

“A Limit to Lifespan” Excerpt Transcript

Excerpt from [October 7, 2016](#) episode of Science Friday

IRA FLATOW	This is Science Friday. I'm Ira Flatow. We begin with a consideration of human mortality pretty apt time to do that. Average global life expectancy rose by five years between 2000 and 2015, continuing our general trend of living longer as medicine advances in the fight against disease and infant mortality is making progress. But what about the limits of our lifespans? Harvard researcher David Sinclair said, the first person to live to 150 has already been born. But new research published in Nature this week is a little less optimistic. Here with this story and other headlines is Popular Science senior editor Sophie Bushwick. She joins us in our CUNY studio. Welcome back, Sophie.
SOPHIE BUSHWICK	Thanks.
FLATOW	So let's talk about it. How long have I got?
BUSHWICK	Well, so when they talk about this particular study, it's distinct from average human lifespan. Like you said, average human lifespan has been increasing due to a lot of breakthroughs. But when you look at maximum human lifespan, that's a different factor. And so what these researchers did was looked at maximum human lifespan over time. And they found that it increased fairly steadily through from the 1970s through the 1990s, and then it sort of plateaued. And it's been plateaued ever since. And this has led them to conclude that about 115 is probably the cap on maximum lifespan. There will be exceptions. So the woman that we know of who has lived the longest lived to age 122. She died in 1997. But the researchers say, this is probably an exception. There's going to be a few exceptions, but in general, the odds of someone living past age 120, any human on Earth, is going to be like one in 10,000.
FLATOW	Wow. So she was an outlier, as they would say in statistics.
BUSHWICK	Exactly.
FLATOW	Is this because of anything we're eating, our nutritional habits or food or anything like that?
BUSHWICK	No. So what happens for a lot of the people who live to the longest amount of time, they tend to have survived the era when a lot of other people die of

	cancer or of a lot of diseases that strike the elderly. But the issue is that, as you age, your cells get worse at repairing themselves. And your body, in general, accumulates wear and tear and is just not as good at recovering from that. And so when you die, it's sort of death by 1,000 papercuts almost. Your body just reaches that point. And that's what they think is causing people to die at 115. And that can't really be fixed by eating a healthy diet.
FLATOW	Could it be fixed if you have better genes, maybe, right?
FLATOW	Well there are other researchers who say, if we could have a breakthrough in treating that particular type of wear and tear and making the cells better at repairing themselves, that sort of medical breakthrough could increase that age.
FLATOW	All right. Thank you, Sophie.
BUSHWICK	Thanks for having me.
FLATOW	Sophie Bushwick is a senior editor at Popular Science.