The University of Texas
Rio Grande Valley
Office of Technology Commercialization

The Measurement of Phytoestrogens in Human Urine

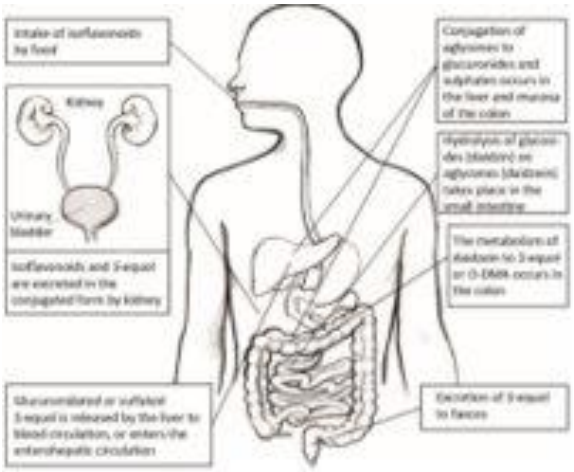
There is substantial interest in phytoestrogens, not only because they are known to benefit human health overall, but also because they play a role in the prevention of hormone-dependent and age-related diseases which include: cancer, osteoporosis, menopausal symptoms, and cardiovascular disease.

Problem

Due to the association that has been found between phytoestrogen levels and the prevention of these diseases, there is a need to detect and quantify phytoestrogen content.

Solution

With the use of high-performance liquid chromatography coupled with photodiode array, the inventor was able to extract and quantify three phytoestrogens (equol, genistein, and daidzein) content in human urine.



The production and metabolism of S-equol in humans. Modified from Frankenfeld (2011)

Competitive Advantages

- Low cost method of phytoestrogen quantification
- A clear alternative to costly mass spectrometry
- More accessible due to its low cost

Status of Development

- Seeking implementation and research advancement partners

IP Status

- Patent pending
- Licensing available

For further information regarding this Technology please contact:
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