Abstract

Health statistics of several developed countries show that the overall incidence of kidney stones is slowly increasing. On average 1 in 20 people develop kidney stones during their lifetime and oxalate containing stones make up 70% of these. Oxalate is a normal end product of body metabolism but oxalates absorbed from food increase the amounts excreted and increase the risk of stone formation. Many plant foods contain small amounts of oxalates and there is a group of well-known high oxalate containing foods. There is no real evidence that people are eating more of these in the diet but there are some new foods and fruits that contain moderate amounts of oxalates which many people may not be aware of. It also appears that there is an increasing departure from traditional patterns of consuming high oxalate foods with calcium sources, a combination which considerably reduces the absorption of soluble oxalate from the digestive tract. Excessive consumption of certain juicing diets has led to incidences of kidney stone formation when these juices have been consumed in large amounts. The composition of these mixed juices needs to be carefully monitored.

About the speaker

Associate Professor Geoffrey Savage is a leading Lecturer and researcher in the Department of Wine, Food and Molecular Bioscience at Lincoln University, New Zealand. Dr Savage has a long term interest in the oxalate content of various plant foods. This numerous publications in this area have measured the oxalate content of a number of locally produced foods for instance, yams (oca), spinach and silver beet. More recent research has followed the development of juicing diets which can contain high levels of oxalates.

Dr Savage is also involved with a number of projects in Vietnam where the oxalate content of the rhizomes, petioles and leaves of taro which are used in human and pig diets pose a number of problems.