The production of fermented foods is one of the oldest food processing technologies known to man. Since the dawn of civilisation, methods for the fermentation of milks, meats, fish and vegetables have been used to produce safe foods with distinctive organoleptic properties. Microbial food cultures (MFC) with a technological impact on food are called “starter cultures”. They may be present as natural microflora in the food, or as a result of the intentional addition of the microorganisms in an industrial food fermentation process. MFC that are used for their beneficial effect on consumers’ health are called probiotics. Probiotics are always intentionally added to the food as they have been carefully selected and studied to guarantee that they provide a proven beneficial effect to consumers. They may be used in both fermented and non-fermented foods such as food supplements. This paper aims to provide an overview of the European regulatory framework which governs the use and labelling of commercial microbial food cultures intentionally added in a food manufacturing process.