Conjugated linoleic acid (CLA) is a collective term for a mixture of positional and geometric isomers of linoleic acid (18:2) in which the two double bonds are conjugated. Two CLA isomers, \textit{cis}-9,\textit{trans}-11 CLA and \textit{trans}-10,\textit{cis}-12 CLA, have been the subject of particular interest in terms of human health.

Human studies investigating the effects of mixtures of \textit{cis}-9,\textit{trans}-11 CLA and \textit{trans}-10,\textit{cis}-12 CLA, on body weight have been inconsistent. \textit{Cis}-9,\textit{trans}-11 and \textit{trans}-10,\textit{cis}-12 CLA are incorporated into several plasma lipid fractions in a dose-dependent manner in humans when provided as supplements. Human intervention studies investigating the effects of CLA mixtures on blood lipid concentrations have also been inconsistent. This may explained by emerging evidence, which suggests that \textit{cis}-9,\textit{trans}-11 and \textit{trans}-10,\textit{cis}-12 CLA have opposing effects on plasma triacylglycerol and on the ratios of LDL:HDL cholesterol and total cholesterol:HDL, with \textit{cis}-9,\textit{trans}-11 CLA demonstrating a relative hypolipidaemic effect and \textit{trans}-10,\textit{cis}-12 CLA a hyperlipidaemic effect.