

## The Bajau people are good at deep diving because it's in their genes

By Nicola Davis, The Guardian, adapted by Newsela staff on 04.25.18 Word Count **459** Level **560L** 



Image 1. A Bajau diver hunting fish on the reef. Photo by: Melissa Ilardo

The Bajau people in Southeast Asia are amazing divers. They dive to hunt fish. They can hold their breath underwater for a long time. Scientists have finally figured out how they do it.

The secret is evolution. Evolution is an idea, or theory, about how life has developed over the years. It shows how living things become better at living in their environment. Evolution happens over thousands or millions of years.

The Bajau people are able to dive up to 200 feet underwater. All they bring with them are weights and handmade wooden goggles. They take a single breath of air. Then they dive in.

The reason for this skill used to be unclear.

Now scientists say they know why the Bajau people are so good at diving. The answer is in their genes. Genes are made up of DNA. Genes tell a specific part of the body how to grow and work. Genes are passed down from parents to children.

## **Genes Changed Over The Years**

Over time, the Bajau people's genes have changed.

The Bajau have large spleens, for example. The spleen is an organ in the body. It can help people hold their breath for longer.

The Bajau have been diving for more than 1,000 years, and maybe even longer than that. Over that time, some people's genes caused them to have larger spleens. The genes were useful for diving. Then they



got passed from one parent to the next child many, many times. That's why the Bajau can hold their breath underwater for so long.

Scientists solved this mystery in an unusual way. They looked at seals. Some seals can dive longer than others. The better divers have larger spleens. The scientists wondered if this was true for people too.

## **Changes Come From Evolution**

The team of scientists used a special tool. It takes a picture of the inside of someone's body. They measured the spleens of 43 Bajau people. They turned out to be much larger than the spleens of other groups of people that live nearby. The Bajau people's spleens were 1.5 times as large. That's a big difference.

The scientists tested the Bajau people's genes. They had types of genes that led to other changes in their bodies. These changes help them handle situations where there's not much air.

The scientists looked at these genes. They are not the result of chance, the scientists found. They are changes from evolution. They happened because of how and where the Bajau people live.

## Quiz

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Read the introduction [paragraphs 1-5].

Which sentence from the introduction states the MAIN idea about why evolution is important?

- (A) The Bajau people in Southeast Asia are amazing divers.
- (B) It shows how living things become better at living in their environment.
- (C) The Bajau people are able to dive up to 200 feet underwater.
- (D) Genes are passed down from parents to children.
- 2 Finish the sentence below.

One MAIN idea of the article is that \_\_\_\_\_

- (A) the Bajau people have special genes that help make them good at diving.
- (B) scientists are interested in what kinds of genes the Bajau people have.
- (C) some seals are like Bajau people because they can dive longer than others.
- (D) there were special tools used to take pictures of the Bajau people's bodies.
- How did the Bajau people change because of evolution?
  - (A) They learned to dive by watching nearby seals.
  - (B) They learned to hunt fish by diving under water.
  - (C) They developed larger spleens than other people.
  - (D) They developed organs called spleens in their bodies.

Why are the changes to the Bajau people's bodies important?

- (A) They help them keep from getting some kinds of illness.
- (B) They help them learn to use weights and goggles to dive.
- (C) They help them see underwater in order to catch fish.
- (D) They help them in situations where there is not much air.