5.5: The Skin and Sun

A moderate amount of UV in sunlight is necessary for the skin to form vitamin D. This vitamin prevents bone disorders like rickets to which animals reared indoors are susceptible. Excessive exposure to the UV in sunlight can be damaging and the pigment melanin, deposited in cells at the base of the epidermis, helps to protect the underlying layers of the skin from this damage. Melanin also colours the skin and variations in the amount of melanin produces colours from pale yellow to black.

Sunburn And Skin Cancer

Excess exposure to the sun can cause sunburn. This is common in humans, but light skinned animals like cats and pigs can also be sunburned, especially on the ears. Skin cancer can also result from excessive exposure to the sun. As holes in the ozone layer increase exposure to the sun’s UV rays, so too does the rate of skin cancer in humans and animals.

Contributors

- Ruth Lawson (Otago Polytechnic; Dunedin, New Zealand)