more activity into your life, and whether you're an avid nature lover or just beginning to explore the outdoors, this training offers valuable insights and practical strategies for everyone.

Let's embark on this journey together and discover how embracing physical activities and the healing power of nature can lead to a healthier, happier, and more balanced life.



### PHYSICAL ACTIVITIES: IMPACT ON THE HUMAN BODY & MENTAL HEATLH

# Understanding what's at stake

The human body was simply not built for a sedentary lifestyle. From our skeletal structure-to our muscles, joints, blood and respiratory systems, humans were clearly "designed" to move.

Prolonged sitting has become a common aspect of modern life, particularly for those working in office settings, but it can have detrimental effects on both physical and mental health. Sitting for extended periods can lead to poor posture, back pain, and muscle stiffness. More critically, it is associated with an increased risk of developing chronic conditions such as obesity, heart disease, diabetes, and even certain cancers. The lack of movement slows down metabolism, reduces circulation, and can contribute to the development of blood clots, making regular movement crucial for maintaining overall health.

Taking breaks to stand up, stretch, or walk can significantly counteract the negative impacts of prolonged sitting.





These activities help improve circulation, reduce muscle tension, and enhance mental clarity and focus. Even short, frequent breaks can make a substantial difference, helping to maintain energy levels and prevent the physical discomfort associated with long periods of inactivity. Incorporating regular movement into your daily routine is a simple yet effective way to support both your body and brain, leading to well-being improved and productivity, consequently - manage stress.

It is not hard to understand why achieving these guidelines could be a challenge as most of our waking hours are spent at work sitting at a desk or crouched over a computer. In fact, research suggests that only 21% of adults meet the 150 minutes of weekly activity guidelines. Still think this is not your thing? Perhaps you need a little more convincing? Let's check out the science behind it.

#### **Cardiovascular Health**

Engaging in regular physical activity significantly benefits cardiovascular health. The cardiovascular system, which includes the heart and blood vessels, is responsible for delivering oxygen and nutrients to tissues throughout the body and removing waste products. When you exercise, your heart rate increases to pump more blood, and as a result, more oxygen is transported to your muscles.

#### Heart Rate and Stroke Volume

Exercise increases heart rate (the number of beats per minute) and stroke volume (the amount of blood pumped with each beat). Over time, these adaptations improve cardiac output (the total volume of blood the heart pumps per minute), making the heart more efficient at delivering oxygen and nutrients to tissues. The increased demand for oxygen during exercise leads to physiological changes, such as increased heart muscle mass (hypertrophy) and enhanced contractility, allowing the heart to pump more effectively.



#### Cholesterol and Lipid Profiles

Regular exercise helps regulate lipid profiles by lowering bad cholesterol (LDL) and increasing good cholesterol (HDL). This balance reduces the risk of atherosclerosis (buildup of plagues in the arterial walls), which can lead to heart attacks and strokes. Exercise also improves the metabolism of triglycerides, reducing their levels in the blood, which further lowers cardiovascular risk.

#### Inflammatory Markers

Physical activity reduces levels of inflammatory markers like Creactive protein (CRP), **decreasing the risk of chronic cardiovascular diseases**. Chronic inflammation is a key contributor to the development of cardiovascular diseases, and regular exercise helps modulate the immune response, promoting an anti-inflammatory state.

#### Muscular Strength and Endurance

Muscular strength and endurance are essential components of physical fitness. Strength refers to the maximum force a muscle can produce in a single effort, while endurance refers to the ability of a muscle to sustain repeated contractions over time.

#### Muscle Fiber Types

There are two primary types of muscle fibers:

- Type I (slow-twitch) and
- Type II (fast-twitch).

**Type I** fibers are more efficient at using oxygen to generate fuel for continuous, extended muscle contractions over a long time. They are vital **for endurance activities** like long-distance running.

**Type II** fibers, on the other hand, are better suited for short bursts of **strength** or **speed**, such as sprinting or heavy lifting.

#### Hypertrophy

Strength training induces hypertrophy, an increase in muscle size due to the enlargement of individual muscle fibers. This process is driven by mechanical tension, muscle damage, and metabolic stress during resistance exercises.

The body responds by repairing damaged muscle fibers through a cellular process where muscle fibers fuse, increasing the mass and crosssectional area of the muscle. Satellite cells (muscle stem cells) play a **crucial role in muscle repair** and growth, contributing to increased muscle fiber size.

#### Neuromuscular Adaptations

Regular resistance training enhances communication the between the nervous system and muscles. Improved neuromuscular efficiencv allows for better coordination and activation of muscle fibers durina physical activitv. leading to increased strength and endurance. Hence, the unit recruitment (the motor activation of additional muscle becomes more efficient. fibers) allowing for greater force production and sustained muscular activity.



#### Metabolic Adaptations

Exercise promotes mitochondrial biogenesis (the formation of new mitochondria within cells). Mitochondria are the powerhouses of cells, generating ATP (adenosine triphosphate), the energy currency the cell. An increase of in mitochondrial density enhances the produce muscle's capacity to aerobically thereby energy improving endurance. Enhanced oxidative capacity allows muscles to utilize oxygen more efficiently, delaying the onset of fatigue during prolonged exercise.



#### **Respiratory Improvements**

The respiratory system, which includes the lungs and airways, plays a crucial role in delivering oxygen to the bloodstream and removing carbon dioxide from the body. Regular physical activity enhances the efficiency and capacity of the respiratory system. How exactly? Let's find out.



#### Ventilation Efficiency

Exercise increases the demand for oxygen, leading to an increase in tidal volume (the amount of air inhaled or exhaled in a single breath) and respiratory rate (the number of breaths taken per minute). Over time, these adaptations improve the overall efficiency of ventilation. Enhanced lung function allows for greater oxygen intake and carbon dioxide expulsion, supporting sustained physical activity.

#### Ventilation Efficiency

The alveoli are tiny air sacs in the lungs where gas exchange occurs. Regular physical activity promotes the growth of capillaries around the alveoli, enhancing the surface area for gas exchange.

This results in **more efficient** oxygen uptake and carbon dioxide removal. The increased capillary network also improves the diffusion capacity of the lungs, allowing for better oxygen delivery to the bloodstream.

#### Oxygen Utilization

Physical activity enhances the muscles' ability to extract and use oxygen from the blood, a process known as the arteriovenous oxygen difference (a-vO2 difference).

Increased a-vO2 difference means that more **oxygen is utilized** by the muscles during exercise, improving overall aerobic capacity.

This is critical for adaptation performance, endurance as it allows for sustained energy production durina prolonged physical activity.

Enhanced oxygen utilization also supports improved endurance and performance in both aerobic and anaerobic activities, enabling individuals to sustain higher levels of physical exertion for extended periods.



#### Diaphragm and Intercostal Muscles

These muscles play a vital role in the mechanics of breathing. Exercise strengthens the diaphragm and intercostal muscles, improving their endurance and reducing the effort reauired for breathing. This adaptation is particularly beneficial for individuals with respiratory conditions. such as asthma or chronic obstructive pulmonary disease (COPD). Improved muscle strength and endurance facilitate deeper and more effective breaths, enhancing overall respiratory efficiency.

physical inactivity constitutes one of the leading causes of death globally, related to over

## every year around the world

death

Physical inactivity is one of the leading *modifiable* risk factors for global mortality. Globally, it has been estimated that physical inactivity is responsible for 6% of the burden from coronary heart disease. The World Health Organisation (WHO) defines physical activity as *"any bodily movement produced by skeletal muscles that require energy expenditure"*. To achieve health benefits, the WHO recommends that healthy adults aged 18-64 should accumulate **at least 150 minutes** of moderate to vigorous intensity aerobic physical activity *every week*.

# How much should I exercise?

Global estimates show that 1 in 3 adults and 81% of adolescents do not do enough physical activity. Are you one of them? Start by limiting sedentary time.





# EXERCISE IS THE MOST POTENT AND UNDERUTILIZED ANTIDEPRESSANT, AND IT'S FREE.

Dr. John J. Ratey

Harvard Medical School professor and author of "Spark: The Revolutionary New Science of Exercise and the Brain"

### TIME IN NATURE: IMPACT ON THE HUMAN BODY & MENTAL HEALTH

# A connection as old as time

Humans have an intrinsic connection to nature, a bond that has been forged over thousands of years of evolution. For most of human history, our ancestors lived in with close contact natural environments, relying on the land for food, shelter, and survival. This deeprooted connection is embedded in biology and psychology, our influencing how we respond to the world around us. This is not something to be easily ingnored.

Nowadays our disconnection from nature is more profound than ever. We spend the majority of our days indoors, surrounded by artificial environments that can heighten our stress levels and diminish our sense of well-being. Yet, the solution to many of our modern stressors lies in something as simple and accessible as reconnecting with the natural Research world. increasingly supports the idea that nature is not just a luxury, but a necessity for mental and physical health. If we could incorporate time in natural settings into our daily routines, we can counteract the negative impacts



of our hectic lifestyles, finding solace, rejuvenation, and a sense of peace that only nature can provide. In this part we will explore how this essential connection to nature can be leveraged to effectively manage work-related stress, enhance overall well-being, and restore balance.

#### Biophilia Hypothesis and Stress Reduction Through Nature Exposure

In the 1980s, the renowned biologist E.O. Wilson came up with this brilliant hypothesis: that humans have an innate, biologically-driven affinity for nature and living organisms.



The term "biophilia" itself comes from the Greek words "bios." meaning life, and "philia," meaning or affection. essentially love translating to a "love of life or living systems". This connection is not just a cultural or aesthetic preference; it's a fundamental part of our biology. The natural world provided early thev humans with everything needed to survive, and as a result, brains evolved to respond our positively to natural environments. This is why we often feel a sense of calm and well-being when we are in nature—it's in our DNA.

Research has shown that exposure to nature can reduce stress, lower blood pressure, and improve mood. lt can also enhance cognitive function and attention restoration. The hypothesis provides а framework for understanding why nature is so effective in promoting mental and physical health, and why our disconnection from nature in modern urban environments may contribute to the rise in stressrelated health issues.

When we spend time in nature, we engage with environments that our bodies and minds were designed to interact with. Natural settings have been shown to lower levels of of cortisol, the body's primary stress hormone. Exposure to green spaces can also reduce blood pressure, slow the heart rate, and ease muscle tension.



In every walk with nature, one receives far more than he seeks.

John Muir

#### **Psychological Benefits**

On a psychological level, nature has the power to restore our attention and mental claritv. Urban environments are often filled with stimuli that demand our attention, leading to cognitive overload and In stress. contrast, natural environments provide what psychologists call "soft fascination"scenes that gently engage our attention without overwhelming us. This allows our minds to rest, recover, and reset, which is essential for managing stress effectively.

Being in nature encourages mindfulness, the practice of being fully present in the moment. The sensory experiences of naturehearing birds sing, feeling the wind on your skin, or smelling fresh pinedraw us into the present, helping to quiet the mind and reduce the constant mental chatter that often accompanies stress. This heightened sense of presence and awareness helps break the cycle of negative thoughts and worries. further reducing stress levels. How does even just reading about this make you feel now?

On the other hand, culturally, humans have long used nature as a place for reflection, healing, and community gathering. Whether it's a walk in the park, a hike in the mountains, or simply sitting by a body of water, these activities not only reduce stress but also reconnect us with our innate human nature and with each other. Social connections, fostered in natural settings, are crucial for emotional support and stress relief.

All these physiological responses are indicative of a shift from the "fight or flight" mode, which is triggered by stress, to the "rest and digest" mode, which is associated with relaxation and recovery.



Spending time in nature offers a unique opportunity to disconnect from the stressors of daily life and reconnect with the environment. Check out the list below to discover some of the key advantages.

# Lowering of BloodPressure and HeartRate

Spending time in natural environments has been shown to lower blood pressure and reduce heart rate, which are key indicators of relaxation and reduced stress. The soothing sights, sounds, and smells of nature trigger the parasympathetic nervous system. which is responsible for the body's digest functions. rest and This svstem counteracts the stressinduced responses of the sympathetic nervous system, leading to a decrease in blood pressure and heart rate.





Nature encourages physical

relaxation, leading to a reduction in muscle tension. Exposure to natural surroundings can reduce the physical manifestations of stress, such as muscle tightness and tension, by promoting a relaxed state of mind and body. The natural environment, free from the noise and demands of the urban environment, allows the body to release tension more effectively.





Regular exposure to nature has been linked to reduced symptoms of anxiety and depression. Here's why: nature exposure stimulates the production of serotonin and endorphins, neurotransmitters that are crucial for regulating mood and combating feelings of anxiety and depression. Time in green spaces can also decrease the activity in the brain regions associated with rumination, which often exacerbates mental health issues.



Being in nature can lead to immediate and lasting improvements in mood and overall emotional well-being. The calming effect of nature, combined with physical activity, boosts the mood-enhancing production of chemicals like dopamine and serotonin.

This combination not only lifts the mood but also enhances resilience to stress, making it easier to maintain emotional balance in a high-pressure work environment.



# 05

#### Shift from Negative Thoughts to Natural Beauty

Nature provides a mental break from stress-inducing thoughts, allowing for a shift in focus towards more positive and peaceful stimuli. The natural environment offers a variety of gentle, engaging stimuli that effortlessly capture attention, helping to divert the mind from negative thought patterns and stress. This shift allows the mind to rest and recover from the cognitive fatigue caused by constant stress.



#### Nature - an antidote to stress

A groundbreaking study published in the *Journal of Environmental Psychology* in 2019 offers compelling evidence that nature might just be the antidote we need. This research provides valuable insights into how even brief interactions with nature can significantly reduce stress levels, particularly through the reduction of cortisol, or as we know it - the stress hormone.

The study recruited a diverse group of participants and instructed them to take "nature pills"—that is, to spend 20-30 minutes outdoors in a natural setting at least three times a week. Importantly, participants were asked to keep these breaks free of distractions such as exercise, reading, or the use of electronic devices. The aim was to immerse themselves fully in their natural surroundings, allowing them to experience nature in its purest form.

The results were striking. The researchers found that spending just 20-30 minutes in nature led to a significant reduction in cortisol levels, with the most substantial decrease occurring within this time frame. Beyond 30 minutes, the benefits continued, but at a slower rate, indicating that even a short period spent in nature can have a powerful impact on the body's stress response. The data showed that cortisol levels dropped by approximately 21% on average during these nature breaks, underscoring the potential of these brief interludes in mitigating the effects of stress.

One of the most fascinating aspects of the study was its findings on the universal effect of nature. Participants chose a variety of natural settings for their breaks—ranging from lush parks and gardens to more modest green spaces, and even areas with just a few natural elements. Despite the differences in the environments, the stress-reducing benefits were consistent across the board. This suggests that the presence of nature itself, rather than any specific type of environment, is the critical factor in alleviating stress.

In a world where time is often our most precious resource, the idea that just 20-30 minutes in nature can significantly lower stress levels is incredibly empowering.

### DID YOU KNOW

### WALKING EACH DAY CAN REDUCE YOUR RISK OF HEART DISEASE BY UP TO 19%?

Just 30 minutes of walking each day can reduce your risk of heart disease by up to 19%" is based on research highlighting the cardiovascular benefits of regular physical activity. Walking is one of the simplest and most accessible forms of exercise, and it plays a crucial role in maintaining heart health. Walking, especially in natural environments, helps reduce stress levels by triggering the release of endorphins and lowering cortisol levels.

#### **KEEP WALKING**

# CASE STUDY

#### The Lifestyle Heart Trial by Dr. Dean Ornish

Dr. Dean Ornish conducted the Lifestyle Heart Trial, which was a groundbreaking study published in the Lancet in 1990. The study examined the effects of lifestyle changes, including physical activity, on patients with coronary artery disease.

A group of 48 patients with moderate to severe coronary artery disease were recruited for the study. Participants were divided into two groups:

1. The experimental group followed a comprehensive lifestyle modification program that included:

- A low-fat, whole foods, plant-based diet.
- Moderate aerobic exercise (e.g., walking for 30 minutes a day).
- Stress management techniques (e.g., yoga, meditation).
- Smoking cessation.
- Social support.

2. The control group received standard medical care, including advice to follow the American Heart Association's guidelines.

So, what happened? The results were quite interesting:

- **Cardiovascular Health:** After one year, participants in the experimental group showed a **significant reduction in coronary artery blockages**. On average, there was a 37.2% reduction in the frequency of angina (chest pain), and the severity of blockages was reduced by 4.5%. Conversely, the control group experienced a worsening of coronary artery blockages.
- Muscular Strength and Endurance: Participants who adhered to the exercise regimen experienced improvements in physical fitness and endurance, as measured by exercise tolerance tests.
- **Respiratory Improvements: Improved cardiovascular efficiency** indirectly enhanced respiratory function. The participants' enhanced physical fitness

likely contributed to better overall lung function, though specific respiratory measurements were not the primary focus of the study.

 Mental Health and Overall Well-being: The experimental group reported significant improvements in psychological well-being, including reductions in stress, anxiety, and depression. These changes were attributed to the combined effects of exercise, diet, stress management, and social support.

#### Key message

Lifestyle The Heart Trial provided compelling evidence that comprehensive lifestyle changes, including regular physical activity, is an excellent way to manage stress and can significantly improve cardiovascular health and overall well-being. Dr. Ornish's demonstrated study that lifestyle interventions could not only halt but potentially reverse the progression of coronary artery disease.

#### Give it a try:

- get out there and walk 30 Minutes
- try cycling and swimming

30 Minutes



Source: Ornish, D., Brown, S. E., Scherwitz, L. W., Billings, J. H., Armstrong, W. T., Ports, T. A., ... & Gould, K. L. (1990). Can lifestyle changes reverse coronary heart disease? The Lifestyle Heart Trial. Lancet, 336(8708), 129-133. DOI:10.1016/0140-6736(90)91656-U.

For further reading, you can find the study <u>here</u>.



### A CALL TO ACTION

#### By small and simple things

Incorporating short walks and movement breaks into your daily work routine is not just about getting a bit of exercise; it's about enhancing your overall productivity, creativity, and well-being. Engaging in regular, brief bouts of exercise throughout the day can break the cycle of stress accumulation, preventing the build-up of tension that often leads to burnout. These exercises also offer a mental reset, giving you a chance to step away from your desk, clear your mind, and return to tasks with renewed focus and creativity.

#### TRY THIS:

- Walking meetings: Instead of sitting in a conference room, take your meetings on the move or outside. Stand up and simply walk around during phone calls instead of sitting at your chair.
- **Stair climbing:** Use the stairs instead of the elevator. Climbing stairs is a great cardiovascular exercise and helps to strengthen leg muscles.
- Step count goals: Set a daily step count goal, such as 10,000 steps, and find opportunities to walk throughout the day. This could include walking to a colleague's desk instead of emailing, taking short walks during breaks, or pacing while on phone calls.

### SEATED LEG LIFTS Sit upright in your chair. • Extend one leg out straight and hold for a few seconds. • Lower it back down without letting it touch the floor. • Repeat with the other leg. Perform 10-15 repetitions per leg CALF RAISES Stand behind your chair . and hold onto the back for support. • Lift your heels off the ground and rise onto your toes. Hold for a few seconds, then lower back down. Perform 15-20 repetitions.

#### **CHAIR DIPS**

- Sit on the edge of your chair with your hands gripping the edge.
- Slide your bottom off the chair and lower your body by bending your elbows.
- Push yourself back up to the starting position.
- Perform 10-12 repetitions

SEATED MARCH

- Sit tall in your chair.
- Lift one knee as high as you can, then lower it and lift the other knee.
- Alternate between legs, mimicking a marching motion.
- Continue for I-2 minutes.

ORKOUTS

#### WALL PUSH-UPS

- Stand a few feet away from a wall and place your hands on the wall at shoulder height.
- Bend your elbows and lean your body toward the wall.
- Push back to the starting position.
- Perform 10-15 repetitions.

### SQUATS

- Stand with your feet shoulder-width apart.
- Lower your body as if sitting back into a chair, keeping your back straight and knees behind your toes.
- Return to standing position. Perform 10-15
- repetitions.

### NECK STRETCHES

- Sit or stand tall.
- Gently tilt your head to one side, bringing your ear toward your shoulder.
- Hold for 15-20 seconds and repeat on the other side.
- Perform 2-3 repetitions per side.

SEATED SPINAL TWIST

- Sit tall in your chair with your feet flat on the floor.
- Place your right hand on the back of your chair and your left hand on your right thigh.
- Gently twist your upper body to the right, looking over your shoulder.
- Hold for 15-20 seconds and repeat on the other side.
- Perform 2-3 repetitions per side.

SHOULDER ROLLS

• Sit or stand tall.

- Roll your shoulders forward in a circular motion for 10 repetitions.
- Reverse the direction and roll your shoulders backward for IO repetitions.

WORKOUTS

### SEATED CAT-COW STRETCH

| (•

- Sit on the edge of your chair with your feet flat on the floor.
- Place your hands on your knees.
- Inhale as you arch your back and look up (cow position).
- Exhale as you round your back and tuck your chin to your chest (cat position).
- Repeat for I-2 minutes.

### SEATED FORWARD BEND

- Sit on the edge of your chair with your feet flat on the floor and your knees hip-width apart.
- your knees hip-width apart.
  Inhale deeply, then slowly exhale as you hinge at your hips, reaching your hands toward the floor or resting them on your legs.
- Allow your head and neck to relax, letting your chest move closer to your thighs.
- Hold the stretch for 15-30 seconds. Slowly return to an upright position.
- Repeat 2–3 times.

# **5 DAY CHALLENGE**

How about a challenge? The schedule below is based on the simple office workouts examples presented earlier. You may also start small by doing just one activity (e.g. morning) and start adding the rest of them gradually. They are meant to be short by design. Mix and match or add other exercise according to your work environment and schedule.

MONDAY		TUESDAY		WEDNESDAY	
Morning: Seated Leg Lifts. 10-15 per leg. Afternoon: Chair Dips. 10-15 repetitions.		Morning: Calf Raises. 15-20 repetitions. Afternoon: Wall Push-Ups. 10-15		Morning: Neck Stretches. 2-3 repetitions per side. Afternoon: Shoulder Rolls. 10 repetitions	
<b>End of the day:</b> <b>Seated March</b> . Continue for 1-2 min.		repetitions. End of the day: Squats. 10-15 repetitions.		per direction. End of the day: Seated Spinal Twist. 2-3 repetitions per side.	
THURSDAY			FRI	DAY	
	Morning: Seated Forward Bend. Repeat 2-3 times.		Morning: Wall Push- Ups. 10-15 repetitions.		
	Afternoon: Seated Cat-Cow Stretch.		Afternoon: Calf Raises. 15-20 repetitions.		
	End of t	the day: inal Twist.	End of the Dips. 10-12	day: Chair repetitions	

# FOREST BATHING

Forest bathing, or Shinrin-yoku, is a powerful practice that involves immersing oneself in a forest environment to reap the mental and physical health benefits of nature. Originating in Japan, this practice has gained international recognition for its ability to reduce stress and enhance overall well-being. It involves more than just a walk in the woods; it's about fully engaging with the natural environment through all your senses. Spend 30-60 minutes in a forest or wooded area, focusing on the sights, sounds, smells, and textures of the environment. The practice encourages a slow, mindful approach, allowing you to immerse yourself in the natural world and experience its calming effects.

#### **GET STARTED BY:**

**1. Find a Suitable Forest:** Locate a nearby forested area or nature reserve where you can spend time without distractions. The area should be relatively quiet and free from urban noise.

**2. Leave Devices Behind:** To fully engage with nature, leave your phone and other electronic devices behind or put them on silent. This helps minimize distractions and enhances your connection with the environment.

**3. Engage Your Senses:** As you walk slowly through the forest, focus on the sensory experiences:

- Sight: Observe the variety of green hues, textures of bark, and patterns of leaves.
- Sound: Listen to the rustling of leaves, chirping of birds, and other natural sounds.
- Smell: Inhale the earthy scents of pine, soil, and other forest aromas.
- Touch: Feel the texture of leaves, bark, and soil. Walk barefoot if comfortable and safe.

**4. Practice Mindfulness:** Take moments to sit or stand still, allowing yourself to be fully present in the moment. Practice deep breathing and mindfulness techniques to enhance relaxation.

**5. Reflect and Relax:** After your time in the forest, take a few minutes to reflect on how you feel. Notice any changes in your mood, stress levels, and overall sense of well-being.

# ASSESSMENT

#### 01.

What is one of the main benefits of combining physical activity with time spent in nature?



- B- Enhanced physical and mental health
- C- Higher stress levels

#### 03.

How does physical activity impact our bodies according to the introduction?

A- It decreases muscle strength

B- It triggers the release of mood-enhancing neurotransmitters

C- It causes cardiovascular decline

#### 02.

What neurotransmitter is mentioned as a natural mood lifter that is released during physical activity?



A- Serotonin

B- Dopamine

C- Endorphins

#### 04.

According to the text, what can be a result of modern lifestyles that confine us to desks and screens?

- A- Increased physical strength
- B- Enhanced mental clarity

C- Stress, burnout, and mental fatigue

#### 05.

What type of physical activities are suggested to improve both physical health and mental wellbeing?



A- Sedentary activities

B- Desk exercises only

C- Jogging, brisk walks, and hiking

#### 06.

What does time spent in nature help to shift our focus away from?



A- Physical activities

B- Creative tasks

C- Daily worries and negative thoughts

#### 07.

How does nature contribute to a state of relaxation according to the introduction?

A- By increasing mental stress

B- By providing a respite
 from daily worries and
 promoting tranquility

C- By enhancing competitive drive

#### 08.

What are two benefits of physical activities mentioned in the text?

A- Improved cardiovascular health and decreased mood enhancement

 B- Increased anxiety and reduced cognitive function

C- Enhanced cardiovascular function and muscle strength

#### 09.

What aspect of modern lifestyles is highlighted as a cause of stress and burnout?



A- Frequent outdoor activities

B- Sedentary desk work and prolonged screen time

C- Regular physical exercise

#### 10.

What mental health benefits are associated with spending time in nature, as mentioned in the text?

> A- Increased feelings of depression and anxiety

B- Decreased symptoms of anxiety and depression

C- Reduced cognitive clarity

#### 11.

How does physical activity affect energy levels and cognitive functions according to the introduction?

- A- It decreases energy levels and impairs cognitive functions.
- B- It improves energy levels and sharpens cognitive functions.

C- It only affects physical health but not cognitive functions.

#### 12.

How does the text suggest physical activity contributes to mental clarity and focus?

> A- By causing mental fatigue

B- By clearing the mind and enhancing focus through exercise

C- By reducing physical endurance

## **ASSESSMENT ANSWERS**

1-B	2-C	3-B	4-C
5-C	6-C	7-B	8-C
9-B	10-B	11-B	12-B

# **KEY TAKEAWAYS**



#### **Improved Health Through Movement**

Regular physical activity strengthens the body and boosts cognitive function. Simple activities like jogging or hiking can have significant health benefits.



#### **Focus and Creativity Enhance**

Engaging in physical activity and spending time outdoors can clear your mind. This leads to improved focus, creativity, and mental clarity.



#### **Endorphins Boost Mood**

Physical activity releases endorphins, which act as natural mood lifters. Combining exercise with nature can enhance both physical and mental health.

#### **Nature Eases Mental Strain**

Spending time in nature provides a mental break from daily worries. It helps shift focus away from stress and promotes relaxation.

05

#### **Natural Environments Matter**

For most of human history, we thrived in natural settings. Reconnecting with nature can help alleviate stress and improve overall well-being.

# **RESOURCE LIBRARY**

If you have to learn one thing from these training topic is to just go out there and allow your body to show you can manage stress, naturally. However, we've found some other interesting resources which can help you explore the topics of physical activity and time in nature further:



#### **BLUE ZONES**

This is documentary series that explores the lifestyles of people in regions with the highest life expectancy. It highlights the importance of diet, community, and connection to nature for longevity and well-being.

LINK



#### WHO GUIDELINES ON PHYSICAL ACTIVITY

The World Health Organization's resource page on physical activity will grant you access to relevant data, initiatives and actions of value to both individuals and groups, including employers.

LINK



#### **RESTORE YOUR BRAIN WITH NATURE**

In this TEDx talk, Professor David Strayer has been researching brain-based measures of cognitive restoration. He also shares his findings how to allow the brain to rest and restore via nature.

LINK

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