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Antimicrobial Activity of Guava Leaves (*Psidium guajava* Linn.) against Dental Pathogens

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Guava leaves (*Psidium guajava* Linn.) possess a wide range of biological properties such as antibacterial, antidiabetic, antihypertensive, anti-diarrhoeal and antimalarial. Moreover, Guava plant leaves occupy a very important place in the field of medicinal plants. Although a number of medicinal plants are available in the market, the search for a new medicinal plant activity continues still date. Hence an *in-vitro* study has been conducted to evaluate the antimicrobial action of guava leaves (*Psidium guajava* Linn.) against the common oral pathogens. *In-vitro* study was performed under aseptic conditions by using cup plate method on dental pathogens. Dried leaves were extracted with ethanol (95%) by using cold maceration process. The dental pathogens were isolated from patients at Masterskill dental clinic and identified. Different concentrations of guava leaf extract were evaluated for their antimicrobial activity using chlorhexidine as standard. Guava leaves extract at a concentration of 10% (w/v) in normal saline showed similar activity as that of the standard chlorhexidine 0.2% (w/v) against *Streptococcus mutans*. But none of the concentrations of the extract show antimicrobial activity against *Staphylococcus aureus*.

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Rheological Properties of Sucrose Stearate Stabilised Olive Oil-in-Water Emulsions

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Rheology is an important aspect in cosmetic cream formulation due to its direct correlation to the product appearance and consumer acceptance of the cream. The rheological properties of 50 % w/v olive oil-in-water emulsion stabilized by 5 wt% sucrose stearate with a hydrophilic-lipophilic balance of 16 were performed by means of oscillatory shear and steady shear tests. Oscillatory measurement was carried out in the linear viscoelasticity region. The emulsion system exhibits elastic solid like behavior as the storage modulus higher than loss modulus for the whole range of frequency measured and damping factor (ratio between viscous and elastic properties) are not more than one. The results from steady shear tests indicated the emulsion system exhibited shear thinning behavior with thixotropic behavior. Therefore the elastic solid like oil-in-water emulsion is adequate to use in cosmetic cream formulation since it is easy to spread.