

# THE EFFECTS OF UV ON A HUMAN BODY

## WHAT IS UV?

Energy from the sun reaches the earth as visible, infrared, and ultraviolet (UV) rays. Ultraviolet A (UVA) is made up of wavelengths 320 to 400 nm (nanometers) in length. Ultraviolet B (UVB) wavelengths are 280 to 320 nm. Ultraviolet C (UVC) wavelengths are 100 to 280 nm.

Only UVA and UVB ultraviolet rays reach the earth's surface. The earth's atmosphere absorbs UVC wavelengths. UVB rays cause a much greater risk of skin cancer than UVA.

But UVA rays also cause aging, wrinkling, and loss of elasticity. UVA also increases the damaging effects of UVB, including skin cancer and cataracts.

### SKIN

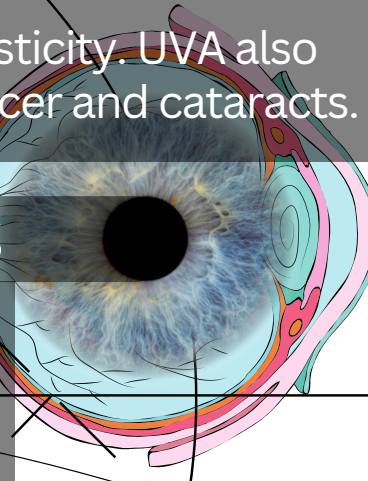
UV can cause premature aging and other skin damage  
Premature aging (photoaging)

Non-melanoma skin cancers  
Non-melanoma skin cancers comprise basal cell carcinomas and squamous cell carcinomas. These are rarely lethal but surgical treatment is painful and often disfiguring.

Malignant melanoma  
A large number of atypical nevi (moles) is the strongest risk factor for malignant melanoma in fair-skinned populations.

### THE EYES

UV can cause cataracts and other eye damage



### IMMUNE SYSTEM

The immune system is the body's defence mechanism against infections and cancers, and is normally very effective at recognizing and responding to an invading micro-organism or the onset of a tumour. Although the data remains preliminary, there is increasing evidence for a systematic immunosuppressive effect of both acute and low-dose UV radiation exposure.

The installation of MicroLouvre blocks 100% of harmful UV rays while allowing an unrestricted flow of light and air.