European consumers’ behaviour has been undergoing gradual changes. People require not only enough and high quality sanitary products (dietary, hygienic and health standards), but also certification and reassurance of product origin and production methods. In order to preserve quality food products coming from particular geographical areas and to protect consumers against imitations and false information, the European Commission defines via different regulations the labels Traditional Speciality Guaranteed (TSG), Protected Designation of Origin (PDO) and Protected Geographical Indication (PGI). Traceability is an essential tool to enhance trader and consumer confidence in the safety, quality and authenticity of the food. It also helps the regulatory authorities to detect fraud and dangerous substances. According to Regulation EC 178/2002, the term traceability means the ability to trace and follow a food, feed, food-producing animal or substance intended or expected to be incorporated into a food or feed, through all stages of production, processing and distribution. Objective criteria that identify and trace back a product are mandatory. Research in this area is partly focused on developing methods to authenticate the food products and on the demonstration of their suitability. This talk will come with some reflections obtained after more than 15 years of research in method development for the authenticity of food products and the participation to about 10 European projects dealing with traceability and authenticity issues. Key criteria as appropriate sampling plan, sampling preparation procedures, full protocol validation and suitable expression of results of proposed analytical methods are necessary in order to fulfil the traceability and authentication issues.

Keywords: authenticity and traceability, food and feed, sampling plan, sampling procedure, validation