Wednesday, November 11, 2009

{THE BLUE BANNER}

# Studies show regular exercise can curb depression

By Jacob Yancey Staff Writer JAYANCEY@UNCA.EDU

Students face an increased likelihood of depression as winter's diminishing sunlight and cold weather force people indoors, according to the National Institute of Mental Health.

Students who feel unusually down, helpless or lethargic during winter might suffer from seasonal affective disorder, the diagnostic term for winter episodes of depression. Young women, according to NIMH, are most susceptible to SAD.

"One thing people may not understand is that depression can sneak up on you," psychology professor William Bruce said. "It's not always as obvious as getting the flu. It would be hard to have the flu without knowing it; you can become depressed without knowing it."

With sunset as early as 5:20 during winter months, sunlight deprivation prompts bodily changes that increase the risk of depression, according to NIMH. In addition to increased time indoors, students hide their skin under layers of warm clothes, minimizing their contact with sunlight. For the most part, students' bodies won't see the sun until spring.

In darkness the pineal gland secretes the hormone melatonin, a primary factor in seasonal depression, according to NIMH. Melatonin regulates many crucial aspects Diagnostic and Statistical Manual of Mental Disorders lists two hallmark symptoms of depression and seven other symptoms:

## Hallmark symptoms:

- loss of interest in activities

-daily feelings of depression

### Other seven symptoms:

-weight fluctuation without diet

- Insomnia or hypersomnia

- psychomotor retardation or agitation

-fatigue or loss of energy

- feelings of worthlessness or excessive guilt

-diminished ability to concentrate

## -recurrent thoughts or attempts at suicide.

of daily functioning. Most pertinent to SAD, melatonin resets circadian rhythms that control recurrent biological fluctuations such as sleep cycles, body temperature and hormone secretions. According to research, the body's natural clock and circadian rhythms face confusion as exposure to sunlight decreases and levels of melatonin increase.

As winter's late sunrise and early sunset disorient students' bodily rhythms, sleeping provides less rest and recovery.

Disturbance in peoples' natural rhythm accounts for 65 percent of SAD symptoms, according to NIMH studies.

For students crunching to the semester's end, increased fatigue and stress can instigate a downward spiral. Once students are frustrated, even slight disappointments can overwhelm to the point of depression.

"A student might find life increasingly bleak and that things aren't much fun anymore. Then, they might find that little things are bothering them a lot. They might also find it takes a great effort to get anything done, that they're tired more than they want or should be. Then, they may blame themselves for the whole thing," Bruce said.

Hallmark symptoms of depression include loss of interest in activities or depressed mood most of the day nearly every day, according to the *Diagnostic and Statistical Manual of Mental Disorders*.

The manual lists seven other symptoms: weight fluctuation without diet, insomnia or hypersomnia, psychomotor retardation or agitation, fatigue or loss of energy, feelings of worthlessness or excessive guilt, diminished ability to think or concentrate and recurrent thoughts of or attempts at suicide.

According to the DSM-IV, students experiencing five of these nine symptoms, including at least one hallmark symptom, should seek help immediately.

"Don't wait or try to find the bottom before getting help – there isn't any bottom. Suicide is a risk for people who are depressed. Depression is a dangerous disorder," Bruce said.

One study of depressed patients, conducted by John Greist, found jogging to be just as effective and longer-lasting in treating depression as medicine.

Greist's study involved three groups of depressed patients.

The first group received medications to treat their depression.

The second group, or experimental group, jogged for short periods throughout the span of a few months without medications. The third control group, while closely monitored, abstained from any form of treatment during the study.

At the end of his study, Greist found both treatment groups improved equally.

However, in follow-up reports, the patients in the experimental jogging group stayed better longer.

The group treated with medicine experienced relapses in a relatively short period of time.

## Delays

Asbestos removal ranks highest in priority when it comes to renovating Carmichael. According to Baxley, specialists keep the area wet and secured to ensure nobody inhales asbestos.

"We have to hire a contractor that is licensed by the state in asbestos removal," he said. "People aren't going to just show up with sledgehammers and start busting out walls."

The state of North Carolina appropriated \$1.3 million for renovation planning, the first of three phases of a project. According to Baxley, space and necessity are key elements of planning a renovation.

"We did (get money), but in the dire circumstances that money was withdrawn and we had to start over on that project," Chancellor Anne Ponder said to the new board of governors. "To have an inferior, inappropriate, unsafe, too-small facility is a huge issue."

According to Pierce, universities constantly seek new ways to expand academic space to improve education and have to convince the state the need for renovation is necessary for academic improvement.

"There's always a possibility that there can be a donation, and it can be significant," he said. "But it's a little unusual to think that, if we call it \$20-plus million, could come from one donation."

Baxley said officials teach building occupants how to control potential hazards.

"If they are storing flammable items in a stairwell, which is a fire hazard, we will be

#### CONTINUED FROM PAGE 3

talking to them," he said. "On the things that they can't control, those are issues that we're addressing with our higher headquarters, General Administration and the legislators."

UNCA spends \$1.66 per square foot on energy compared to the North Carolina average of more than \$2 and saves the state more than \$800 annually. According to Pierce, Carmichael Hall is the least energyefficient building on campus.

"Looking at the energy efficiency, the energy consumption of this building (Carmichael) is five times more than New Hall," he said. "The percentage of space in need of renovation is 48 percent compared to the university average of 33 percent."

UNCA's energy savings return to the

state rather than the university, according to Pierce.

"It gives us a lot of 'attaboys," he said. "If there was a big increase in utility cost, the university wouldn't have to carry all that burden. On the flipside of things, if we have huge energy savings, it doesn't come back to us. It goes back to the state."

Due to Carmichael's pre-1973 construction, when energy was cheaper, the building is highly inefficient compared to newer buildings on campus, according to Baxley.

"You can do things like we did in New Hall and get tremendous energy savings like being able to move heat-load in the building. We can move heat from one end of the building to the other without having to generate new heat," he said.

Page 7