

Comparison of rancimat evaluation modes to assess oxidative stability of fish oils

Méndez, Eduardo

Sanhueza, Julio

Speisky, Hernán

Valenzuela, Alfonso

Two Rancimat evaluation modes, the induction period (IP), and the time needed to achieve a selected difference in conductivity ($t_{?K}$) were compared for assessing relative stability of anchovy sardine, and hake liver oils. Mean coefficients of variation were 2.5 and 2.4% for IP and $t_{?K}$ values, respectively, for oils oxidized in the range 55-90°C. Natural logarithms of IP and $t_{?K}$ values varied linearly with temperature ($P < 0.001$). A linear relationship ($r = 0.999$) was established between the IP and $t_{?K}$ values ($P < 0.001$). Relative oxidative stability of fish oils was determined with the same degree of confidence by either IP or $t_{?K}$ values.