

WEBVTT Kind: captions Language: en

00:00:00.000 --> 00:00:02.850 - Hi, my name is Andre Zinchuk, and today we're gonna talk

00:00:02.850 --> 00:00:06.900 about the importance of sleep and what happens to our brain

00:00:06.900 --> 00:00:09.600 and our emotions when we don't get enough of it.

00:00:09.600 --> 00:00:13.140 And then, in cases where you can't get enough sleep

00:00:13.140 --> 00:00:15.300 for a short period of time, I'm gonna give you

00:00:15.300 --> 00:00:19.800 some strategies that you can use to help go through the day

00:00:19.800 --> 00:00:21.993 with as minimal disruption as possible.

00:00:25.140 --> 00:00:28.170 Every hour of sleep is like money in the bank,

00:00:28.170 --> 00:00:32.580 and so lack of sleep contributes to a lot of dysfunction.

00:00:32.580 --> 00:00:35.220 And because sleep is linked to almost every function

00:00:35.220 --> 00:00:37.860 of our body, from in the immune system to our

00:00:37.860 --> 00:00:41.430 neurocognitive system, it really has broad implications,

00:00:41.430 --> 00:00:44.820 and so we feel this most when it comes to our brain

00:00:44.820 --> 00:00:46.530 and how we interact with the world.

00:00:46.530 --> 00:00:48.480 A single night of sleep deprivation

00:00:48.480 --> 00:00:51.090 can impact our memory and our attention,

00:00:51.090 --> 00:00:53.640 and moreover, it can even create false memories.

00:00:53.640 --> 00:00:55.590 And so one of the easiest things to measure

00:00:55.590 --> 00:00:58.260 is the reaction time to specific stimulus,

00:00:58.260 --> 00:01:02.850 and so we know that people tend to make A, longer decisions,

00:01:02.850 --> 00:01:05.763 and B, those decisions tend to be more incorrect.

00:01:08.910 --> 00:01:10.440 But it's not just thinking that's affected

00:01:10.440 --> 00:01:12.660 by lack of sleep, it's also our emotions.

00:01:12.660 --> 00:01:14.220 As we all know, when we're sleep deprived,

00:01:14.220 --> 00:01:17.250 we tend to be more irritable and tend to feel sleepy,

00:01:17.250 --> 00:01:19.020 and so those two symptoms, over the long haul,

00:01:19.020 --> 00:01:21.660 can lead to things like depression and anxiety.

00:01:21.660 --> 00:01:25.560 And on top of this, we, when we are sleep deprived,

00:01:25.560 --> 00:01:27.870 have a hard time reading other people's emotions,

00:01:27.870 --> 00:01:29.880 so we have a harder time recognizing

00:01:29.880 --> 00:01:31.290 whether someone is stressed or not,

00:01:31.290 --> 00:01:33.030 whether someone's excited or not.

00:01:33.030 --> 00:01:35.460 And so all those things tend to impact our ability

00:01:35.460 --> 00:01:38.260 to interact with the world in a healthy, meaningful way.

00:01:40.830 --> 00:01:43.200 Similar to analogy of money in the bank,

00:01:43.200 --> 00:01:47.070 every day of sleep deprivation is like compounding interest

00:01:47.070 --> 00:01:49.860 on the loan that you took, and so the effects

00:01:49.860 --> 00:01:51.210 of sleep deprivation build up.

00:01:51.210 --> 00:01:54.120 So for example, if you take 20, 30 year old individuals

00:01:54.120 --> 00:01:57.210 and deprive them of sleep for, let's say, four to six hours

00:01:57.210 --> 00:02:00.480 a night and you do this for 14 days, what you'll notice

00:02:00.480 --> 00:02:03.720 is that with each single day of sleep deprivation,

00:02:03.720 --> 00:02:06.090 their reaction times get worse, their memory gets worse,

00:02:06.090 --> 00:02:09.300 their ability to do critical thinking gets worse,

00:02:09.300 --> 00:02:12.690 and after about seven days of sleep deprivation

00:02:12.690 --> 00:02:16.620 for four hours, it's kind of equivalent to not having slept

00:02:16.620 --> 00:02:17.883 for two days in a row.

00:02:20.670 --> 00:02:23.790 Turns out that what we perceive as irritability,

00:02:23.790 --> 00:02:27.090 lack of concentration, and other symptoms tends to actually

00:02:27.090 --> 00:02:29.520 level out after a few days of sleep deprivation.
00:02:29.520 --> 00:02:31.440 We sort of adapt to it.
00:02:31.440 --> 00:02:33.960 But if you actually do objective testing
00:02:33.960 --> 00:02:36.960 on performance and attention and reaction speed,
00:02:36.960 --> 00:02:39.813 those decrements continue to decline over time.
00:02:43.620 --> 00:02:47.100 For situations with short period sleep deprivation,
00:02:47.100 --> 00:02:50.070 maybe one or two nights where you can't get
optimal sleep,
00:02:50.070 --> 00:02:51.810 there are a few strategies that you can do.
00:02:51.810 --> 00:02:54.150 Number one is be be kind to yourself.
00:02:54.150 --> 00:02:56.880 Don't get frustrated that you're not getting sleep.
00:02:56.880 --> 00:02:58.980 Number two is give yourself an opportunity
00:02:58.980 --> 00:03:00.669 to recover from sleep.
00:03:00.669 --> 00:03:03.720 Number three is take a cat nap.
00:03:03.720 --> 00:03:06.240 20 to 30 minutes can really go a long way
00:03:06.240 --> 00:03:08.460 to help you feel more refreshed during the day.
00:03:08.460 --> 00:03:11.040 And other strategies that can help you are being
exposed
00:03:11.040 --> 00:03:14.730 to light during the day, using caffeine at strategic
times,
00:03:14.730 --> 00:03:16.980 especially before 2 or 3:00 PM,
00:03:16.980 --> 00:03:19.380 and then also exercise and some yoga,
00:03:19.380 --> 00:03:21.540 mindfulness practices that can help us maintain
00:03:21.540 --> 00:03:22.790 alertness during the day.
00:03:24.480 --> 00:03:27.000 So what caffeine does is it blocks activity
00:03:27.000 --> 00:03:30.210 of something called adenosine, and adenosine
00:03:30.210 --> 00:03:35.040 is a body molecule that controls sleep propensity.
00:03:35.040 --> 00:03:37.470 So meaning, do we wanna sleep or do we not?
00:03:37.470 --> 00:03:39.120 And the way I think about it is sort of like,
00:03:39.120 --> 00:03:41.280 if you have an hourglass of sand,
00:03:41.280 --> 00:03:43.860 and the sand in the hourglass is adenosine.

00:03:43.860 --> 00:03:47.220 So when we wake up, the hourglass is flipped upside down

00:03:47.220 --> 00:03:50.190 and this adenosine starts to trickle down into our body

00:03:50.190 --> 00:03:53.130 and our brain to create our need for sleep.

00:03:53.130 --> 00:03:56.250 And so by the end of the night, all of that sand

00:03:56.250 --> 00:03:57.450 is at the bottom of the hourglass

00:03:57.450 --> 00:03:59.730 and we feel like we have to go to sleep.

00:03:59.730 --> 00:04:02.640 And so what caffeine does it actually blocks the activity

00:04:02.640 --> 00:04:05.520 of this adenosine molecule, and so it prevents us,

00:04:05.520 --> 00:04:08.400 for a short period of time, from feeling as sleepy

00:04:08.400 --> 00:04:10.290 as we would be otherwise.

00:04:10.290 --> 00:04:13.050 And so that's how it works, and if we use it strategically

00:04:13.050 --> 00:04:15.810 during the time that we feel most sleepy during the day,

00:04:15.810 --> 00:04:17.520 it can help us stay awake.

00:04:17.520 --> 00:04:19.260 Now, just like anything else in this world,

00:04:19.260 --> 00:04:21.330 there's nothing free, and caffeine can have

00:04:21.330 --> 00:04:23.640 some side effects, and probably the most common one

00:04:23.640 --> 00:04:26.370 is using too much of it at the wrong time.

00:04:26.370 --> 00:04:29.748 And so if we drink caffeine after 3 or 4:00 PM,

00:04:29.748 --> 00:04:32.910 it can actually delay our ability to fall asleep

00:04:32.910 --> 00:04:35.100 on the night of the recovery.

00:04:35.100 --> 00:04:38.880 And so for that reason, we don't recommend use of caffeine

00:04:38.880 --> 00:04:41.580 after 2 or 3:00 PM, and if you are gonna use it,

00:04:41.580 --> 00:04:44.888 use somewhere between 150 to 300 milligrams of caffeine.

00:04:44.888 --> 00:04:46.890 So that would be a regular coffee,

00:04:46.890 --> 00:04:50.353 or maybe a coffee and a half in a 12 ounce cup.

00:04:50.353 --> 00:04:53.190 In addition, for some people, caffeine is gonna be
00:04:53.190 --> 00:04:55.800 hard to handle, because caffeine is a stimulant,
00:04:55.800 --> 00:04:59.100 and also it stimulates heart rate and can promote
anxiety,
00:04:59.100 --> 00:05:00.750 and so you really wanna make sure you start
00:05:00.750 --> 00:05:03.400 with a lower dosage before moving on to higher
doses.
00:05:06.960 --> 00:05:09.690 So the bottom line is that sleep is really important,
00:05:09.690 --> 00:05:12.510 and when we get less than seven hours of sleep on
average
00:05:12.510 --> 00:05:16.470 per night for an average human, we tend to have
consequences
00:05:16.470 --> 00:05:20.220 for how we think and how we react to people
around us.
00:05:20.220 --> 00:05:23.850 And so there are some strategies for dealing with
that,
00:05:23.850 --> 00:05:25.890 and if you have chronic sleep deprivation,
00:05:25.890 --> 00:05:28.050 I would strongly encourage you to talk to your
doctor
00:05:28.050 --> 00:05:30.650 or your sleep specialist to help you deal with that.