## How to get a safe dose of Sunlight for optimal Vitamin D synthesis

Up until recently, medical science emphasized mostly on the harmful effects of sunlight on the skin and eyes. The recent research has shown that UV light of the sun has many beneficial effects on the body. The key is to take sunlight safely in appropriate amounts. Healthy tips for safe sunlight therapy:

- For one hour around the rising and setting sun, there is no UV light. At this time, one can safely gaze the sun for 5-10 minutes to promote hormonal balance, vigor/ vitality, and boost memory.
- A UV light of the sun is most intense during the midday, so that is not an ideal time to sunbath for vitamin D, despite protection with sunblock creams and sunscreens.
- For Vitamin D synthesis, UV light of the sun is in the safe range, one hour after sunrise between 7 AM to 10 AM.
- Heating and redness of the skin is a sign that exposure to sunlight is too intense, and one must stop further exposure.
- Global burden of disease due to UV light exposure of sun is only 0.1%; which is relatively benign. In contrast, there is a much more substantial burden of illness due to low exposure of the population to a healthy dose of sunlight. Lack of sun exposure has been linked to many diseases, as outlined above in the benefits section.
- One can never overdose on vitamin D, synthesized naturally in the skin by the sunlight.
- Safe duration of sun exposure at the appropriate time of the day is:

In fair or white skin individuals- 15 to 30 mins

In brown skin individuals -30 to 60 mins

**Very dark individuals** require 5-6 times longer sun exposure for optimal vitamin D synthesis in the skin.

- For maximum benefit, up to 40% of the body should be exposed to sun or at least arms, hands, and feet.
- Bulky clothing, sunblock lotions, and very dark pigmented skin (melanin) prevent UV penetration of skin for Vitamin D synthesis.
- Multiple 2-3 short 10-15 min exposures to the sun are more useful for vitamin D synthesis than one prolonged exposure of 60 minutes.
- Sunlight exposure, as outlined above, done 3-4 times a week will do the needful concerning adequate Vitamin D levels for proper bone and overall health.