



Anti-Aging Technology Hype and Reality

Many newly formed companies and ventures are in a race to find and develop anti-aging technologies, for whoever figures out how to substantially extend human lifespan can make a fortune. But it appears that most of them are chasing dreams, when solid anti-aging interventions are already here, and they're cheap. The fact that making money is a leading motivator has blinded them to what's here now. Perhaps they're hoping that the rest of us won't take notice and give them our cash. Here's the anti-aging technology hype and reality.

Anti-aging companies and technologies

Investors and scientists have formed a number of companies with the aim of developing anti-aging interventions. Among them are:

Calico: Google formed this company "whose mission is to harness advanced technologies to increase our understanding of the biology that controls lifespan." Among its scientists is Cynthia Kenyon, one of the most noted scientists in the field of aging; she's responsible for the discovery that insulin signaling controls lifespan.

Mount Tam Biotechnologies: This company is located on the campus of the Buck Institute for Research on Aging, and develops drugs, notably rapalogs, which are drugs that are similar to [rapamycin](#). Note the nexus here between scientific research and making money.

Elysium Health: This company has developed a supplement that contains nicotinamide riboside and pterostilbene, which retails for \$50 for one month's supply. Noted scientist in aging Leonard Guarente is "Chief Scientist".

Ambrosia: This company has jumped on the "young blood" phenomenon and is

currently offering transfusions of plasma taken from young people, reportedly at a cost of \$8,000 for a course.

Alkahest: Similar to Ambrosia, founded by noted scientist Tony Wyss-Coray.

The products and services that these companies offer range from unproven to possibly workable, and from relatively cheap to very expensive. The striking thing (to me) is the rush for riches by top scientists, which may be a good or bad thing depending on how you look at it. I'll just note that many or most of their discoveries were made using public grant money.

It's already known, for example, that [old blood transfused into younger animals causes more harm than young blood transfused into old animals causes benefit.](#)

So far, other than rapamycin, none of these interventions have been shown to extend the lives of lab animals, much less humans.

Cheap anti-aging methods are already here

[Metformin](#) is the most-prescribed anti-diabetes drug, and is currently the subject of a clinical trial with the aim of fighting aging. [Nir Barzilai, a prominent Israeli scientist in this field, takes metformin and is behind the push to test metformin clinically and to get it to be taken seriously as an anti-aging drug.](#)

Metformin has been shown to extend the lives of lab animals, and in humans, diabetics who take metformin appear to have longer lifespans than non-diabetics who don't. ([I've previously detailed some of my objections to anti-aging studies](#), but let's set that aside for now.)

Metformin's proven life-extension effects stand in contrast to the unproven interventions of the new high-tech startups.

Perhaps most notably in the context of high-tech companies searching for a cure for aging, metformin costs as little as 5 cents a pill, and thus a typical daily course runs about 10 cents.

Barzilai started taking metformin when he was diagnosed with prediabetes; however, nothing in the linked article states whether he's cut back on carbohydrates and sugar, and he appears a bit on the pudgy side. Nothing is stated about whether he exercises.

Rapamycin, [angiotensin blockers](#), aspirin, PDE5 inhibitors ([Viagra and similar](#)): all are available now, and all are inexpensive. The most expensive, rapamycin, can be had with a prescription from Canadian pharmacies for a few dollars a pill, and taken once weekly would cost perhaps \$50 a month.

You can even put together your own [cheap anti-aging supplements](#).

How to practice life extension now

In sum, there's no need to wait for these high-tech companies to develop expensive and unproven life-extension technologies.

The biggest obstacle that I see in using these already available drugs is getting a doctor to prescribe them. But there's [at least one in the country](#) willing to prescribe the lot, so you could always go see him, and he charges only \$350 for an initial consultation.

Some of the substances don't require prescriptions, notably [aspirin](#) and [berberine](#) (the latter acts similarly to metformin).

There are also things you can do on your own. Besides the drugs mentioned above, the following are what I'd be looking at to slow aging:

- [Keep iron levels in the low normal range.](#)
- [Lift weights.](#)
- [Cut refined carbohydrates and sugar from your diet and never eat industrially processed food.](#)
- [Stay lean and muscular.](#)
- [Supplement wisely.](#)

While the high-tech anti-aging companies may well make some breakthroughs, for now, much of it is pie in the sky, and of course relentlessly hyped because of the money angle. But anyone with the drive to do so doesn't have to wait to practice anti-aging and life extension.

PS: Supplements that fight aging are discussed in my new book, [Best Supplements for Men](#).



PPS: [Check out my Supplements Buying Guide for Men.](#)