1. **THOUGHTFULLY NOTATE THIS ARTICLE TO SHOW EVIDENCE OF YOUR THINKING THROUGHOUT YOUR READING (this includes using vocab strategies, as well).**
2. **RESPOND TO THE “Food For Thought” SECTION BELOW THE ARTICLE.**



September 21st, 2010

10:00 AM ET

CNN.com

[Some say "Frankenfish," others call it a solution](http://eatocracy.cnn.com/2010/09/21/fda-listens-to-both-sides-of-gmo-salmon-debate/)

AquaBounty Technologies' AquAdvantage Salmon would be the first genetically modified animal to appear in restaurants and grocery stores.

Currently, 50 percent of the salmon we eat worldwide is farmed Atlantic salmon, grown from eggs in large containment pools rather than the open ocean. The current production of farmed Atlantic salmon exceeds 2 billion pounds, according to the United Nation's Fisheries and Aquaculture Department.

The genetically altered salmon will also grow in on-shore facilities close to consumer markets, reducing transportation and the energy used to keep the fish fresh or frozen, according to a document from AquaBounty. Grown from eggs developed by AquAdvantage, this salmon will reach maturity in about half the time as natural salmon. The company asserts that this might help reduce pressure on the wild fish population.

Food and Drug Administration officials are meeting to decide if genetically modified salmon will be swimming their way into the US's food system.

Advocates both for and against the approval of [AquaBounty Technologies'](http://www.aquabounty.com/) genetically modified AquAdvantage® Salmon as a food source met in Washington yesterday and today in [a series of hearings orchestrated by the FDA](http://eatocracy.cnn.com/2010/09/20/fish-tales-the-fdas-gmo-salmon-hearings/). Dr. Larissa Rudenko of the FDA, stated that the group has not yet made a decision, but that they "are looking for good and constructive conversation."

Because this analysis is entirely new ground for the FDA, their Veterinary Medicine Advisory Committee is using the regulations they would to evaluate veterinary pharmaceuticals, [rather those used for than food safety. According to Section 5 of the group's overview of this engineered Atlantic salmon](http://www.fda.gov/NewsEvents/PublicHealthFocus/ucm224089.htm), "That rDNA construct meets the definition of a 'drug' under the Federal Food, Drug, and Cosmetic Act" as "an article intended to alter the structure or function of the body of man or animal." Aqua Bounty Technologies, the developer, has filed a new animal drug application under those guidelines.

Genetic engineering introduces desirable traits of one living being into another, using recombinant DNA , or rDNA technology. In the case of AquAdvantage® Salmon, scientists have injected the fertilized eggs of Atlantic salmon with a growth gene from Pacific Chinook salmon, as well as genetic material from an eel-like fish called ocean pout, which overrides the Atlantic salmon's propensity to stop growing in colder weather.

This allows the AquAdvantage® Salmon to grow to twice the size it normally would, in half the time, as well as effectively rendering the vast majority of the fish sterile - which both prevents the altered fish to breed with wild populations of fish, and protects the company's intellectual material.

"Both land-based resources and aquaculture resources are stressed as are wild-caught fisheries, and without improvements in productivity and efficiency, it's hard to imagine how we'll meet the protein needs of the developing population over the next 20 to 30 years," AquaBounty Technologies Executive Director, President and Chief Executive Officer Dr. Ron Stotish told the committee on Monday.

Dr. Yonathan Zohar of the University of Maryland's Center of Marine Biotechnology agreed, saying, "There is no doubt in my mind that these kinds of technologies need to make it to the industry." He also noted he believes the research will lead to developing fish with higher disease resistance and more environmental tolerance. "And if we do it right, there will also be health benefits."

Opponents of this modified salmon's entry into the food system assert that while FDA members generally considered the fish to be safe for consumption, there simply has not been enough testing, nor a period of time enough to assess its longer-term impact on the ecosystem or the human body. "This is a dangerously limited set of data. Even the FDA acknowledges problems in the sample size, what's the rush?" said Wenonah Hauter, with the consumer watchdog group Food & Water Watch

**FOOD FOR THOUGHT:**

1. **Create a detailed T-chart using information from the article above in order to show the PROS and CONS of introducing genetically modified salmon into our food supply.**