

International Conference on

GLYCOBIOLOGY

September 21-22, 2017 HOUSTON, TX, USA

Glycobiology Conference 2017

Ghrelin release by carbonated beverages: The detrimental effects of soft drinks revisited

Johnny Stiban

Birzeit University, Palestine

The dangerous health risks associated with obesity makes it a very serious public health issue. Numerous studies verified a correlation between the increase in obesity and the parallel increase in soft drink consumption among world populations. The effects of one main component in soft drinks namely the carbon dioxide gas has not been studied thoroughly in any previous research. Here, we show that rats consuming gaseous beverages over a period of around 1-year gain weight at a faster rate than controls on regular degassed carbonated beverage or tap water. This is due to elevated levels of the hunger hormone ghrelin and thus greater food intake in rats drinking carbonated drinks compared to control rats. Moreover, an increase in liver lipid accumulation of rats treated with gaseous drinks is shown opposed to control rats treated with degassed beverage or tap water. In a parallel study, the levels of ghrelin hormone were increased in 20 healthy human males upon drinking carbonated beverages compared to controls. These results implicate a major role for carbon dioxide gas in soft drinks in inducing weight gain and the onset of obesity.

Biography

Johnny Stiban is an Associate Professor of Biochemistry and Cell Biology at Birzeit University. Currently, he is the Chairperson of the Department of Biology and Biochemistry and the Director of the Master's program in Environmental Biology at the same institution. He is an active Researcher who works mainly in the fields of Cancer Biology, Protein and Lipid Biochemistry and Mitochondrial Biology. He also worked on obesity in mammals. He has obtained two Fellowships to spend time at Michigan State University (a total of 14 months) to work in the lab of Prof. Laurie Kaguni on the purification and structure-function determination of mitochondrial DNA helicase. He has 14 peer-reviewed articles in international journals in addition to 8 lab manuals he wrote for different lab courses.

jstiban@birzeit.edu

Notes: