DavosLife E3 Tocotrienols Increase Skin's Resilience to Modern Pollution

Skin exposure to modern pollution has increased due to both artificial light from digital devices and air pollution from industrial and urban activities.

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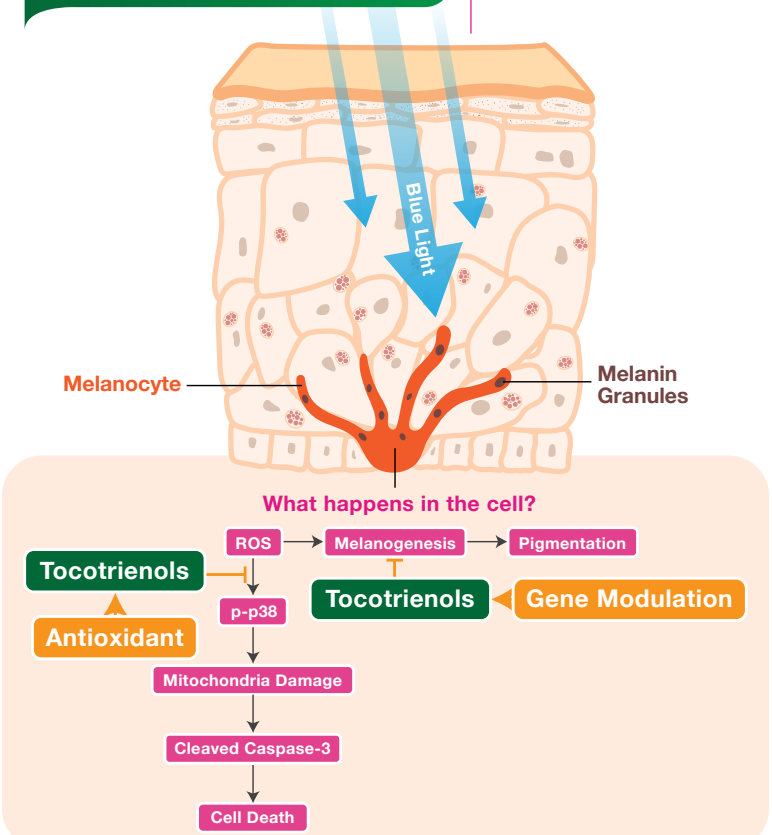
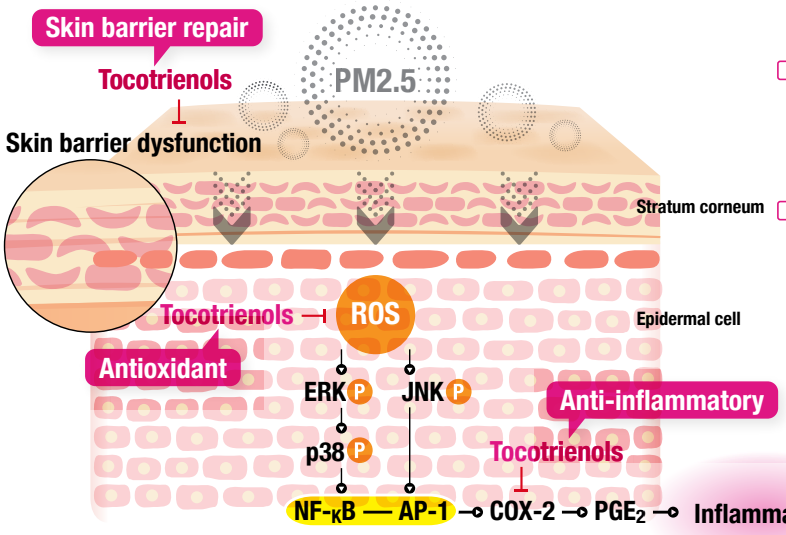
Blue Light Protection[1]



- **Effectively suppressed oxidative stress** and preserved the mitochondrial membrane potential
- **Reduced skin cell death** by reducing activation of the p38 mitogen-activated protein kinase molecule and **downregulating the expression** of cleaved caspase-3
- **Modulated tyrosinase activity**, resulting in reduced melanin production
- **Tocotrienols protect B16-F1 cells** against skin damage and pigmentation caused by blue light exposure but alpha-tocopherol does not.

Pollution Shield[2]



- **Inhibited PM2.5-induced oxidative stress** and was more effective compared to α-Tocopherol
- **Inhibited inflammation** caused by PM2.5 exposure, a property not shared by α-Tocopherol
- Could potentially **restore skin barrier function**, by increasing protein expression levels of filaggrin, involucrin and TGM-1, following exposure to PM2.5. α-Tocopherol does not share this property

Accreditations

Halal | Kosher | FSSC 22000 | USFDA | ISO 9001 | ISO 14001 | ISO 45001 | HACCP | RSPO | MSPO | ECOCERT COSMOS

References:
1. Neo, J. R. E., Teo, C. W. L., Ung, Y. W., & Yap, W. N. (2023). Tocotrienol-Rich Fraction Attenuates Blue Light-Induced Oxidative Stress and Melanogenesis in B16-F1 Melanocytes via Anti-Oxidative and Anti-Tyrosinase Properties. International journal of molecular sciences, 24(20), 15373. https://doi.org/10.3390/ijms242015373
2. Neo, J.R.E., Teo, Z.N., Yeo, J.S.E., Ng, C.K.S., Teo, C.W.L., Ung, Y.W. and Yap, W.N. (2022). Tocotrienols improve urban particulate matter-induced skin damages by regulating skin barrier function and ROS/MAPK signalling pathway in keratinocytes. Atmospheric Pollution Research, 13 (10), 101564. https://doi.org/10.1016/j.apr.2022.101564

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