

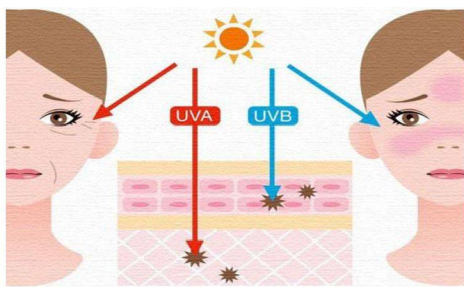


Caracterización de Antioxidantes Naturales en la prevención de Daño Oxidativo durante Procesos Fotosensibilizados

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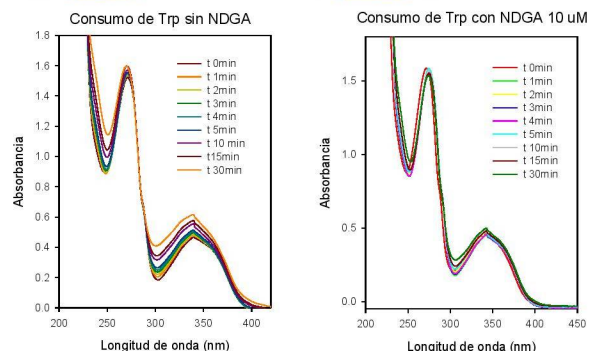
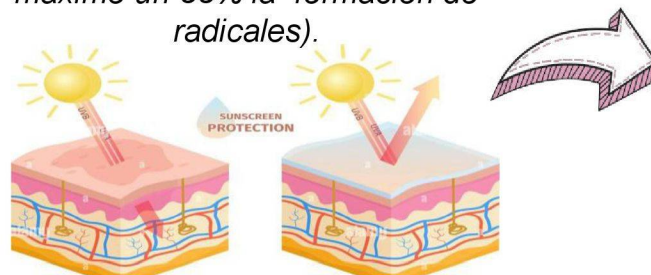
Antioxidantes



Daño UV

UV-B (290 a 320 nm)
UV-A (320-400 nm)

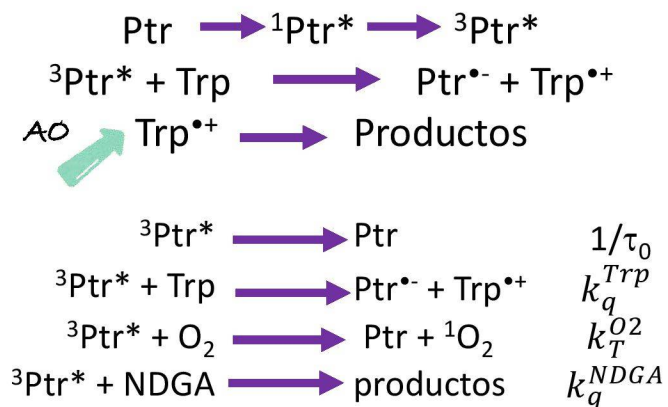
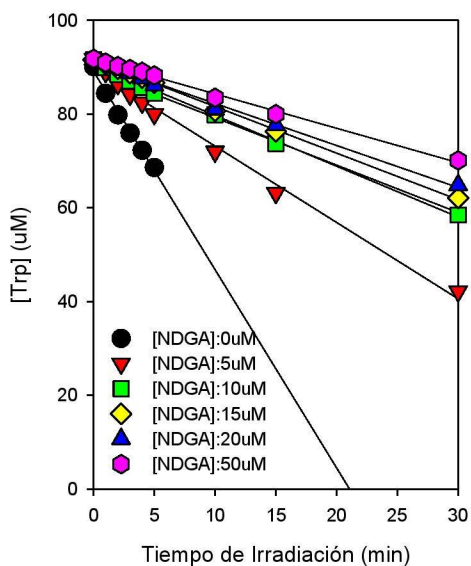
Protectores Solares (Evitan como máximo un 55% la formación de radicales).



Estudio por UV-Visible

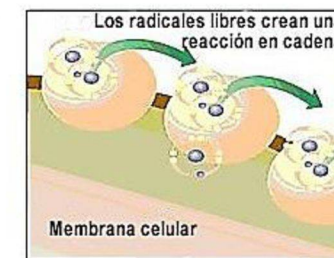
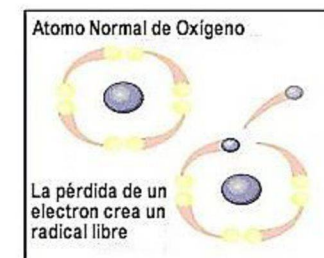
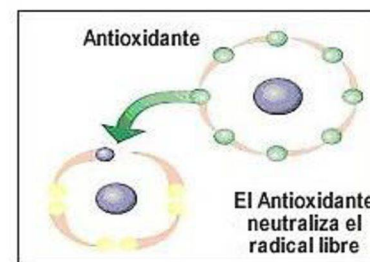
Estudio de oxidación del Trp con Ptr por HPLC

Cinética de Trp 90uM +Ptr 90uM + NDGA

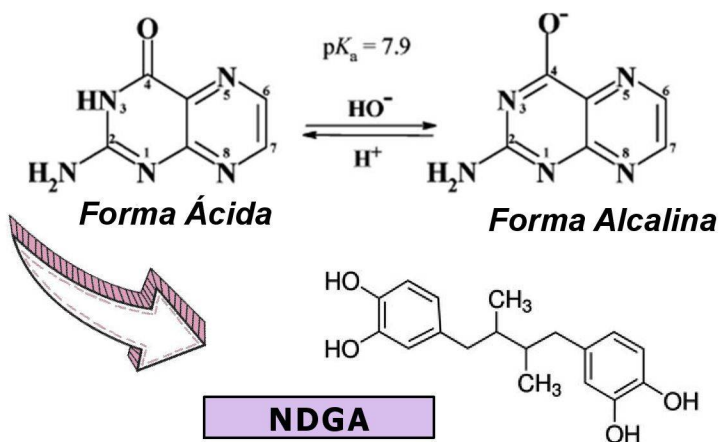


$$f_X = \frac{k_q^X [X]}{1/\tau_0 + k_T^{O_2} [O_2] + k_q^{NDGA} [NDGA] + k_q^{Trp} [Trp]}$$

Especies Reactivas de Oxígeno (EROs)



Fotosensibilizador Ptr



Fracciones de Quencheo de los estados tripletes

	[NDGA] (uM)	v_0 (uM/s)	f_{Trp}^T	f_{NDGA}^T	$f_{O_2}^T$	$f_{T \rightarrow S^0}^T$	Rate decrease
[Trp] = 100 uM	0	0.070	0.19	0	0.57	0.23	0
	5	0.027	0.19	0.007	0.57	0.23	0.61
	10	0.018	0.19	0.014	0.56	0.23	0.74
	15	0.017	0.19	0.021	0.56	0.23	0.76
	20	0.015	0.19	0.028	0.56	0.22	0.79
	50	0.012	0.18	0.067	0.53	0.22	0.83