



CRS Report for Congress

Seafood Marketing: Combating Fraud and Deception

Eugene H. Buck
Specialist in Natural Resources Policy
Resources, Science, and Industry Division

Summary

Media attention has focused on recent incidents of economic fraud relating to seafood. The extent of this fraud is not well documented and, in many cases, may not be intentional. In addition, some new treatment procedures by the seafood industry are being questioned for their potential to deceive consumers. This report reviews recent incidents of fraud and deception and examines several policy issues. Congress may become involved in oversight of how federal agencies are addressing these issues, and legislation related to these concerns may be introduced.

Media attention has focused on recent incidents of fraud relating to seafood — restaurants serving lower-priced fish than identified on menus, lower-priced species marketed commercially as higher-priced species, packaged weights of seafood less than labeled weights, and excessive water added to seafood to increase total product weight — raising public concern. Although such apparent fraud may not be intentional and its extent is not well documented, these concerns have the potential to erode consumer confidence in seafood. Congress is facing questions of whether the law applicable to fraudulent seafood sales and marketing is clear and enforceable, whether agency enforcement efforts targeting seafood fraud are adequate, and whether the penalties for seafood fraud offenses are a deterrent.

Fraudulent or Deceptive Practices

Mislabeling or Substituting Species. The flesh of many fish species is similar in taste and texture and, therefore, it is difficult to identify species from fillets, especially after preparation for consumption. Thus, it is relatively easy to substitute an inexpensive species for one of higher value. Over the nine-year period of FY1988-FY1997, investigations by the National Marine Fisheries Service's National Seafood Inspection Laboratory found that 37% of fish and 13% of other seafood (e.g., shellfish, edible

seaweed) were mislabeled.¹ The primary federal law that addresses mislabeling is the Food, Drug, and Cosmetic Act of 1938 (FDCA; 21 U.S.C. §§301 et seq.), which is administered by the Food and Drug Administration (FDA).

This fraud can be perpetuated several different ways. Unfair and deceptive trade practices occur when restaurants misrepresent menu items to their patrons by substituting other (often less expensive) fish for an item described as a higher-valued species. This fraud also occurs at the manufacturing level, as in American Samoa, where a dozen tuna cannery workers were accused of falsely labeling cans as tuna when the cans were actually filled with less expensive wahoo, and selling it to local stores.² In addition, food service entities can be victimized, if they pay several times what they should due to bait-and-switch tactics of unscrupulous vendors, while legitimate suppliers lose an equivalent amount of business to competitors who undercut them by quoting one item and replacing the higher-valued species with an inexpensive one.

In February 2007, WKRG-TV (Mobile, AL), using DNA testing, found that only one in ten samples advertised as grouper actually were this fish, prompting state agriculture inspectors to target 35 Gulf of Mexico restaurants and seafood markets for sampling.³ Alabama state law makes a restaurant or distributor subject to a fine of \$5,000 per offense for selling falsely labeled seafood products. In a similar media investigative report, 17 of 24 Tampa, FL, area restaurants were selling less-desirable species as grouper.⁴ These media investigations have not been limited to the Gulf area.⁵ These problems can arise from substitution at the restaurant level, misrepresentation by the restaurant supplier, or product misidentification anywhere earlier in the harvesting/processing process. It is often difficult to determine who is at fault, especially if there is collusion.

Other instances of mislabeling include imported farmed salmon being falsely identified as wild Alaska salmon and frozen seafood being marketed as fresh product. Since large quantities of seafood are imported for U.S. consumption, some portion of the mislabeling problem undoubtedly originates with foreign suppliers. **Table 1** provides a list of the most commonly substituted species.⁶ The problem of species substitution is not only concentrated with certain species and products because of their differing values, but also is more pervasive for species with easily mistaken substitutes.

Low Weights or Undercounting. Inaccurate (low) counts or net weights (“short weighting”) result in consumers receiving less for their money than advertised and

¹ See [<http://sst.ifas.ufl.edu/22ndAnn/file08.pdf>].

² “Chicken of the Sea Embroiled in Labeling Scam,” Associated Press (March 21, 2007).

³ See [http://www.wkrg.com/servlet/Satellite?pagename=WKRG%2FMGArticle%2FKRG_BasicArticle&c=MGArticle&cid=1149193401779&path=%21news%21local].

⁴ See [<http://pqasb.pqarchiver.com/sptimes/access/1230334761.html?dids=1230334761:1230334761&FMT=FT&FMTS=ABS:FT&date=Mar+10%2C+2007&author=CURTIS+KRUEGER&pub=St.+Petersburg+Times&edition=&startpage=1.A&desc=%27Grouper%27+costs+restaurants>].

⁵ Others have been reported in Portland, OR, [<http://www.kptv.com/print/11072970/detail.html>]; and in Phoenix, AZ, [<http://www.kpho.com/print/10371007/detail.html>], for example.

⁶ See [<http://www.cfsan.fda.gov/~frf/econ.html>].

anticipated. These instances, although commonly reported, also constitute mislabeling offenses under the FDCA.

Table 1. Examples of Commonly Substituted Seafood
(less expensive products are in column A)

<u>A</u>	<u>B</u>
Rockfish	Red Snapper
Yellowtail	Mahi Mahi
Mako Shark	Swordfish
Oreo Dory or John Dory	Orange Roughy
Alaska Pollock	Cod
Sea Bass	Halibut
Arrowtooth Flounder	Dover Sole
Black Drum	Red Drum
White Perch or Zander	Lake or Yellow Perch
Paddlefish or other fish roe	Caviar (Sturgeon species)
Sauger or Alaska Pollock	Walleye
Pacific Salmon	Atlantic Salmon
Pink Salmon	Chum Salmon
Skate Wings	Scallops
Steelhead Trout	Salmon
Imported Crabmeat	Blue Crabmeat
Farm-Raised Salmon	Wild-Caught Salmon

Over-Treating or Added Water Weight. Overbreeding may cause consumers to pay shrimp prices for excess bread crumbs. The FDA standard for breaded shrimp requires that such a product contain at least 50% shrimp. Frozen fillets, shrimp, crab legs, and other products are normally protected from dehydration (freezer burn) while frozen by the application of a light glaze of ice; a packer then includes more product in the package to compensate for the weight of the glaze. Excessive amounts of glaze (overglazing) not compensated for in this manner can deliberately be used to increase the apparent weight, and therefore the apparent value, of the delivered product.

In addition, sodium tripolyphosphate (STP) can be used to maintain and retain moisture in seafood products. Prolonged soaking of seafood in STP-water solution can result, for example, in Atlantic sea scallops with excessive water, adding to the product's total weight and constituting economic fraud. Seafood treated with STP must be accurately labeled to identify this treatment.

Altered Color. Some aquaculture operations add the color additives canthaxanthin and/or astaxanthin to feed to impart a more orange color to fish flesh of salmon and/or trout. The flesh of the farmed varieties of these fish would (if not for these color additives) be a less appealing pale white. Without additives, farmed salmon and trout lack the natural orange flesh color because they do not ingest astaxanthin, an antioxidant that wild salmon and trout receive through their diet of shrimp, krill, and plankton. Since the diet of farmed salmon lacks the natural pigments, these fish may be fed an artificial astaxanthin, such as Carophyll Pink, to enhance their flesh color.

More recently, fish fillets have been treated with carbon monoxide (CO) to give fish flesh a fresher-appearing reddish tint.⁷ The growing use of CO (“tasteless smoke” or TS) as a “pigment fixative” has alarmed some consumer advocates who say it deceives shoppers who depend on color to help them avoid spoiled fish. Those critics are challenging the FDA and the seafood industry, saying the agency has violated its own rules by allowing this practice without a formal evaluation of its impact on consumer safety. FDA considers tuna to be misbranded if it is treated with either TS or CO but not labeled to indicate that it contains a preservative, and thus purports to be unprocessed, fresh, or fresh-frozen tuna.⁸ All processed seafood involving CO or TS require label declarations under 21 C.F.R. part 101.

Transshipment to Avoid Import or Customs Duties. Transshipment occurs when foreign producers ship goods to a second country en route to the United States. Although transshipment is generally legal and commonly used in the ordinary course of business, it is illegal if it is done for the purpose of circumventing trade laws and other applicable trade restrictions. It has been reported that shrimp from China and Thailand have been shipped to the United States by way of Indonesia to avoid paying antidumping duties levied by the United States on shrimp imported from China and Thailand, but not on shrimp imported from Indonesia.⁹

Industry Initiatives

On October 13, 2006, concerns that seafood fraud has and could increasingly erode consumer confidence in seafood led the National Fisheries Institute (NFI) to announce an initiative to promote economic integrity within the seafood industry.¹⁰ Implementation of this initiative is scheduled for summer 2007, concentrating on three primary areas:

- transshipment of products subject to antidumping and countervailing duties;
- mislabeling of products or species substitution; and
- mislabeling of weights or counts of products.

NFI intends to pursue this initiative (1) by obtaining commitments from the CEOs of NFI member companies to comply with current law and regulation and (2) by developing an accountability system that would reward “good actors” and identify “bad actors.” Such an accountability system would involve screening by a Better Seafood Bureau, independent third-party audits of processes and products, and a member review process.

⁷ See [http://www.sushiman.net/ahi/carbon_monoxide_trea.htm].

⁸ See FDA Import Bulletin #16B-95, available at [http://seafood.ucdavis.edu/Guidelines/fda_bulletin16b.htm].

⁹ See [http://www.atimes.com/atimes/Southeast_Asia/HC22Ae01.html]. Further information is contained in out-of-print CRS Report RS21776, *Shrimp Trade Dispute: Chronology*, by Eugene H. Buck, available from the author.

¹⁰ See [http://www.aboutseafood.com/assets/files/nfi_annrpt06d2.pdf].

Applicable Law

With the increasing media attention to this issue, Congress may face questions concerning current law applicable to seafood marketing and fraud. The issues to consider include whether current law applicable to fraudulent seafood sales and marketing is clear and enforceable; whether federal agency enforcement efforts targeting seafood fraud are adequate; and whether the penalties for seafood fraud offenses are a deterrent.

Customs and Border Protection. Transshipment to avoid paying import or customs duties is illegal whenever it circumvents trade laws and other applicable trade restrictions.¹¹ The applicable law and regulation may vary, depending upon the trade agreement existing between the United States and another nation as well as the status of any antidumping and countervailing duties currently in force for particular products imported from designated nations.

FDCA. The FDCA, as amended, gives FDA authority over most food regulation and includes a series of definitions elaborating on the concepts of adulteration and misbranding, control over all labeling of foods traveling in interstate commerce, detailed regulation of issues concerned with safety and wholesomeness of foods, and enforcement remedies available to the agency, when needed.¹²

The substitution of a less expensive fish or seafood item for a more expensive one in interstate commerce constitutes fraud and is prohibited under §403 of the FDCA (21 U.S.C. §343). Thus, FDA becomes involved when interstate or international transport is involved. About 85 of FDA's roughly 1,350 inspectors work primarily with seafood. Labeling violations are one of the infractions checked by the agency, and FDA has issued an import alert on species substitution, providing guidance to agency field personnel regarding the manufacturers and/or products at issue.¹³ However, enforcement of economic fraud and labeling laws has taken a backseat to protecting the security of the U.S. food supply.¹⁴

State Weight and Measures Statutes. Individual states enforce laws on intrastate business and commerce to assure that products are correctly labeled for weight and count.

Conclusions

Although it is not clear whether the amount of fraud and deception in seafood sales and marketing is increasing, media attention to this issue has raised its profile with the public. The economic integrity initiative of the National Fisheries Institute has the potential to increase attention within the seafood industry on this issue as well as to address eroding consumer confidence in fair marketing of seafood produce. In response

¹¹ Section 592 of the Tariff Act of 1930 (19 U.S.C. §1592).

¹² CRS Report RL33559, *Food Safety: National Uniformity for Food Act*, by Donna V. Porter.

¹³ For FDA import alert #16-04, see [http://www.fda.gov/ora/fiars/ora_import_ia1604.html].

¹⁴ "Species Substitution: Labeling Law Not An FDA Priority..." *Santa Monica Seafood SeaLog* (April 2006).

to increased public concern, Congress may face questions concerning current law applicable to seafood marketing and fraud and might conduct oversight into whether current law applicable to fraudulent seafood sales and marketing is clear and enforceable, whether federal agency enforcement efforts targeting seafood fraud are adequate, and whether the penalties for seafood fraud offenses are a deterrent. In addition, increased funding may be an issue so that agencies can more systematically monitor the situation, better determine the scope and scale of this type of problem, and develop new programs that address this fraud.