

Chasing Life

AUG 2, 2022

Living in a Dream World



Speakers

Sidarta Ribeiro, Dr. Sanjay Gupta, Listener #1, Listener #2, Listener #3, Listener #4, Listener #5, Listener #6

00:00:04

Sidarta Ribeiro

I was surrounded by children, but there was no adult around. In a city, there was fenced and surrounded by barbed wire. It was always rainy. It was always muddy. It was very depressing.

00:00:17

Dr. Sanjay Gupta

That's Sidarta Ribeiro. He's a professor and founder of the Brain Institute at the Federal University of Rio Grande de Norte in Brazil.

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Sidarta Ribeiro

And there was a center house, a stone house, that had cannibal witches inside. And every once in a while we had to all go there and one child had to go inside and it was, everybody would be watching, the boy or the girl would go inside and then go up the stairs. All the lights were off and suddenly in one window we would see lights going on and we'd see the profiles of the witch and the kids and the scream. So it was really, really horrible.

00:00:58

Dr. Sanjay Gupta

The memory that Sidarta is describing sounds terrifying and so vivid, but it's also not real. It was all a dream, a series of bad dreams, actually. They began after his father died, when Sidarta was just five years old.

00:01:13

Sidarta Ribeiro

I developed another dream that was not nearly as negative. It was not a horror movie. It was like a suspense thriller. In this one, I was a detective looking for a mad criminal that was hiding in the airport. And then I had a, I had a male figure that could be my father, it wasn't my father, but he was a tall man with dark hair. And he was helping me. But I was more active than he was. And in the end, I couldn't find the criminal. And I leave the place. And there's like a camera, like a third person point of view that shows where the criminal was all the time, like a spider on the ceiling and I couldn't see him. So that was scary.

00:01:54

Dr. Sanjay Gupta

Sidarta's dreams were so bad, he didn't want to go to sleep anymore. So his mom took him to a psychotherapist who slowly taught him to take control of his nightmares.

00:02:05

Sidarta Ribeiro

And then came a third dream that was like an adventure, like an action movie. I was hunting a tiger. It was a male figure. He was helping me. I was in the jungle. And then at some point, the male figure says, 'I cannot proceed with you. You need to go there alone.' There was an island with the tiger there, and then I go alone. The tiger ambushes me. I jump in the sea, and when I hit the sea, I become lucid. I understand that I am dreaming. And there's a shark there and I'm afraid of the shark. But I decide to swim and I swim next to the shark for some time and I realized it's going to be okay. Once I had that dream, everything stopped. So the dream is very healing.

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Dr. Sanjay Gupta

Maybe your dreams don't feel as intense or as powerful as Sidarta's. But the fact is that dreams are a universal human experience. They can transport us to places we could never visit when we're awake. Places that are full of fear, joy, adventure. But the question has long been, do dreams have any meaning or real purpose or are they just random? And can we use this alternate plane that we visit nightly to our advantage? To help us process what's happening in our waking lives, to inspire creativity, to be more productive? Today, we're going to dove into the magical world of dreaming, and we're going to learn to harness the power of our dream world. So get ready to dream big. I'm Dr. Sanjay Gupta, CNN's chief medical correspondent. It's time to start chasing life. Even if we don't realize it or remember, we all spend a couple of hours a night dreaming. We put a call out on social media and asked you to share some of your strange dreams. And let me tell you, you delivered.

00:04:02

Listener #1

Around the beginning of COVID, I had a dream that I was pulling snakes out of every hole in my body.

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Listener #2

After the Supreme Court ruling on abortion and I had this dream that I had something terminally wrong with me and had kind of opted for some sort of treatment that would end my life sooner.

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Listener #3

My boyfriend and I are currently long distance. Last night I had a dream that he had cheated on me.

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Listener #4

All of my teeth start progressively falling out one by one.

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Listener #5

I was in a work scene and I was wearing a pencil skirt and high heels. Why am I having so many dreams about like, yeah, how I express my gender?

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Listener #6

I am a lucid dreamer and what I always choose to do is fly.

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Sidarta Ribeiro

So dreams are the product of the reactivation of memories. To a large extent, they reflect what's going on in your life. They reflect your fears and desires, your challenges. Nothing is just a dream. A dream is something to be paid attention to, something to be interpreted, something to be shared, because it will influence everybody else. And I think we lost that. And that's why I think we should rescue the art of Dreaming.

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Dr. Sanjay Gupta

That's Siddhartha again, the Brazilian neuroscientist we heard from earlier. He's internationally recognized as a leading expert in the field of memory, sleep and dreaming. He's also author of the book *The Oracle of Night*, which explores the science and history of dreams.

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Sidarta Ribeiro

For example, the night before Julius Caesar's killing, his wife had a very direct dream that he was going to be stabbed by senators and die in a pool of blood and he did. So that's what in antiquity was called the theormatic dream, a dream that is exactly like what's going to happen. But he had a very symbolic dream. He had a dream in which he he started to fly through the clouds. And he met Jupiter. And Jupiter shook his head warmly. Now his dream, meeting with the God of Gods was a dream of divinization, and divinization was something that happened when people died. So it was also about his death.

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Dr. Sanjay Gupta

Sidarta wants us all to understand the significance of dreaming and the important role they play in our lives and in our history.

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Sidarta Ribeiro

People were dreaming all the time to acquire new knowledge, to come up with new ideas, and this was recognized and valued. Dreams are still providing that. The song yesterday from Paul McCartney came from a dream. The periodic table put together by Mendeleev came from a dream. But we do not have in our public discourse a place for dreams anymore. We don't value dreams. We don't share dreams of our family members with our friends, with coworkers. It's actually weird when people start telling a dream, the other people people say, 'Oh my God, you know, this is boring.' And if we don't tell the dream to somebody that cares, it doesn't really matter. And the dreams, they lose their magic. When you tell your dream to somebody that cares, they become more meaningful.

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Dr. Sanjay Gupta

Have human's dreams changed over time?

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Sidarta Ribeiro

In our urban contemporary society that barely remembers any dreams and often shares dreams with no one. People tend to focus on their own experience. Dreams are about the ego, about the person, the dreamer. But in, among Native Americans, for example, among the Yanomami in the northern border between Brazil and Venezuela, in the Amazon, dreams are about the others. So dreams have to do with community building. One argument I've been making the past few years is that the amazing cultural explosion that occurred in the human lineage, if you look what happened in the last 300,000 years in terms of culture, it's just. Unbelievable. It's just amazing. It's happening as we speak. Right? And until, you know, 500 years ago. Dream sharing was actually a strong motor, propelling this cultural accumulation.

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Dr. Sanjay Gupta

That is interesting from an evolutionary standpoint that there was great value, it sounds like, in dreams. I mean, people were able to maybe have better success with inventions, like you say, with the periodic table or discoveries and and creativity. And yet, it does seem like more recently there's this idea that the dreams are more of a interesting sideshow, but maybe not having as much value. You think that there's great value and that value increases if you take the time to share your dream with somebody else, family member or loved one or somebody like that.

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Sidarta Ribeiro

I go a little further even. I think that we are undergoing a paradox in the 21st century, but that may be related to poor sleep and worse dreaming. And the paradox is that on one hand, we feel that we never had so much technological power and knowledge and science has never been so strong. So we can really change things now. We can make things better. On the other hand, most people are feeling despair, they're feeling that there is no future and they are feeling isolated. And I think that we are feeling that way. But I think that one key element of this paradox is that we are abandoning something that really worked for us throughout our evolution, which is to sleep well, dream well, and share that. Those are simple things, and you will see this in every single hunter gatherer society that currently exists. You'll see during the antiquity and in the Middle Ages. It's only in the Eurocentric tradition of science and capitalism, in the last 500 years, that dreams were pushed aside.

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Dr. Sanjay Gupta

That is fascinating. That is I mean, I think you're making a very compelling case for dreams and why we should all dream. I have so many questions about this, but what is the connection between sleep and dreams? And let me ask it this way. Do you have to be well-rested in order to dream?

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Sidarta Ribeiro

This is a really good question because sleep is not a single thing, a monolithic thing. Sleep, it has different phases. When you have a full night of sleep, you go through four or five full cycles of sleep. In each cycle you want to go four different states. State one and two are very brief. This is when we are dozing and then we start dreaming. But those dreams and little clips they're not really full fledged dreams. Then we go into phase three, this so-called slow wave sleep. When you're in that state, you don't really dream much. People that are woken from that state, they will report some vague thoughts. You know, I need to pay some bills or something like that, but not a movie, not something with a strong visual impression. Then we go into rapid eye movement. Sleep, REM sleep. And this is when our brains become really, really engaged in the reactivation of memories. And this reactivation of memories produces an internal reality. We have access to an inner world of brain representations of mental creatures, which is something that was tremendously important throughout our history and prehistory probably. But in our contemporary society, it's pretty much out of the map. So people that are chronically sleep deprived, they're getting a lot of damage, emotional damage, cognitive damage and actually health damage from not having proper REM sleep every night.

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Dr. Sanjay Gupta

Sounds a little bit like when you are dreaming you're still having these thoughts, but they may not be as inhibited and you may see things or connect things that you otherwise wouldn't do.

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Sidarta Ribeiro

Absolutely. There are reasons that are very concrete and specific for that disinhibition. One is the nearly complete deactivation of the prefrontal cortex in some portions of the frontal part of the brain that are still active during REM sleep. But most of the prefrontal cortex is deactivated, and this is the part of the brain that produces censorship that tells us, don't do this, that inhibits behaviors. That is important for decision making. When this is deactivated, we basically accept everything. We become tolerant. So you see, a purple giraffe, you say, 'Okay, it's purple giraffe. Fine. Keep dreaming.' And there's another thing going on, which is during REM sleep, there is no release of norepinephrine, one very important neurotransmitter for neuronal communication and for memory formation. So when you're-, when you have a lot of norepinephrine, for example, when you are alert and paying attention and stressed, you know, you will only do one thing and all the other things won't be done. It's like a decision making that is totally biased in one direction. When you don't have norepinephrine, it's the other way around. Unlikely pathways become more likely. What dreams allow us to do is to probe things that may be a little crazy, but maybe they work. Maybe they're good strategies, maybe they're good behaviors. So it's a way to stimulate potential futures.

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Dr. Sanjay Gupta

Not having adequate REM sleep means you're not as likely to have these sort of more full dreams, these movie dreams, as you describe them. And there is a health detriment to that. I mean, we know that there's health detriments to not getting enough sleep. I think, as you say, that that research has been more established over time. What about people who are dream deprived?

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Sidarta Ribeiro

So people that are deprived of sleep, they start to accumulate cognitive deficits. A lot of what REM sleep does is to reset our emotions. If you had a bad adverse encounter yesterday, it doesn't mean you need to wake up cranky, irritated. But if you are deprived of REM sleep, you will. And this will become a social snowball because you're going to treat other people worse and they will react to that. Now, how much of that is really related to dreaming? I would say this is a frontier of neuroscience at this moment. What we do know is that when you dream of performing a certain task, you become better at that. So that gives a strength to the notion that dreams are simulations of potential behaviors and also of potential outcomes. Like a person that is attacked by a shark will have nightmares about sharks and they will not be very metaphorical in the beginning. It will be very direct. But in the regular life of people that are not homeless or in the middle of the war, we do not have one major problem. We have hundreds, thousands of small problems. So dreams tend to become more like a kaleidoscope.

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Dr. Sanjay Gupta

When we come back, tips from Sidarta and how we can take control of our dreams. That's ahead. After this quick break.

00:14:48

Dr. Sanjay Gupta

And now back to Chasing Life. You know, we talked a lot about the ways dreaming has historically enriched our lives by helping us problem solve, experiment, flex our creative muscles. But there is also a dark side to dreaming. Sidarta was incredibly open with me about the recurring nightmares he faced after the death of his father. So I felt comfortable opening up to him and sharing a nightmare that has followed me for a part of my life. It all started after a very traumatic experience back when I was in medical school.

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Dr. Sanjay Gupta

One day when I was working in the hospital, one of our professors of otolaryngology was seeing patients in his clinic, and one of these patients became extremely angry with what the doc and this doctor I just have to say, in its absolute truth, he was just this amazingly wonderful man, incredible teacher, incredible person, somebody we all aspired to be in our own lives. Anyways, this patient pulled out a gun and shot him point blank in the chest and in the head. And we got this call to come, you know, take him to the operating room and try and save him. And it was it was beyond saving. He was, it was such, such bad injuries. He died and he died while we were operating on him, which was, I mean, just something I will never, ever forget. And it was somebody I knew personally so well. I just spent time with them earlier that day. Over the, over the following weeks and months, I used to have this recurring dream. I was at a an event and there was a big dinner, festive sort of environment. And I don't really understand why I am to make some comments, some remarks at this this dinner. And as I'm making my remarks, I'm not yet concluded. People just start clapping, you know, they start clapping first a little bit slowly, but then more rapidly, more rapidly. They're clapping and they're looking at me and but I'm still speaking and I'm trying to understand what's going on. I look down and I realize that I've been shot.

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Sidarta Ribeiro

Wow.

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Dr. Sanjay Gupta

And and I you know, I don't feel any pain or anything. The only reason I know that I've been shot is because I look down and I see that I have blood and stuff now underneath my shirt. And that's the dream.

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Sidarta Ribeiro

Wow.

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Dr. Sanjay Gupta

That's it. And it and it's I've I've abbreviated it, but it's, it's horrifying. And it happened over and over and over again for maybe a few years of my life.

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Sidarta Ribeiro

Wow. Wow.

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Dr. Sanjay Gupta

Based on everything you've told me. It. I guess this this sort of dream makes sense to you. But what do you what do you make of this?

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Sidarta Ribeiro

I think dreams are probabilistic Oracle. They are a neurobiological process that based on yesterday tries to figure out tomorrow. Once you see a person that was there with you that was, you know, so important. Go, just like this. The rational thing is to say, oh, it could happen to me. And so I think that sense dreams are really reasonable. It's reasonable to have this anxiety. If somebody that was supposed to be totally protected can disappear just like that. It could be you. It could be a colleague. It could be any person.

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Dr. Sanjay Gupta

Is it therapeutic? I mean, your case, your dreams had this story and it was healing. And then you were swimming with the shark and you were not afraid of that shark. And then, you know, you were given this this guidance by this elder in your life to go out on your own. I mean, I mean, this was, this was, these were nightmares for me. I mean, I'd wake up just sweating and and, you know, sometimes screaming. Is there an advantage to that?

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Sidarta Ribeiro

Nightmares evolved because they allow us to anticipate impending threats and change the course of action. But when we are traumatized, the repetitive nightmares are one of the major hallmarks of that and if you are having repetitive nightmares, this condition needs treatment. If you are having the same nightmare over and over again. If I had stayed having the same witch nightmare with, without psychotherapy, I was actually going to be retraumatizing myself. You were reactivating those bad memories. And that's why, as a, as a child, I thought, my mom, I don't want to go to sleep anymore. So I think that if people are having repetitive nightmares that are related to a trauma, sometimes they are not. And it's a mystery. Why is it that you have the same dream throughout life and it's not a nightmare, it's not a trauma. It's those things are more complicated. But when when it's something you understand, like that case, it's totally related to the assassination of your mentor. In that case, it's useful. It's very useful to seek help, try to talk to a psychologist or psychiatrist that can help you navigate away from this condition. Now, one thing I want to stress is that there are multiple ways of navigating out of that, of this maelstrom of negative thoughts. But I prefer those that do not involve medicines involve actually more inner work, more knowledge of our own inner landscape.

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Dr. Sanjay Gupta

I again, I preface everything I'm saying, as with I'm no expert here, but I don't know. They did stop after a while. Those recurring dreams, every now and then, I'll still have some version of that dream. But it, it's felt less traumatizing. And I don't know. I think part of me did not want to forget him. And I feel like I during my waking life, I was so busy, you know, I was a resident, working 100 hours a week, just getting clobbered every day at night. I don't know. Even though it was it was traumatizing, but it was I think in some ways, for me, an opportunity to not forget him. I don't know.

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Sidarta Ribeiro

Huh, I hear you. I hear you. I think we are under the impression that each person is the only inhabitant of that person's mind. This is not so. We have hundreds, thousands of mental creatures that have a degree of autonomy. I actually believe that when we are having dreams, it's like having the doors open at the zoo at nighttime. All the beasts are out. And all these interactions going on, I had dreams with relatives that passed away in which they come to me and say, 'I didn't die. I'm still alive.' So I think these mental creatures, they have a life of their own and they want to be alive.

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Dr. Sanjay Gupta

The way that dreams can become these intricate fantasies is so fascinating to me as someone who is very interested in the brain and its capabilities and this ability as Sidarta put it, to open doors of the zoo at nighttime. Well, that really intrigued me.

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Sidarta Ribeiro

So lucid dreams are dreams in which the dreamer knows that he or she is dreaming, that it's not real, it's not the waking reality, and that therefore it can be changed by the dreamer's will. The dreamer becomes aware there's a dream going on. Then she or he may acquire the ability to shape the characters that show up or the scenario, the setting, or make things that wouldn't be possible in real life, like flying or meeting with dead ancestors or meeting with gods or with whoever. It's interesting that lucid dreams are a tool to mitigate or even get completely cured of repetitive nightmares. So when people are experiencing traumatic nightmares. The nightmares themselves can become more reason for trauma. And one of the things that can be done is to learn to acquire lucidity during dreaming, so as to say, 'Oh, this monster is chasing me, but it's not real. I can dispel it. I can make it disappear and transform this horrible situation into something actually very nice.' And this is something that everybody can learn. This is something that has been known for millennia in the East. And now more and more people are becoming aware that lucid dreaming is one of their ment-, possible mental states, and that it can be mastered.

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Dr. Sanjay Gupta

First of all, just in terms of your sleep in your waking, do you use an alarm clock to wake up and then do you record your dreams as soon as you wake up? How do you conduct yourself?

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Sidarta Ribeiro

I do not use an alarm clock. Of course, on occasion, if I really need to. But I'm trying to live the life in which I sleep early and wake up when I want. I feel the health benefits of that, of waking up slowly in the quiet manner. So I do some yoga and I try to get all the benefits from having a good night of sleep. Because if you have a good night of sleep, but then you wake up like a crazy person and have to run here and there defeats the purpose.

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Dr. Sanjay Gupta

And you record your dreams. Then when you wake up, do you write them down or record them into a tape recorder?

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Sidarta Ribeiro

I write it down, I write them down. Some periods I do it every morning. When I'm more busy, I do it less often. But I have dreams that I collected over the past many decades, and I think it's really useful. Every dream you bring back is a piece of a puzzle. And when you put the puzzle together, it's, it's you. So I think you get more and more insight about the whole picture. Right? If you have many, many of those pieces. If you have a dream diary that extends for weeks, when you consider the collections, you say, 'ah, okay, I can see what's going on.'

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Dr. Sanjay Gupta

My guess is you probably share your dreams regularly with your wife, maybe others?

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Sidarta Ribeiro

Yes. Every morning. And with my children.

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Dr. Sanjay Gupta

And with your children. What is that like? I mean, how has that influenced your relationship with them? I mean, is it sort of this idea that they're getting a greater insight into you as a result of you sharing that?

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Sidarta Ribeiro

I think so. I think it increases the cohesion of the group. So every morning we make a point of bringing this up during breakfast and even, like now they come to us, they already come and say, Oh, I have a dream. You know, they even wait for me to ask. Even when you have a bad dream, if you have a nightmare, this can be quite useful and it can add poetry and it can add perspective, even when it doesn't feel good at the time. But then afterwards it can be quite useful. Tell a quick example. I had a conflict when I was in grad school because one fellow students took the car that I needed to do my research and he didn't tell me and it was not there when I needed. And I was very angry and I was rehearsing during the day when I meet this guy, I'm going to scold him and then at night I had a dream in which I would scold him and he would beat me up badly. He's a huge man, much bigger than me, much stronger. And I hadn't realized that, I was so angry that I hadn't put myself in his shoes and I hadn't really considered the situation. So the next day, when I finally met him, I was polite. I was still angry, but polite, and he was polite as well.

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Dr. Sanjay Gupta

So, I mean, dreams can be used to our advantage in this way, right? They can give us some guidance and some insights that maybe we always had, but we were inhibiting that part of it. And this allows us to sort of see the situation, the story from all these different angles. I'm curious, again, the connection between sleep and dreams is obvious. You've spoken to that. And when we dream, what stage of sleep do you measure your own sleep in any way? I mean, you know, people wear watches and things like that to understand how much deep sleep or REM sleep and all that they're getting, is that beneficial, do you think?

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Sidarta Ribeiro

Yes, I think it's good. I think it helps that I do it sometimes. But I also I have a sleep lab, so I go to my lab and I do experiments on my own.

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Dr. Sanjay Gupta

You have more resources than most people.

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Sidarta Ribeiro

I try. I try my protocols on me first.

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Dr. Sanjay Gupta

Before talking to Sidarta, I never really thought about the possibility that dreams could be such an important part of our lives. And I know many of us probably don't even remember our dreams in the first place. So I asked Sidarta for his advice and how to create a richer dream world. Tip number one: Pay attention to your bedtime routine.

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Sidarta Ribeiro

If we don't learn to switch off the screens at some point early in the night, we are doomed because we will always be willing to see new things, which actually will release norepinephrine, make us more alert. Alcohol at night. It will reduce REM sleep. THC in cannabis. Exercise too much. Exercise at night. Not good. Too much food. So all those things need to be taken care of.

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Dr. Sanjay Gupta

Then once you're in bed and feeling sleepy, approach your dreams with intent.

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Sidarta Ribeiro

Make a point of telling yourself, before you go to sleep, 'I will dream, I will remember. I will report or record and I will share.' So this is like the main things that you need to tell yourself so that you really remember to do this in the morning.

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Dr. Sanjay Gupta

Next, when you wake up in the morning. Take some time to reflect on the night before.

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Sidarta Ribeiro

You need to stay still in bed. If you move around, if you talk to people, switch on the TV, this will completely erase the dream memory. So when you wake up, you don't have a neurochemical environment able to hold on to the memory. So you need to stay still, let the norepinephrine be released, and then slowly, you know, amplify this memory into a full story and bring it back.

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Dr. Sanjay Gupta

And finally, when you're out in the real world, talk about your dreams.

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Sidarta Ribeiro

It is important to, first of all, record the dream and then revisit it, trying to bring up more details as much as possible throughout the day even. And then once this report is sort of concluded that it has brought all the memories that were possible to be fetched from the dream, then it's really interesting to tell that dream to somebody else, somebody that is listening attentively and then slowly go from the actual contents of the dream to its possible meanings to it, the associations that it may bring up. The possible interpretations become richer and possibly more meaningful to the dreamer.

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Dr. Sanjay Gupta

I'm definitely going to be making a few tweaks to my morning routine to leave a little bit more room for processing what happened in my dreams. Normally I just get up and I'm immediately starting my day. Taking those few extra beats to think about what just happened during the night can be well worth it. And I'm also looking forward to sharing this part of my life with my wife and my daughters. I hardly ever remember my dreams, let alone talk about them. That's going to change. Maybe we'll even go around the table and talk about what we experienced, not just the day before, but the night before, over breakfast. Just like Sidarta and his family. Part of this is just another way to know my loved ones better, to understand what is happening in their conscious mind and in their dream world. To be more present with each other, more connected. And it's an opportunity to slow down, to really reflect and recognize another thing that we all have in common. We all dream.

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Dr. Sanjay Gupta

What do you think? You going to write down some of your dreams, maybe share them with your loved ones? Put some of these tips into action. Let us know, record your thoughts as a voice memo and email them to ask Sanjay at CNN dot com, or give us a call at 4703960832 and leave a message. We might even include them on an upcoming episode of the podcast. We'll be back next Tuesday with an episode all about climate anxiety. What is it and what are the ways that it impacts the mental health of young people in particular. Thanks for listening.

00:30:41

Dr. Sanjay Gupta

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