A STUDY OF MICROBIAL FLORA OF DADHI

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'Dadhi' or 'dahi' is a form of fermented milk product. Its quality greatly depends on the microbial flora present in it. We undertook the present work to find out the micro-organisms present in the good 'dadhi' and those responsible for the formation of defective 'dadhi' under our local conditions.

We found that in the good local 'dadhi', there were always present two species of lactic acid bacteria. They are: Streptococcus thermophilus Orla-Jensen 1916 and Lactobacillus lactis (Orla-Jensen 1916) Holland 1920. The microbial defect of local 'dadhi' was found mainly due to the different species of Clostridium, one of which has been identified as Clostridium perfringens (Veillon and Zuber 1898) Holland 1920. Besides bacteria, in many 'dadhi' samples examined, we have found a large number of cells of an imperfect yeast. The imperfect yeast has been identified as Candida pseudotropicalis (Castellani) Basgal var. lactosa (Hansen) Didden and Lodder. Presence of large number of this yeast gives 'dadhi' an alcoholic taste. 'Dadhi' prepared from skimmed milk and usually employed for making 'ghol' or 'lassi' has been observed to be containing a predominant number of this particular species of yeast.

'Dadhi' is very similar to yoghurt, a fermented milk product of South-Eastern Europe and now largely consumed in Western Europe, including England. Satisfactory yoghurt cultures contain a *Lactobacillus* (probably, *L. bulgaricus*) and *S. thermophillus* (Hammer and Babal 1957). In Ceylon, the fermented milk product usually referred as curd, is produced by utilizing *Streptococcus lactis*, a *Lactobacillus*, and yeast. In most samples, the yeast and *S. lactis* predominate (Salle 1961).

The species of imperfect yeast isolated from local 'dadhi' has been reported to be isolated from Kefyr (Smith 1960), a form of fermented milk, consumed in Caucasus mountain and adjoining territory. On perusal of the literature available here, it appears, that this particular species, so far, has not been reported from 'dadhi'.

References

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