

***Morinda citrifolia* L. Noni has Cholesterol Lowering Potential** (Poster)

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Introduction

Morinda citrifolia L. Noni has been used in Tonga, Tahiti, Hawaii and throughout the islands of Polynesians for over 2000 years. It has been purported to have numerous health benefits such as anti-diabetics, anti-gout, anti-hypertension among others. However, the cholesterol lowering potential of Noni has not been fully investigated and mechanisms involved have not been elucidated.

Objectives

To investigate any effects of *Morinda citrifolia* L. Noni on enzymes involved in the biosynthesis of cholesterol in humans.

Methods

HMG-CoA Reductase enzyme from Wistar rat liver was used in the in-vitro bioassays; A 2.5 uM of it was incubated with 1%, 5% and 10% of *Morinda citrifolia* fruit juice concentrate and the commercial Brand TAHITIAN NONI(R)Juice.

Results

In one study, 1%, 5% and 10% concentrations of the commercial Brand TAHITIAN NONI(R)Juice inhibited HMG-CoA reductase enzyme activity by 50%, 81%, and 83%, respectively. In another study, 1%, 5% and 10% concentrations of *Morinda citrifolia* fruit juice concentrate inhibited HMG-CoA reductase enzyme activity by 58%, 94% and 96%, respectively.

Conclusion

Our results show that both the *Morinda citrifolia* fruit juice concentrate and the commercial Brand TAHITIAN NONI(R)Juice inhibit the enzyme HMG-CoA Reductase in a dose dependant fashion. A human clinical trial maybe necessary to investigate the Noni's cholesterol lowering effects in-vivo. Concomitantly, the results presented here warrant further research into other mechanisms that may be involved in the cholesterol lowering effects of Noni.

Keywords: Noni, HMG-CoA Reductase

Selected References

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