

MEDICINE THAT'S PERSONAL

THIS MONTH'S
TOP STORIES

Sleep Deprivation and Alzheimer's Risk

Sleep is more than a comfort.

While the brain sleeps, it clears out harmful toxins, a process that may reduce the risk of Alzheimer's, researchers say. During sleep, the flow of cerebrospinal fluid in the brain increases dramatically, washing away harmful waste proteins that build up between brain cells during waking hours, a study of mice found.

"It's like a dishwasher," says Dr. Maiken Nedergaard, a professor of neurosurgery at the University of Rochester and an author of the study in *Science*.

The results appear to offer the best explanation yet of why animals and people need sleep. If this proves to be true in humans as well, it could help explain a mysterious association between sleep disorders and brain diseases, including Alzheimer's. Nedergaard and a team of scientists discovered the cleaning process while studying the brains of sleeping mice. The scientists noticed that during sleep, the system that circulates cerebrospinal fluid through the brain and nervous system was "pumping fluid into the brain and removing fluid from the brain in a very rapid pace," Nedergaard says.

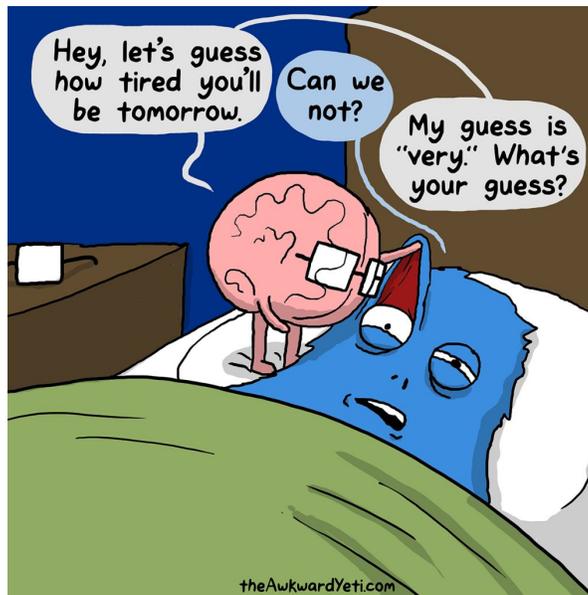
Nedergaard's team, which is funded by the National Institute of Neurological Disorders and Stroke, had previously shown that this fluid was carrying away waste products that build up in the spaces between brain cells. The process is important because what's

getting washed away during sleep are waste proteins that are toxic to brain cells, Nedergaard says. This could explain why we don't think clearly after a sleepless night and why a prolonged lack of sleep can actually kill an animal or a person, she says.

So why doesn't the brain do this sort of housekeeping all the time? Nedergaard thinks it's because cleaning takes a lot of energy. "It's probably not possible for the brain to both clean itself and at the same time [be] aware of the surroundings and talk and move and so on," she says. It could offer a new way of understanding human brain diseases including Alzheimer's. That's because one of the waste products removed from the brain during sleep is beta amyloid, the substance that forms sticky plaques associated with the disease. That's probably not a coincidence, Nedergaard says.

"Isn't it interesting that Alzheimer's and all other diseases associated with dementia, they are linked to sleep disorders," she says.

Researchers who study Alzheimer's say Nedergaard's research could help explain a number of recent findings related to sleep. One of these involves how sleep affects levels of beta amyloid, says Randall Bateman, a professor of neurology Washington University in St. Louis who wasn't involved in the study.



“Beta amyloid concentrations continue to increase while a person is awake,” Bateman says. “And then after people go to sleep that concentration of beta amyloid decreases. This report provides a beautiful mechanism by which this may be happening.”

The report also offers a tantalizing hint of a new approach to Alzheimer’s prevention, Bateman says. “It does raise the possibility that one might be able to actually control sleep in a way to improve the clearance of beta amyloid and help prevent amyloidosis that we think can lead to Alzheimer’s disease.” Disturbed sleep can leave a person drowsy throughout the day and reduce cognitive functioning. The Sleep Program at the

Hormone Center would like to help you determine what factors may be preventing you from getting the optimum number of hours of sleep, and together we develop a treatment plan to improve your sleep. Whether you are suffering from insomnia, sleep apnea, narcolepsy, or other sleep problems, we establish treatment which fits your individual needs. Sleep studies have shown important links between getting enough sleep and reducing chronic disease, including many cognitive disorders.

Read More at <http://www.hormonecenter.net/sleep/>

The Hormone Center is now listed on the Forever Health Network

The Forever Health Network is a listing of medical providers across the country who provide an integrative approach to healthcare, working on an individual level to customize Bioidentical Hormone Replacement Therapy (BHRT). The Forever Health network has Suzanne Somers as its spokeswoman. She is passionate about BHRT and has been using it for over 20 years.

“I truly believe that each one of us has the power to feel fantastic — at any age. It happened for me when I found integrative healthcare, including bioidentical hormone replacement therapy (BHRT), environmental and integrative medicine. And now it can happen for you. That’s why I always recommend the practitioners of the Forever Health Network”. —

Suzanne S

BIOIDENTICAL HORMONES & WELLNESS

THE NEW WAY TO AGE

"Forever Health™ connects patients with doctors who can help them with Bioidentical Hormone Replacement Therapy (BHRT) . Thanks to BHRT, I enjoy robust health, balanced hormones, strong bones, and the energy of someone half my age. So naturally, I am proud to be affiliated with Forever Health."

Suzanne Somers

FOREVER HEALTH™
Bioidentical Hormones & Wellness

What's Up Doc?



Question:

Why are people giving up gluten? Is it just a fad?

Answer:

Gluten is a protein that has been genetically modified and/or cross bred into most wheat products. Gluten offers no nutritional value nor does it add flavor to breads/pastas. Gluten simply makes the bread "bind" better. That's why gluten free bread crumbles more easily than "gluten bread".

The issue is that from an evolutionary standpoint, we do not possess the enzymes to break down gluten in the body. When the body encounters a "foreign" substance, much like a virus, the body's immune system goes into gear, leading to inflammation. It is thought that gluten especially causes inflammation in the brain and is perhaps a contributing factor to Alzheimer's.

(We recommend the book "Grain Brain" by David Perlmutter, M.D., and the documentary "What's with Wheat?" for additional insight into gluten's effects).

Symptoms of gluten SENSITIVITY (not Celiac's disease) include (but are not limited to):

- Depression/Anxiety
- Attention Deficit Hyperactivity Disorder (ADHD)
- Brain Fog
- Auto-Immune Disease
- Low Immunity
- Dental Issues (cavities, canker sores, tooth decay)
- Unexplained weight loss or gain
- Migraine Headaches
- Skin problems (eczema, acne and dermatitis herpetiformis)
- Hormonal imbalance and adrenal fatigue
- Joint and muscle aches
- Extreme Fatigue

- From Glutenfreeschool.com

We recommend that everyone should be off gluten. If you have some of the conditions above, try a gluten free diet. What's the worst thing that will happen? You might

just lose some weight or get glowing skin!

Join Us in Training for the Great Race!

The Hormone Center will be participating in the Pittsburgh Great Race. Stay tuned for more info on when to train with us all the way to race day. We'll be at the finish line with a private tent for those that run with us.

It's not a competition for us, it's about building community and pushing yourself personally.

Do Something!

Details forthcoming on our website!!

Hormone Center Events

June 22nd - Men's Night Out at Rum Runners Saloon

6:00 p.m. - 9:00 p.m.

3385 Babcock Blvd, Pittsburgh, PA 15237

June 24th - Wake Up! Workshop: A Guide to Whole Body Health

9:00 a.m. - 12:00 p.m.

498 Camp Horne Road, Avonworth PA 15237

July 1st - MET Performance Collaboration

12:00 p.m. - 2:00 p.m.

1213 Bingham St, Pittsburgh, PA 15203

Check our website for updates

Supplement Spotlight

Omega MonoPure® 1300 EC features natural enzymatically enhanced MaxSimil® monoglyceride fish oil that has a three times greater EPA/DHA absorption rate than an equivalent dose of ethyl ester fish oil. This IFOS five-star certified fish oil outperforms other fish oil supplements through MaxSimil patented lipid absorption enhancement technology (PLATform).*



- Positively Affects the Production of Arachidonic Acid-Derived Eicosanoids*
- Supports Cardiovascular Health*
- Supports Healthy Mental Functioning*
- Supports Healthy Glucose and Insulin Metabolism*
- By Supplying the Precursors EPA and DHA, Helps the Body Generate Specialized Proresolving Lipid Mediators, Such as Resolvins and Protectins*

Patient Business Profile



Our exceptional Early Intervention program for children, birth to age 3 who have developmental delays and /or disabilities, provides essential supports and, in the process, transforms entire families. We believe therapy works best when the therapist supports your child and your family as a whole. We come to you, work around your schedule and deliver a truly customized care plan for your child and family. All at NO cost to you.

TEIS therapists are employees, not independent contractors. With TEIS, you can be certain that the therapist working with your child is highly trained, managed and mentored.

The sooner a TEIS therapist begins working with your child, the greater the potential for your child to reach his/her full potential.



Call TEIS for Help 412-271-TEIS (8347) | www.TEISinc.com

Treatment in Allegheny County, western Westmoreland County, and southern Butler County;
Evaluations in Beaver County

The
Hormone
center