# Optimal Psychosocial Health

Kenneth Brummel-Smith, M.D. Charlotte Edwards Maguire Professor of Geriatrics FSU College of Medicine

# Objectives

- Describe the effects of positive and negative attitudes on health
- Describe the effects of social engagement on health
- Describe positive sexuality and aging
- Describe the role of spirituality and health
- Describe the effects of stress on health
- Describe the effect of depression and grief on health

#### **Chicken and egg question**

#### Attitudes and Health

- Consistent link in research between positive attitudes &/or emotions and health
  - Fewer risk factors
  - Fewer negative events (e.g., heart attacks)
  - Faster or more complete recovery from events
- The experience of "gratitude" or "appreciation" is particularly linked to wellbeing

Wood AM, Clin Psych Review, 2010, 30

#### Gratitude

- "The habitual focusing on and appreciating the positive aspects of life."
- □ Strongly linked to positive outcomes
  - Positive emotional functioning
  - Positive social functioning
  - Less anger & hostility
  - Less depression
  - Higher success in lfe activities

Wood AM, Clin Psych review, 2010

#### Gratitude Interventions

#### □ PTSD – low gratitude scores

- If gratitude practice is used better functioning
- □ Sleep
  - Better sleep latency, duration & quality
- □ Simple interventions:
  - Write down 3 things you are grateful for at bedtime
  - Tell someone one time a day something you are grateful for

### Social Engagement

- Clear connection between social engagement and:
  - Development of depression
  - High social engagement scores in all centenarian studies
  - Lower rates of dementia
  - May be as important as exercise
- □ "The necessity of being necessary" (W. Bortz)

#### Social Activities and Health

- □ 13 yr study of 3000 people over age 65
- Tracked 14 activities exercise, social, daily chores
- Regular social activities (volunteer, getting together with friends, playing bridge) fared as well as those exercising
  - Stronger factor in survival than exercise, blood pressure, and cholesterol

Glass T, Brit Med J 1999;319:487-483

#### Social Activities and Dementia

- Long term prospective study of 4000 Japanese American men in Hawaii
- 5 measures: marital status, living arrangements, group activities, social events, close friends
  - Highest scores developed less dementia
  - The greater the decline the greater the dementia

### Physiologic Connections

- □ Improved brain repair mechanisms
- Lower cortisol levels
- □ Lower atherosclerosis
- □ Improved immune responses
  - Increased lymphocyte killer cell activity
- Better glucose metabolism

Saczynski JA. Amer J Epidemiol 2006; 163:433-440

### Marriage and Health

- □ Strongly correlated with better outcomes
  - Unmarried women 50% increased mortality
  - Unmarried men 250% increased mortality
  - Probably related to # of social connections
- Positive effects related to a positive marriage (duh!)
  - Negative marriage not only negates the positive effect, it accentuates risks

Kiecolt-Glasser, Psychological Bulletin 2011,127:472-503

### Low Marital Quality Studies

- □ Increased periodontal disease
- Increased heart disease
- □ Increased behavior problems in dementia
- □ Increased pain and pain-related disability
- □ Increased blood pressure
- □ Many, many more adverse effects

# High Marital Quality Studies

- 100s of studies show better health outcomes when patient is in a healthy marriage (compared to single people)
- Crosses multiple conditions (heart, arthritis, neurological conditions, etc.)
- □ Effect is stronger on men than women
- Smaller number of studies showing couples who work on relationship improve health

#### Sexuality

- 70% of men sexually active at 68, but 25% at
   78
- □ Survey of 80 to 102 year olds 63% of men and 30% of women sexually active
- Key issue is partners at 80 there are 39 men for every 100 women
- Sexual desire and intimacy remains high in spite of medical conditions

#### Does Sexuality Promote Health?

- □ Chicken and egg question
- 1997 Welsh study men who had 2 or more orgasms a week had half the risk of various cancers
- Duke intercourse (for men) and enjoyment of sex (for women) was linked to longevity
- Masturbation in women as effective as vaginal estrogens

#### Male Sexuality

- □ Testosterone decreases with age
- Taking testosterone increase risk of heart disease, hair loss, and accelerates prostate cancer
- Regular, short, intense bursts of exercise raises testosterone
- Decreased rate of erectile dysfunction in regular exercisers

#### Women's Sexuality

- Most common reason for decreased activity is partner problems
  - Lack of, physical health, lack of interest
- □ Most common change is dryness of the vagina
  - Regular sexual activity is best treatment
  - Extended foreplay
  - Water-soluble lubricants
  - May need short term hormone treatment

#### Questions

- □ Use of Viagra and similar medications
  - Male
  - Female?
- □ Use of herbal products no clear evidence
- □ Risk of sexually transmitted infections (STI)

#### Depression and Grief

- □ Grief and bereavement are normal states
  - No evidence they are helped by medications
  - Some evidence that medications interferes with resolution
  - Loss of a spouse if the highest on stress scales
- In an older person, grief after a significant loss can last a long time, and be severe
- □ Even dramatic symptoms are still normal
  - "Hallucinations" of the loved one being present

# Passing Through Grief

- Consciously acknowledge the depth of your feelings (no judgment)
- □ Talk to others, especially to good listeners
- Watch for warning signs appetite loss, isolation, intrusive thoughts
- Remember the positive (effect of positive thoughts on brain function)
- □ Exercise

### Depression

- □ A medical problem
- □ Often experienced differently by older people
  - More "non-emotional" symptoms appetite loss, memory problems, sleeplessness
  - May be written off by providers
  - May not be admitted by patients ("weakness")
- □ Responsive to multiple types of interventions

# Depressions

- □ Symptoms
  - Loss of interests, sleeplessness, appetite loss, concentration loss, lack of energy, hopelessness, feeling down
  - Suicide is the greatest risk
- □ Three equally effective treatments
  - Cognitive-behavioral therapy
  - Exercise
  - Medications

### **Depression Medication Treatment**

- Treat until person feels better then 9 more months
- □ Attempt <u>slow</u> withdrawal from medication
- □ If another episode develops 2 years of treatment
  - The attempt withdrawal again
- If another episode occurs lifelong treatment may be necessary

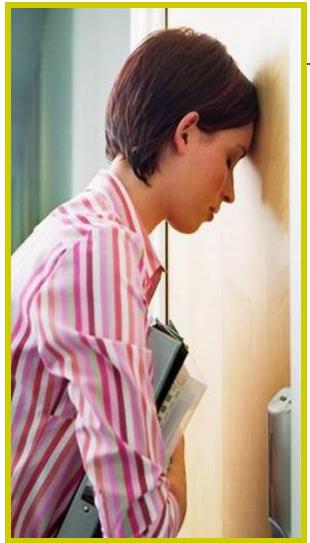
#### Holmes- Rahe Stress Scale

- $\square$  Death of spouse (100)
- $\square Divorce (73)$
- □ Separation (65)
- □ Imprisonment (63
- Death of a close family member (63)
- Personal illness or injury (53)
- □ Marriage (50)

- $\Box$  Fired from work (47)
- □ Retirement (45)
- Marital reconciliation
   (45)
- Change in health of a family member (44)
- Change in financial status (38)
- Death of a close friend
   (37)

#### Reducing the Effects of Stress

- □ Progressive relaxation
- Progressive muscle relaxation
- □ Meditation
- □ Prayer
- Mindfulness-based stress reduction
- □ HeartMath



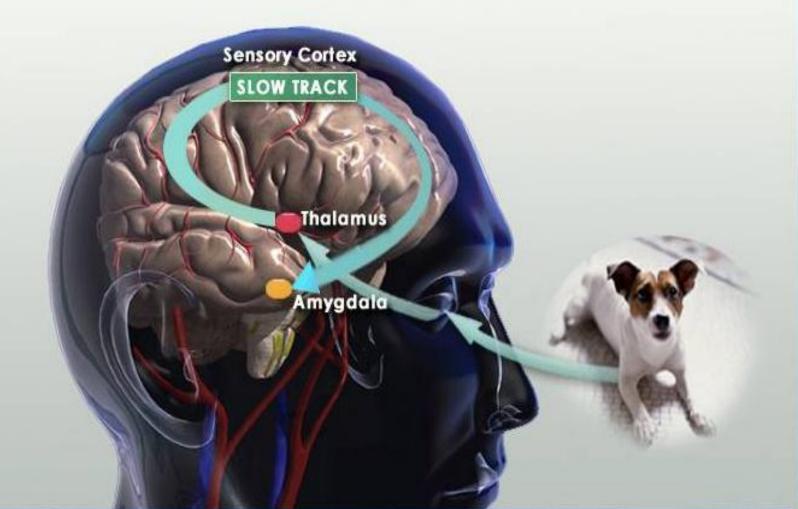
# The Stress Zone

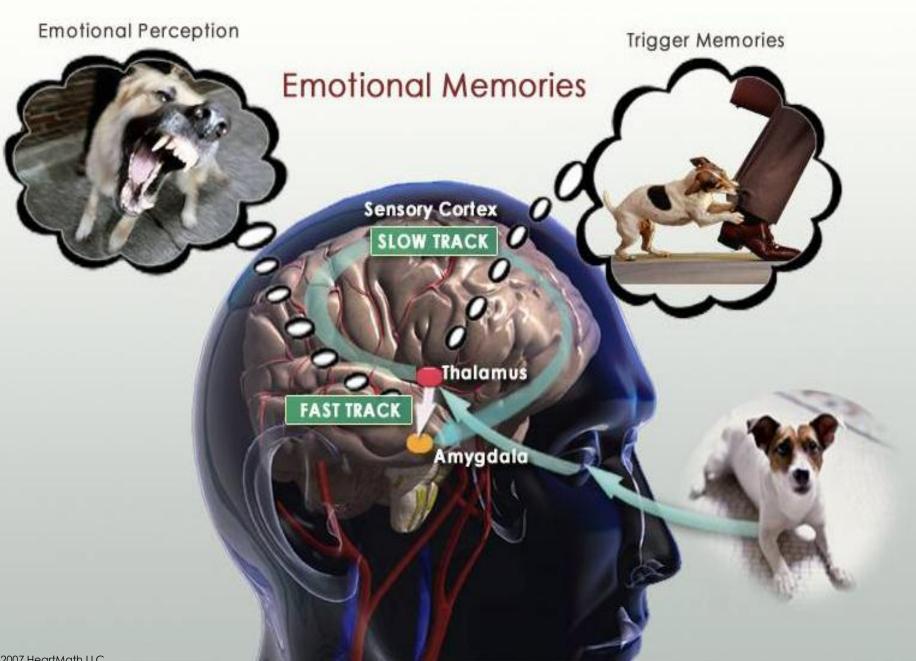
- Stress is almost always an emotional reaction to a situation.
- Stress impacts your ability to think clearly, respond appropriately and perform at your best.
- Your stress level directly impacts how you feel at the end of the day, your health and your relationships.

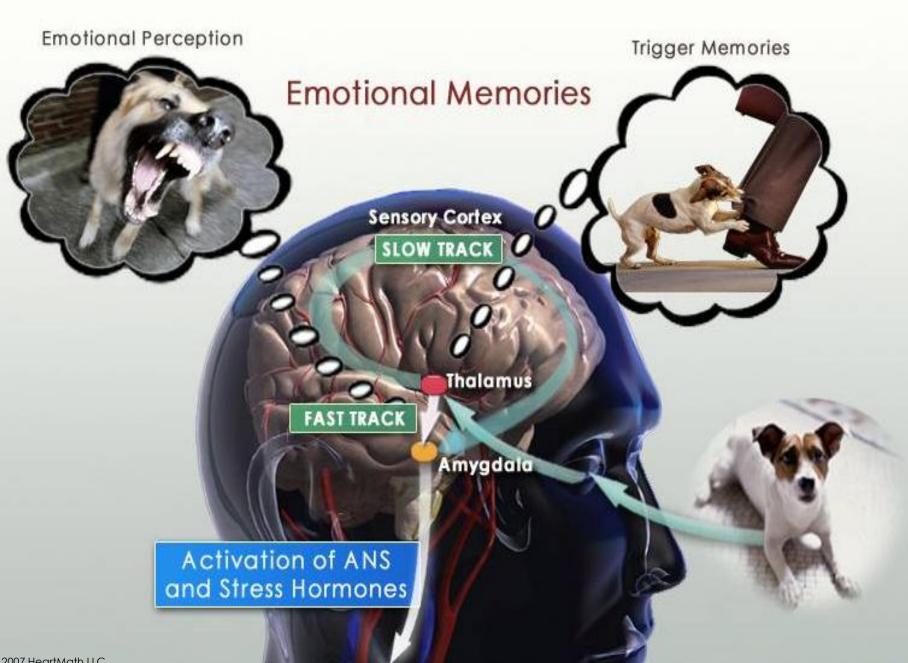
#### Warning signs

 Loss of focus and mental clarity
 Lack of ability to relax and sleep
 Loss of self esteem
 Feeling tired and on edge
 Struggle to motivate yourself and others

#### **Emotional Memories**







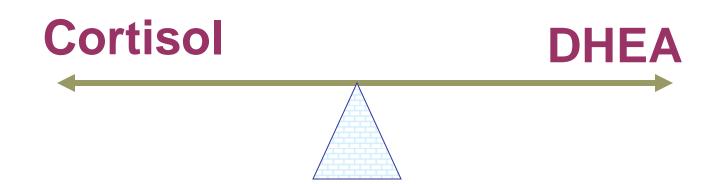
#### Autonomic Nervous System

#### Sympathetic Pathway—Accelerator High Effort

Adrenaline

#### Parasympathetic Pathway—Brake Low Effort/relaxation Acetylcholine

#### Hormonal System

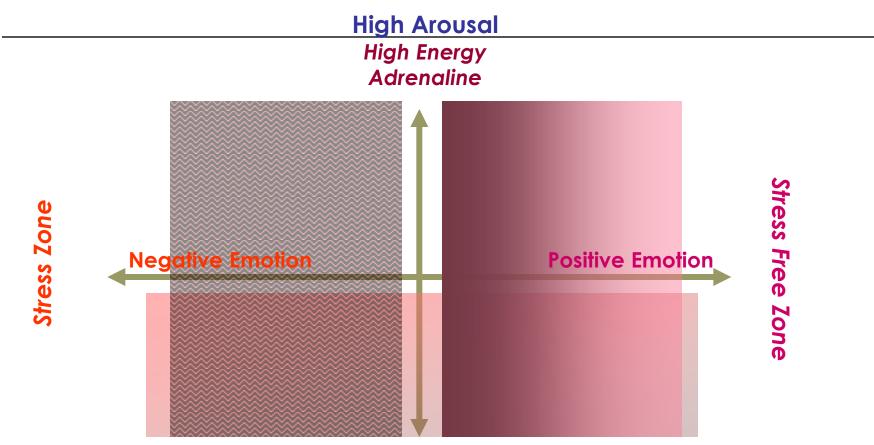


#### High Cortisol:Low DHEA

- □ Impaired memory and learning (Kerr et al., 1991; Sapolsky, 1992)
- Decreased bone density; increased osteoporosis (Manolagas, 1979)
- □ Reduced muscle mass (Berne, 1993)
- Reduced skin growth and regeneration (Berne, 1993)
- Impaired immune function (Hiemke, 1994)
- □ Increased blood sugar (DeFeo, 1989)
- Increased fat accumulation around waist / hips (Marin, 1992)

#### Chronic stress=excess cortisol=accelerated aging.

#### Your Emotional Landscape

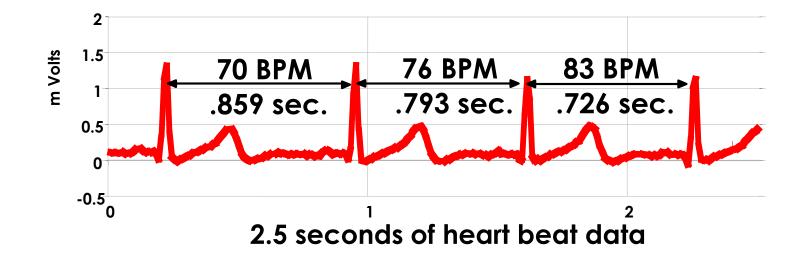


Low Arousal Low Energy Relaxation

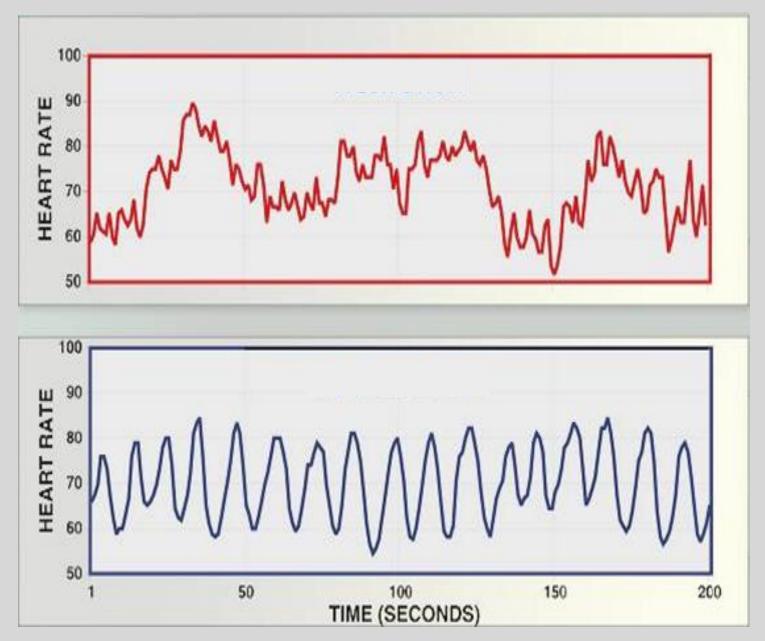
#### Benefits of Physiological Coherence

- Reduced blood pressure in hypertension (McCraty, 2001)
- Increased functional capacity in CHF patients (Luskin, 2002)
- Improvements in asthma (Lehrer, 2000)
- Increased calmness and well-being (Friedman, 2000)
- Increased emotional stability (McCraty, 2001)
- Improved cognitive performance (McCraty, 2001)

#### Heart Rate Variability (HRV)



#### Changing Heart Rhythms



#### The Power of Positive Emotions

- Increased longevity (Danner et al., 2001)
- Reduced morbidity (Goldman et al, 1996; Russek & Schwartz, 1997)
- Increased cognitive flexibility (Ashby et al., 1999)
- Improved memory (Isen et al., 1978)
- Improved decision making (Carnevale & Isen, 1986)
- Increased creativity and innovative problem solving (Isen et al., 1987)
- Improved job performance & achievement (Wright & Staw, 1994; Staw et al., 1994)
- Improved clinical problem solving (Estrada et al., 1997)

#### Quick Coherence® Technique

Heart focus
Heart breathing
Heart feeling







# emWave® Technology

