

**EPISODE 20**

[INTRODUCTION]

**00:06**

**ANNOUNCER:** If you're struggling with your vitality, energy, mood, focus, or sleep, this podcast is for you. Your host, Dr. Ann Tsung, ER doctor, and aerospace flight surgeon, will help you reach for the stars and remove the barriers or blockades that have been holding you back from living your best life. If you've been challenged by your health, relationships, or productivity, then it's time for a breakthrough. So, here's your host, Dr. Ann Tsung.

**00:40**

Hello, and welcome to It's Not Rocket Science Show. I'm your host, Dr. Ann Tsung. Do you travel across time zones frequently, or perhaps you're a shift worker who is constantly switching from days to nights, maybe evening graveyard shift all the time? And when I work in the ER and then ICU, I'm shifting all the time. Or when I travel to Russia for work and coming back, when we go east it's so much harder to adjust to the time zone than versus when we are going west – going from New York to LA – it's a lot easier that way. And that takes us a few days, even when we're shifting from days to nights like 12-hour shifts to even recover. And we feel like it takes us a whole entire day to recover. So, I have experienced all of those issues with recovery. And I want to share with you some of the items, the tips and habits I found to be very, very useful for either jetlag or to help sleep shift when I need to shift very, very quickly for work.

**01:44**

And we're going to be discussing the cost of not shifting effectively, and some of the tactics on how to shift and regarding the effects of lighting to help you shift, the gut circadian rhythm, your nutrition, and recovery. So, let's go ahead and think about how much it's costing us to do this shift work, and if we

don't shift adequately. And the jetlag, if you're traveling, what is the cost of jetlag, you can say that, you know, in terms of working, if you're in the healthcare field, that the cost of not shifting adequately, is that you're tired. Patient Care suffers, your response time suffers, you're on the computer trying to do things, but your brain is just not catching up and you're thinking to yourself, "What am I doing next?" and it takes you a few moments to get your attention, your focus back, it's really, really hard to focus. And so, your productivity suffers, patient safety, perhaps, is an issue as well, it's huge. And if you are traveling for work, or traveling for leisure, if it takes you a few days to even recover to get in sync with the time zone there, the money that you have spent to travel there goes to waste for a few days, you can't do anything, you can't have fun. Or if you're traveling for work, for a meeting, you may not be as effective at the meetings or at work, essentially, your productivity goes down, you decrease the time that you get to spend with your loved ones or during vacation. Or perhaps if you're doing shift work, and you come back from a nice shift, and you have to switch your days, those of you who do shift work know that it takes you an entire day to just shift back to be normal, maybe even a few days just to be normal. But definitely that first day, you can't really enjoy your time, your weekends off. So, it's a huge, huge cost. And because of the cost, that's why it really gives us a sense of motivation and drive to do everything we can, every hack, every habit change we can in order to optimize this process if this is what we have to do for work.

**04:00**

And number one thing I want to share with you is how to shift. So, if your schedule currently is shifting backwards instead of forwards. So, what that means is that there's the morning shift, perhaps and then there's the evening shift, and then there's the overnight graveyard shift. So, if currently, your schedule is scheduling you say, a week of morning, and then the following week is a week of graveyard. And then the following week is a week of evening. So, you're kind of going backwards and shifting early and earlier. That is so much harder than shifting forward or a delay essentially. So, we get this because essentially when we shift to backwards, shifting earlier, is that every time we're trying to shift, we're going traveling from LA to New York, and then you know that every time you have to wake up earlier and earlier and earlier and definitely it makes it harder. If you are doing shift work, then it will be useful for you to suggest to your superiors or if you're in control of making the schedule to shift forward or delay it instead. So, what that means is that you can do a week of morning, and then the following week you do a week of evening, and then the following [week], you do a week of overnights.

**05:21**

So, it's much easier for us to kind of delay the time that we sleep. So, it's a similar concept that we're basically shifting, when we're like we're flying from New York to LA. So, we have more time, it's easier for our body. So, that's the most important thing that you can do right now is to shift board. And to really, if you're not in control of this type of scheduling, then push for this with your scheduler, because it's the most effective way that can kind of help you if you're in this long term. Now, if you're traveling, that's a little difficult, and you may not be in control of it. So, you're just going to have to do all the other hacks.

**06:05**

So, number two is light stimulation. So, light stimulation has the most effective variable in terms of circadian and treatments. So, what that means is that your exposure to light to your retina will help you shift depending on the timing of your exposure to light. So, I think we have discussed the blue-blocking glasses before. This is essential for shift workers – essential. And even people who travel across time zones because, say, I am working nights, and when I get out, typically the sun is really, really bright. And if I want to go to sleep early, then I put on my blue blockers actually sometimes an hour before I get off shift because in the hospital, there are bright LEDs throughout the hospital. So, I start putting on my blue-blockers an hour before shift and then continuing on. When I leave the hospital, I make sure I never get exposed to blue light when I'm getting off the night shift so that when you get exposed to blue light it sends a signal to your brain that you don't have to produce as much melatonin, your melatonin production decreases. And that definitely affects your sleep.

I think a lot of times when people get off the night shift, they don't wear the blue blockers. That's why it takes them a while for them to get to bed at like 10 or 11 am. And that doesn't really give you a lot of time to sleep. If you're working, say your shift at 7 am to 7 pm or 7 pm to 7 am. If you're going to bed at 10 or 11 am, it really only gives you six or seven hours of sleep and you have to rush to work. So, you don't have time to work out or do anything. And typically, what I do, I put on the blue blocker glasses get off at 7:30. Take a quick shower, and I minimize any amount of light I'm exposed to at home I don't turn on any light, all the blinds are closed. And I am typically asleep by 8 am. And I can sleep typically for eight to nine hours.

Now if I am just beginning to shift, then I do need some help of what's called Alteril. This is what I take. It's like an herbal supplement that is mixed in with melatonin that you can find at CVS or Walgreens but there are other brands out there that you can try that is not prescription sleep medication. I've found that if I take prescription sleep medication, I actually don't get quality deep sleep it gets me to sleep. But it's not real quality sleep. It's almost like taking Benadryl you wake up and you still have this Benadryl hangover, it's not restorative sleep. So, what I do if I am switching from days to nights, I would, essentially, take Alteril when I get off in the morning, and I would typically take one or two and it helps me to stay asleep throughout the night until well, daytime, but it will be my night until about four or five and actually, there's restorative sleep.

**09:06**

And so, what if you're switching from nights to days? Now if you're switching from nights to days, it would help that, of course, you get exposed to blue light, or sunlight is the best way. And then you just stay up again all the way until it's actually you're ready to sleep. So, what that means is like when you get off, then expose yourself to blue light that will help you stay up as long as you can. Perhaps you need to go to bed at a six or 7 pm so that you can switch days again. So, that is the light exposure piece. It's critically important to get blue blocking glasses. You can find that on Amazon and it doesn't have to be expensive. There are ones online for \$12 and it really, really will help you and train you to the time zone of your destination country or your next shift.

**10:01**

Now, the third thing I want to talk about is the circadian rhythm of your gut. It's critically important as well to notice the timing of when you eat will affect your quality of sleep. So, there are different scenarios. First, if you are going somewhere, it depends, if you're going somewhere where, for a very short period of time, it takes you probably, you know, one day to shift, one hour of time zone difference. So, if you're let's just say if you're traveling to China, it's a 12-hour difference, it might take you over a week to shift to the timing of the light, and also the timing of when you eat, your gut will take time to shift, too. And, essentially, your digestive process – when you digest, when you're supposed to sleep – that all have a circadian rhythm. And so, it will take you over a week or so. So, what that means is that it depends on how long you're traveling. If you're only going there for two

days, there's no point to shift. If I'm only working over for two nights, there's no point to shift my gut with the timing of when I eat.

So, if I'm working two overnights, I keep my daytime eating schedule. So, what that means typically, I will eat my dinner around five or 6 pm. And I stick to that schedule. So, when I am on night shift, my last meal is at five or 6 pm before I go in at 7 pm. And I make sure I eat really nutritious food, lots of live food, not dead food. Lots of live food, like green, purple, something raw like salad. Food that looks vibrant and alive. I think we know what live food is, you know, and I make sure I get a lot of healthy fats – butter, not grass-fed butter, nuts, and avocado, olive oil, olives – a ton of fat that will (inaudible) me, usually (inaudible) me throughout the whole night. And I make sure that I don't eat or snack anything during the middle of the night. Because at that time, my body is not really used to digesting during that time anyway. And again, if you eat close to your bedtime, then your sleep is not going to be quality sleep. I know a lot of people when they get off night shift in the morning at 7 am. They like to go for breakfast, and then they go straight to sleep right away. We've talked about how digestion if your blood is going to your intestine for digesting, it can't flow over to your muscles or your brain as well for the restorative process that needs a detoxification process that sleep does for you. So, when I am shifting just very short like two or three days, I do not shift the timing of when I eat. I keep to the same time. I will, when I'm going on shift, my routine is that I will usually make a bulletproof matcha tea which is my go-to now that has low amount of caffeine, matcha has something called L theanine. So, it's a relaxed and calms you down, too. There's no jitteriness at all whatsoever. And I make it bulletproof. So, what that means is I add grass-fed butter in it, I add medium chain triglyceride and so it's full of fat, healthy fat, blended all together. And usually that is probably holds me over maybe the first two to four hours of the shift. And so, there's no more caffeine, any sort of caffeine, it has very low amount of caffeine anyway, and I don't drink coffee, I don't drink soda.

And then I also would get green drinks, or green powder to help me through the shift. If, especially if it's my first overnight I'm shifting when I'm really tired. Because the next thing, really, I wanted to talk about is your nutrition, what you eat, and the supplements. You know, when we go through jetlag when we go through overnight, we often have increase in cortisol, increase in stress, increase like mental stress as well. It's almost like we're putting our body through a huge workout, we're walking around all the time and our mind through a huge mental stress. So, it makes sense that we need to

replenish our body with the right nutrients so that we can, you know, have the energy to last throughout our shift and to recover as well. And often see that what we put in our body, especially during a night shift is not energizing to us. And I firmly believe that we are what we eat. And food is information because I listened to Dr. Mark Hyman and I completely agree with him. Food is information. Food can help transform the genes that are expressed which makes the protein. I really firmly believe that you need these antioxidants. You need these vitamins to function. It makes sense. But yeah, during night shift, we order midnight cookies, we order pizza because those are the only things available. We don't have time to cook, we just order sandwiches. And those high-carb meals put us into food coma. In addition to us already, with normal circadian rhythm, we're already feeling low energy and circadian rhythm was down from two to 4 am timeframe. So, it's like a double whammy almost. That's why, for me, I've been going keto for probably six plus years or so where I eat 50 to 70% fat because I don't get that food coma at all. And I make sure I eat food that energizes me, instead of bringing me down, your body will know what it needs, you can tell if the food makes you sleepy, it's not really giving you the energy that you need. So, I currently experienced food coma very, very rarely. And it's typically after rice noodles, if there's rice, or if there's potatoes, anything that's you know, high glycemic index or high carb, but it happens to me very, very rarely now. So sometimes I would bring green powder that has all the vitamins and I would drink that when I know I'm about to hit a slump, so about 12 am or so or 1 am. And typically, that will be the last time I take in the anything that may need to be digested essentially, or I will buy fresh green juice from local juicers before the shift. And I would drink that and there will be no sugar in the green drink. I don't put, there are no fruits in it typically, then that will hold me over throughout the rest of the night. So that is what I do.

And there are other multivitamins that you can take as pills. I also take magnesium (inaudible), which goes straight to your blood brain barrier that helps your brain. Magnesium is such an important micronutrients that helps in all of your cellular processes. And I essentially treat it like a workout, I put my body through mental and physical stress, and I do everything I can in my power to recover my body like athletes, that's what they do. And they recover, they recover a nutrient they eat something that's nutritious, it's the same thing. And I really believe that we need to treat our shifts, or our work the same way if you have a lot of mental stress or physical stress when you are at work or when you need to be productive. And the last thing I want to focus on is that if you have a stretch of days or nights that I really want to focus on recovery, it takes a few days to recover. Sometimes you feel jet lag

for a long time. And that is really when you need to get adequate sleep, that's number one sleep, it's what's going to help you recover. So don't do anything else. If you can't get adequate sleep. Sleep is number one, at least seven to eight hours. And it's also the quality of your sleep. If you're getting deep sleep and REM sleep then that's fantastic. If all you're getting is light sleep, then it doesn't matter as much. If you're getting light sleep and you're sleeping nine to 10 hours, you will not wake up as restored as you would have. And then I'll tell you one thing regarding sleep is that the half-life of caffeine is six hours. So that means that the caffeine that you're drinking, it will take six hours to metabolize 50% of it. So you really need to stop caffeine, at least nine or 12 hours before bed if you can't help it, and do the sauna if you can, massage, do float therapy, I've discussed the benefits of floating and really, really heavy Epsom salt water. And also, you can try meditation, anything that will kind of calm your mind state from all the stress that you have gone through, especially if you work in the ER, I mean, it is just, it is nonstop throughout the shift. It's really hard work, your cortisol is elevating the entire time. So please treat yourselves to me time, recovery time. Set a day that you are free all day, have nothing on your schedule, I have Sunday as my me day, have nothing on your schedule, and put one item there for you to recover.

**19:25**

So just to summarize some of the items we've discussed, number one, is I want you to think about the cost of you not adjusting well, when you're jet-lagged when you're shift working and shifting. What is the cost? It's the cost of time, productivity, having no energy with your family. And think about the benefit of you making these changes. Visualize what your life could be like if you made these changes. And just pick one thing, starting from your next time you have to shift, and pick one thing that you can change. Oh, there's one item I want to discuss. One last item regarding the timing of your meal. So, if you are going to be shifting for a long time, like two, three weeks or permanently, you're gonna be traveling going to stay there for a month, what I do to help me shift to reduce the jetlag is that actually, I started shifting my eating schedule to match up with my destination. So same thing with shift work, I start shifting my eating schedule, if I'm going to be on night shift for two, three weeks in a row, then I will start shifting a few days before to the night shift schedule. So, you just do like an hour or two at a time and the next day, you do an hour or two at a time, and then you get used to it. And that will shift your GI system to that destination, or that next shift schedule a little bit easier it won't take as long. So that is one tip that I have started trying and I think it's worked very well for me.

**20:59**

And so, to summarize, number one, if you are shifting, your schedule is shifting backwards, or we can say eastwards, then see if you can ask your supervisor or if you're in control of the schedule to change it, so that you're delaying your shifting forward. And the shifting, try not to go back and forth, back and forth two days at a time three days at a time. If you can help it do at least two weeks, perhaps, but at least two weeks to kind of shift from days and nights. That will be optimal, two to three weeks. But just don't do like two nights, days, two nights, nights, two nights, days, two nights nights. I mean, that is just terrible on your body. And I really feel like your body is gonna get stressed out so much, you're going to age much quicker that way.

**21:50**

And number two, make sure you get blue-blocker glasses. And right before you go to bed, two, three hours before wear those glasses if you're going to be exposed to blue light. But if you need to stay up, take off those glasses and look at sunlight, which is the best way. Number three, the gut, the timing of when you eat. If you're shifting just for two days, and you're coming right back. So, stick to the time of your original time schedule. So, if you're only going to nights for two days, just eat like you would have during the day. So sometimes what I would do, I will wake up pretty late like two, 3 pm. But I will eat once then but very high calorie count. And I will eat one more time at 6 pm, very high calorie count to make my daily calorie. So, I already eat twice a day with intermittent fasting. But this is like a four-hour eating window essentially. So, I can try to keep my eating schedule the same time as days. And if you are shifting for a long time, like you're going to stay on nights for a long time, or you're going to be in that destination country for a long time, then try to shift your eating schedule a few days before to match where you're going, essentially.

**22:56**

Number four is your nutrition, your supplements, make sure the food that you're eating have all the colors of the rainbow that they are alive and not dead. Dead is like brown and dark. And you know what food is alive and what food is dead, essentially, I think you know, eat food that doesn't give you food coma. Typically, high healthy fat, not fried food but because fried food oxidizes the oil and causes more inflammation. So, my typical go-to is avocados, lots of salad, wild fish, olives, olive oil, lots of

grass-fed butter, sometimes eggs. So, it just depends on what you like and if that energizes you. Take supplements during your shift, if you need to bring juice, green powder, magnesium multivitamin, whatever you want. Just start with one at a time and see how you feel. Okay, see if it works well for you. Then the fifth thing is recovery. Once in between shifts in between like a long stretch, when you had time to recover, you really got to give your body the love that it deserves. Love yourself, like your life depended on it. This is a book that I recently read and it's fantastic. And if we put our bodies through the circadian shifting and the stress of work, our body deserves our love, our brain deserves our love. And do meditation, any sort of sauna, go out and play in any social gathering perhaps, and also floating perhaps that can help you relax, any massage. Okay?

**24:31**

So again, please pick one thing, take one thing that you can change. This is what I always propose, like one micro step that you can change and just try it out and the momentum will propel you forward. You can see how these micro habits stack and you'll see that it can be much different, your life can be much different, your body, your energy can be very, very different compared to before. Thank you so much for your time being with me here today. I'm really, really grateful here. And remember that everything we need is already within us now. Thank you.

**25:07**

**ANNOUNCER:** That's it for today's episode. Head on over to iTunes and subscribe to the show. One lucky listener every single week that posts a review on iTunes will win a chance in the grand prize drawing to win a private VIP Day for a health and life makeover with Dr. Ann Tsung, herself. Then, be sure to head on over to [itsnotrocketscienceshow.com](https://itsnotrocketscienceshow.com) and pick up your free gift from Dr. Tsung. Then, join us on the next episode.

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