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Dr. Gene Cohen of the GWU Center on Aging, Health and Humanities talks about some exciting discoveries about the mature brain -- among them that as we age, we actually use more of our brains.

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The Mature Mind

COURIC: Dr. Gene Cohen is the director of the Center on Aging Health and Humanities at George Washington University. And also is the author of a new book called "The Mature Mind: The Positive Power of the Aging Brain."

Hi, Dr. Cohen, good morning.

Dr. GENE COHEN ("The Mature Mind"): Hi. It's great to be with you.

COURIC: You know, everyone--sort of the conventional wisdom is that you're mentally on a downward slide after a certain age, that--that your acuity suffers. But you say that, in fact, is not true.

Dr. COHEN: No. The brain is really designed to have reserve. And some of the latest findings are very exciting such as the fact that we can produce new brain cells throughout the life cycle. People used to think that af--after the age of three, you had all your cells. But now we know that's not true. That's one big new discovery that's been made.

COURIC: Well, if that's the case, then, Dr. Cohen, why is it, is it a psychological thing that we feel that we're not as sharp, that we feel as if we forget things or, you know, that we're a little fuzzier than we used to be? Is that because we're expecting our brains to be like that? Or is stress having an impact on that?

Dr. COHEN: Yeah. With most people, significant memory problem is--is--is not an issue. At 20, you misplace your keys, call somebody by another name, you know, don't give it a second thought. After 50, eyebrows go up.

COURIC: Oh, I see.

Dr. COHEN: It's the same phenomenon.

COURIC: And what is the difference between the brain and the mind?

Dr. COHEN: They're really two sides to the same coin. The--the brain is the physical structure. The mind is, in part, how the brain has manifested.

COURIC: Meanwhile, we hear about left brain and right brain. And certainly people who are stronger in one--on one side or the other, I guess, left having to do with more verbal reasoning, and right more scientific and mathematical reasoning, is that right?

Dr. COHEN: Yes. The--the left is more an analytic, and the right is more visual.

COURIC: Oh, more creative then?
Dr. COHEN: More creative.
COURIC: So I got it wrong. The left is more mathematical, really, and the right is more creative, visual stuff.
Dr. COHEN: Yes.
COURIC: And one of the findings is that as you age, you actually use your whole brain more often, is that right?
Dr. COHEN: Yes. This is one of the latest findings. It's very exciting. You always use both sides of your brain, but up until mid-life, it's largely one side or the other at a given time. But mid-life, and later, it's as if you move to all-wheel drive and you're using your whole brain. And that often allows you to look at things in a different way, to get a bigger picture. And it's sort of better integration of the heart and the mind, so to speak, and how you look at things.
COURIC: So is there something--there's something to the notion that you get wisdom as you age, right?
Dr. COHEN: Yes. And there's a formal phrase for that. It's called post-formal thinking, and it's that better integration of the objective and the subjective, the heart and the mind.
COURIC: Having said that, though, is there something to the use it or lose it expression? Are there certain things you can do to, I guess, encourage that integration and make sure that your mind is still functioning on all four cylinders?
Dr. COHEN: Yes, yes. This is, again, one of the most exciting findings in--in modern science, is that when you challenge your brain with challenging activities, the brain responds. A given brain cell has projections called dendrites. They're like branches from a tree.
COURIC: Right.
Dr. COHEN: And as you challenge yourself, those brain cells, they start new projections and--and--and it increases the ability of cells to communicate with one other. Better contact points, better connections for ideas. And those dendrites increase in number with--with aging. Actually, they peak from the early 50s to the late 70s, a time when people think you're over the hill.
COURIC: But don't they have to be stimulated? In other words, just sitting there watching television or doing an activity that's not stimulating, that is mindless, probably doesn't encourage those dendrites to--to develop?
Dr. COHEN: No, you're absolutely right. You really need to be involved in something that's challenging. That could be an interesting hobby, learning a new musical instrument, taking a new language. The key point, as with physical exercise, if you're not sweating a little bit, you're probably not getting enough out of it. For mental exercises, you want to feel like your mind is sweating a little bit.
COURIC: And also, you talk about the psychological development and the phases of the psychological development. You talk about a mid-life reevaluation, liberation, summing up and encore. What exactly does that mean?
Dr. COHEN: Those are four different psychological phases that I've described in my book, "The Mature Mind." And in effect, as we grow, these psychological changes, in effect, refresh our mind to be able to meet situations in a different way. The liberation phase is fascinating. it's sort of from the mid 50s to the mid 70s. And it's if you have these inner voices in your mind that--that say, if not now, when? why not?
What can they do to me? You know?
COURIC: Right.
Dr. COHEN: Those are very empowering feelings. And so you often see a lot of experimentation at that time of life.
COURIC: Well, it's very exciting and looks as if people my age have a lot to look forward to, at least mentally.
Dr. COHEN: A tremendous amount. It's never too late. Never too late.
COURIC: All right, Dr. Gene Cohen, the book is "The Mature Mind: The Positive Power of the Aging Brain." Thank you so much.
Dr. COHEN: Thank you.

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