INTRODUCTION

The medical compositions for oral administration listed in the general medical preparations like tablets, capsules, pills, powders, liquid, syrup, and the like. Such dosage forms are not easily taken by patients of advanced age, particularly patients with dysphagia. Among these, liquid and syrup preparations are easily taken by them compared with the other dosage forms. However, because of liquid, there are problems to be overcome, when formulating into dosage forms, such as masking of bitterness of effective components, their dispersibility and stability. Particularly, patients with dysphagia cannot take such a medical composition because they are choked by water. The patient with advanced age cannot easily take tablets or capsules depending on their sizes. Thus, it has been to develop new pharmaceutical preparations that are easily taken by patients of advanced age or patients with dysphagia. (US Patent no.: 5932235, 1999)

Despite tremendous advancement in drug delivery, oral route remains the preferred route for the administration of therapeutic agents, low cost of therapy and ease of administration leads to patient compliance. So most of the pediatric formulations also available in different types of oral dosage forms, like syrups, suspensions, reconstituted powders, dispersible tablets, mini tablets etc. But so many problems are arising in usage of that type of formulations in pediatrics, like stability, dosage wastage, dose dumping etc., and also the children’s are not showing the interest to take such type of formulations, and need so much counseling to the mothers to use the above type of formulations in the right directions to their babies. (Bhusan S.Y. et al, 2000)

The medicated jelly has through the years gained increasing acceptance as a drug delivery system. Several ingredients are now incorporated in medicated jelly, chlorhexidine as local disinfectant, nicotine, aspirin as an analgesic, and caffeine as a stay alert preparation, drug which required fast onset of action drug which have major absorption site is stomach and small intestine, Children in particular may consider jelly as more preferred method of drug administration compared with oral liquids or tablets. The use of medicated jelly is feasible as all local treatment of diseases of the oral cavity as well as treatment of systemic conditions.

It is not known so far that a medicated preparation for oral administration is used in a jellied dosage form. Jellies are semisolid to thick viscous fluids that consist of sub microscopic particles in a somewhat rigid or plastic vehicle. They are transparent or translucent, non greasy and mucilage type products. They are generally applied externally for medication, lubrication
and some miscellaneous applications. The jelly dosage form can be swallowed easily without water and are soft and smooth. Edible jellied compositions include sweet jellies used in food industry, which are prepared usually using as a base one or two or more of gelatin, pectin, xanthan gum, carrageenan, locust bean gum and the like. Their appearances are secured usually for about one year under preservation at room temperature or in cool place. However, none of them can keep preservation stability in terms of pH and the contents of the components at the medical level tests. (Yokoyama H. et al 2007)

Medicated jelly consists of a masticatory gum/pectin like core with a coating that can be a film of polymers, waxes, sweeteners, sugar, flavors or colors. The pharmacologically active ingredients can be present in the core, in the coating or in both. Medicated jelly today is gaining consideration as a “vehicle” or a “delivery system” to administer active principles that can improve health and nutrition but it’s potential as an “Alternative drug delivery system” has not been yet fully discovered and exploited. US market accounts for approx. 20% of world market for medicated jelly.

Advantages:

- It is convenient to administer – anywhere, anytime, doesn’t require water.
- As a delivery systemic administration of drug via the oral mucosa it has the potential to overcome the problems of short lived action and variations in drug release and retention times.
- It may prove to be particularly suitable for the systemic delivery of drugs, which are susceptible to metabolism in the gut wall or liver.
- The treatment can, if required, be terminated at any time.
- In addition, the drugs that are released from jelly and swallowed, will be introduced in the gastrointestinal tract either dissolved or suspended in saliva and thus will be present in a readily bioavailability form.