

Researcher offers a greater incentive to eat your greens

September 18 2009

(PhysOrg.com) -- University of Queensland PhD candidate and nutritionist Christine Houghton is set to investigate whether broccoli could help in the fight against diabetes.

Ms Houghton's research focuses on sulforaphane - a substance produced when <u>broccoli sprouts</u> are cut or chewed that has been found to protect against heart disease, some types of cancers and act as an anti-ageing agent.

"Sulforaphane essentially talks to the DNA within your cells and can help to optimise several of your body's natural defence systems," Ms Houghton said.

"Studies have found that sulforaphane influences about 200 genes of the cell's defence system.

"Remarkably, sulforaphane enhances the cell's ability to defend itself from harmful free radicals and toxic cellular break down products.

"Regular consumption of broccoli or broccoli sprouts is a simple way to activate your body's own protective mechanisms which naturally decline as we age or are unwell."

Ms Houghton is currently trying to find out exactly how much sulforaphane is produced in 500mg of encapsulated broccoli sprout powder.



Using this encapsulated broccoli sprout, in 2010 she hopes to start a clinical trial for patients with impaired glucose tolerance.

"Where previous human clinical trials have been undertaken, the product has not been fully characterised so it is difficult to ascertain what quantity of ingested sulforaphane produces a measured clinical outcome," Ms Houghton said.

"Evidence in in vitro and animal studies indicates that sulforaphane can reduce the complications of diabetes, with improved biochemical markers evident.

"My planned research may be the first time a clinical trial intervention with a fully characterised product has been attempted."

Recent research funded by the British Heart Foundation found sulforaphane may protect against inflammation and <u>atherosclerosis</u> of the arteries, while scientists at Johns Hopkins University found broccoli sprouts significantly reduced a person's risk of developing ulcers and stomach cancer.

Raw broccoli sprouts are difficult to obtain in stores but a powdered version is available from naturopaths, integrative health doctors, some pharmacies and health food stores. Some companies sell home kits to grow your own sprouts.

<u>Broccoli</u> sprouts are best eaten raw or in powdered form and any dried powdered products must be consumed within 30 minutes of preparation as the chemical reaction needed to produce the sulforaphane is only active for a short time, Ms Houghton said.

Ms Houghton will discuss the potential health benefits of sulforaphane at the Australasian Academy of Anti-Ageing Medicine Conference in



Melbourne, to be held on October 3 and 4.

Provided by University of Queensland (<u>news</u>: <u>web</u>)

Citation: Researcher offers a greater incentive to eat your greens (2009, September 18) retrieved 10 April 2024 from https://medicalxpress.com/news/2009-09-greater-incentive-greens.html

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