Effect of sodium bicarbonated natural mineral water in hypercholesterolemia Asian males

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World Health Organisation (WHO) reported that cardiovascular disease (CVDs) remains the number one cause of death globally, with an estimated 17.7 million people died from CVDs in 2015, representing 31% of all global deaths. Dyslipidemias are disorders of lipoproteins, that can be manifested by the elevation of serum total cholesterol, low-density lipoprotein (LDL) cholesterol, and triglyceride concentrations, and a decrease in the high-density lipoprotein (HDL) cholesterol concentration. Hydropinic therapy (drinking of mineral water), in particular water that is rich in natural bicarbonate, has shown to have an effect in reducing cholesterol and lypaemic levels by increasing the lipoprotein metabolism. This study is a follow-up study to investigate the consumption of a mineral water that is rich in natural sodium bicarbonate (sodium 650 mg/L, bicarbonate 2195 mg/L) (ARDESY®, France), and their effects in lipoprotein metabolism in moderately high cholesterol males subjects. Thirty-five males with elevated serum total cholesterol, drank 1 liter of sodium bicarbonate mineral water per day for 30 days. At one month post sodium bicarbonate water, there was significant reduction in levels of total cholesterol (p=0.001), LDL cholesterol (p=0.0002), total cholesterol/HDL (p=0.013) and LDL/HDL (p=0.001), but not in BMI, blood pressure, urine pH and serum sodium level. The limitation of this study was that it was not randomized. In conclusion, regular consumption of rich bicarbonated water can significantly improve cholesterol and lipid profile in moderate risk cholesterol males though validation in a randomized control trials is required.

Biography

Natalia Liem graduated with her Bachelors in Genetics/Microbiology in Queen Mary Westfield College (London), and her Masters in Prenatal Genetics and Fetal Medicine, from the University London College (UCL), before embarking on her scholarship in a PhD program under the University of New South Wales (Australia), in conjunction with Sydney Children Hospital. She obtained her PhD in 2005 in childhood leukemia under UNSW, School of Medicine and proceeded her scientific career with John Hopkins Hospital, both in Baltimore (USA) and in Singapore. Her experiences in medical research included senior research fellow scientist in Haematology/Oncology NUH, Singapore, and associations with other hospitals in Singapore led to her collaborative research with SGH, John Hopkins Singapore and NUS, in the field of breast, prostate and lung cancers. Dr Liem is currently a Medical Science Liaison Executive to Halden United Investments, and holds a visiting scientist position in Singapore General Hospital (SGH), Singapore

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