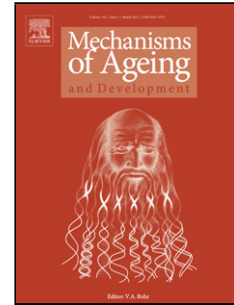


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Mechanisms of Aging and Development

Special Issue: Oxidative Stress in Skin Biology and Medicine
M. Rallis, G. Valacchi, guest editors, 2017, Elsevier

*A New Understanding of Environmental Damage to the Skin
and Prevention with Topical Antioxidants*

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Highlights:

- Environmental pollution and UVA act synergistically to initiate skin precancers and cancers.
- PMs penetrate the skin transepidermally and through hair follicles to activate the AHR.
- Ozone induces oxidative stress in the upper epidermis, triggering inflammation in deeper layers.
- Pollutants as well as UV cause extrinsic skin aging, so protection beyond sunscreen is necessary.
- Topical antioxidants can prevent damage inflicted by both UV and environmental pollution.

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