

# Decoction of *Centella Asiatica*, *Justicia Gendarussa* and *Imperata Cylindrica* Protect Heart by Oxidative Stress Diminution on Spontaneous Hypertensive Rats

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## Abstract

Breastfeeding is known to be the effective method for reducing the infant's malnutrition. Many traditional practices have been utilized for increasing milk quantity during lactation. Galactagogue from herbal remedies of *Cyperus rotundus* (Nagarmotha), *Foeniculum vulgare* (Fennel), *Gmelina arborea* (Shiwan), *Gossypium herbaceum* (Kapashy), *Ipomoea digitata* (Bhui-kohala), *Lepidium sativum* (Aalive), *Pennisetum americanum* (Bajra), *Ricinus communis* (Castor) and *Trigonella foenum-graecum* (Methi) are being considered to be promising herbals for induction of lactation. The study demonstrated that oral administration of Female rats with aqueous extract of these plants during their first lactation showed increase in pups body weight. The measurement of milk production during lactation was achieved by measuring pup weights during suckling period. Pup weight gain and weight of mother rats of extract treated groups were significantly higher than control group. About 30 to 50% more milk was produced in experimental group of animals as compared to that of the control groups of animal. The aqueous extracts of these plants were found to significantly

stimulate the prolactin and maintaining the level of stress hormone i.e. cortisol. Additionally protein and carbohydrate content of mammary gland tissue were also significantly higher than control group of animals. In addition, the mammary gland tissues of experimental group showed obvious lobulo-alveolar development with milk secretion. Administration of aqueous extracts of these indigenous plants did not cause any signs or symptoms of toxicity in female rats at the highest dose up to 2000 mg/kg body weight. Also, significant changes were not observed in biochemical and histological profile of treated animals and controls, which implied that aqueous extracts of these indigenous plants are not harmful and toxicologically safe. The study demonstrated the efficacy and safety of these plants for stimulation of lactation in female rats and may be potential candidates for inducing lactation in women too.

## Biography:

Atmaram Bandivdekar completed his Ph D Degree at the age of 31 years from Mumbai University. Bandivdekar was the Post-Doctoral and Carrier fellow at Population Council, New York. He was also the visiting scientist at UC Davis Primate Center. He is the Deputy Director of National Institute for Research in Reproductive Health which is the premier Institute in India in the field of Reproductive Health Research. He has published more than 70 papers in peer reviewed journals and also the book and two conference proceedings. He also has six National and International awards for his scientific contributions. Bandivdekar is actively involved research on understanding sexual transmission of HIV and development of preventive and therapeutic vaccine and formulation for prevention of HIV transmission.