

The following protocol is in a process of continual improvement and will be updated periodically. Last update: 11-08-2021

## **Taste Testing**

Taste testing is a valuable tool to assess whether inclusion of an ingredient in an aquaculture feed will influence consumer preference for the seafood end product. Consumers judge the resulting fillet based on taste, texture, color, and other sensory indicators that typically impact the consumer experience. Institutions such as Oregon State University perform formal sensory and consumer behavior research, however informal panels of experienced consumers may also yield useful information.

Here are some recommendations for conducting taste testing:

- Note that animals grown in a recirculating aquaculture system will need to be purged prior to harvesting to remove off-flavors.
- Analyze the nutritional quality of the fillet to provide to consumers participating in the tasting panel. In addition to taste, nutritional information may affect consumer preference.
- Texture profile analysis may support taste testing results by quantifying fillet texture characteristics such as hardness, cohesiveness, springiness, and resilience. These results yield further information on how diets impact the texture profile of an aquacultured species.
- It is not recommended to overwhelm tasting panelists with many samples. Typically the most accurate results are found when one experimental group is compared to a commercial control.
- "No preference" is considered a positive outcome for taste testing.
- If conducting an informal panel, provide feedback sheets including specific questions to consumers i.e., how would you describe the taste and aroma? Do you have a preference?
- Some institutions who host formal tasting panels may require that all ingredients in the feed formula be GRAS (Generally Recognized As Safe).
- All testing should be blind i.e., participants should not know which treatment group they are consuming