No-Observed-Adverse Effect Level (NOAEL) of food additives has been long determined on the basis of toxicological studies. Acceptable Daily Intake (ADI) levels of food additives for human are derived from these NOAEL, and their legal limits are then established for the food products, intentionally added with food additives. However, recent studies demonstrated that consumption of some processed food containing certain food additives might have increased the risk of cancer in human although the legal limits of these additives in processed foods are well respected by the manufacturers. Possible reasons for increased carcinogenicity risk in processed foods containing these additives can be due to various factors: - interaction of additives with some food ingredients, -food processing may change the chemical formula of food additive to a formula to be acting similarly as carcinogenic compound, -a negative synergistic effects when combined with other additives, -improper storage conditions, and -unknown carcinogenic by-products occurring during the food processing. Due to the above mentioned factors we recommend that an additive, intentionally added to the food during processing must be traced officially for its carcinogenicity. In this review, we overviewed all of the food additives authorized in European Union. Therefore, the traceability issues of processed foods containing certain food additives, which have a negligible probability of carcinogenicity in legal limits, must be reinforced in the perspective of public health concerns.