Abstract:

by mechanically crushing and grinding it into smaller pieces and play an important role in speech. If a tooth infection goes untreated it leads to potential life threatening complications such as toxic bacteria entering into the bloodstream causing blood poisoning and ending up in the heart causing endocarditis. The traditional system of medicine and the use of different medicinal plants is effective for the treatment of dental problems as they are the main element of indigenous medical treatment. Extraction of Azadirachta indica (neem), Psidium guajava (guava), Syzygium aromaticum (clove), Cinnamomum verum (cinnamon) and Aloe barbadensis Miller (Aloevera) has antimicrobial and antiinflammatory activities and can be used for the formulation of multi-herb Oral care toothpaste. The growth of these plants is abundant in Punjab, Pakistan. The aqueous extraction method was carried out for the extraction of these plants. Different percentage of extraction and abrasive was used to formulate the different compositions of toothpaste. After this, the formulated multi-herb toothpaste samples were examined for physiochemical and subjective evaluation. Cleansing ability, homogeneity, stability, grittiness, sensitivity, abrasiveness, and spread ability were checked. The color range of the toothpaste was from light brown to cream color. Two flavoring agents, peppermint oil and clove oil were used to enhance the palatability and consumer acceptability. The spread ability of multiherb toothpaste was from 4.4cm to 5.1cm. All the samples of multiherb toothpaste were homogeneous. The cleansing ability of all the multiherb toothpaste was excellent. All the samples have the smooth texture and a semi-solid consistency. The overall stability of multiherb toothpaste was good as it was checked at humid conditions, 25°C and 45°C after every ten days for three months consectively. The foaming ability range of multiherb toothpaste was 6cm to 8cm. The range of moisture content was from 29.90% to 35.83%. The pH range was from 6.9 to 7.4. No gritty matter and abrasiveness was found in any sample of multiherb toothpaste. Subjective evaluation results were also quite suitable without any adverse effects. However, more research and further developments are required to improve its quality.

The teeth are the hardest substances of the human body that aid in swallowing and digestion of food