Comparison of butter and margarine for some properties
Tuba Erkaya, Arzu Kavaz, Mustafa Şengül and İhsan Bakişci
Department of Food Engineering, Faculty of Agriculture, Atatürk University, 25240 Erzurum, TURKEY terkaya@atauni.edu.tr

Butter which must contain at least 80% fat (weight per weight, w/w) is mainly produced by churning milk fat from sweet cream or cream acidified with cultures it is sometimes produced from yoghurt. Butter is a natural dairy product, which was made as far back as 2000 BC. Butter that usually produced in world is made from cow or sheep milk but it can also be made from the other mammalian’s milk such as goat, buffalo, and yaks. Margarine can be made from any of a wide variety of animal or vegetable fats and is often mixed with skim milk, salt, and emulsifiers. Margarine was invented a little over 100 years ago. Since then quality has improved and it can now be considered a staple product in its own right, though it is still regarded by some as a butter substitute. There are some differences between butter and margarine with respect to nutritional, rheological, flavour and fatty acid compositional properties. Both butter and margarine contain fats, which are groupings of the elements carbon, hydrogen and oxygen. The difference is how those atoms are bonded together. Although butter and margarine include partially saturated fatty acids, butter is a natural product that does not contain trans-fatty acids. Therefore, it is accepted an excellent source of fat-soluble vitamins such as vitamin A, D, E and K. On the other hand, margarine is cholesterol free and lower in saturated fats. It also contains harmful trans-fatty acids, and often residues of the toxic metals nickel and cadmium. Many researches show that trans-fatty acids increase inflammation in the body. This can worsen illnesses such as colitis and arthritis. Moreover, in some studies are suggested that intake of margarine may increase total cholesterol and LDL, the risk of coronary hearth diseases, asthma, cancers, allergic disease and decreases the immune response. The aim of this review was to evaluate the differences of butter and margarine with respect to some properties under scientific knowledge in literature.

Keywords: Butter, margarine, fat, vegetable oil, fatty acids, cholesterol