



MONTEREY BAY
AQUARIUM

Monterey Bay Aquarium Position on Genetically Engineered (Modified) Salmon

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In assessing and evaluating the risks associated with the production of genetically engineered (GE) fish, the U.S. Food and Drug Administration (FDA) approval process and the required Environmental Assessment document both rely on three specific containment strategies: physical, geographical and biological.

The United Nations Food and Agriculture Organization (FAO) recommends that introductions of species for aquaculture should be considered as introductions to the wild, even if the facility is considered a closed system (FAO, 1995). Therefore we consider the likelihood of escape of GE salmon at some time in the future to be high.

Current methods available to fish farmers to produce sterile or reproductively non-viable fish (and therefore to achieve 'biological containment') are not perfect. The most common method, triploidy, is less than 100% effective. At 99% sterility, one fish in every hundred would not be sterile and could be reproductively viable. Production of GE salmon, even in its early stages, is likely to involve the production, shipping and growing of hundreds of thousands of eggs and fish. Therefore we must consider any escapes to potentially contain reproductively viable GE salmon.

Due to the largely unknown or incalculable risks associated with the introduction of (even small numbers of) reproductively viable GE fish into the wild, the Monterey Bay Aquarium's Seafood Watch rating criteria are unable to adequately assess this as yet untested type of aquaculture. Concerns about the genetic interaction of escaping domesticated farmed salmon with wild populations are well-documented.

Taking into account the additional risks associated with potential escape of GE fish, the Monterey Bay Aquarium opposes production of GE salmon due to the inherent environmental risks involved.

For more information, please contact:

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