## Japan poised to approve CRISPR gene edited sea bream fish that has 50% more muscle mass — and requires no extra food

Japan is genetically modifying sea bream fish to have 50 percent more muscle and, according to Japan News/Yomiuri Shinbun, government approval is expected soon. Not surprisingly, there are concerns about what this will do to the environment and to consumers.

To make the sea bream grow to have more muscle, the myostatin gene — responsible for muscle growth restriction — will be modified so that it is incapacitated. Turning off the gene makes the fish grow more muscular than unmodified fish.

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The genetically modified fish are thought to be able to grow meatier without additional feed inputs, resulting in a competitive advantage intended to improve outcomes in the aquaculture industry.

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[T]he researchers behind the modified sea bream say safety measures have been put in place. Each edited fish is tagged for individual identification, and the fish are cultivated in tanks on land to avoid cross breeding in the wild.

In addition, Japan News reported, government regulators will oversee safety matters. "A Health, Labor and Welfare Ministry expert subcommittee and other bodies will confirm, among other items, that new genes have not been inserted into the fish and whether the modified fish produces new allergens," the paper reported.

This is an excerpt. Read the original post here.