Stabilité des huiles alimentaires au cours de leur stockage

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Abstract: Stability of edible oils during storage
Vegetable oils are chemically unstable due to the sensitivity to oxidation of their unsaturated fatty acids. The oxidative mechanisms are based on complex and radical reactions that always result in a significant loss of oil quality in both sensorial (rancidity) and nutritional values (loss of polyunsaturated fatty acids and vitamin E). Monitoring the oxidation state of oil can be performed using different markers, each bringing a partial information of the whole phenomenon, but unable to predict by itself the future stability of the oil. The accelerated ageing tests used in reasonable heating conditions are useful for measuring the resistance of oil to oxidation but are difficult to extrapolate to normal storage conditions. The oxidative degradation of oil during storage can be delayed by protecting it from light, heat, oxygen and metals. Another way consists to increase the retention of endogenous antioxidants naturally contained in the oil seeds, such as tocopherols (vitamin E), which are partially removed during conventional operations of extraction and refining.

Key words: *oxidative degradation, polyunsaturated fatty acids, tocopherols, antioxidants*

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le tableau 2 page 130 comporte des erreurs sur la ligne Colza. Le tableau correct est celui-ci :

Tableau 2

Composition en tocophérols (mg/kg) des principales huiles végétales (adapté de Gunstone, 2007)

	Tocophérols					**Tocotriénols**					
	α	**β**	**γ**	**δ**	**Total**	**α**	**β**	**γ**	**δ**	**Total**	**Total**
Soja	100	-	590	260	960	-	-	-	-	0	960
Maïs	110	50	600	20	780	-	-	-	-	0	780
Colza	170	-	350	10	530	-	-	-	-	0	530
Tournesol	490	-	50	10	550	-	-	-	-	0	550
Olive	200	10	10	-	220	-	-	-	-	0	220
Palme	260	-	320	70	650	140	30	290	70	530	1180

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