POTASSIUM AND HUMAN HEALTH

During the upcoming Frontiers of Potassium Science conference, the chronic lack of sufficient potassium (K) in human diets will be discussed (kfrontiers.org).

Potassium is known as a "shortfall nutrient" for humans because large numbers of people do not receive an adequate supply in their food. For example, only 3% of Americans consume adequate K to meet recommended levels of intake. Nutrient-fortified foods do not have K added and most highly refined foods do not contain adequate K. Sufficient daily K consumption is essential for heart and bone health, and it also plays an important role in reducing the risk of stroke and heart diseases.

Dietary Sources of Potassium

There is less K in modern Western diets than in previous years. Diets that were once rich in K (for example higher consumption of potatoes, fruits, and vegetables) have transitioned to diets that contain more refined foods, cereals, and animal products. Dietary supplements of potassium chloride can provide some benefits for blood pressure, but they do not provide the benefit to bone health that dietary K will.

The largest single food contributor to K is found in white vegetables, notably potatoes. Other significant contributors of dietary K are milk, coffee, chicken, beef, citrus juices, and bananas.

The DASH diet (Dietary Approaches to Stop Hypertension) is one approach focused on increasing K consumption to decrease high blood pressure. This diet focuses on increasing consumption of fruit, vegetables, and dairy products.

Health Benefits of Potassium

An adequate supply of dietary K is a major tool for lowering blood pressure. Potassium plays an important physiological role to inhibit resorption of sodium and to dilate blood vessels. This occurs with certain proteins that are only activated in the presence of adequate K.

Consumption of sufficient dietary K has also been linked to decreased risk of stroke. The lower risk of stroke may be related to the ability of adequate K to reduce blood pressure, but the decreased risk of stroke persists even with controlled blood pressure. Eating a diet of K-rich foods has been frequently tied to reduced occurrence of strokes.

Growing Potassium-Rich Food

Agronomists and farmers too often fail to recognize the direct link between food production and human health. The Frontiers of K Science conference will challenge farmers, scientists, and educators to take a closer look at how they can work together to improve dietary health.

Food	Portion size	Potassium, mg
Potato	small (143 g)	738
Tomato Juice	1 cup (243 g)	664
Plain yogurt	1 cup (245 g)	550
Sweet potato	medium (119 g)	542
Orange juice	1 cup (248 g)	496
Banana	medium (118 g)	422
Skim milk	1 cup (245 g)	382

IPNI International Plant Nutrition Institute
3500 Parkway Lane, Suite 550
Peachtree Corners, Georgia 30092-2844 USA
Phone (770) 447-0335 | www. ipni.net