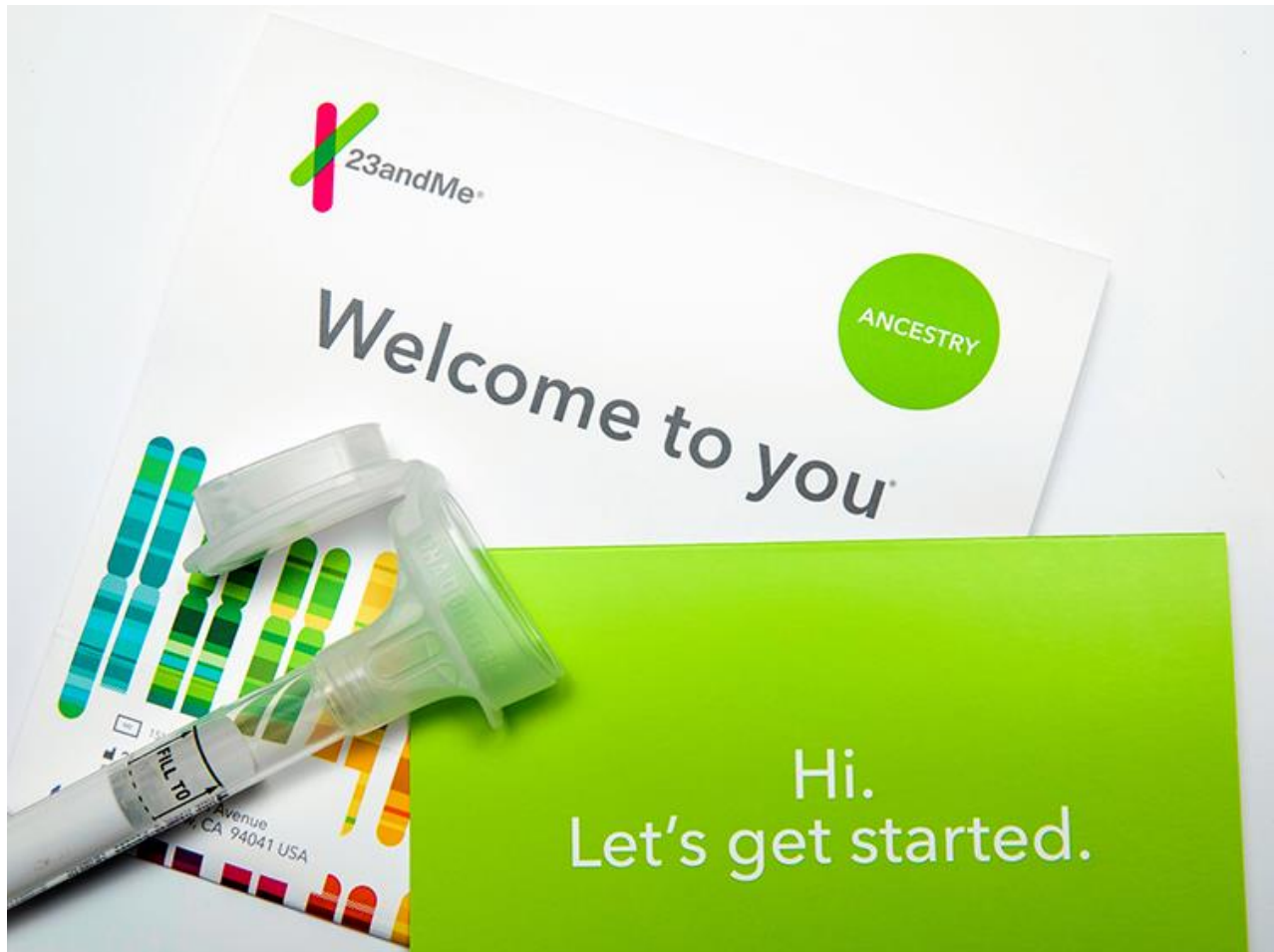


**ASAHI GLOBE, Japan**

**Roots and sickness, DNA testing to know yourself is big and privacy is okay?**

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Test kit of a major US genetic testing company "23 Andmy" = AP

Gene technology, which has rapidly become familiar, is spreading to the knowledge that we know about ourselves. In the past few years in the United States, roots search by genes has become popular, but genetic information is also "ultimate personal information". Is there any problem in handing over to others?

■ **Net inspection that can be received at 10,000 yen**

In this spring, Terrisa Harrison ( 48 ) , an accounting firm office in New Jersey, USA, tried using genetic testing industry leaders Ancestry.com and 23 And me.

People who learned about examination by television programs and commercials and who actually underwent surveillance among their relatives came out and interested in their own roots. Both the inspection costs are 1 in about thousand yen, can apply on the Internet. When saliva is sent, the race composition in yourself is displayed as a percentage for each nationality. "I knew that my ancestors came from slave trade because they are African-Americans, but I wanted to know more accurately."

Gene technology, which has rapidly become familiar, is spreading to the knowledge that we know about ourselves. In the past few years in the United States, searching for roots by genes has become popular.

In the case of Harrison, West Africa accounted for the majority as expected, such as Nigeria 40 % and Ghana 12 %, but it turned out that there is also connection to Scandinavia and the UK. "I was surprised that European genes were contained, and my interest in history and culture related to my own roots grew stronger than before."



Tellysa Harrison received a DNA test to learn the details of his ancestors from Africa = New Jersey state, Song Mitsuhi

Genetic testing also has a service to show the risk of future genetic diseases. In April last year, the US Food and Drug Administration permitted "23 And me" to provide risk information on 10 types of diseases such as Alzheimer's disease and Parkinson's disease directly to users without going through a doctor.

**"Genetic information is the most important privacy"**

However, there are voices concerned about such a genetic testing epidemic. Schedule Klimsky (77), a professor at Tufts University and specializing in bioethics, says, "Genetic information is the most important privacy, and the inspection company is profitable by selling information

obtained from users to research organizations It should be more sensitive to how genetic information is used. ”

In order to create a society where everyone can live with peace of mind. I think about “what we need now”.

Latest from PR



Sheldon Klimsky talks about genetic discrimination and privacy issues = US New York, Song Mitsuhi

According to Krimsky, companies that provide services to find roots appeared in 2000 and began to gain popularity. Meanwhile, genetic examination was requested at the time of company hiring and medical insurance application, and as a result, there were cases where we refuse contracts for recruitment and insurance. The NGO (CRG) where Krimsky is a member developed a campaign seeking enactment of a law prohibiting genetic discrimination, and in 2008 the genetic information discrimination law was made.

However, this law does not apply to life insurance and long-term care insurance in the field of employment and medical insurance. “When information on disease risk leaks and ties with individuals, there is plenty



of risk that discrimination among individuals such as marriage as well as insurance will occur.”

University of New Jersey official Greg Costaras ( 45 ) received genetic testing for roots search one and a half years ago, but has not received any tests to find out the disease risk. When asked why, this answer came back. “I think that it is extra information to me now whether it is cancer or other diseases. Whether you really want to know such a risk in the first place or not even for myself”



Greg

Costaras who received the DNA test

In Japan as well, like the United States, genetic testing that can investigate constitution such as ease of fatness, lifestyle diseases and cancer risk without going through medical institutions is expanding as market. (Song Mitsuro)

## ■ Genome anthropology Where did we come from?

Where did the Japanese come from? How much are we pulling the genes of Jomon people and Yayoi people who are said to be their ancestors? In genetic analysis using DNA, it is possible to trace the origins of Japanese as well as personal history.

According to Saito Naruya, a professor of the National Institute of Genetics who tackles the genome analysis of contemporary Japanese (Ainu, Yamato, Okinawa), it is the Ainu who take over the DNA of indigenous Jomon people. It is genetically close to that Ainu person Okinawa who is far in the south. The Yamato is geographically located between the two, but the DNA which we inherited from the Jomon people is the least, and the genetic distance from the Yayoi citizen among the three is the closest. On the other hand, DNA from the Jomon people hardly appeared in Korean, Northern Chinese, and Southern Chinese.



Jomon people are Japanese roots in the north and south © Kimura Design Office

So, when did Mixed Blood with Yayoi who came from the continent began? Assuming that the Ainu people are direct descendants of the Jomon family, in the case of the Yamato people, the mixed race with the Yayoi people began before 55 to 58 generations. If we look at one generation

for about 25 years, it will be around the 3rd to 7th century AD. It is estimated that the mixed race with the Yayoi family of Okinawa people is from 43 to 44 generations before the AD, 1075 to 1320AD.

On the other hand, even among Yamato people, DNA differs from region to region. When mitochondrial DNA summarized by prefecture is analyzed, prefectures along the central axis of the archipelago such as Tokyo, Shizuoka, Aichi, Osaka, Kyoto, Fukuoka, etc. are included in the group having the same tendency, while Okinawa, Miyazaki, Nagasaki, Shimane, Aomori said that features similar to the neighboring prefectures will appear.

Headwaters of the Japanese people, entered the people of the indigenous Jomon personality in Japan in the Old Stone Age, "that brought over who is applied came from northeast Asia around the time of the Yayoi era 2 double structure model" was the established theory.

However, the analysis of DNA collected from the teeth of the triple peninsula Jomon people excavated from the Mikusuku shell mounds in Fukushima Prefecture has proved that this Jomon people is different from the southern arrivals that had been supposed so far.

Saito is now, 2 an enlarged view of the dual structure model 3 believes the stage brought over model. The idea is to divide the passage from Old Stoneware to the Jomon Period into two phases and to divide the arrival of the Yayoi who will be in the third stage into the first half and the second half.

"If more DNA analysis goes further, a more subtle source of Japanese people will come out" (Ikuya Tanaka)

**Author**



**[Song Minoru](#)Asahi Newspaper GLOBE editorial staff**

Born in Osaka in 1977. After a magazine editor at a publishing house in Kansai, since 2004 he has been to the Asahi newspaper reporter. The company was absent

from work in September 15. One year in Paris, France, three sons of my son who was a wife and a kindergarten child challenged a zero-yen payday living. The theme here is "I think by myself."



[Ikuya Tanaka](#) Asahi newspaper reporter

Born in 1958. Science medical staff through the Ministry of Economics, GLOBE editorial department, etc.

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