



Highlights: DNA Ancestry Services

There are now more than a dozen outfits in the direct-to-consumer DNA-testing business that promise to unlock your family origins. Their marketing is wildly successful: More than 15 million people worldwide have submitted their DNA. **Puget Sound Consumers' Checkbook** (Checkbook.org) tried out eight of these services by asking three volunteers to submit their DNA to each. Highlights from Checkbook's report:

- The reports Checkbook's volunteers got back generally agreed with one another on their ancestry at the continental level. But once companies tried to express their estimates at regional levels, reports were less consistent.
- In fact, most people won't learn much about their roots from these services. While the services can determine whether genes include traits from specific continents, and perhaps narrow down origins to broad regions on those continents, estimating ties to smaller areas involves a lot of guesswork. Companies claiming to "pinpoint ancestry" are stretching the truth about what they can deliver.
- Some companies disclose more details than others about their methods. Among those that do, Checkbook found their ethnicity estimates were calculated using a 50 percent confidence interval. Relying on such a low threshold means that if a report says you are 12.2 percent Scandinavian, maybe you're as much as about 20 to 25 percent Scandinavian, but maybe you're not Scandinavian at all. You're probably not exactly 12.2 percent Scandinavian, and it's silly to use such a precise statistic.
- Checkbook found many companies fail to adequately explain to their customers that their estimates are imprecise and why. All the companies need to improve their data and methods to better serve people of non-European descent (most genetic research has so far been done by European and North American scientists studying those populations).
- While DNA ancestry services provide only very general info about your roots, a little time spent on genealogical research often provides rich details. Many people can easily identify specific relatives—and where they were born and lived—going back hundreds of years.
- There's little profit in charging \$60–\$100 to analyze DNA to report on ethnicity. The real profit potential lies in selling all the genetic data companies are collecting. Checkbook believes that all these companies aren't transparent enough about what else they do with all the genetic info they're collecting, and that not enough is being done in this industry to protect consumers' privacy. When you submit your DNA for testing on your own, you don't get the same legal privacy protections you receive when doctors or hospitals initiate medical genetic tests.
- Four of the eight companies also offer to use customers' DNA to connect them to biological family members who have also submitted samples. One reason to think carefully about doing a test: Some folks discover shocking family secrets like infidelity and hidden adoptions.
- Several services are keenly interested in selling add-ons—for example, 23andMe offers to test for genetic medical conditions and carrier traits. HomeDNA and Vitagene sell personalized diet and nutrition plans. HomeDNA also sells "healthy weight" analyses, skin care, and allergy reports. 23andMe's health reports provide a lot of info for very little money, but there's also a lot to beware. Checkbook found the other add-on reports it received on dieting, skin care, etc., were wastes of money. You don't need to undergo genetic testing to formulate a sensible diet and exercise plan.

Checkbook's editors are available for interviews. Please contact Jamie Lettis at 202-454-3006 or jlettis@checkbook.org to schedule.