Town Planning and the Sun

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Vitamin D Deficiency is Endemic

• We get 90 per cent of our vitamin D from the sun

• We now spend 90 percent of our time indoors - at low light levels
Clinical Depression

- 1996 - Depressed patients recover more quickly in sunlit wards than in dimly lit wards

- 2005 - Light therapy is as effective as medication for seasonal and non-seasonal depression

- By 2020, severe depression will be second only to cardiovascular disease as the largest cause of death and disability
1998 - Deaths are more frequent in sunless north-facing rooms than amongst patients in sunlit rooms
Neonatal Jaundice

• Sunbathing is a traditional remedy for jaundice

• 1956 - Rediscovered at the Rochford Hospital

• 1980 - Reducing sunlight levels in a ward increased the incidence of jaundice
Sunlight and Pain Relief

• 2004 - Spinal fusion patients need less medication in sunlit wards
Drug Resistance

- Hospital Acquired Infections are a leading cause of death – MRSA, VRE, C Difficile

- X-TB, community acquired MRSA and Avian Flu

- Sunlit wards have fewer bacteria in them than dark wards
Recent Findings

• New Photoreceptor in the Eye

• Sunlight and Serotonin Levels

• Light Therapy as Effective as Medication in Depression

• The Sun Drives Circadian Rhythms
Conclusions

• Towns used to be planned for direct sunlight in order to overcome health problems

• We need light at therapeutic levels
Solar Design

Where the sun does not go
the doctor does