Who wants to live to forever?

A trillion. Infinity. One hundred and five.

When you ask a 7-year-old when they want to die, you get a wide range of answers. Asking people in their 70s provides less variation: 120, 105, "Until I am a burden."

Filmmaker <u>Barry Gibb</u> uses interviews with these two sets of people, one in primary school, the other in retirement communities juxtaposed with scientist interviews to illustrate an often overlooked point: When we resolve the aging component of disease, we have no clue how our life spans will be extended.

That idea is more controversial that you might think. Some embrace the idea enthusiastically. David, practices calorie restriction as a method of prolonging aging. "I would like the end point of my life to be indefinite," he tells Gibb. The 53-year-old looks like he's in his mid-thirties.

But the researchers Gibb talks to feel a bit differently. University College London researcher David Gems has been able, via genetic mutation, to extend life expectancy in the worm *C.Elegans* by an order of magnitude, the equivalent of a human living to 1,000. The next step will be to look for the same gene in flies, then mice, and ultimately people.

Gems thinks that if he knew his lifespan would shift dramatically, even to 200, he would have to reconsider his career and his marriage. Would either of them last another 100 years? The cultural infrastructure of our societies would need to change dramatically to support people who live to 200. Would we retire at 150? Would we reproduce until 100?

And does life extension matter at all if we suffer the same age-related disease risks and degeneration, just postponed?

"Evolution produced a body designed to grow and reproduce," explained Tom Kirkwood biologist at Cambridge University, not one designed for longevity. Because the mechanisms of aging are so unexplored, its still impossible to know if treatments can be developed to eliminate aging, or just to delay the inevitable, creating the same problems further down the line.

Watch the full film here:

Additional Resources:

- Old blood, new science: 115-year-old woman's blood suggests lifespan depends on stem cells,
 Genetic Literacy Project
- <u>Live to be 100+? Extreme longevity research is futuristic privatized enterprise</u>, Genetic Literacy Project
- Arrested Development, Mosaic Science