LOSE WEIGHT WHILE YOU SLEEP? MAYBE SOON, ACCORDING TO ICUS CONFERENCE STUDY

Press Release
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Chicago -- (Business Wire) -

Obesity can be treated with an innovative gene therapy that produces weight loss and reduces fat according to a new study described today at the 32nd annual Advances in Ultrasound conference in Chicago.

Dr. Paul Grayburn of the Baylor University Medical Center, Dallas, TX focused on a brown antipose tissue (BAT) common in hibernating animals like bears and also in children that increases energy expenditure. In Dr. Grayburn’s animal study, a protein specific to this brown antipose tissue was uncoupled to improve metabolism.

“We were able to deliver a gene ‘cocktail’ via tiny gas-filled microbubbles into skeletal muscles that lead to increased fat and glucose oxidation and weight loss,” Grayburn said.

In the study finding, the same brown antipose tissue that increases energy production in hibernating bears was activated in fatty rats and led to decreased food intake, weight loss, and reduced fat.

More than one-third (36.5%) of U.S. adults have obesity according to the Centers for Disease Control and Prevention. This promising, minimally-invasive therapy is easier and less expensive than gastric bypass surgery. The average cost of gastric bypass surgery in the US is $23,000.

In a second study at the same International Contrast Ultrasound Society (ICUS) Chicago conference, Dr. Pintong Huang used gas-filled microbubbles to deliver gene therapy in non-human primates with diabetes. His results showed the gene therapy stimulated normal glucose and insulin levels that were sustained for three to six months. Professor Huang is Chair of Ultrasonography of the Second Affiliated Hospital of Zhejiang University School of Medicine in Hangzhou, China.

Prof. Huang concluded that the results require additional larger studies which if successful show promise for human patients with diabetes.

ABOUT ICUS:
ICUS is an international, multi-disciplinary, not-for-profit medical society that is exclusively dedicated to advancing the use of contrast enhanced ultrasound diagnostic imaging to improve patient care worldwide. Founded in September 2008, ICUS brings together physicians, scientists, and other ultrasound imaging professionals from over 55 countries. ICUS members represent diverse specialties such as cardiology, radiology, vascular imaging, gastro-intestinal imaging, oncology, OB-GYN, and hepatology. For more information about ICUS, please visit www.icus-society.org.

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