

Maintaining a Healthy Brain

CIRTL: Improving Teaching with Psychology

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Stress

- ◆ Stress experienced by students
 - ◆ Academic stress
 - ◆ Difficult classes, multiple exams, writing papers
 - ◆ Public speaking, test anxiety
 - ◆ Adjusting to college life
 - ◆ Many students are on their own for the first time
 - ◆ Time management and work/school/family conflicts
 - ◆ Many students (mostly non-traditional) have full-time jobs and families
 - ◆ Other life stress
 - ◆ Illnesses, deaths of friends and family, financial struggles, etc.

Stress

- ◆ Negative consequences of chronic stress:
 - ◆ Cardiovascular disease and metabolic syndrome risk factors
 - ◆ Weight gain, inflammation, high blood pressure, insulin resistance and reduced insulin production (diabetes).
 - ◆ Depression
 - ◆ Can largely impact academic performance
 - ◆ Sleep disturbances
 - ◆ Also associated with the abovementioned negative health outcomes
 - ◆ Some memory consolidation occurs during sleep
 - ◆ Brain: hippocampal damage via chronic high levels of glucocorticoids
 - ◆ Necessary for forming new explicit memories
 - ◆ Part of the feedback loop involved in regulating your stress response

How to Protect your Brain and Overall Health

- ◆ Diet and Exercise
 - ◆ Most importantly: focus on methods that prevent cardiovascular (cerebrovascular) disease
 - ◆ Exercise can increase neurotrophins that protect your brain cells
 - ◆ This has been measured in the hippocampus (i.e. memory area) in many animal studies
- ◆ Maintain stable and reliable social relationships
 - ◆ Social support buffers the negative effects of stress
- ◆ Others?
 - ◆ Coping strategies

What to Do When Students are Dealing with Stress

- ◆ Sometimes life can suck
- ◆ What should we (as teachers) do when students are struggling with stress?
 - ◆ Make-up work
 - ◆ Re-write exams
 - ◆ Offer an Incomplete for the course
 - ◆ Evidence of need to miss class (e.g. doctor's note)
 - ◆ Not all events are documented
 - ◆ You'll have to make subjective decisions
 - ◆ It is important to have something in your syllabus about this
 - ◆ E.g. *Makeup exams may be offered only if documentation is provided indicating that circumstances beyond a student's control had prevented them from taking a scheduled exam. A note from a friend or family member is not acceptable documentation.*
 - ◆ But what if there is no documentation?

Resources for Students

- ◆ <http://www.uta.edu/universitycollege/resources/index.php>
- ◆ Resources for pretty much everything
 - ◆ Counseling and psychological services, tutoring, disabilities and special accommodations, veterans services, adapting to college life, health and wellness, academic advising, money management, etc.

Other Ideas?