

Do half a million sharks cost for Covid 19 vaccine?

Hiba Jasmin V

B.F.Sc, Dr. R.P.C.A.U, PUSA, BIHAR

Email- hibajasminv1999@gmail.com

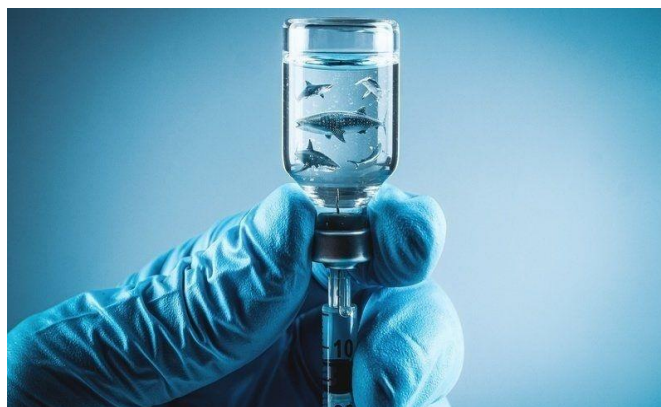
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Humankind is passing through a critical stage, it's the COVID pandemic! perhaps the biggest crisis of this generation which put a full stop in normal lifestyle. The decisions made by the government and people will probably shape the world for generations to come, not only just the healthcare routine but also our economy, ecology, culture and thus the nature. Thus, it's necessary to think 100 times before making every decision regarding the control of COVID 19. One such a situation is slaughtering of half a million of sharks in making a global COVID 19 vaccine.

Why sharks?

Because shark liver oil contains, SQUALENE-an organic compound which plays an inevitable role in the functioning of the vaccine. It acts as the "adjuvant"-a pharmacological agent that improves the immune response of a vaccine. It is added to boost the immune response of vaccine to produce more antibodies and longer-lasting immunity, thus minimize the dose of antigen required. Squalene from shark is already used as a common moisturizing ingredient in cosmetics. It's also used in malaria and flu vaccines as an adjuvant.

According to shark allies, a non-profit organisation, an estimated 2.7 million sharks are already killed to make cosmetics. As of Oct. 2, there were 193 coronavirus vaccines in clinical and pre-clinical evaluation [WHO]. At least five of those vaccines contain shark squalene. It is estimated that about 3000 sharks must be killed to extract just a ton of stuff and if the world's population all received 2 doses of the vaccine from shark, about half a million sharks would have to be slaughtered [shark allies].



What are the impacts & why we protect sharks?

Sharks are one of the key animals in an ocean's ecosystem. They are top predators and keep the fish stock healthy, food chain intact and diseases out. As they majorly contribute to the natural balance of the ocean, removing sharks results damage to ecology and economy.

Sharks are already killed by the millions each year for purposes like shark fin soup. The situation is not good for the world's 400 shark species and thus turns to vulnerable species. World Wildlife Federation (WWF) explains: -

“Shark populations around the world are in rapid decline. Sharks grow relatively slowly, take many years to mature and produce relatively few young. They also suffer from the large and growing demand for shark fins and the general lack of management of shark fishing. Populations simply cannot replenish at the same rate as they are caught and finned to meet market demand. Sharks are also often caught as bycatch in longlines, trawl nets and seine nets, and simply discarded.”

Sharks regulate the behaviour of prey species and prevent them from over-grazing vital habitats. In fact ,the loss of sharks from certain areas is an indicator of an ecosystem out of balance and in trouble.

Due to overexploitation and lack of proper management, many shark species are under high risk of unrecoverable decline with some species having declined to near extinction in recent years. In such a situation,using sharks in covid vaccine is definitely not sustainable option.

Is there any alternative to shark's squalene?

There are many sustainable squalene alternatives including olive oil, sugar cane, wheat germ, bacteria, and yeast. They have identical chemical nature to shark squalene with same effect. However, the extraction of shark squalene has been a more attractive option for producers as it can cost less and yield greater quantities than nonanimal alternatives [Shark Allies].

To avoid threatening shark populations, scientists are testing an alternative to squalene - a synthetic version made from fermented sugar cane.

Conclusion

“Sourcing an ingredient from a wild animal is not a long-term solution, especially if it's a top predator that doesn't reproduce in huge numbers” said, Stefanie Brendl, founder and executive director of Shark Allies.

Thus research and development in large scale production of non- animal squalene in all tests for current and future products must be the major concern. Because to use a finite resource for a product which has to be fed for the entire world population for years to come is extremely short sighted and totally impractical.