TOP 10 LIFESPAN EXTENDERS

Foods, Herbs & Supplements from Doug Skrecky's Fruit-Fly Longevity Experiments

Source: Doug Skrecky's ~230 "fly longevity experiment" updates posted to the CryoNet mailing list (cryonet.org), c. 1996–2008. Ranked by maximum longevity achieved in his own runs.

Background

Doug Skrecky, a Vancouver-based cryonics/life-extension hobbyist, ran a long-running home experiment testing hundreds of foods, herbs, teas, juices and supplements for their effect on the lifespan of *Drosophila melanogaster* (the common fruit fly). He posted the raw survival tables to the CryoNet mailing list in numbered updates over roughly a decade. In each run he housed a single cohort of about 15–35 flies per bottle, mixed the test substance into a standard fly food ("4-24" medium), and tracked the percentage still alive on successive days until the last fly died. Food and dead flies were never removed once a run began, and taurine was added as a larvicide so no new generations arose.

The metric Skrecky himself emphasised was **maximum longevity** — the age of the last surviving fly — measured against a same-run control. The ten entries below are the strongest performers he documented, drawn from his own milestone summaries (especially his 100th update, where he re-tested every substance that had ever produced a fly living past 105 days) and verified against the original run data. Fruit flies typically live for 40 to 50 days. A 100-day-old fruit fly is equivalent to a human being about 175 to 200 years old

The Top 10

#	Food / Herb / Supplement	Type	Dose in fly food	Max life (days)	Control max (days)	Increase	Run
1	**Pomegranate (paste)**	Fruit	½ tsp per 20 g food (≈ 4 tbsp/day human-scaled)	124	61	**+103%**	Run 87
2	**Elderberry nectar (freeze-concentrated)**	Fruit	~2× concentrated, used as the food liquid	118*	73	**+62%**	Run 36
3	**Apple juice (Sun-Rype) + vitamin C**	Fruit juice	Used as the food liquid (replacing water)	107	73	**+47%**	Run 36

#	Food / Herb / Supplement	Type	Dose in fly food	Max life (days)	Control max (days)	Increase	Run
4	**Coffee, decaffeinated**	Beverage	4 tsp brewed coffee per 20 g food	107	83	**+29%**	Run 132
5	**Hawthorn juice**	Herb / fruit	Full strength, used as the food liquid	106	66	**+61%**	Run 84
6	**Starfruit juice**	Fruit	Raw / full strength, used as the food liquid	106	88	**+20%**	Run 83
7	**White gourd / winter melon juice**	Vegetable	100% (full strength), used as the food liquid	106	88	**+20%**	Run 83
8	**Strawberry (extract)**	Fruit	½ tsp per 20 g food	101	61	**+66%**	Run 87
9	**Activated charcoal**	Supplement	1040 mg per 20 g food	91	61	**+49%**	Run 87
10	**Black cherry juice**	Fruit	Full strength, used as the food liquid	85	73	**+16%**	Run 36

** Elderberry: the last fly in run 36 reached day 118 at the census, and a follow-up census recorded it dead at day 124. "Control max" is the last-fly age in that substance's own run; "Increase" compares the two. Doses are per ~20 g of fly food (about 80 fly-calories). "Used as the food liquid" means the juice replaced the water normally used to hydrate the food.*

The Human Angle

N*o* food has been shown to extend human lifespan in the sense a fly study shows it — we have no randomized trials with lifespan as an endpoint. So the real question becomes: which of these has independent human evidence for reduced mortality or improved healthspan, rather than just a fly result? That reframing matters, because the mechanisms that extend fly lifespan often *don't* carry over.

Why most fly results don't translate. A large share of Drosophila lifespan extension comes from antioxidant/polyphenol content and mild hormetic stress. But antioxidant supplementation is the textbook cautionary tale: vitamin C, vitamin E, and beta-carotene extend life in various invertebrate models yet have flatly failed to reduce mortality in human RCTs (beta-carotene actually *increased* it in smokers). Flies also lack the diseases that actually kill humans — atherosclerosis, most human cancers, neurodegeneration — so "lives longer as a fly" is weakly predictive on its own. The foods worth betting on are the ones whose active compound (a) hits an evolutionarily conserved aging pathway and (b) has separate human data behind it.

By that standard, here's how your list sorts:

Best translation candidates

- **Decaffeinated coffee** — the strongest of the group by human evidence. Large prospective cohorts consistently link coffee, *including decaf*, to lower all-cause mortality, which points to the non-caffeine compounds (chlorogenic acids, other polyphenols) as the drivers. This is about as robust as nutritional-epidemiology longevity signals get.
- **Pomegranate (paste)** — its ellagitannins are converted by gut bacteria into urolithin A, a mitophagy inducer that has actually been through human trials showing improved mitochondrial and muscle function in older adults. Plus independent cardiovascular data. Mechanistically this is a genuine geroscience target, not just antioxidant hand-waving.
- **Strawberry (extract)** — berries are among the better-supported foods in human cognitive- and cardiovascular-aging epidemiology, and strawberries specifically carry fisetin, one of the senolytic compounds under active aging research. Reasonable dual support.

Weak but not implausible

- **Elderberry** — anthocyanin-rich, with human data mostly for immune/cold outcomes rather than longevity. The broad anthocyanin-cardiovascular association gives it some plausibility.
- **Apple juice + vitamin C** — whole apples track with lower mortality (fiber, quercetin), but *juice* strips the fiber and leaves mostly sugar with residual polyphenols, and the added vitamin C is the exact intervention that has failed human mortality trials. So the fly benefit here is the least likely to survive translation.
- **Hawthorn juice** — has real human cardiovascular use (symptomatic heart-failure trials), but nothing pointing to lifespan/mortality benefit.
- **White gourd / winter melon juice** — thin human evidence; mostly traditional use and water.

The one to flag

- **Starfruit juice** — this is the outlier you'd want to *avoid* extrapolating. Starfruit contains caramboxin and high oxalate, and is genuinely nephrotoxic and neurotoxic in people with impaired kidney function, with reported fatalities. Whatever it does in a fly, in humans it carries real downside risk.

How to read these results (important caveats)

- **Amateur, unreplicated data.** These are single-cohort hobbyist experiments, not peer-reviewed or statistically powered. Sample sizes are tiny (~15–35 flies), so chance plays a large role. Skrecky repeatedly said as much — e.g. he attributed "an element of luck" to the record pomegranate result.
- **Some winners failed to replicate.** Peanut skin (a resveratrol source) looked strong in one run (~98 days) but was null on careful retest; Skrecky noted resveratrol does not affect fly lifespan because fly Sir2 does not govern their aging. This is why it is not in the list.
- **Temperature dominates.** Ambient temperature is by far the biggest lifespan lever for flies, and it varied between runs (Skrecky's best results came in cool winter months). Absolute day counts therefore are not directly comparable across runs — always read a substance against its own run's control.
- **The benefit may be antimicrobial, not "anti-aging."** Many top entries are acidic fruit juices. Because the food and corpses are never refreshed, Skrecky suspected part of the benefit is simply suppression of bacterial/viral growth in the aging food, rather than a true slowing of aging.

- **Flies are not people.** Insect biochemistry differs from mammals; none of this demonstrates human benefit. Doses are per ~20 g fly food; Skrecky's one human-scaling estimate (for pomegranate) was roughly 4 tablespoons per day.
- **Coverage.** This ranking is anchored on Skrecky's own documented "105-day club" plus sampled later runs; his series ran to ~230 updates and not every run was individually re-examined here.

Primary sources (CryoNet)

- Index of all Skrecky messages — https://www.cryonet.org/cgi-bin/findmsgs.cgi?author=doug+skrecky
- 100th update — champion re-test / ">105-day club" — https://www.cryonet.org/cgi-bin/dsp.cgi?msg=22367
- Run 36 — elderberry 118 d, apple 107 d, black cherry — https://www.cryonet.org/cgi-bin/dsp.cgi?msg=16020
- Run 83 — white gourd & starfruit 106 d — https://www.cryonet.org/cgi-bin/dsp.cgi?msg=21406
- Run 84 — hawthorn 106 d — https://www.cryonet.org/cgi-bin/dsp.cgi?msg=21507
- Run 87 — pomegranate 124 d (all-time record), strawberry, charcoal — https://www.cryonet.org/cgi-bin/dsp.cgi?msg=21734
- Run 123 & 132 — peanut skin / decaf coffee 107 d — https://www.cryonet.org/cgi-bin/dsp.cgi?msg=23838