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Evaluation of a traditional Sri Lankan herbal beverage (water extract of dried flowers of *Aegle marmelos*, Bael fruit) in type II diabetic patients

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The water extract of the dried flowers of *Aegle marmelos* (WEAM), is a popular traditional beverage in Sri Lanka. Hypoglycaemic activity of this has been established in Wistar rats and healthy volunteers. This study was done to evaluate the hypoglycaemic effect of the extract in diabetic patients. On day 0, OGTT was performed following administration of water (50ml) 30min piror to glucose loading (75g in 300ml) in 30 diabetic patients on diet control. On day1, the same subjects received the WEAM (50ml, 85mg/kg) and OGTT was repeated. They received a single dose of the WEAM every morning for two weeks. On day 15, OGTT was repeated and plasma insulin levels were estimated. After one month serum AST, ALT, ALP, Gamma GT, creatinine and Hb were measured. In diabetics, daily administration of the WEAM significantly reduced the fasting glucose levels and OGTT values (Table 1), while the post glucose load plasma insulin levels were increased (62%) significantly. Serum levels of tested enzymes, creatinine and Hb were not significantly altered at the end of one month. The WEAM exerts a significant hypoglycaemic effect and increases insulin secretion in Type II diabetics with no adverse effect.

Day	Fasting serum glucose concentrations (mmol/l)	Serum glucose concentrations following OGTT (mmol/l)
Day 0	7.55 ± 1.06	11.46 ± 1.25
Day 1	7.51 ± 1.04	9.18 ± 0.93 (19.9%)*
Day 15	$5.83 \pm 0.74 \ (22.8\%)^*$	$7.62 \pm 0.81 (33.5\%)^*$

Biography

Kumari K. D. K. P. is a Bachelor of Science in Human Biology (Microbiology Specialization), from University of Sri Jayewardenepura, Sri Lanka. Presently she is following a Ph.D. in Biochemistry, attached to the Faculty of Graduate studies, University of Sri Jayewardenepura. She is having a one publication and ten communications.

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