

Living Stress FREE

Vicki Siegel, MA, CES, CSCS
South Denver Cardiology Associates, P.C.

What is Stress?

- Our REACTION/RESPONSE to an event – NOT necessarily the event itself
- It is our *reaction* to stress that turns it into “dis-stress.”

Stress

- 2 people can have EXACTLY the same event happen to them
- 2 EXACT opposite reactions to the SAME event

Stress

- You DO have a choice about whether events in your life will be your absolute undoing or whether it becomes something you deal with in a constructive manner

External or Internal

- **External Stress:** noise, weather, injury, home/family, work, alcohol or drug use, illness
- **Internal Stress:** fear, anger, frustration, love, hate, envy, excitement, joy

Early Warning Signs of Stress

- Excessive fatigue, forgetfulness
- Headaches, repeated colds or flu
- Nail biting, teeth grinding
- Low or high blood sugar
- High blood pressure
- Ulcers
- High cholesterol or triglycerides
- Muscle aches in chest, back, shoulder, neck

Unmanaged Stress

- Nutritional resources deplete rapidly
- Digestive disorders are common
- Bingeing behavior can increase
- Stress hormones encourage fat storage
- Risk for heart disease, stroke, and diabetes increases
- Immune system is compromised

Fight or Flight

- Evolution – helped us survive
- Cavemen ancestors needed to react swiftly to any perceived threat
- Fight or flight response designed to provide quick energy for 5-10 minutes
- Do battle or run

Stress Response

- At first sign of perceived danger human brain releases a substance that stimulates the release of cortisol in the adrenal cortex

Immediate effects:

- Pupils dilate and hearing improved
- Lung capacity jumps

Stress Response

- Blood sugar rises
- Thinking becomes more focused
- Digestive system is temporarily shut down
- Blood is shunted from internal organs for emergency use elsewhere
- Heart rate and blood pressure climb
- More stored fuel (fat and glucose) is mobilized for quick action

Stress Response

- Production of insulin (fat storage hormone) is also dramatically increased
- Insulin overrides signals to burn fat, and instead, encourages body to store fat for future use in abdominal region
- Originally an adaptive response
- Now – stress is more **CHRONIC!**

Stress Response

- Human brain cannot distinguish between a valid physical threat and day-to-day chronic stress
- Fight or flight response triggered on an almost daily basis
- Brain reacts the same in both cases

Cortisol

- High cortisol levels associated with increased hunger
- In the face of prolonged/chronic stress:
- Cortisol levels remain constantly high, keeping you in a state of perpetual HUNGER

Stress Response

- For caveman – well served by system that signaled him to eat after emergency – replenish fuel
- Today extra fuel turns to FAT – we don't need to replenish fuel we DON'T use

Stress Response

- DHEA, a naturally occurring feel-good hormone also declines under stress
- May be another connection between stress and weight gain

Dealing with Stress

- NEVER a time in life that is totally free of stress
- How to deal with ravages of STRESS?
Try EXERCISE!
- Burns calories & uses stored fat as FUEL!
- Offsets negative effects of cortisol and insulin

Dealing with Stress

- As little as 10 minutes of exercise causes the brain to produce beta-endorphins
- Calms the stress response
- Decreases levels of stress hormones
- Mimics typical caveman-like physical reaction to a threat
- Modern-day version of appropriate reaction to flight or fight

Dealing with STRESS

- Inadequate sleep increases cortisol levels and reduces leptin – hormone that signals fullness
- People who sleep 2-4 hrs/night are 73% more likely to be obese than normal sleepers
- 5 hrs/night – 50% more likely to be obese
- 6 hrs/night – 23% more likely to be obese
- At least 8 hrs/night – 11% LESS likely

Stress Management

- Need a “tool-box” full of stress management techniques we can use
- New PLEASURABLE behaviors we can employ as a way to manage stress
- Create NEW connections in the brain
- Have more than one technique

Recommended Techniques

- Postures/ Stretching
- Progressive Relaxation
- Breathing
- Meditation
- Imagery



Postures/ Stretching

Assuming a series of Physical Poses . . .

- Counteracts muscle stiffness and tension from anxiety, poor posture, previous injury and inactivity
- Strengthens muscles opposing those being stretched
- Increases bone strength
- Increased balance & coordination
- Massages internal organs by increasing blood flow



Relaxation Techniques

Lying on your back (sitting in a chair) with eyes closed systematically tensing and relaxing muscles

- Helps body recover from exertion, fatigue or tension
- Decreases muscle tension
- Decreases blood pressure and heart rate
- Improves sleep
- Calms the mind
- Improves ability to meditate and visualize



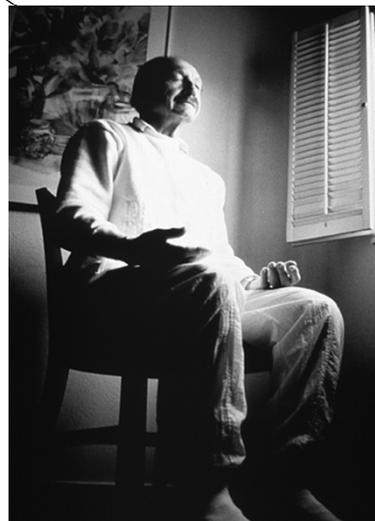
Breathing Techniques

- Consciously controlling the breath & rhythm of breathing
- Helps you to feel better and function with more energy
- Restores breathing rhythm
- Calms and balances nervous system
- Increase oxygen circulating in the body
- Increases awareness of internal state
- Deepens stretching, relaxation, meditation & imagery



Meditation

- Maintaining the focus of attention on one object
- Develops the ability to concentrate
- Calms, clarifies, and sharpens the mind
- Increases threshold for stress
- Provides insight, meaning and inspiration



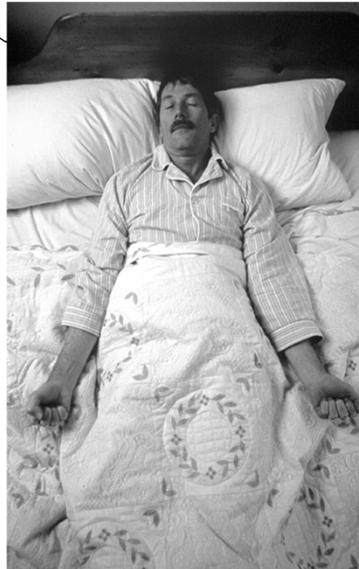
Imagery

- Using the imagination to picture a positive outcome
- Induces a positive mental and physical state
- Helps to acknowledge issue and positive responses



Progressive Relaxation

- Tension Relaxation for the entire body
- Produces calming effect
- Lowers heart rate, blood pressure and adrenaline levels



Meditation

- Helps to concentrate mental energy
- Improves thought focus
- Improves thinking capacity



Focused Thinking

- Comes from meditation and calm state
- Helps shift toward more positive output



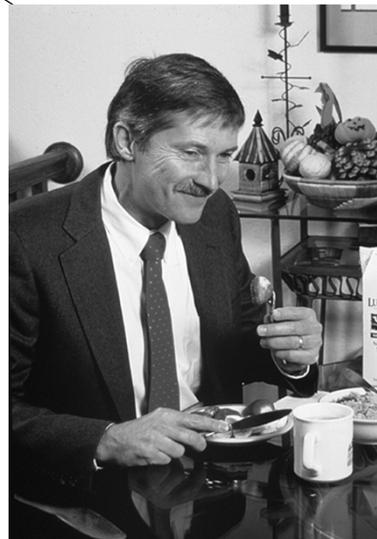
Visualization

- Facilitates planning and clear thought
- Helps maintain relaxed state



Mindfulness

- Facilitates enjoyment of all aspects of life
- Leads to deeper sense of appreciation of all sensual experiences



Deep Breathing & Stretching

- Clears the mind
- Lowers heart rate and blood pressure



Stress Management

- What types of things give you pleasure?
- Music
- Bath
- Walk
- Reading
- Pedicure
- New CD
- Meditation

Stress Management

- Massage
- Movie with a friend
- Rent a DVD
- Hobby
- Dance
- Call an old/new friend
- Managing stress helps us feel more in control of our environment

Managing Stress

- What are YOU going to do next time you feel stressed?!?

“You did what you knew how to do
And when you knew better
You did better” – Maya Angelou

Stress

- Your life is created from the inside out
- The solutions lie within you

Stress

- Homework:
- Put 5 things in your “tool-box” you will try next time you feel stressed. Write them down and keep the list handy.