

# Managing Emotions

## How Feelings are Linked with Physical Health

**Positive Emotions** are linked with **Decreased Health Risk**



MIDUS participants reported how often they felt positive emotions, such as being:

- in good spirits
- extremely happy
- calm & peaceful
- close to others
  - full of life
- enthusiastic
- confident

Having more positive emotions was associated with a *decreased risk* of various physical disorders (such as high blood pressure, ulcers, hay fever, and thyroid disease). [Weiser, 2012]

MIDUS is advancing knowledge of how:

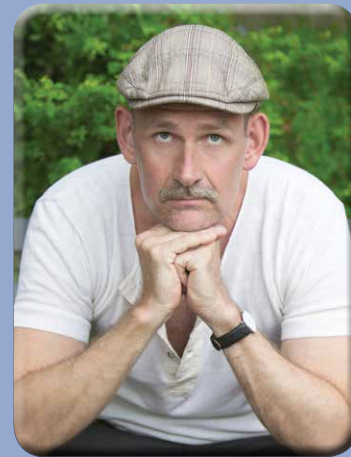


- emotions are linked with becoming ill
- effective management of emotions can promote good health

**Negative Emotions** are linked with **Increased Health Risk**

MIDUS participants reported how often they felt negative emotions, such as being:

- nervous
- restless
- hopeless
- lonely
- afraid
- irritable
- angry, upset
  - so sad nothing could cheer them up



Having more negative emotions was linked with an *increased risk* of various physical disorders (such as diabetes, arthritis, and migraines). [Weiser, 2012]



### Anger → Risk for Diabetes

- ▶ People who develop Type 2 diabetes are often overweight, but most people who are overweight do not develop diabetes.
- ▶ MIDUS researchers found that those who are overweight and often angry (whether they expressed it or hid it from others) were more likely to have higher insulin levels and insulin resistance, both of which are risk factors for Type 2 diabetes.



[Tsenkova, 2014]

### Overreacting to Minor Hassles → Chronic Illness

- ▶ People who reported more negative emotional responses to everyday stress, such as traffic jams, work overloads, or arguments over household chores, were more likely to report a chronic illness (such as digestive problems) 10 years later. [Piazza, 2013]



# How to Manage Emotions to Improve Health



## Increase Leisure Time

- Those who reported everyday stress (deadlines, arguments) were able to increase positive feelings by spending time relaxing or pursuing leisure activities.
- This was particularly helpful among those who had little free time. [Qian, 2014]

## Get a Better Night's Sleep

- Inconsistent sleep patterns over a 7-day period were related to fewer positive emotions (no matter the average amount of time slept).
- Having trouble getting to sleep or staying asleep was associated with less positive and more negative emotions, especially for those reporting long-term insomnia.
- Better sleep was associated with:
  - supportive family ties
  - less frequent contact with family if relationships were strained
  - lower body mass among women

[Lemola 2013, Karlson 2013, Ailshire 2012, Mezick 2014]



## Culture & Negative Emotions

- In the U.S., negative emotions predicted higher levels of IL-6, a protein that causes inflammation (swelling) in various body tissues, and is linked to illnesses such as heart disease and cancer.
- Among the Japanese, however, negative emotions were *not* associated with increased inflammation.
- This may reflect cultural differences: American traditions encourage pursuing happiness and avoiding negative feelings, which are considered undesirable.
- In contrast, negative emotions are accepted as a normal part of life in Japan. Opposites, such as happiness and unhappiness, are thought to coexist within the same person. Negative feelings are sometimes desirable, as a motivation for self-improvement or an opportunity to receive support from others. [Miyamoto, 2013]



*Human beings,  
by changing the inner attitudes of their minds,  
can change the outer aspects of their lives.*

∞ William James



## Savor Experiences with Your Spouse or Partner

- MIDUS participants viewed various images while their emotional states were measured via facial EMG (electromyography). Sensors on the forehead measured muscle movement (in the supercillii), which decreases during positive emotions and increases during negative ones.
- Those who reported less marital strain over a 10 year period had longer periods of positive emotions in response to pleasant images.
- This suggests that having a good marriage and a partner with whom one can savor experiences may promote the mental ability to relish positive events longer. [Lapate, 2014]

## What if You're Single?

Single people were more likely to experience fewer negative emotions if they:

- Had a high sense of control (*"I can do just about anything I really set my mind to"*).
- Were more self-sufficient (*"I would rather deal with my problems by myself"*).

[Bookwala, 2009]



## Improve Your Control—Keep a Regular Schedule

- Those who trusted their ability to achieve their goals and didn't believe in obstacles beyond their control had more positive & less negative emotions.
- However, those who had a *low* sense of control, but kept a regular daily schedule, reported *more* positive emotions compared to those with low control and more varied routines.
- Knowing that daily activities are predictable may counteract the effects of having a low sense of control over other areas of life. [Tighe, 2014]



## Find a Purpose

- More negative emotions were experienced by those whose satisfaction with life had declined over a ten year period and who expected it to keep declining 10 years into the future.
- However, those with declining satisfaction who had a strong sense of purpose (goals that gave their life meaning and direction) showed the same emotional benefits as those whose satisfaction with life had increased or remained stable over time.
- Additionally, those with a sense of purpose lived longer. This was true for all ages, suggesting that finding a direction in life as early as possible may add years to life. [Burrow 2014, Hill 2014]





**Negative Emotions  
May Be Costly**

**Stress Hormones Increase**

- MIDUS researchers compared levels of the stress hormone cortisol in younger and older adults reporting negative feelings.
- Chronically elevated cortisol is associated with having poor memory, weaker immune systems, & more chronic illnesses.
- Younger adults' cortisol levels were *not* affected by having more negative feelings. However, adults over 50 who reported *high* negative emotions had *higher* cortisol levels than older adults who reported fewer negative emotions.
- Additionally, older adults who had higher negative emotions over an eight day period had higher cortisol levels at bedtime, even though cortisol levels normally drop late in the day to allow sleep. [Piazza, 2013]

**Risk of Metabolic Syndrome Increases**

- Compared to younger adults, older adults who expressed their anger outwardly (yelling, slamming doors) had a greater risk of metabolic syndrome (characterized by a large waist, high cholesterol, high blood pressure, and/or high blood sugar), which is associated with risk of heart disease and Type 2 diabetes.
- Risk of having metabolic syndrome increases with age, but older adults who reported *less* anger expression showed *reduced* risk. [Boylan, 2015]



**Thank you for your  
contributions to MIDUS!**

*We are grateful to all MIDUS participants who continue to give generously of their time to make this research possible.*

**Please help us stay in touch:**

Send updates to your address, phone(s), and/or email(s) to:

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**Happiness  
Usually Increases**

- Among MIDUS participants, older adults tended to report more positive and fewer negative emotions than younger adults.
- Researchers theorize that this is because, with age, people may get better at avoiding irritating situations and develop better ways of coping with stress. [Mroczek, 2001]



**You Can Be Happy in Spite of Poor Health**

- Aging brings increased risk of chronic illness (such as asthma, arthritis, or diabetes).
- Although having multiple chronic illnesses was associated with an *increase* in negative emotions, this pattern did not result in a *decrease* in positive emotions. [Friedman, 2012]



**Happiness, Purpose,  
and Good Friends  
Can Improve Your Health**

- Increased inflammation (swelling in body tissues measured by blood levels of IL-6 & CRP) is linked to having more chronic illnesses.
- However, those who had chronic illnesses and:
  - more positive emotions (feelings of happiness)
  - a purpose (goals in life they were trying to achieve)
  - good relationships (with trusted friends who listened to them)
 had lower levels of inflammation, which predict a better prognosis for their chronic illnesses.
- Positive aging is thus not the absence of physical illness, but the ability to remain happy and actively engaged in life despite declines in health. [Friedman, 2012]

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Publications about emotions, including those summarized here, can be found on our website:



**MIDUS.wisc.edu**