

Impregnated Disposable Infant & Baby Tooth Cleaning Device

APPLICATION

The infants and babies will be benefitted as their mothers will have an affordable and effective tool for massaging their gum and cleaning teeth.

COMPANY NAME

K First Biotech Pvt Ltd

FOUNDER'S NAME

Kanika Singh Dhull

TECHNOLOGY READINESS LEVEL (TRL)

TRL: 4 (The POC has been established. Initial version of the prototyping is under progress)

INTELLECTUAL PROPERTY

IP filing process is under progress

PROBLEM ADDRESSED

Early childhood caries ECC is a serious public health problem in both developing and industrialized countries. The consequences are alarming and can affect the immediate and long-term quality of life of the child's family and can have significant social and economic consequences beyond the immediate family as well.

ABOUT THE TECHNOLOGY

Early childhood caries(ECC) is Caries occurring in children of age 6 years or younger. Caries process starts as withdrawal of inorganic constituents Calcium & Phosphorus from the enamel, with production of weak acids lactic acid by the cariogenic bacteria S.mutans followed by dissolution of organic constituents. This process can be halted during infancy with the cleaning of teeth, thereby removing bio-film(cariogenic bacteria) adhered to the enamel surfaces. Additionally, application containing remineralising agents would enhance the redeposition of Calcium & Phosphorus, thus reversing the condition if treated in its incipient stage. So this device will help in effective cleaning of teeth and prevention of caries.

FUNDS RAISED/ACHIEVEMENTS

- DST NIDHI PRAYAS- INR 7.8 Lakhs

END USERS/CUSTOMERS

This project is targeted at infants and babies by providing their mothers with an affordable and effective tool for massaging their gum and cleaning their teeth. End users will be mothers of infants and babies.

PRODUCT IMAGE



Schematic diagram showing Disposable infant and baby tooth Cleaning device

USP

- This is a disposable baby tooth cleaning and gum massaging device which will be impregnated with medicament for effective cleaning of newly erupted teeth and thereby preventing early childhood caries during infancy.
- The proposed medicament incorporated will not only prevent the early childhood caries but also reverse the initial lesion created by dental caries. Therefore it will have a dual benefit.
- The gum massaging device will provide soothing and anti-inflammatory effect to the gums during eruption of new teeth.
- There are no such disposable device available in Indian market.