PANPESK1: Participate fully and communicate cooperatively with others.

PANPESK9: self-initiate behaviors that contribute to personal and partner/group effort

PANPESK10: adjust behavior to prevent/reconcile conflicts

PANPE2a: identify the health, wellness and fitness benefits of selected alternative physical activity

PANPE1a: Plan and implement a personal / group physical activity learning project, focusing on an alternative to traditional sports

PANPE1b: Demonstrate knowledge and movement skill readiness in an activity that is an alternative to traditional sports

PANPE1d: Self-assess performance of alternative physical activity skills and evaluate and adjust alternative physical activity learning plan

Objectives:

- Define stress
- Identify common causes of stress
- Describe the effects of stress on the body
- Identify effective ways to reduce stress

Guiding Questions:

- How does stress affect overall fitness and health?
- What are ways to cope with stress?

Introduction:

The causes of stress can include any event or occurrence that a person considers a threat to his or her coping strategies or resources. Researchers generally agree that a certain degree of stress is a normal part of a living organism’s response to the inevitable changes in its physical or social environment, and that positive, as well as negative, events can generate stress. Stress in humans results from interactions between persons and their environment that are perceived as straining or exceeding their adaptive capacities and threatening their wellbeing.

Activate Prior Knowledge:
In today's society, most of us can't avoid stress. But we can learn to behave in ways that lessen its effects.

Content:

What Is Stress?
Stress is a physical, psychological, or emotional response to a particular stimulus, situation, or event in a person's life.

Many things can invite stress into your life. Everyone experiences unsettling events in their lives, but the particular causes and the extent to which different people experience the resulting stress varies from one person to another.

There are two types of stress:

- **Good stress:** Good stress, also called eustress, has positive implications and gives you a feeling of fulfillment. Most people thrive on situations that induce good stress. Examples of eustress include falling in love, riding a roller coaster, and winning a race.

- **Bad stress:** Bad stress has negative implications and leads to feelings of uneasiness. Bad stress describes the type of feelings that most of us identify as stress and try to overcome.

Acute Stress
Acute stress comes on suddenly. The causes are rarely a mystery—they're usually obvious and abrupt events, and tend to be temporary. Acute stress is associated with the fight-or-flight response, which is the human tendency either to confront or to flee an immediate threat. Examples:

- A car accident
- Loss of a job
- A flood in the basement

Chronic Stress
Chronic stress is constant, seems never ending, and is compounded. Often, chronic stress results from family strife, financial hardship, and/or hostile living situations. Something small yet consistent (e.g. traffic jams), can prolong this sense of powerlessness. Examples:
• Constant care of an ill or elderly family member
• Bullies at school
• Long-term unemployment

Triggers of Stress

Many things can invite stress into your life. Everyone experiences unsettling events in their lives, but the particular causes and the extent to which different people experience the resulting stress varies from one person to another. To alleviate stress, it is important first to identify the possible stressors, or triggers. Triggers fall into three categories: Frustrations, Conflicts, and Pressures.

Frustrations
Frustrations are obstacles, barriers, or anything that keeps you from achieving your goals. Limitations and an inability to overcome or accept them can put a strain on your mental and emotional state and lead to internal or external stress.

Internal frustrations are characteristics that you may perceive as limitations within yourself. Examples include age, physical handicaps, mental illness, and shyness.

External frustrations are obstacles that occur outside of you. You may feel that they hold you back from your goals. Examples include age discrimination, abuse, divorce, and an inability to find a job.

Conflicts
Conflicts are moral dilemmas and decisions that call for you to consult your conscience. Conflicts leading to stress may include:

• Involvement in a combative marriage
• Friction with a coworker
• The prospect of making a tough or significant decision
• Being in the middle of an argument between friends

Pressures

You are bound to experience pressures in life that lead to stress. Pressures can be either internal or external. The goals that you attempt to achieve and the bar that you set for yourself can be just as stressful as any work deadline.

Internal pressures are burdens you put on yourself; living up to your own standards or perceptions of yourself. Examples include an attempt to
lose weight, search for the perfect mate, a promotion at work, a desire to maintain high grades in school.

**External pressures** are situations that the world or another outside influence puts upon you. Examples include bills, work/school obligations, social responsibilities, and child rearing.

### Effects of Stress
The effects of stress are numerous and can manifest themselves in a variety of ways. These effects can be divided into four general categories: emotional, physical, psychological, and behavioral.

#### Emotional Effects of Stress
Emotional Effects: Probably the most obvious effect of stress is the havoc it can wreak on your emotions. When you are stressed, it can be hard to think about anything else. Stress can cause many unpleasant emotional responses, such as:

- Anxiety
- Depression
- Anger

#### Physical Effects of Stress
Your mental state has a profound influence on your overall well-being and can have physical effects too. Emotional and psychological stress affects your body. Some common physical symptoms of stress are:

- Headaches
- Fatigue
- High blood pressure
- Hives

#### Psychological Effects of Stress
It is difficult to focus when you have stress and psychological troubles that lead to worry or tension. If your stress takes up so much of your consciousness that it edges out your typical sense and outlook, your mind can become overloaded. Effects include:

- Memory problems
- Difficulty making decisions
- The desire to escape or run away
- Loss of concentration
Behavioral Effects

If you are having a hard time understanding how to deal with stress, noticeable behavioral changes can follow. These changes can come on so slowly that you may not even notice an unhealthy pattern emerging. Effects include:

- Excessive or inadequate sleep
- Alcohol and/or drug abuse
- Loss of temper
- Lack of interest in your favorite hobbies or activities

Stages of Stress

While suffering from stress, you experience three consecutive stages: alarm, resistance, and exhaustion.

**Alarm**
In response to a perceived or real threat, you go into an alarm state where your body produces adrenaline to bring out the fight or flight response, which prepares you to confront the cause of the stress/threat.

**Resistance**
If stress persists, your body must cope and adapt. But your body cannot keep up with this demand/response indefinitely, causing your resources gradually to decrease, leading to resistance.

**Exhaustion**
During the exhaustion stage, your body’s resources and ability to fight against the stressor are depleted, causing your body to function abnormally. If this stage goes on for too long, it can result in illnesses, such as depression, ulcers, and cardiovascular problems.

**Stress-Related Exhaustion: Initial Phase**

The exhaustion stage has two stages of its own: the initial phase and the burnout phase.

During the initial phase of exhaustion, persistent stress renders you unable to concentrate or work efficiently.
Stress-Related Exhaustion: Burnout Phase

By the time you reach burnout, you are utterly exhausted and can experience a total physical, psychological and emotional breakdown requiring immediate attention. A few potential signs of an impending burnout are:

- Chronic irritability
- Withdrawal and isolation
- Feeling drained of emotional energy

What Is Stress Management?

Stress may be hard to avoid, but the ways in which you manage it are within your control. Stress management consists of a series of techniques that you integrate into your life to cope with the psychological, emotional, physical, and behavioral responses that you experience through stress.

Types of Stress Management

Stress management techniques come in three forms: action oriented, emotion oriented, and acceptance oriented.

Action-Oriented Stress Management

The action-oriented approach to stress management involves confronting a stressor head-on and doing what it takes to remedy the situation. An example of action-oriented stress management would be to trade in the frenzied lifestyle of the city for a more peaceful existence in the suburbs.

Emotion-Oriented Stress Management

The emotion-oriented approach to stress management involves altering your views, thoughts, and perceptions of a situation so as to transform it into a more positive and understandable obstacle or challenge. An example would be to allow yourself to learn something from a stressful event rather than view yourself as a victim.

Acceptance-Oriented Stress Management

The acceptance-oriented approach to stress management involves accepting those situations over which you have no control such as the death a loved one and pushing through to overcome it.
**Day-to-Day Stress Management Techniques**
Making even small changes in your day-to-day lifestyle can help you manage stress and reduce the severity of periodic bouts. You can give yourself the tools and strength to deal with stressors when they arise, even though it’s unlikely that you will ever eliminate stress entirely.

**Document Your Stress**
Putting your thoughts and feelings down on paper gives you a therapeutic outlet, which helps relieve bottled-up frustration and resentment. Unexpressed emotions, either repressed or stifled, can eventually produce many unhealthy results and stress is foremost among them. Whenever you are stressed, keep a record of what you believe the cause to be.

**Benefits of the Written Word:** Journaling about your stress can help you develop self-awareness, which is a valuable asset in keeping your stress level to a minimum.

**Write in a journal:**
- The moment that each stressor occurred
- Your reaction to and feelings about the experience
- Ways you aspire to handle similar situations in the future

**Chronicling stress:**
- Helps you become aware of your emotions, their origins, and the reasons they exist
- Aids in relaxation
- Improve brain functioning

**Ways to Reduce Stress**
- One easy way to deal with stress is to maintain a healthy diet. Your mood, memory, and concentration are all affected by what you drink and eat.
- Start with a balanced breakfast each day, and cut back on caffeine and sugar intake.
- Eat slowly and allow yourself time to enjoy your food. Do not eat just because you are upset or anxious.
- Eat fresh, unprocessed food, ideally home-cooked. Eat fresh fruits and vegetables every day, and mixed seeds for B-vitamins, calcium, and protein.

**Foods for Protection against Stress**
The following foods have proven benefits against the effects of stress:
- Apples
- Apricots
- Asparagus
- Avocados
- Bananas
- Barley
- Beetroot
- Broccoli
- Cabbage
- Carrots
- Celery
- Figs
- Grapes
- Kiwi fruit
- Lettuce
- Oats
- Oranges
- Peaches
- Peppers
- Raspberries
- Spinach
- Strawberries

**Laugh to Reduce Stress**

You may have heard that laughter is the best medicine. Studies report that people who laugh a lot have a decreased chance of developing life-threatening illnesses, such as heart disease, than those who do not.

**Benefits of Laughter**
- Provides an emotional release
- Distracts from negative emotions (anger and guilt)
- Reduces levels of stress hormones (cortisol, adrenaline, dopamine)
- Increases health-enhancing neurochemicals including endorphins
- Increases antibody-producing cells, which strengthen the immune system and inhibit physical effects of stress
- Exercises the heart

**Have a good chuckle:**
• Watch a funny movie
• See a comedy
• Read a humor book
• Have a lighthearted night out with friends

**Exercise to Reduce Stress**
Physical exercise is a great way not only to stay in shape but also to relax tension in your muscles (which in turn helps you to sleep) and release endorphins (which give you a sense of happiness and well-being).

Exercise is also an outlet for negative emotions, stress, tension, and anxiety, allowing you to cope more easily with the conflicts and issues that are causing you stress.

**Benefits of Exercise**

• Develop speed and strength
• Improve cardiovascular and respiratory systems
• Boost self-esteem
• Increases levels of endorphins

**Types of Exercise**
There are three major types of exercise you can do: aerobic, anaerobic, and skill development.

**Aerobic Exercise:** Aerobic (meaning “with oxygen”) exercise is meant to be performed at a moderate pace. In aerobic exercise, your muscles require a large supply of oxygen in order to generate energy. You can usually perform aerobic exercise for 30-45 minutes at a time without needing many breaks. Examples of aerobic exercise include running, walking, cycling, swimming, rowing, and cross-country skiing.

**Anaerobic Exercise:** Anaerobic (meaning “without oxygen”) exercise involves short but intense spurts of strenuous activity that leave you winded or tired out quickly. You can do these types of exercises for just a couple of minutes at a time. Examples of anaerobic exercise include weightlifting, sprinting, push-ups, pull-ups, and sit-ups.

**Skill Development Exercise:** This type of exercise focuses on activities that improve balance, flexibility, and coordination. Examples of skill development exercises include basketball, tennis, golf, yoga, and martial arts.
Sleep to Reduce Stress
On average, the human body needs about 7-8 hours of sleep per night to rejuvenate itself fully. If you do not get a good night’s sleep on a regular basis, you will experience cumulative fatigue and a sleep debt, which can lead to moodiness, aggressive behaviors, and stress.

Benefits of Sleep
- Improved judgment and reaction time
- Improved cognitive function
- Better short-term memory
- Increased motivation
- Improved physical performance
- Improved vision

Meditate to Reduce Stress
Meditation means emptying your mind and focusing your thoughts. It can help alleviate stress and allows you to drown out issues that may be causing you stress. Meditation centers and calms your mind. It is something you can practice every day in the comfort of your home.

To meditate, find a quiet space and sit on a chair or on the floor. Close your eyes, relax your muscles, breathe deeply, and block out everything in your mind by focusing your attention on just one thing: a sound, your breath, an image, anything to keep you focused.

Some people repeat a mantra, such as the Sanskrit word om, which in the Hindu tradition is believed to contain the sounds of the entire universe. But meditation does not need to be mysterious or complex, just do whatever feels good to you. The goal is to create 20-30 minutes of peace and quiet.

Benefits of Meditation
- Creates a sense of calm and well-being
- Slows down the heart rate and breathing
- Improves immune function
- Helps make health-enhancing hormones
- Slows the aging process
- Helps to clear the mind
- Boosts creativity
- Increases emotional stability
Immediate Stress Management Techniques

When a sudden stressful event or situation happens, it is important to understand that you can and should do something to ease that stress.

Breathe, Relax and Let It Go

Take several slow, deep breaths, and try to relax your body more with each breath. You’ll quickly begin to feel more relaxed.

Doing 10-15 minutes of controlled breathing each day can significantly reduce stress-related symptoms.

Benefits of Deep Breathing

- Increases oxygenation in the lungs, improves the quality of the blood, and helps clean the body of toxins
- Improves the condition of the nervous system, including the brain, spinal cord, and nerve centers, which in turn improves whole-body health
- Rejuvenates the skin
- Improves lung power
- Helps burn excess fat
- Relaxes the body and mind

Using Your Imagination to Reduce Stress

Your thoughts can affect how you feel. Visualization, or imagining pleasing scenarios, can help to relieve stress by taking you out of your current situation temporarily and placing you mentally in a different one.

To visualize, find a comfortable place in which to sit or lie down, close your eyes, and relax your muscles. Think about a scene that brings you happiness. Imagine every detail of the scene, using all five senses. For example, if you are picturing yourself at the beach, actually try to see the color of the water, hear the waves crashing against the shore, smell the suntan lotion, taste a Popsicle, and feel the sand between your toes.

Benefits of Visualization:

- Lowers the blood pressure
- Decreases the body’s level of stress hormones
- Boosts energy levels and motivation
• Helps attain a deeper awareness of self

If something worries you about a situation, imagine it happening. Practice in your mind the way you would handle it. This way, you will feel more relaxed and prepared in the event that it does happen, as you’ve already “experienced” it mentally.

Summary

Stress can seem inevitable. But even if you cannot eliminate stress completely, you can reduce its effects significantly.

• Identify stress triggers and tackle what makes you tense
• Make lifestyle changes to stop stress before it begins
• Learn effective ways to reduce stress when it occurs

Student Practice:

Signs of Stress
This activity gives you an opportunity to display your understanding of stress management techniques.

Instructions: Submit a written response to the following:
Questions: What stress management techniques do you utilize and why? If you do not use any of the techniques, explain.

Ways of Handling Stress
This laboratory activity gives you an opportunity to display your understanding of handling stress.

Instructions: Submit a written response to the following:
Question: How would you describe six relaxation techniques that can help you cope with stress?