

# Healthy Blends of High Linoleic Sunflower Oil with Selected Cold Pressed Oils: Functionality, Stability and Antioxidative Characteristics

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The consumption of health-promoting products such as cold pressed oils may improve human health and prevent certain diseases. Blends (10% and 20%, w/w) of cold pressed oils including black cumin oil (BC), cumin oil (Cum), coriander oil (Cor) and clove oil (Clo) with high linoleic sunflower oil (SF) were formulated [1]. Oxidative stability (OS) and radical scavenging activity (RSA) of SF and blends stored under oxidative conditions (60 °C) for 8 days were studied. By increasing the proportion of cold pressed oils in SF, linoleic acid level decreased, while tocopherols level increased. Progression of oxidation was followed by measuring peroxide value (PV), *p*-anisidine value (Av), conjugated dienes (CD) and conjugated trienes (CT). Inverse relationships were noted between PV as well as Av and OS at termination of storage. Levels of CD and CT in SF and blends increased with increase in time. Cold pressed oil blends gave about 70% inhibition of DPPH• radicals. Oxidative stabilities of oil blends were better than SF, most likely as a consequence of changes in fatty acids and tocopherols' profile, and minor bioactive lipids found in cold pressed oils.

[1] Ramadan MF, Wahdan KMM (2012) Food Chemistry 132: 873-879.