Computer models provide new understanding of sickle cell disease

*Date:* July 28, 2017  
*Source:* Brown University  
*Summary:* Simulations developed by mathematicians provide new details of how sickle cell disease manifests inside red blood cells, which could help in developing new treatments.

Artificial light from digital devices lessens sleep quality

*Date:* July 28, 2017  
*Source:* University of Houston  
*Summary:* Blue light emitted from digital devices could contribute to the high prevalence of reported sleep dysfunction, suggests new research.

Dementia: BACE inhibitor improves brain function

*Date:* July 28, 2017  
*Source:* Technical University of Munich (TUM)  
*Summary:* The protein amyloid beta is believed to be the major cause of Alzheimer's disease. Substances that reduce the production of amyloid beta, such as BACE inhibitors, are therefore promising candidates for new drug treatments. Scientists have recently demonstrated that one such BACE inhibitor reduces the amount of amyloid beta in the brain. By doing so, it can restore the normal function of nerve cells and significantly improve memory performance.

Green tea ingredient may ameliorate memory impairment, brain insulin resistance, and obesity

*Date:* July 28, 2017  
*Source:* Federation of American Societies for Experimental Biology  
*Summary:* A new study involving mice, suggests that EGCG (epigallocatechin-3-gallate), the most abundant catechin and biologically active component in green tea, could alleviate high-fat and high-fructose (HFFD)-induced insulin resistance and cognitive impairment.

Walnuts may promote health by changing gut bacteria

*Date:* July 28, 2017  
*Source:* Louisiana State University Health Sciences Center  
*Summary:* A new study has found that walnuts in the diet change the makeup of bacteria in the gut, which suggests a new way walnuts may contribute to better health.

Estrogen regulates pathological changes of bones via bone lining cells

*Date:* July 28, 2017  
*Source:* University of Veterinary Medicine -- Vienna  
*Summary:* The female sex hormone estrogen plays an important role in the structural stability of bones. To date, however, it had been unclear exactly which cells were involved in the hormone's protective function. Researchers have now shown for the first time that estrogen uses bone lining cells to regulate the expression of the protein RANKL. Estrogen deficiency leads to uncontrolled expression of RANKL, which can trigger pathological changes in the bones.

*Source:* sciencedaily.com/news

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