ABSTRACT

Lipids are essential for plant and animal development, growth and nutrition and play critical roles in health and reproduction. The dramatic increase in the human population has put increasing pressure on human food sources, especially of those sources of food which contain adequate levels of polyunsaturated fatty acids (PUFAs) and more importantly, sources of food which have favorable ratios of the n-3 (18-carbon, α -linolenic acid, ALA) to n-6 (18-carbon linoleic acid, LA) PUFAs. Recent studies have demonstrated the beneficial effects of the n-3 PUFAs in diets as well as potentially negative effects of excessive levels of n-6 PUFAs in diets. This review discusses these human health issues relating to changes in diets based on environmental and industrial changes as well as strategies in East Africa for improving lipid composition of food using indigenous sources.