Managing Stress
Principles and Strategies for Health and Well-Being

Nutrition and Stress
Dr. Suseela Lanka
Stress

• We all have it, and how we handle it can make all the difference.
• Stress management can be a powerful tool for wellness, since too much stress is bad for you.
• There are many strategies, and one of them includes what you eat.
Stress

• The word stress is derived from the Latin word "stringi" which means, "to be drawn tight" (Tense)

Definition being…

“A physical or psychological stimulus that can produce a mental tension or physiological reactions leading to illness is defined to be a state of STRESS”.
CAUSES OF STRESS
CAUSES OF STRESS :-

Some main causes of stress in today`s life with respect to different age groups are :-

1- IN CHILDREN :-

- Broken families

- Un judicious pressure from parents to perform.

- Sexual abuse.

- Over busy parents leading to lack of proper care and attention.
2- IN ADULTS :-

❖-The increasing job demand, work deadlines, frequent travelling or starting a new job.

❖-Especially for women-to keep up with the juggle between home, husband, children and work.

❖-Family changes, separation, divorce, new baby or marriage.

❖-Sexual problems- getting partner or with partner.

❖-Physical changes- lack of sleep, new work hours.
3-IN OLD AGE :-

- Separation from the loved ones and the rest of the family.
- No concrete work schedule to follow.
- Chronic ill health.
TYPES OF STRESS:

- **Chronic Eustress** (Good Stress)
- **Acute Eustress** (Good Stress)
- **Acute Distress** (Bad Stress)
- **Chronic Distress** (Bad Stress)
- **TYPES OF STRESS :-**

  Stress can be broken down into four different categories:

  1- **Eustress**

  This is the helpful types of stress i.e. experienced right before the need to exert physical force.

  2- **Distress**

  Distress is one of the negative type of stress.

  There are actually two types of distress:

    - Acute stress
    - Chronic stress.
a--Acute Stress:

Acute stress is the reaction to an immediate threat, commonly known as the “fight or flight” response. Once the threat has passed, your levels of stress hormones return to normal with no long-lasting effects. Some degree of acute stress is even considered desirable as it primes your brain for peak performance.

b--Chronic Stress:

Chronic stress will occur if there is a constant change of routine for week after week. This is the type of stress that leads to various emotional and behavioral changes.
# Signs of Stress

**Some Signs of Stress**

<table>
<thead>
<tr>
<th>Physical Signs</th>
<th>Behavioural Signs</th>
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<tbody>
<tr>
<td>- Increased heart rate</td>
<td>- Increased smoking, drinking, drug use</td>
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<td>- Muscle aches, stiffness or pain</td>
<td>- Aggression (ie. Yelling, swearing)</td>
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<td>- High blood pressure</td>
<td>- Changes in eating habits</td>
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<tr>
<td>- Frequent colds or flu</td>
<td>- Changes in sleeping habits</td>
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<tr>
<td>- Weight gain or loss</td>
<td>- Nervousness (Fidgeting, pacing, etc.).</td>
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<td>- Headaches</td>
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<tr>
<td>- Constipation</td>
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<td>- Sweating</td>
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<td>- Nausea</td>
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<td>- Fatigue</td>
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<td>- Trembling</td>
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<tr>
<th>Mental Signs</th>
<th>Emotional Signs</th>
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<tr>
<td>- Difficulty concentrating</td>
<td>- Anxiety</td>
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<tr>
<td>- Decreased memory</td>
<td>- Anger</td>
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<tr>
<td>- Confusion</td>
<td>- Irritability; short temper</td>
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<tr>
<td>- Difficulty making decisions</td>
<td>- Impatience</td>
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<tr>
<td>- Bad dreams</td>
<td>- Worry</td>
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<tr>
<td>- Decreased libido</td>
<td>- Fear</td>
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<tr>
<td>- Inattentiveness</td>
<td>- Frustration</td>
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# SIGNS OF STRESS
The Stress Response

• Your muscles tense, your heart races, and your breath comes faster -- we all know what stress feels like.

• The “fight or flight” response is behind it: Your hormones get your body ready to either take on a threat or run from it.

• If this happens too often -- say, every day during your commute -- it’s called “chronic stress,” and it can take a toll on different parts of your body and your overall health.
How It Happens

- Hormones are chemicals that tell certain parts of your body to spring into action.
- Your adrenal glands make the ones that help your body prepare to fight or run from danger (adrenaline, noradrenaline, cortisol).
- When those stay at a high level for a long time, they can weaken your bones and your immune system, mess with your sleep, and make you lose muscle.
Effects of Stress
- EFFECTS OF STRESS ARE CATEGORISED AS

Physical and mental effects

Behavioral effects.
SYSTEMIC EFFECT OF STRESS

SKIN
RESPIRATORY SYSTEM
GASTRO-INTESTINAL SYSTEM
IMMUNE SYSTEM
CNS
CVS
REPRODUCTIVE SYSTEM
MUSCULO-SKELETAL
- Loss of memory.
- Anxiety And Depression
- Insomnia
- Migraine
- Irritability
- Lack in concentration
- Constriction of the peripheral blood vessels causing Hypertension.

- Increased risk of high cholesterol

- Impaired heart function; can cause angina
- Changes in breathing pattern, i.e.:
  - Rapid or shallow breathing
  - Risk of asthmatic problem
  - Choking.
EFFECT OF STRESS ON GASTRO-INTESTINAL SYSTEM:

- Gastritis.
- Stomach upset.
- Diarrhea.
- Peptic ulcers.
- Colitis.
- Mouth ulcers.
- Irritable bowel syndrome.
• EFFECT OF STRESS ON:

- PCOD.
- RECURRENT VAGINITIS
- VAGINISMUS
- IMPOTENCE
- PREMATURE EJACULATION
- LOW SPERM COUNT.
- INFERTILITY
- Tension in skeletal muscles and joints, leading to muscular aches and pains.

- Predisposition to degenerative diseases such as rheumatoid arthritis

- Increased incidence of low bone density.
EFFECT OF STRESS ON SKIN

- Eczema
- Psoriasis
- Rashes
- Lack of skin glow
- Formation of tension lines over forehead, eyes and mouth.
- Weakened defenses, with lowered resistance to infections
  - Viral illnesses
  - Allergies,
  - Cell changes; cancer, tissue degeneration
  - Acceleration of ageing process
- Frequent crying and suicidal thoughts.
- Social withdrawal and isolation.
- Stuttering and Stammering.
- Increase in smoking, alcohol intake and drug abuse.
- Obsessive compulsive disorder.
- Difficulty in making decisions.
- Least interest in personal appearance.
- Compulsive gambling and compulsive shopping.
- Nervous habits like fidgeting and tapping foot
STRESS MANAGEMENT

AYURVEDA

NUTRITION

LIFESTYLE MANAGEMENT

HERBS

YOGA AND PRANYAM
Unhealthy Eating Habits Caused by Stress

- Fast Food Intake
- Forgetting / Skipping meals
- Coffee(caffeine) intake
- Eating the wrong food types
- Taking up quick fix (fad) diet
- Constantly picking at foods
HEALTHY HABITS TO AVOID STRESS

- Eat Breakfast
- Avoid Caffeine, fatty, sugary and salty foods
- Avoid Nicotine and Alcohol

- Healthy Munches
- Stock Your Home With Healthy Fare
- Keep yourself hydrated

- Opt For Green Tea
- Try Sparkling Juice or Perrier
- Carry a Snack
Nutrients prone to depletion during stress

- B Vitamins
- Potassium
- Vitamin C
- Calcium
- Vitamin A
- Magnesium
- Proteins
• if you’re really stressed, you may have nausea and your tummy might hurt. This is natural, because your body may slow or stop digestion during the fight-or-flight response to help you focus.
If stress closes down your digestive system too often, it can cause diarrhea or constipation and affect your body’s ability to take in nutrients. There also seems to be a link between stress and irritable bowel syndrome, which can cause belly pain and cramping, as well as constipation and diarrhea.
Heartburn and Acid Reflux

- People who are under a lot of stress might eat more, or eat more unhealthy food.
- They also may drink more alcohol or smoke more often.
- All this can lead to heartburn and acid reflux (when stomach acid comes up into your food pipe). If it’s not treated, it can cause ulcers (open sores) and scar tissue.
Headaches

- When you’re stressed, the muscles in your head, neck, and shoulders tighten up. This can lead to tension headaches and migraines. Relaxation techniques may help lower your stress as well as the number of these headaches.
Menstruation

- Stress can make a woman’s cycle irregular and cause missed or painful periods. It also may make premenstrual syndrome (PMS) worse -- the mood swings and cramping some women get before their periods.
Breathing Issues

• When you’re stressed, you may breathe harder and faster, which can be a problem if you have a condition like asthma or a lung disease, like emphysema, which makes it difficult to get enough oxygen into your lungs.
Heart Problems

- The hormones that get into your system when you’re stressed can be bad for your heart if they stay at high levels.
- They can raise your blood pressure, which can lead to a heart attack or stroke. They also may cause inflammation of the blood vessels that supply blood to your heart muscle, and that also can lead to a heart attack.
Diabetes

• When you’re stressed, your liver releases glucose -- a kind of sugar -- into your blood to fuel your fight-or-flight response. This can lead to diabetes if you’re obese or at risk for it in other ways. But managing your stress can help control your blood sugar.
Sexual Desire

- Stress can make men and women less interested in sex.
A Malnourished Diet

• A malnourished diet—one that is deficient of essential amino acids, essential fats, vitamins, and minerals—is itself a stressor on the body.
Poor Nutrition and Stress

Research has shown that some foods actually induce a state of stress.

- Excess amounts of sugar
- Caffeine
- Salt
- Bleached flour
- And foods poor in vitamins and minerals.

These foods weaken the body’s resistance to the stress response.
Additional Stress and Nutritional Factors

- A high-fat diet suppresses the immune system
- Excess simple sugars deplete vitamin stores, particularly B-complex
- Caffeine triggers sympathetic nervous system
- Chronic stress depletes vitamins B & C
Additional Stress and Nutritional Factors (continued)

- High sodium may raise blood pressure
- Excessive alcohol consumption is thought to suppress the immune system
- Hydrogenated and partially hydrogenated foods = trans fatty acids, leading to free radical damage to cells
Balanced nutrition is essential to enhance the capacity to cope with stress.

Basic Nutrients like:

- Carbohydrates,
- Proteins,
- Vitamins &
- Minerals

are required in balanced amounts
Nutrition and the Immune System

• Food can either enhance or suppress the immune system.
• Most foods today are laden with toxic chemicals that tax the immune system. Stress only compounds the problem.
• If you are susceptible to disease or illness, or have a disease or illness follow the advice of Hippocrates:
  – “Let food be your medicine and let medicine be your food.”
Nutrition and the Immune System I

- Consume bountiful antioxidants
- Consume healthy amounts of fiber
- Drink adequate amounts of clean filtered water
- Consume adequate amounts of protein
- Decrease processed foods and junk food
- Decrease the synthetic pesticides, herbicides, fungicides, and fertilizers in food
Nutrition and the Immune System II

- Decrease antibiotics and hormones in food
- Consume a healthy balance of omega 3’s & 6’s
- Decrease the consumption of saturated fats
- Eliminate consumption of trans fatty acids
- Consume healthy amounts of bioflavinoids
- Consume healthy foods with pH balance
Nutrition and the Immune System III

- Replace nutrients depleted from stress
- Decrease consumption of processed sugars
- Eliminate aspartame and MSG (excitotoxins)
- Prepare food in the best way possible (e.g., steam veggies instead of microwaving them)
- Consume organic foods whenever possible
- Avoid all GMOs (franken foods)
- Use herbal therapies that boost the immune system
Stress-Busting Foods: How They Work

- Foods can help tame stress in several ways.
- Comfort foods, like a bowl of warm oatmeal, boost levels of serotonin, a calming brain chemical.
- Other foods can cut levels of cortisol and adrenaline, stress hormones that take a toll on the body over time.
- A healthy diet can help counter the impact of stress by shoring up the immune system and lowering blood pressure.
- Do you know which foods are stress busters?
Complex Carbs

• All carbs prompt the brain to make more serotonin, a chemical in the body that can boost mood and reduce stress. For a steady supply of this feel-good chemical, it's best to eat complex carbs, which take longer to digest.

• Good choices include whole-grain breads, pastas, and breakfast cereals, including old-fashioned oatmeal.

• Complex carbs can also help you feel balanced by stabilizing blood sugar levels.
Simple Carbs

• Dietitians usually recommend steering clear of simple carbs, which include sweets and soda.
• But in a pinch, these foods can hit the spot. They're digested quickly, leading to a spike in serotonin. Still, it doesn't last long, and there are better options. So don't make these a stress-relieving habit; you should limit them.
Oranges

- Oranges make the list for their wealth of vitamin C.
- Studies suggest this vitamin can curb levels of stress hormones while strengthening the immune system.
- In one study of people with high blood pressure, blood pressure and levels of cortisol (a stress hormone) returned to normal more quickly when people took vitamin C before a stressful task.
Spinach

• Too little magnesium may trigger headaches and fatigue, compounding the effects of stress.
• One cup of spinach helps you stock back up on magnesium. Don't like spinach? Other green, leafy vegetables are good magnesium sources. Or try some cooked soybeans or a fillet of salmon, also high in magnesium.
Fatty Fish

• To keep stress in check, make friends with naturally fatty fish.
• Omega-3 fatty acids, found in fish such as salmon and tuna, can prevent surges in stress hormones and may help protect against heart disease, depression, and premenstrual syndrome (PMS).
• For a steady supply of feel-good omega-3s, aim to eat 3 ounces of fatty fish at least twice a week.
Black Tea

- Drinking black tea may help you recover from stressful events more quickly.
- One study compared people who drank 4 cups of tea daily for 6 weeks with people who drank another beverage. The tea drinkers reported feeling calmer and had lower levels of the stress hormone cortisol after stressful situations.
Pistachios

- Pistachios, as well as other nuts and seeds, are good sources of healthy fats.
- Eating a handful of pistachios, walnuts, or almonds every day may help lower your cholesterol, ease inflammation in your heart's arteries, make diabetes less likely, and protect you against the effects of stress.
- Don't overdo it, though: Nuts are rich in calories.
Avocados

• One of the best ways to reduce high blood pressure is to get enough potassium, and half an avocado has more potassium than a medium-sized banana.

• Avocados are not only delicious mashed into guacamole or sliced onto a salad — they're also packed with omega-3 fatty acids. These healthy essential acids are known to reduce stress and anxiety, boost concentration, and improve mood.
Almonds

- Almonds are chock-full of helpful vitamins: vitamin E to bolster the immune system, plus B vitamins, which may make you more resilient during bouts of stress or depression. To get the benefits, snack on a quarter of a cup every day.
Raw Veggies

• Crunchy raw vegetables can help ease stress in a purely mechanical way. Munching celery or carrot sticks helps release a clenched jaw, and that can ward off tension.
Bedtime Snack

- Carbs at bedtime can speed the release of the brain chemical serotonin and help you sleep better. Since heavy meals before bed can trigger heartburn, stick to something light.
Another bedtime stress buster is the time-honored glass of warm milk. Research shows that calcium eases anxiety and mood swings linked to PMS. Dietitians typically recommend skim or low-fat milk.
De-Stress With Exercise

• Besides changing your diet, one of the best stress-busting strategies is to start exercising.
• Aerobic exercise boosts oxygen circulation and spurs your body to make feel-good chemicals called endorphins.
• Aim for 30 minutes of aerobic exercise three to four times a week.
Positive Attitude

• Stress can be a good thing in some situations -- for example, it can help you meet a tight deadline or focus better on a test or presentation.

• If you look at it in that light -- as friend, not foe -- your body may deal with it in a healthier way.

• You also may lower your stress level if you think of others more often. In one study, people who did nice things for friends and family during stressful times had fewer health issues than those who didn’t.
Nutritional Recommendations

• Nutritionists recommend that you follow guidelines regarding:
  – adequacy (of essential nutrients)
  – moderation (limited sugar, fat, and salt)
  – balance (of nutrients), caloric control, and variety
Recapping the Stress-Nutrition-Disease Domino Effect

• Stress can deplete the body of much needed essential nutrients
• Good eating habits are nonexistent when people are stressed (nutrients are not replaced!)
• Some foods/beverages act as gasoline on the fires of stress
• Additives, preservatives, synthetic chemicals tax the immune system
• The body’s immune system is ill prepared to combat invading forces
• Acute and or chronic illness occurs in a vacuum of a poor immune system.
Tips to follow while under stress?

Try incorporating these steps into your daily routine for a healthier (and happier!) day:

• Eat regularly, and try not to skip meals. Eating 3 balanced meals a day, which include all the food groups (fruits, vegetables, whole grains, low fat dairy products, and lean proteins), will keep you fueled to handle anything hectic throughout the day.

• Keep healthy snacks around. Good options include almonds, fruit, yogurt, string cheese, and granola bars. One or two snacks during the day will help you stay energized between meals.

• Cut back on caffeine. Drinking too many caffeinated beverages (coffee, energy drinks, soda) can cause anxiety, irritability, sleeplessness, and headaches. Drink more water to keep hydrated—the recommended 8-10 glasses a day.

• Try some stress management techniques instead of turning to food when you’re not hungry, but stressed and anxious. Meditate, talk about your problems with a close friend, exercise, or watch a funny movie.

• Whenever you feel like the stress in your life is out of control, one way to help you control it is by eating healthy foods. By doing so, you’ll affect the way you sleep and feel emotionally and physically in a positive way.
“Fortunately or unfortunately, we live in a world that tempts us with a great variety and abundance of food, and many of us eat not to satisfy physical hunger, but to allay anxiety, depression, and boredom, to provide a substitute for emotional nourishment, or to try to fill an inner void.”

—Andy Weil, M.D.
THANK YOU