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Low trans solid fat functionality; the role of interesterified high oleic soybean oil based shortenings

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With the FDA June, 18th 2018 mandate to phase out partially hydrogenated oils (PHO's) fast approaching, the edible oils industry has and is developing PHO alternatives to meet demands for functionality and oxidative stability. High oleic soybean oil offers the edible oil industry a viable high oleic oil that can be used to formulate PHO free shortenings with improved stability and functionality. Blending of high oleic soybean oil with fully hydrogenated oils or palm fractions creates solid fat alternatives that can meet certain food applications demands for function and stability. Interesterification of high oleic soybean oil with various sources of solid fat creates functional, stable shortenings that can be applied to many food applications. Interesterified high oleic soybean oil based shortenings impart attributes similar to partially hydrogenated oils, though without the influence of significant levels of *trans* fatty acids. This paper will review work to date on blending and interesterification of high oleic soybean oil with various sources of solid fat to create the next generation of low *trans*, PHO free shortenings.