DREADING WINTER??

Must-Know Hacks for Thriving vs. Nose Diving

Part 1—The Biology of Thriving in Winter
LIGHT EXPOSURE
Nature Approach:
* 30 min./day of bright sun exposure for depression
* 15 min./day for prevention
* 2-4 hours/day if overcast

Light Box Approach:
* 10,000 lux box
* for most, 30 min. w/i one hr. of waking up
* check with doc first

BRIGHT LIGHT THERAPY
Which of these 4 sleep patterns do you most closely fit?

- **Late Shift:**
  - Morning sluggishness w/ difficulty waking up on time
  - Trouble falling asleep—stay up to exhaustion so you can fall asleep
  - Bedtime drifts later and later
  - Able to sleep 10 or more hours and still feel tired
Early Shift:

- Fall asleep easily, but wake up way too early
- Unable to go back to sleep after awakening
- Most common pattern in clinical depression

Which of these 4 sleep patterns do you most closely fit?
Fragmented sleep:

- Wake up frequently throughout the night
- No obvious time pattern to the awakenings

Which of these 4 sleep patterns do you most closely fit?
WHICH OF THESE 4 SLEEP PATTERNS DO YOU MOST CLOSELY FIT?

- Healthy sleep:
  - Fall asleep easily
  - Stay asleep easily
  - Get up in the morning easily
LATE SHIFTERS:

*30 min. of bright light exposure w/i 1 hour of wake up at approx the same time each day

*If no improvement, extend to one hour or get another half-hour in the late afternoon with box twice as far away

EARLY SHIFTERS:

*30 min. of bright light exposure in the early evening, approx 5 hours before bedtime

*Avoid morning bright light exposure via sunglasses.

*If no improvement, shift to a half-hour later for 3 days and keep pushing time back 30 min. until no longer waking up too early (but not within two hours of bedtime)

*If needed, extend exposure time to an hour for a few weeks
FRAG SLEEPERS:

*30 min. of bright light exposure for 2 weeks ½ - 1 hour after wake up at approx. the same time each day.

*If no improvement, extend morning exposure to one hour.

HEALTHY SLEEPERS:

*15 min. of bright light exposure in the morning, ½ - 2 hours after wake up.

*If you have depression, do 30 min. exposure.

*If no improvement after 2 weeks, extend exposure to 60 min.

For all types of sleepers, once sleep quality improves, reduce duration by 5 min. per day to maintenance does of 15 min.
BRIGHT LIGHT THERAPY MAY NOT BE FOR THOSE WHO HAVE...

*a serious eye disorder
*extreme light sensitivity
*bipolar disorder
*seizure disorder
*diabetes

*Always check with your doctor before use!
SIDE EFFECTS:

*usually...NONE!

*rarely...
- eye irritation
- headache
- mild nausea the first few times (move box further away)
- serotonin syndrome
- shift body clock too far (can adjust)
VITAMIN D

*Hormone that on average, is at perilously low blood levels (<15mg/mL when 50-80 is optimal) in depressed patients

*Over ½ the US population is deficient by end of winter

*Supplementation lifts mood, sometimes even in a single megadose (10,000iu)

*Fights depression via regulating gene function in the brain and other vital organ systems and also has powerful anti-inflammatory effects
Supplementation:
* 4000iu/day for up to 3 mo. for those deficient
* too much can throw off calcium balance
* if depressed, consider 10,000iu/day with doc supervision and regular monitoring

Sun Exposure:
* body converts cholesterol to Vit D with a little sun
* in US, May-Aug, 10-15 min/day between 11-3 (no sunscreen; arms and face exposed)
* March, Apr, Sept, & Oct, 20-30 min/day
* during Nov-Feb, supplement
* elevated risk of skin cancer—DON’T SUNBURN!

TWO APPROACHES