



Light pollution messes with our hormones

I just saw another article about how the blue light emitted from computer screens, ipads and other electronics is impairing our ability to sleep, so I thought I'd repost this oldie but goodie.

I just finished reading the most fascinating book called [Lights Out: Sleep, Sugar, and Survival](#) by Wiley and Formby, which discusses how light pollution is damaging the health of animals and humans alike.

You may have heard how the frogs and toads have been disappearing from swamps near lit soccer fields. It has also been documented that during solar eclipses, animals go to sleep, thinking it is night time.

When you return to nature by going camping, have you noticed how you tend to crawl into the sleeping bag soon after it is dark, as there isn't much else to do when you can't see anything.

We too, are beings that evolved living by the rules of nature, and to be healthy, we still need to live that way. It is not that long ago that the lights were turned on in our cities, and our physiology has not yet adapted to this new reality.

Our bodies work in complex system of feedback loops that act like checks and balances. When systems get out of balance, our bodies don't function optimally physically or psychologically.

Today's modern lifestyle means we can keep the lights on all night, sugar is always available to us to eat, and things like sitting in traffic jams can cause our stress hormones to go through the roof, so hormonally most of us are WAY out of balance.

Just like the frogs, every cell in our body is light sensitive, and hormones are activated or deactivated and neurotransmitters such as serotonin and dopamine are released daily according to the light or lack of light sensed by our cells.

The hormones that depend on a lack of light to function tend to be our "rest and repair" hormones, and the hormones that are activated by light tend to be the "coping with stress" hormones.

When we stay up too late at night with the lights on, long after the sun has gone down, we don't get enough hours of tissue repair and immunity building. And on the flip side, with the extended hours we spend in the light, the stress hormones that are supposed to be active during the day only, wind up working overtime.

There is no balance in the daily cycle between the day hormones like cortisol, insulin, and the night hormones like the antioxidant melatonin and the immune builder, prolactin. So we are stressed and tired, in a weakened state with poor immunity, and therefore we are sitting ducks for sickness and disease.

And when any hormone is overly elevated for long periods of time the receptors that take in that hormone become resistant, which leads directly health problems.

The example I gave a couple of weeks ago was insulin resistance, which leads to type 2 diabetes. In this case, treating the high blood sugar by giving insulin is not helpful, as the problem is not the lack of insulin, but rather the lack of sensitivity of the receptors.

Balancing the hormones through adequate sleep, darkness time, and eating foods that do not overly raise blood-sugar levels would be a more successful approach.

The western medicine approach to dealing with the hormones that are too low, would be to supplement. Taking melatonin supplements (our night time repair hormone) each

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Many resources are provided to help you succeed. Here are what people are saying that took the course:

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Hi Vreni, I just completed your course on [why the food guides are wrong](#).....it was fabulous! Although I have heard this information many times before and have even conducted mini-workshops on it with my clients, you really put the information together beautifully, making it even easier to explain to people."
Manuela Soares

evening would unfortunately eventually result in our pineal gland shrinking and our body being unable to produce its own melatonin.

Dimming the lights and wearing rose-coloured glasses in the evening can increase melatonin production, but the bottom line is to get the critically important hormone balancing as well as the tissue repair and immune improvement, we need to get to bed in complete darkness at a reasonable hour, such as 10pm.

Any light leaks will shut down melatonin, which in turn, will shut down prolactin. In the summer when the light is long, we can stay up a little longer, but once the sun goes down, bed should soon follow.

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"Hi, Vreni. I loved the course and would not change it one bit. I found it very easy to follow and I learned a lot!!! I found the price just right. You covered a lot in a short time."
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"I was going to email you to tell you how much I enjoyed the course, but you're just too fast for me. You've done a great job of making the information clear yet concise and easy to follow. And I'm so glad you're telling people one size does not fit all. I like that you've included the rules as a separate document."
Rebecca V.

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