

Chapter 6

Conclusion

This research reports that traditionally prepared *napham* holds a significant position in the food habit of the Bodo community of Kokrajhar district of Assam. The traditional knowledge of the preparation of ethnic food *napham* has great relevance to the nutritional security of the ethnic communities. The report and documentation of this traditional knowledge will help in its preservation. Through this study, it is found that traditionally prepared *napham* is a good source of nutrition in fulfilling the daily recommended intake of proteins, minerals like calcium, sodium, iron, phosphorus, essential amino acids, and essential fatty acids like monounsaturated fatty acids (MUFA), polyunsaturated fatty acids (PUFA), DHA, Omega 6 fatty acids, and Omega 3 fatty acids. The amino acids detected were aspartic acid, glutamic acid, glutamine, alanine, and lysine and form the essential chemical composition of the microenvironment of *napham* generating flavor and essential nutrients. The microflora of *napham* constitutes both grampositive and gram-negative bacteria. Phylum Firmicutes, Proteobacteria, and Actinobacteria were dominant communities in all the microbiomes of *napham*. The alkaline nature of *napham* favors the growth of Lactobacillales and Clostridiales in *napham*. The dominant genera detected in *napham* were *Bacillus*, *Enterococcus*, *Clostridium*, *Lactobacillus*, *Leuconostoc*, *Lactococcus*, *Pedicoccus*, *Pisciglobus*, *Staphylococcus*, *Streptococcus*, *Streptomyces*, *Weissella* and *Yaniella*. Sequences belonging to LAB bacteria were detected in *napham* which enhances its self life for months. This study revealed that there is scope for further studies of microbial communities with unique functionalities in *napham*. The use of novel technology in food processing, system biology, and bioinformatics shall open vast avenues for the preparation of starter cultures, value addition, and nutritional fortification in *napham*. The study reports the biochemical and microbial composition of traditionally prepared *napham*. In future, there is a scope to research to optimize the process through defined starter culture and help the development of standardized and consistent products.