

BIO1300 The Human Animal

Topic 3: The Naked Ape

Key Words

Skin colour
Melanin
Connective tissue
Hemoglobin
Range of colour
Polygenic inheritance
Dominance
Recessiveness
Alleles
UVR absorption
Visible light absorption
Anti-oxidant
Free radicals
Cell damage
DNA damage
Melanocytes
Melanosomes
Dendrites
Keratinocytes
Tanning
UVR protection
Same number of melanocytes
Albino
Vitiligo
Freckles
Liver spots
Skin colour evolution
Dark skin ancestry
Solar radiation
Tropics
Sub-tropics
Temperate regions
Dark-skinned people
Light-skinned people
Evolution of skin colour
Cancers
Basal cell carcinoma
Squamous cell carcinoma
Melanomas
Reproductive age
Aesthetic and recreational sunning
Tanning

Vacationing
Folate
Vitamin B9
Leafy vegetables
Nucleic acid synthesis
Neurotransmitter production
Folate deficiencies
Neural tube defects
Anencephaly
Spina bifida
Folic acid supplements
Higher incidence in light skinned mothers
Higher incidence in summer pregnancies
Evolution of light skin
Vitamin D3
Cholecalciferol
Formed in skin
UVB radiation
Ca and P uptake
Bone formation
Rickets
Cancers
Immunity
Brain function
UVB solar radiation
Zenith angle
Long-wave radiation
Short-wave radiation
Atmospheric filter
Vitamin D deficiency
Vitamin D-rich foods
Northern indigenous diets
Ozone layer
Stratosphere
Troposphere
UVA
UVB
UVC
Formation of ozone
Binary oxygen molecule
Elemental oxygen
Chlorofluorocarbons
CFCs
Ozone depleting chemicals

Chlorine atoms
Ozone destruction
Ozone hole
Polar regions
Global atmospheric currents
Increased skin cancers
Melanomas
Non-melanomas
Death rates
Cancers by region
Cancers by skin colour
Montreal protocol
Banning production
Phase-out use
Ozone layer regeneration
Skin protection
Shading
sunscreens