

SCRIPTURE TRUTH MINISTRIES' CLEAN AND UNCLEAN FISH LIST OVERVIEW;
FISH COMMONLY CONSIDERED 'CLEAN' BY MANY RABBINICAL AUTHORITIES, AND THE REASONS WHY WE SAY THEY ARE UNCLEAN:



LEVITICUS 11:9-12 (NKJV):

These you may eat of all that are in the water: whatever in the water has fins and scales, whether in the seas or in the rivers—that you may eat. But all in the seas or in the rivers that do not have fins and scales, all that move in the water or any living thing which is in the water, they are an abomination to you. They shall be an abomination to you; you shall not eat their flesh, but you shall regard their carcasses as an abomination. Whatever in the water does not have fins or scales—that shall be an abomination to you.

DEUTERONOMY 14:9-10:

These you may eat of all that are in the waters: you may eat all that have fins and scales. And whatever does not have fins and scales you shall not eat; it is unclean for you.

When compiling our CLEAN AND UNCLEAN FISH LIST, we followed the Scripture directive to “test all things” – 1 Thessalonians 5:21. What we discovered is that many of the fish that have been traditionally classified as ‘clean’ by rabbinical organizations are unclean.

We came to this determination through a few different reasons.

All fish with non-flexible, non-retractable rigid fins, including dolphins, sharks, and whales, are unclean. So, clean fish must have certain kinds of fins, fins that are non-rigid. We believe this principle holds true for fish scales. Clean fish must have overlapping, shedding scales that cover the entire body of the fish.

Scripture Truth Ministries believes that clean fish must have leptoid (ctenoid or cycloid) imbricated (overlapping), shedding (easily removable) scales covering the entire body of fish that are visible with the naked eye and must have non-rigid, flexible, retractable fins. Fish with embedded (non-overlapping scales) or ganoid (diamond-patterned non-overlapping scales) are unclean.

(1) The first Hebrew word *qasqeseth* means the imbricated scales of fish, which together with the dorsal fin were a distinguishing mark of all fish allowed as food to the Israelite ([Leviticus 11:9](#) [Deuteronomy 14:9](#) f). In the figurative sense the word is used of a coat of mail ([1 Samuel 17:5, 38](#)).

There is nothing in the words of the sacred text which compels us to think of literal scales. (In *Tobit*, however, a literal flaking-off of foreign substance is meant.) We have here rather a description of the sensation which terminated the three days' period of blindness which the apostle suffered after his meeting with the risen Lord on the road to Damascus. The apostle himself does not use this expression in his own graphic description of the same experience: "In that very hour I looked upon him" ([Acts 22:13](#)). The phrase has, however, come into English, for we speak of "scales falling from one's eyes" when we mean a sudden illumination or remembrance or a dissipation of harassing doubt.

10. **COUNTABLE NOUN** [usually plural]

The **scales** of a fish or reptile are the small, flat pieces of hard skin that cover its body.

Scripture Truth Ministries has studied fish from a Hebraic, Scriptural, and scientific perspective. A liberal understanding of a fish having both fins and scales would render sharks as clean fish, as sharks have a type of scale: placoid, and they have rigid fins, but sharks are unclean as they have placoid scales and rigid fins, which are not the kind of scales and fins that clean fish have.

Types of scale

1. Leptoid scale – a. Cycloid scale - Ex. Salmon, Trout, Carps
b. Ctenoid Scale - Ex. Perch
2. Placoid scale – Ex. Shark, Rays
3. Ganoid scale – Ex. Sturgeon & Gars
4. Cosmoid scale – Ex. Lung fish

Many people are satisfied with common rabbinical authorities' rulings of clean and unclean fish. We at Scripture Truth Ministries are not. We have discovered that fish must be fully scaled, have ctenoid or cycloid scales covering the body of the fish, fish cannot be half-scaled or partially-scaled, cannot have embedded scales, and cannot have mixed scales with scutes.

We believe the rabbinical organizations that originally classified clean and unclean fish, erred in understanding the Hebraic meaning of ‘scales’ and also misunderstood their function in keeping clean fish clean. We believe overlapping, shedding scales covering the entire bodies of clean fish shield and protect them from toxins and parasitic infections. If a fish is partially scaled or has scales and scutes, toxins and parasites enter such fish through their skin, contaminating them. Scutes are typically located near a fish’s lateral line, near its tail end. Scutes act like an unzipped opening in a fish’s otherwise scaled body, whereby fish with scutes acquire microorganisms that toxify the fish’s flesh and cause humans who consume them to often get sick with ciguatera food poisoning.

We consider all fish with scutes unclean, because in all cases these fish are known to cause ciguatera food poisoning. Many local fishermen are aware of these fish with scutes that should not be consumed, because they cause ciguatera food poisoning, will not eat such fish, and will throw them back into the waters when they catch them. Other organizations do not consider scutes as a cause to classify fish as unclean. Many fish, classified as clean by rabbinical and other organizations, are harmful to human health by means of ciguatera poisoning, high mercury levels, parasitic infestation, toxicity, and various other reasons.

Scripturally clean fish also can be a carrier of ciguatera food poisoning or other toxins, as is the case with Greater Amberjack (*Seriola Dumerili*), Chinamanfish (*Symphorus Nematophorus*), Great Barracuda (*Sphyraena Barracuda*), Bream / Sea Bream (*Family: Bramidae, Sebastidae, and Sparidae*), Goatfish (*Family: Mullidae*), Halfbeak (*Family: Hemiramphidae*), and Porgy (*Family: Ephippidae and Sparidae*).

How could it be that consuming clean fish can cause sickness?

Clean fish may harbor some toxins in their body, but they do not harbor toxins in their flesh. Unclean fish harbor toxins in their bodies, their internal organs and skin (fat), and their flesh. The problem is that people eat the internal organs and skin of clean fish, and this is why people can get sick from consuming clean fish, as eating the organs and skin (fat) of animals is a violation of the dietary laws. We are permitted to eat the flesh or meat of creatures, not their internal organs or fat (Leviticus 3:17).

Scripture instructs us to eat *only the flesh or meat* of creatures (exception: clean insects):

EXODUS 12:8,46 16:8,12, 29:31-33; LEVITICUS 7:15, 8:31; NUMBERS 11:4,13,18,21,33, 18:15-18; DEUTERONOMY 12:15,20,23,27; 1 SAMUEL 2:13-15,25:11; 2 SAMUEL 6:19; 1 KINGS 17:6, 19:21; 1 CHRONICLES 16:3; JOB 31:31; PSALMS 78:20,27; PROVERBS 9:2, 23:20; ISAIAH 22:13, 44:16,19; JEREMIAH 7:21; DANIEL 10:3; ROMANS 14:21; 1 CORINTHIANS 8:13

Some might accuse Scripture Truth Ministries of ‘adding to Scripture,’ with our refined understanding of Scripturally clean fish having both non-rigid fins and overlapping, shedding scales covering the entire body of clean fish. While we understand such objections, we do not believe that we are adding to the Scripture requirements for clean fish; we believe we are clarifying them. Many of the fish listed on a standard clean and unclean fish list are unclean, unhealthy, and dangerous to consume.

This overview contains some of the information that was used by us to compile our CLEAN AND UNCLEAR FISH LIST, to make a better distinction of clean and unclean fish, and will serve to guide Torah observant and health conscious fish consumers with knowledge of these controversial fish, so that people can make better informed decisions about the fish that they consider clean and unclean and ultimately eat or don’t eat.

Clean Fish* That Can Be Problematic or Toxic:

*The clean fish listed on this overview is not a complete list of clean fish. These are some fish that are Scripturally clean, yet can be problematic or toxic when consumed (incorrectly), that is if people eat the internal organs and / or skin (fat) of these fish.

Throughout this overview, and on our CLEAN AND UNCLEAR FISH LIST, **clean fish** are referenced in **blue** and **unclean fish** are marked in **red**.

Among the many fish that we consider **unclean**, but are considered **clean** by many organizations, include: all flatfish (flounder, etc.), grouper, jacks (except amberjacks), mackerel, and tuna.

Amberjack (Greater Amberjack - *Seriola Dumerili*)

Concern: Ciguatera Food Poisoning.

Curious Facts about Greater Amberjack

✓ It's known that in some areas it has caused cases of ciguatera, (ciguatoxin poisoning), so you should avoid consuming the intestines, head and roe, where the concentration of toxins is greater. This poisoning is rarely lethal.

Parasites

Tapeworms occasionally infest greater amberjacks. Although this may be unappetizing, the worms are harmless to humans and may be cut away from the flesh and discarded prior to cooking.

A monogenean parasite (*Zeuxapta seriolae*) has been documented as parasitizing the gills of the greater amberjack.



Barracuda (Great Barracuda - *Sphyraena Barracuda*)

Concern: Ciguatera Food Poisoning.

Barracudas are snake-like in appearance with prominent, sharp-edged, fang-like teeth, much like piranha. They have overlapping, shedding scales. One variety, the great barracuda, has been implicated in cases of ciguatera food poisoning.

As food [\[edit \]](#)

Barracudas are popular both as food and **game fish**. They are most often eaten as fillets or steaks. Larger species, such as the **great barracuda**, have been implicated in cases of **ciguatera** food poisoning.^[14] Those who have been diagnosed with this type of food poisoning display symptoms of gastrointestinal discomfort, limb weakness, and an inability to differentiate hot from cold effectively.^[9]

Bluefish (*Pomatomus Saltatrix*) and Chilean Sea Bass (*Dissostichus Eleginoides*)

Concern: High in mercury

Mercury Levels in Fish

Low	Medium	High
Artic Cod Anchovies Butterfish Catfish • Clam Crab (<i>Domestic</i>) Crawfish/Crayfish Croaker (<i>Atlantic</i>) Flounder Haddock (<i>Atlantic</i>) Hake • Herring Mackerel (<i>N. Atlantic, Chub</i>) Mullet • Oyster Perch (<i>Ocean</i>) Plaice • Pollock Salmon Sardine • Scallop Shad (<i>American</i>) Shrimp Sole (<i>Pacific</i>) Squid (<i>Calamari</i>) Tilapia Trout (<i>Freshwater</i>) Whitefish • Whiting	Bass (<i>Striped, Black</i>) Carp Cod (<i>Alaskan</i>) Croaker (<i>White Pacific</i>) Halibut (<i>Pacific, Atlantic</i>) Jacksmelt (<i>Silverside</i>) Lobster Mahi Mahi Monkfish Perch (<i>Freshwater</i>) Sablefish Skate Snapper Tuna (<i>Canned Chunk Light, Skipjack</i>) Weakfish (<i>Sea Trout</i>)	Bluefish Grouper Mackerel (<i>King, Spanish, Gulf</i>) Marlin Oranger Roughy Seabass (<i>Chilean</i>) Shark Swordfish Tilefish Tuna (<i>Canned Albacore, Ahi, Bigeye, Yellowfin</i>)

Clean caviar is typically colored gold, orange, or red.

Unclean caviar is colored black or dark gray.

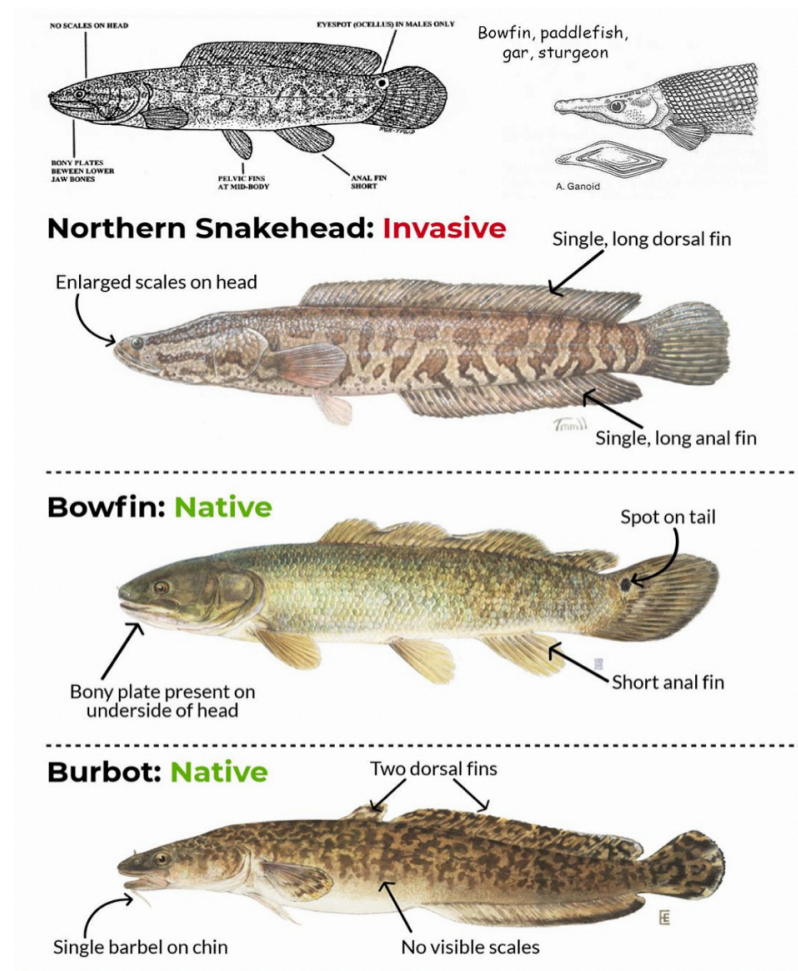


Salmon roe (left) and sturgeon caviar (right) served with mother of pearl caviar spoons to avoid tainting the taste of the caviar.

Bowfin (*Amia calva*)

Concern: Appearance

Bowfin fish - a clean fish, differs from similar looking unclean fish: (Burbot, Northern Snakehead, Snakehead). Bowfins possess large, overlapping cycloid scales of clean fish, Burbot fish do not possess visible scales, and Snakehead fish possess ganoid scales.



Unlike all of the most primitive [actinopterygians](#), the scales of bowfin differ in that they are not [ganoid scales](#), rather they are large, single-layered [cycloid scales](#) closer in similarity to more derived [teleosts](#).^{[18][19]}

Diseases [\[edit \]](#)

A common [parasite](#) of bowfin is the [anchor worm](#) (*Lernaea*). These small crustaceans infest the skin and bases of fins, with consequences ranging from slowed growth to death.^[9] The mollusk *Megalonaia gigantea* lays eggs in the bowfin gills, that are then externally fertilized by sperm passing in the water flow. The small [glochidia](#) larvae then hatch and develop in the gill tubes.^[9]

Bowfin with [liver cancer](#) and with fatal [leukemia](#) have been reported.^[7]

Accumulation of toxic substances [\[edit \]](#)

In some areas of the United States where aquatic environments have tested positive for elevated levels of [toxins](#), such as [mercury](#), [arsenic](#), [chromium](#), and [copper](#), there are posted signs with warnings about the consumption of fish caught in those areas.^[69] Concentration of mercury [biomagnifies](#) as it passes up the food chain from organisms on lower trophic levels to apex predators. It [bioaccumulates](#) in the tissues of larger, long-lived predatory fishes. When compared to smaller, short-lived fishes, bowfin tend to concentrate mercury at higher levels thereby making them less safe for human consumption.^{[8][70]}

Cod (*Family: Gadidae, Genus: Gadus*)

Concern: Parasitic infection, torn skin

Cod are typically infested with parasites. Cod have overlapping shedding scales, but small scales that are hard to see. By all accounts, cooking cod well renders their parasites harmless and cod is apparently healthy to eat, but some may not wish to consume this fish due to its many parasites.

Of all the fish on our fish list, cod was the most difficult to classify. They have shedding, overlapping scales which are difficult to see, as their skin is covered in heavy mucus. Typically, cods are infested with parasites, which could show up on the fish as 'torn' skin. As a fish that could very well have torn skin, one may wish to inspect this fish carefully before purchase or consider this fish 'unclean' for the following Scripture reason:

EXODUS 22:31 [WITH INTERPRETATION]:

And you shall be holy men to Me: you shall not eat meat torn by beasts in the field [OR MICROSCOPIC ORGANISM BEASTS]; you shall throw it to the dogs.

For other verses restricting the eating of flesh that has been torn by beasts, see also: **Genesis 31:39; Leviticus 7:24, 17:15-16, 22:28; Ezekiel 4:14, 44:31.**

Some **cod** are unclean.


Murray cod have soft skin and very fine scales that leave them vulnerable to infection from exotic disease organisms.

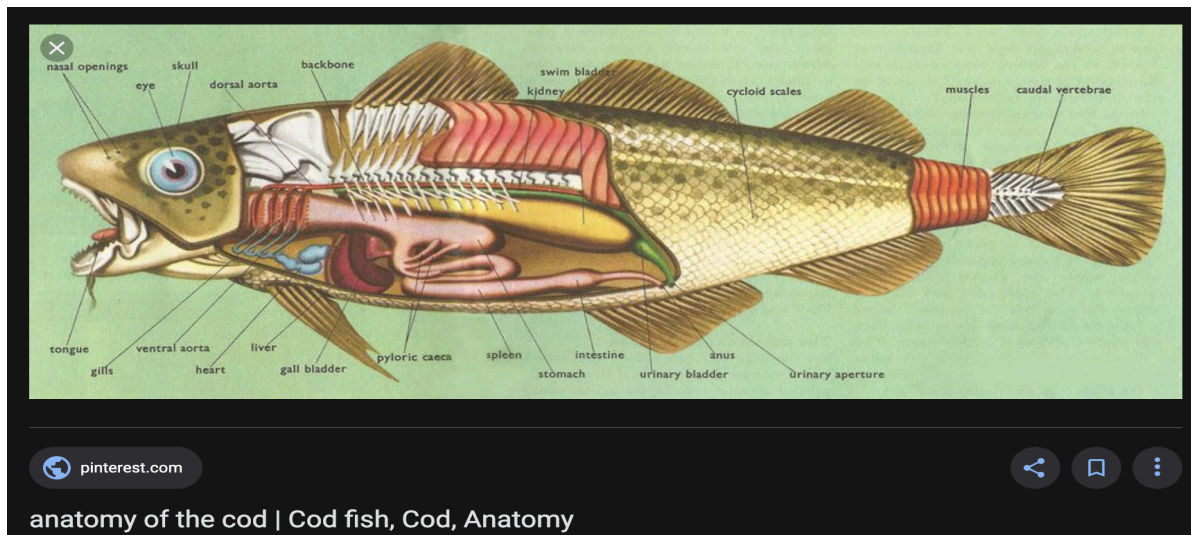
The following exotic disease organisms all seriously affect wild Murray cod; all have been introduced by imports of exotic fish.

Chilodenella is a single-celled, parasitic [protozoa](#) that infects the skin of Murray cod and has caused a number of serious kills of wild Murray cod.^[53]

Saprolegnia is a fungus-like oomycete or "water mould" that frequently infects Murray cod eggs and the skin of Murray cod that have been roughly handled through poor [catch and release technique](#).^[53] (It is essential that Murray cod intended for release only touch cool wet surfaces and are **not** put down on any hard, dry, rough or hot surfaces, e.g. boat gunwales, boat floors, dry grass, dry rocks, gravel banks, dry towels or mats, etc. Hands should also be wetted before touching them. They must not be hung vertically by the mouth or gill covers.) Wild Murray cod populations across their range suffer extremely severe infestations of *Lernaea* or "anchor worm", a parasitic [copepod](#) vectored by introduced [carp](#) and that burrows into the skin of Murray cod.^{[53][54]} *Lernaea* puncture wounds are often secondarily infected by bacteria.^{[55][56]} Severe *Lernaea* infestations probably causes the death of many more adult Murray cod than commonly recognised.^[57] Ebner^[19] reports a young adult Murray cod seemingly killed by severe *Lernaea* infestation.



Lernaea parasite on a murray cod 



Lower Omega-3 Content Than Fatty Fish

Cod does not possess the high levels of [omega-3 fatty acids](#) that fatty fish do.

These important fatty acids may be responsible for some of the health benefits of fish (20).

For this reason, it may be best to regularly consume fatty fish in addition to lean fish like cod.

Parasites

As with many other fish, cod may harbor parasites if it's consumed raw without previously being frozen (21).

Parasites in food can cause foodborne illness and unpleasant symptoms such as diarrhea, abdominal pain, and muscle pain (22 ^{🇺🇸}).

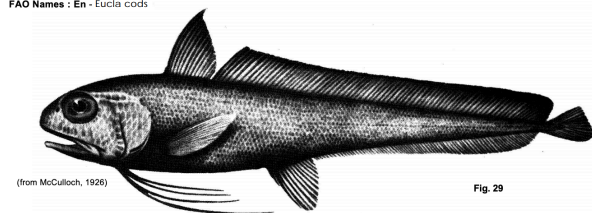
However, consuming fully cooked or previously frozen cod removes this concern.

Eucla Cod (*Euclichthys Polynemus*)

Concern: Appearance

Eucla Cod, unlike most fish that have this appearance (an elongated upper and lower fin), have overlapping, shedding scales and are thus clean.

FAO Names : En - Eucla cods



General Features : Gill openings extend upward above the level of pectoral fins. Anterior dorsal fin originating at rear of or behind head; caudal fin externally symmetrical. No V-shaped ridge on top of skull. Scales in most species overlapping and rounded, not set at right angles to each other. Swimbladder not connected to rear of skull. A single hypural bone attached to last vertebra. Spine on top of first vertebra is tightly connected to a narrow crest at the rear of the skull. Additional details are presented by Marshall & Cohen (1973), Fahay & Markle (1984), Dunn & Matarese (1984), and several authors in Cohen (1989).

Goatfish (*Family: Mullidae*) (aka: Bandtail Goatfish, Nightmare Weke, Giant Nightmare Goatfish, Weke Pueo, Weke (Pahulu).

Concern: Hallucinatory Fish Poisoning

Goatfish have been known to cause hallucinatory fish poisoning. The rare toxin can cause severe vomiting and terrifying hallucinations, in some cases requiring hospitalization. The origin of the toxin is unknown, and is found throughout tropical and temperate waters. Other carriers of this toxin include convict **tangs** (**manini**), **chubs** (**nenu**), **mullet** (**ama**), **coral groupers**, **rabbitfish**, and **sea bream**. Cooking doesn't inactivate the poison, which seems to be concentrated in the brain or the head. The advice to mullet and goatfish fishers is to eat only the meat of the fish between the gills and the tail, and do not eat the head of the fish.

Mahi Mahi (*Coryphaena Hippurus*) (Common Dolphinfish, Dolphin, Dorado, Mahi-Mahi, Mahimahi)

Concern: Ciguatera Food Poisoning.

The mahi-mahi is also a common vector for ciguatera poisoning.^[11] Although a very popular food dish in many parts of the world, there have been reports of ciguatera poisoning from human consumption of this fish. Ciguatera poisoning is caused by the accumulation of toxins in the flesh of the fish over time. These ciguatoxins grow together with marine algae which causes fish like the Mahi-mahi to consume them by accident.^[12]

Avoid eating the internal organs and skin of mahi mahi.

Salmon (*Family: Salmonidae*)

Concern: Farm raised

Farm raised salmon: It is healthier to cook and consume wild caught salmon than farm raised salmon. However, it may be safer to eat farm raised salmon sushi, raw salmon, than wild caught salmon sushi, as farm raised salmon are given drugs to inhibit worm infestation.

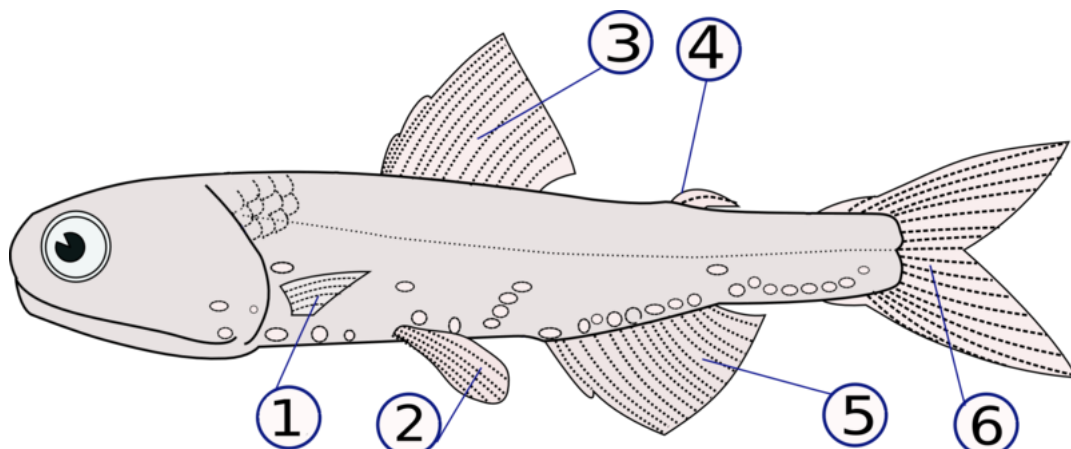
Sea Bream (*Family: Sparidae*)

Concern: Hallucinatory Fish Poisoning

In the Mediterranean and eastern Atlantic, the common food fish saupe, or sea bream, has caused hallucinatory fish poisoning. In Arabic the sea bream is known as “the fish that makes dreams.” Avoid eating near the head region of this fish.

Unclean Fish* That Can Be Problematic or Toxic:

*The unclean fish listed on this overview is not a complete list of unclean fish. These are some fish that are widely proclaimed to be clean by other rabbinical and kosher certifying organizations.



Partially scaled fish and fish with mixed scales and scutes are unclean.

Bombay Duck (*Harpadon Nehereus*) (aka: Bummalu, Bombil, Boomla)

Why unclean: no visible scales / partially scaled fish

Bombay duck was briefly banned by the European Union because its manufacture (open air drying by small businesses) did not conform to EU sanitation standards. Considerable protest ensued (Britain was eating 13 tonnes per year) and the EU now allows it if packaged at an approved facility.



Cooking: For fresh fish, any wet method of cooking will turn this fish into mush. The only suitable methods are to powder it with rice flour, perhaps with some coarse semolina for texture, and either pan fry it or deep fry it. Deep frying it will curl to the skinside, but pan frying you can keep the fillets flat. Brown lightly on the flesh side and then turn it over. Pat down if it curls at all.

Recipes: We have two recipes for Bombay duck:

[Bombay Duck, Fried #1](#) for Dried Bombay Duck. I have served this to guests who described it as "Fish Jerkey". They liked it, but my guests will eat almost anything.

[Bombay Duck, Fried #2](#) for Fresh Bombay Duck.

Buying: I have purchased fresh fish from the San Gabriel Superstore, a very large Asian emporium in greater Los Angeles. My most recent buy was from a Philippine market in Eagle Rock at 2014 US \$0.99 / pound. Because of its unique flesh this fish is highly perishable, needs to be kept well chilled and should be eaten the same day it's thawed.

Subst: Because of its unique characteristics there is no substitute for this fish.

Dried is rare in Indian markets in Los Angeles county, most of which are strictly vegetarian. but I have found it in one that isn't. I have also purchased dried ones labeled "Lutia Fish". These were from Vietnam, and again from the San Gabriel Superstore.

Scales: This fish is supposed to have some scales back towards the tail, so it is rated kosher, but I have yet to find any.

Bumper (*Family Carangidae; Genus Chloroscombrus*)

Why **unclean**: Mixed scales and scutes

Atlantic Bumper, *Chloroscombrus chrysurus*



Atlantic Bumper, *Chloroscombrus chrysurus*. Fish caught off the Tybee Pier, Savannah, Georgia, October 2009. Length: 23.0 cm (9.1 in). Catch, photo, and identification courtesy of Kenneth Tse, Toronto, Canada.

The Atlantic Bumper, *Chloroscombrus chrysurus*, is a member of the **Jack or Carangidae Family**, and is known in Mexico as horqueta del Atlántico. Globally, there are 2 species in the genus *Chloroscombrus*, both of which are found in Mexican waters, 1 in the Atlantic and 1 in the Pacific.

The Atlantic Bumper has a strongly compressed oval body with a ventral profile that is more convex than the dorsal profile and a body depth that is 38% to 42% of standard length. Their appearance is more “pompano-like” than “jack-like”. They are dark metallic blue dorsally and transition to silvery ventrally. They have a black spot on the upper border of their gill cover and a black saddle on their upper tail base. Their fins are yellow with the exception of the pelvic fins which are white. Their head has a very short snout with a blunt tip and a small oblique mouth that extends past the front of their eyes. Their anal fin has 2 standalone spines followed by 1 spine and 25 to 28 rays; their caudal fin has a slender base and is deeply forked and an upper lobe that is longer than the lower lobe; their first dorsal fin has 8 spines; their second dorsal fin has 1 spine and 25 to 28 rays; and, their pectoral fins are curved and longer than the head. They have 9 to 12 gill rakers on the upper arch and 30 to 37 gill rakers on the lower arch. They have a pronounced lateral line with a short anterior arch and 5 to 15 scutes on their caudal fin base. Their body is covered with scales.

Cabrilla (*Epinephelus Labriformis*) (aka: Flag Cabrilla., Serranus Cabrilla., Spotted Cabrilla)

Why unclean: Rough, non-shedding, embedded scales

Description [edit]

The starry grouper is medium-sized fish which grows up to 60 cm.^[3] From:^[4] "The body of the starry grouper is robust and compressed. The end of the top jaw is exposed. The operculum edge has 3 flat spines; the pre-operculum is without spines. The caudal fin is rounded. The lateral line is complete, it ends at the caudal fin base and is smoothly arched. The scales are rough and relatively small."

Carp*

Why unclean: Partially scaled fish

Mirror carp usually belong to the common carp's nominate subspecies, *C. c. carpio*. This lack of scales is widely believed to have been bred in by monks to make the fish easier to prepare for the table.



Mirror carp are a type of fish, commonly found in Europe. The name "mirror carp" originates from their scales' resemblance to mirrors. They can grow in excess of 60 lb - the last few British record fish have all been mirror carp.

The difference between mirror and its wild ancestor, the common carp, is both genetic and visual - biologically they are similar. The mirror carp was the first mutation of common carp, owing to two alternative genes, the S and the N alleles. The genetic term for a mirror carp is "ssnn" (all recessive).

Common carp have an even, regular scale pattern, whereas mirrors have irregular and patchy scaling, making many fish unique and possible to identify individual fish by sight, leading to most carp in the UK over 40 lb being nicknamed. Mirror carp usually belong to the common carp's nominate subspecies, *C. c. carpio*.

This lack of scales is widely believed to have been bred in by monks to make the fish easier to prepare for the table. [citation needed]

Contrary to popular belief, a leather carp is not a mirror carp without scales; a distinct genetic difference exists. Leather carp are permitted a few scales either along the dorsal line or the wrist of the tail. Leather carp also have reduced numbers of red blood cells, slowing growth rates, which makes larger leather carp extremely sought after and rare. The biggest known was Heather the Leather at 52 lb (24 kg).



Cobia (Aruan Tasek, Black Bonito, Black Kingfish, Black Salmon,* Cabio, Crabeater, Haruan Tasek, Lemonfish, Ling, Malay, Prodigal Son).

Why unclean: Non-overlapping, embedded scales

*Cobia are sometimes referred to as Black Salmon. Salmon and Black Sea Salmon are an unrelated clean fish.



The Cobia has the profile of a shark. The dorsal fin is preceded by 6-9 spines. The cobia is a solitary swimmer, not a school fish. The body of the fish is smooth with very small embedded scales not visible to the naked eye. It is a scavenger that follows sharks and turtles to scavenge after them. Cobias are frequently parasitized by nematodes, trematodes, cestodes, and acanthocephalans.

Coelacanth

Why unclean: Elasmoid scales – a type of armored scale.



Lobe-finned fishes, like this preserved coelacanth, have elasmoid scales



Crevalle Jack (Common Jack, Black-Tailed Trevally, Couvalli Jack, Black Cavalli, Horse-Eye Jack, Jack Crevale, Longfin Crevalle Jack, Pacific Crevalle Jack, Yellow Cavalli).

Why unclean: Partially scaled fish with scutes



Why it is unclean: It has scutes. These fish are smooth skinned, with a few small scales and scutes. Taken by lures or bait, the species is not considered a good table fish, having coarse, tasteless flesh. Fishermen consider Crevalle Jack fish 'junk fish.' The Crevalle Jack and similar Jack fish have been implicated in several cases of ciguatera poisoning.

They say jack crevalle can actually be [poisonous to eat](#) due to the threat of ciguatera poisoning. Though ciguatera toxin is said to be harmless to fish, it is known to be really noxious to humans.

What makes this toxin difficult to identify is that it may seem odorless and tasteless – leaving you totally clueless. More so, cooking the fish does NOT stamp out the toxins.

Although most people throw back jacks and refer to them as a "junk fish", but for those of you that do eat them, be careful!

Crevalle Jack:

Why unclean: Partially scaled fish with scutes

The straight section contains 23 to 35 very strong scutes, with bilateral keels present on the caudal peduncle. The chest is devoid of scales with the exception of a small patch of scales in front of the pelvic fins.

Horse-Eye Jack:

Why unclean: Mixed scales and scutes

The straight section contains 32 to 39 very strong scutes, with bilateral keels present on the caudal peduncle. The chest is completely scaled.

Horse Mackerel

Why unclean: Mixed scales and scutes

Jack Mackerel (Blue Jack Mackerel, Pacific Jack Mackerel)

Why unclean: Mixed scales and scutes

Jack Mackerels (Pacific Jack Mackerels) have 50 to 53 scales on its upper section above the fish's lateral line, and 43 to 53 keeled scutes in its bottom section.

Longfin Crevalle Jack

Why unclean: Partially scaled fish with scutes

The **lateral line** is moderately arched **anteriorly**, with this section containing 50 to 73 **scales**, while the straight section has 0 to 16 scales and 24 to 41 **scutes**.^[4] The breast is devoid of scales up to the origin of the **pelvic fins** and is separated from the base of the **pectoral fins** by a narrow band of scales.

Pacific Crevalle Jack

Why unclean: Partially scaled fish with scutes

The species **lateral line** is moderately arched anteriorly, with 58 to 79 scales in this section, while the straight section contains none to seven **scales** and 34 to 43 strong **scutes**.^[2] The breast is devoid of scales with the exception of a small patch of scales in front of the **pelvic fins**.

The straight section contains 23 to 35 very strong **scutes**, with bilateral keels present on the caudal peduncle. The chest is devoid of scales with the exception of a small patch of scales in front of the pelvic fins.

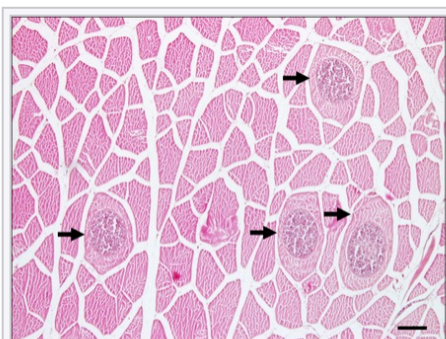
Flatfish

Why unclean: Mixed rough scales and embedded scales

FLATFISH

Flatfish (brill, flounder, fluke, halibut, megrim, plaice, skate, sole, and turbot) are similar looking, bottom dwelling, bottom feeding, half-scaled fish. The scales of flatfish are imbedded in their skin and cannot be easily removed. The top, dark sides of these fish have 'rough' leathery-type scales that can only be removed with a knife. The bottom white side of the fish is typically very smooth and has very few scales, if any, or they are imbedded under their skin and cannot be removed.

Parasites and food poisoning [\[edit \]](#)



Kudoa septempunctata in olive flounder muscles

The **Myxozoan** *Kudoa septemlineata* has been described in 2010 from olive flounder from Korea.^[3] This microscopic parasite infects the trunk muscles of the olive flounder where it causes myoliquefaction. Ingestion of raw fish containing *K. septemlineata* spores has been reported as a cause of food poisoning (**gastroenteritis**) in Japan since 2003.^{[4][5]} However, laboratory studies performed in 2015 and 2016 on adult^[6] and suckling mice^[7] showed that *K. septemlineata* spores were excreted in faeces and did not affect the gastrointestinal tract.

Goby

Why unclean: Partially Scaled fish, not scaled on underbelly or lateral line. Goby fish lie on sea floor

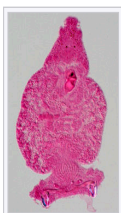
The tubenose gobies have a cylindrical body with a flattened ventral surface. The mouth is wide and slightly subterminal mouth with large lips and no **barbels**. The first dorsal fin has 7 or 8 spines. The **caudal fin** is rounded and has a triangular black spot at its base. The **ventral fins** are fused into a single suction cup shape.^[5] The scales are small and cover the top of the head, behind the eyes, and along the midline. The back and sides have broad, oblique blotches on a lighter brown or olive background. The bottom of the fish is cream to white in color.^[6] This species lacks scales on its **lateral line**. The rows above the lateral line have flattened on the **ventral** surface.^[7]

Grouper

Why unclean: Non-overlapping, embedded scales

Gag's scientific species name, *microlepis*, is derived from the Greek words "micro" for small and "lepis" meaning scale, in reference to the small scales of this fish.

Parasites



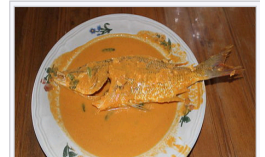
A monogenean parasitic on the gill of a grouper

As other fish, groupers harbour **parasites**, including digeneans,^[16] nematodes, cestodes, monogeneans, isopods, and copepods. A study conducted in New Caledonia has shown that coral reef-associated groupers have about 10 species of parasites per fish species.^[17] Species of *Pseudorhabdosynochus*, monogeneans of the family Diplectanidae are typical of and especially numerous on groupers.

Modern use

Many groupers are important food fish, and some of them are now **farmed**. Unlike most other fish species which are chilled or frozen, groupers are usually sold live in markets.^[18] Many species are popular fish for **sea-angling**. Some species are small enough to be kept in **aquaria**, though even the small species are inclined to grow rapidly.^[citation needed]

Groupers are commonly reported as a source of **Ciguatera** fish poisoning. **DNA barcoding** of grouper species might help in controlling Ciguatera fish poisoning since fish are easily identified, even from meal remnants, with molecular tools.^[19]



6. Forty percent of goliath grouper caught in Belize had mercury levels exceeding the U. S.-recommended levels for human consumption.



Guavina

Why unclean: Mixed scales, rough at rear, smooth at front

Guavina

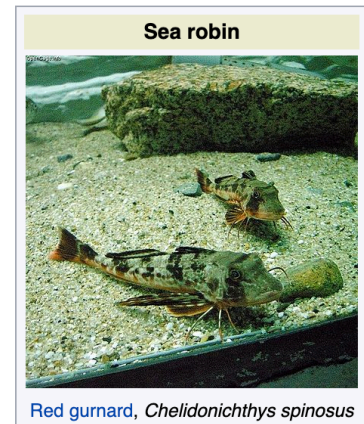
Body elongate, head long, flattened, wide, blunt; mouth large, lower jaw projecting; teeth small conical, in several rows on jaws, the outer row on top jaw longer, but without canines; gill membranes broadly joined to throat, with 6 rays; dorsal fin VII + I, 10, fins well separated, base of 2nd dorsal < distance from the end of that base to tail fin; anal fin I, 8-9; pectoral 16, broad and fan like; pelvic fins I, 5, long, completely and widely separate; scales rough at rear, smooth at front, small, ~110 in lateral series; top of head densely covered with smooth scales; no lateral line.

Gurnard (Sea Robin)

Why unclean: Mixed scales and armored plates. Also have non-scaled bellies, which lie on sea floor

The **Triglidae**, commonly known as **sea robins** or **gurnard**, are a family of bottom-feeding **scorpaeniform fish**. They get their name (sea robin) from the orange ventral surface of the species in the Western Atlantic (*Prionotus carolinus*) and from large **pectoral fins**, which, when swimming, open and close like a bird's wings in flight. The large surface area of the fins also permits the fish to glide short distances above the water surface, much like a **flying fish**.

They are bottom-dwelling fish, living down to 200 m (660 ft), although they can be found in much shallower water. Most species are around 30 to 40 cm (12 to 16 in) in length. They have an unusually solid skull, and many species also possess armored plates on their bodies. Another distinctive feature is the presence of a "drumming muscle" that makes sounds by beating against the swim bladder.^[2] When caught, they make a croaking noise similar to a frog, which has given them the **onomatopoeic** name **gurnard**.^[3]



Red gurnard, *Chelidonichthys spinosus*

Hogchoker

Why unclean: Mixed scales, rough scales on top side, embedded scales on bottom side, which lie on sea floor

A very small flatfish. They are regarded as "trash fish" by recreational fishermen and were fed to pigs, but they have rather bony bodies which were sometimes difficult for the pigs to swallow, hence the vernacular name Hogchoker.”



Herring Scad

Why **unclean**: Mixed scales and scutes

Herring scad

From Wikipedia, the free encyclopedia

The **herring scad** (*Alepes vari*) (also known as the **duskyfin crevalle** and **trevally scad**), is a common **species** of **tropical marine fish** in the jack family **Carangidae**. The species inhabits the surface waters of **coastal** regions throughout the **Indo-West Pacific** region, feeding on a variety of **crustaceans** and small fishes. It is the largest fish of the scad genus *Alepes*, growing to a recorded length of 56 cm. The herring scad is identified among the genus *Alepes* by its more numerous and smaller **scutes** and the number of **gill rakers** on the first arch. It is of minor importance to **fisheries** throughout its range.



The herring scad is an ovate shape, commonly blue green above and silver below

The herring scad has a body profile very similar to other members of the genus *Alepes*, having a strongly compressed, ovate body. The **ventral** and **dorsal** profiles of the fish are almost evenly **convex**, joined **anteriorly** by a pointed snout. There are two separate **dorsal fins**, the first containing 8 **spines** while the second has a single spine followed by 24 to 27 **soft rays**. The anal fin consists of two anteriorly detached small spines followed by a single spine connected to 20 to 23 soft rays.^[6] The **lateral line** is strongly arched anteriorly with the junction of the curved and straight sections located the origin of second dorsal to the third soft ray. The curved section contains 42 to 50 scales and 0 to 2 **scutes**, while the straight section has 0 to 7 scales and 48 to 69 scutes.^[7]

Indian Threadfin (*Alectis Indica*)

Why **unclean**: Embedded scales and scutes



An adult Indian threadfin

The Indian threadfish has the typical body structure of a large jack, with a distinctly angular, strongly compressed body. The major identifying feature of the species is its head profile, having a slight concavity near the **eyes** which distinguishes it from its close relatives in the genus *Alectis*. The **dorsal** profile of the fish is more curved than the **ventral** profile, and the body is deepest between the origins of the soft **dorsal** and soft **anal fins**.^[10] The first section of the dorsal fin consists of 5 to 7 visible **spines**, with the second section having one spine and 18 or 19 **soft rays**. The anal fin has two spines followed by a single spine and 15 or 16 soft rays. The **pectoral fin** is long and curved, extending beyond the junction of the straight and curved sections of the **lateral line**. The body appears to be scaleless, but on closer

inspection has minute, deeply embedded **scales**. The lateral line is strongly curved anteriorly, with a section of 6 to 11 **scutes** toward the tail. Ju

Leatherjacket

Why **unclean**: Scaleless fish

Leatherjacket

Oligoplites saurus

This elongated, silvery fish usually grows to about 10 or 11 inches long, and often has a blue-green or yellow sheen. This game fish should be handled with caution because the spines at its dorsal and anal fins can deliver significantly painful venom.



© David Snyder

Mackerel Scad

Why **unclean**: Partially scaled fish with scutes



[Cigarfish, Cigarminow (small), Galungong (Philippine), Opelu (Hawaii); Round Scad, *Decapterus macarellus*]

This is a worldwide fish, found in all temperate and tropical salt water regions. It is not related to Mackerel, but can be treated similarly, except where the Mackerel's oiliness is important (smoking, pickling). This fish can get up to 18 inches, but the photo specimen was 14-3/4 inches long and weighed 1 pound 2-3/8 oz. They are often marketed much smaller, around 7 inches. They are a popular eating fish in Hawaii.



Removing hard scutes

Scales: Like other Scad, this fish has a modest number of small scales up at the head end. They scrape off easily with little flying about.

Scutes: As with other "hard tail" fish, if you are going to leave the skin on, you must remove the strip of hard "scutes" along the lateral line near the tail. Just make a shallow cut through the skin on each side of the scutes. Get the tip of your fillet knife under the scutes at the forward end, and pull them up as you shave them off. They are too small in the curved part to be a problem.

Marlin

Why **unclean**: Blue Marlin scales are very small, teardrop-shaped tapering to a point, and do not overlap

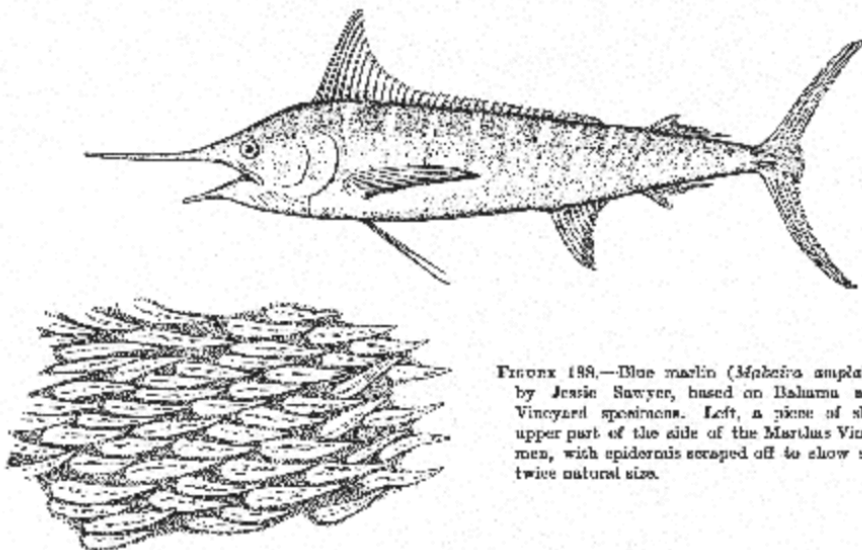


FIGURE 189.—Blue marlin (*Makaira nupha*).
by Jessie Sawyer, based on Bahama and
Vinyard specimens. Left, a piece of skin
upper part of the side of the *Makaira nupha*,
with epidermis scraped off to show scales
twice natural size.

Moapa Dace (*Moapa Coriacea*)

Why **unclean**: Embedded scales

Embedded scales

The **moapa dace** (*Moapa coriacea*) is a rare [cyprinid fish](#) of southern [Nevada, United States](#), found only in the warm springs that give rise to the [Muddy River](#), and in the upper parts of the river. It is the only species of the [monotypic](#) genus *Moapa*.

A small fish, with a maximum recorded length of 9 cm, its scales are small and embedded in the skin, resulting in a noticeably leathery texture (thus the species epithet, derived from Latin *coriaceus* "leathery"). General body shape is standard for cyprinids, with a vaguely conical head.



Moonfish

Why **unclean**: Scaleless fish

In its home range **moonfish** is often dried and can be dried without salt. Having no **scales** it is not kosher and is not listed as threatened. More on Varieties of Fish (very large page). This is a weirdly built fish, but more edible than you might expect for something that flat and bony.



Ocean Sunfish (*Mola Mola*)

Why **unclean**: Scaleless fish



A dish made from the ocean sunfish 

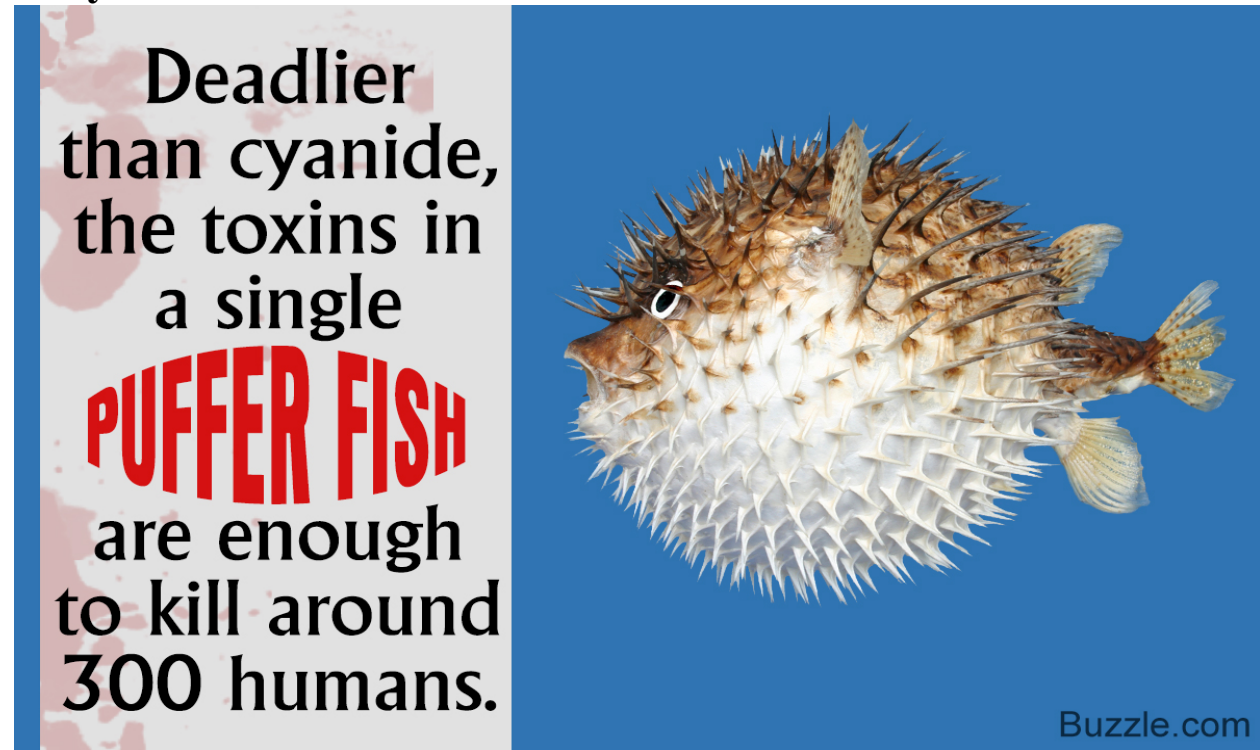
The flesh of the ocean sunfish is considered a delicacy in some regions, the largest markets being Taiwan and Japan. All parts of the sunfish are [used in cuisine](#), from the fins to the internal organs.^[19] Some parts of the fish are used in some areas of traditional medicine.^[15] Fishery products derived from sunfish are forbidden in the [European Union](#) according to Regulation (EC) No 853/2004 of the European Parliament and of the Council as they contain toxins that are harmful to human health.^[5]

More than 40 species of [parasites](#) may reside on the skin and internally, motivating the fish to seek relief in a number of ways.^{[3][23]} One of the most frequent ocean sunfish parasites is the flatworm [Accacoelium contortum](#).^[26]

In temperate regions, drifting kelp fields harbor [cleaner wrasses](#) and other fish which remove parasites from the skin of visiting sunfish. In the tropics, *M. mola* solicits cleaning help from reef fishes. By basking on its side at the surface, the sunfish also allows seabirds to feed on parasites from its skin. Sunfish have been reported to [breach](#), clearing the surface by approximately 3 m (10 ft), in an apparent effort to dislodge embedded parasites.^{[24][27]}

Puffer Fish

Why **unclean**: Scaleless fish



Puffer fish are rightly classified as unclean, having either spines or no scales. Puffers are consumed by people. Pufferfish can be lethal if not served properly. Puffer poisoning usually results from consumption of incorrectly prepared puffer soup, [fugu chiri](#), or occasionally from raw puffer meat, [sashimi fugu](#). While *chiri* is much more likely to cause death, *sashimi fugu* often causes intoxication, light-headedness, and numbness of the lips.

Pufferfish [tetrodotoxin](#) deadens the tongue and lips, and induces dizziness and vomiting, followed by numbness and prickling over the body, rapid heart rate, decreased [blood pressure](#), and muscle [paralysis](#). The toxin paralyzes the [diaphragm](#) muscle and stops the person who has ingested it from breathing. People who live longer than 24 hours typically survive, although possibly after a [coma](#) lasting several days.

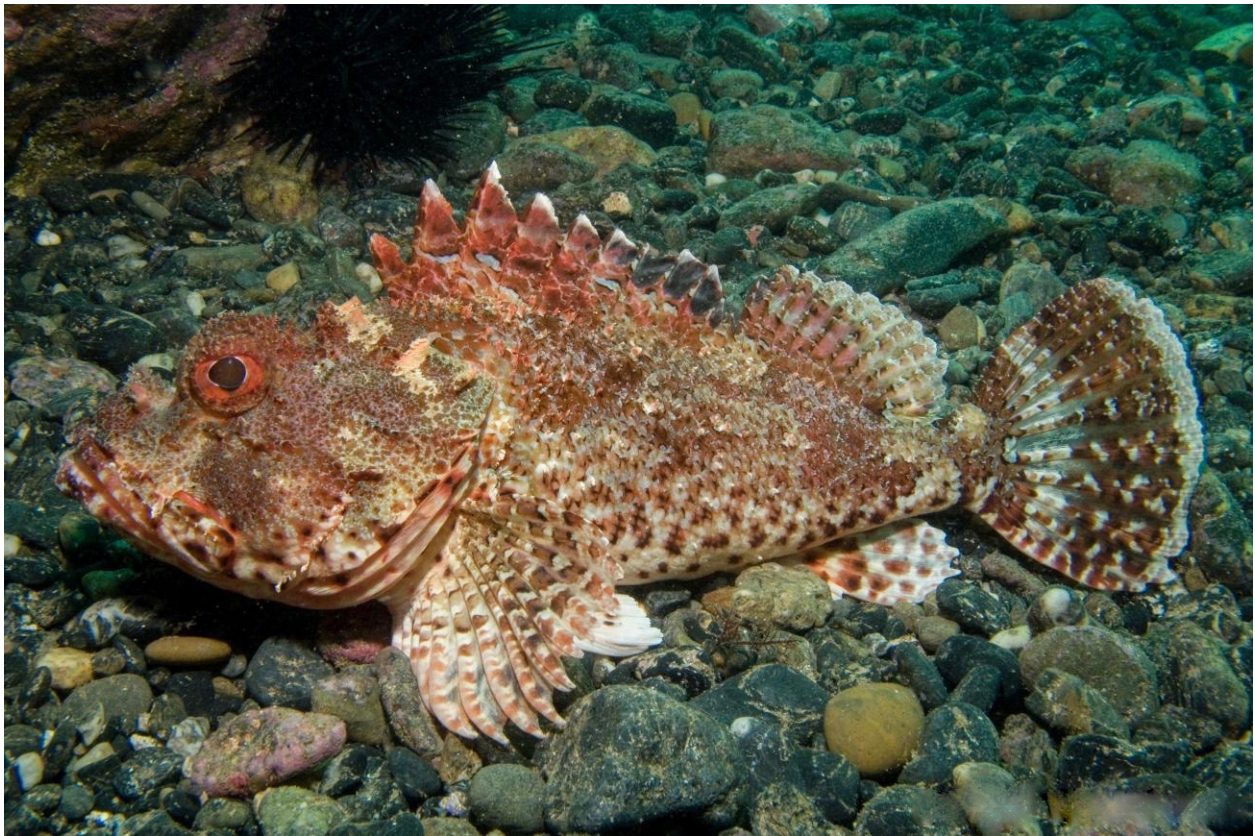
The source of tetrodotoxin in puffers has been a matter of debate,^[20] but it is increasingly accepted that bacteria in the fish's intestinal tract are the source.^[21]

[Saxitoxin](#), the cause of [paralytic shellfish poisoning](#) and [red tide](#), can also be found in certain puffers.

Scorpionfish

Why **unclean**: Scaleless fish

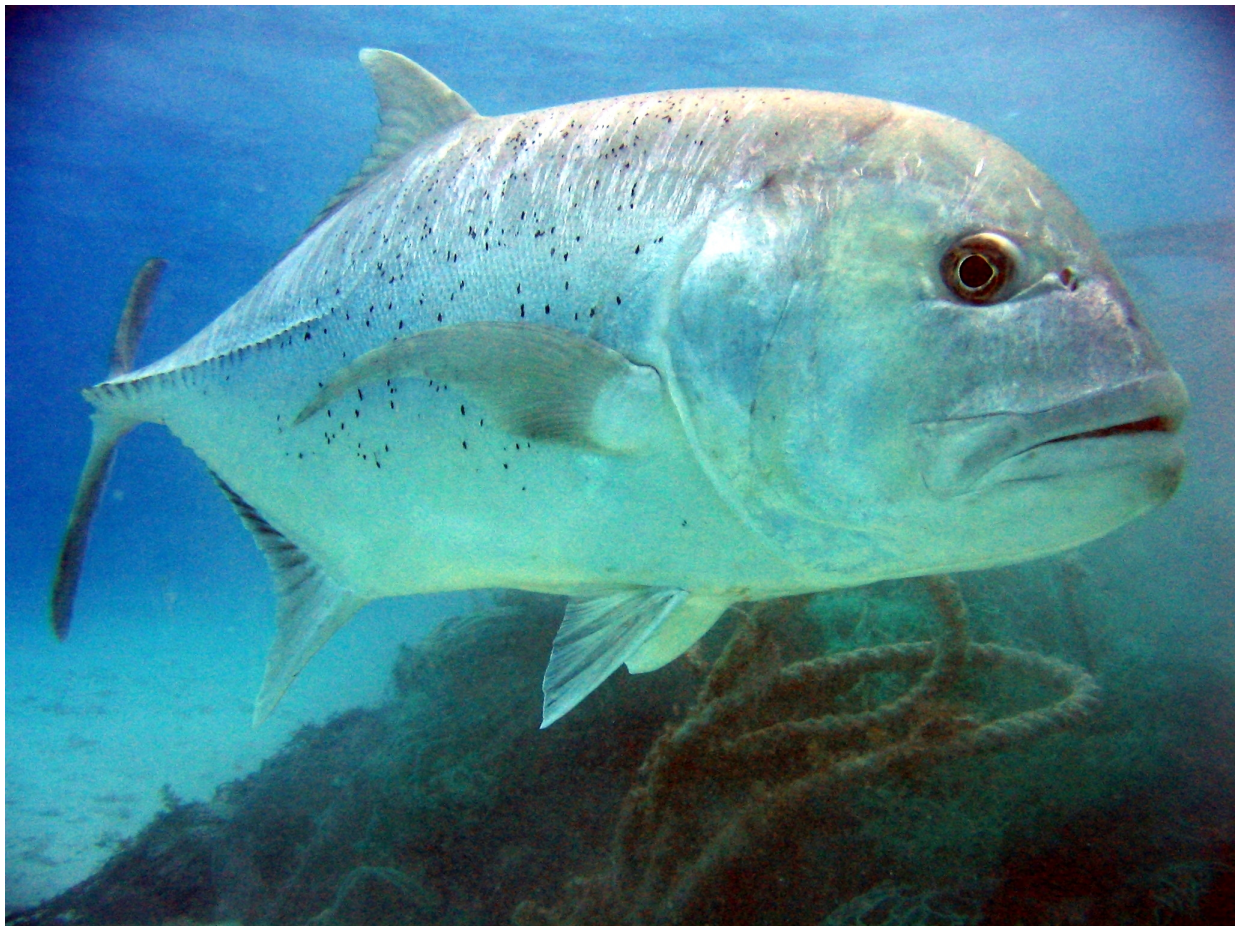
A venomous fish covered in skin flaps. Its shedding skin has been mistaken by some for scales, and based on that they have ruled this a clean fish.



Scorpionfish are bottom-dwelling fish that have also been called rockfish or stonefish because of their tendency to live among rocks near the seafloor. There are more than 200 known species of scorpionfish in the ocean. Members of this fish family are commonly found in the Indian and South Pacific Oceans where water temperatures are temperate and coral reefs are plentiful. Coral reefs provide the perfect space for a scorpionfish to hide and hunt for prey and also avoid any potential predators brave enough to take a bite. But, the body of a scorpionfish is just as important as its habitat when it comes to remaining unseen. Scorpionfish are covered in feathery fins or skin flaps that help with camouflage against surrounding coral. Some scorpionfish are dull in color—mottled brown or yellow— while other species are bright red or orange, making them virtually invisible when hidden among either rocks or reefs. Scorpionfish are also equipped with spines containing dangerous venom. When the spines pierce a predator, the venom is injected immediately at the point of contact. A sting from one of these spines can be potentially fatal to other animals and extremely painful to humans.

Trevally (Barrier Trevally, Blue Ulua, Bluefin Jack, Bluefin Kingfish, Bleufinned Crevalle, Giant Kingfish, Giant Trevally, Lowly Trevally, Omilu, Spotted Trevally, Ulua)

Why **unclean:** Partially scaled fish with scutes



Trevally (Giant): A partially scaled fish with scutes. The curved section of the lateral line contains 58-64 scales, while the straight section contains none to four scales and 26 to 38 very strong scutes. The chest is devoid of scales with the exception of a small patch of scales in front of the pelvic fins.

Trevally (Bluefin): A partially scaled fish with scutes. The curved section of the lateral line contains 55-70 scales, while the straight section contains 0 to 10 scales followed by 27 to 42 strong scutes.

Trevally (Bigeye): A partially scaled fish with scutes. The species lateral line is moderately arched anteriorly, with 49 to 50 scales in this section, while the straight section contains 0 to 3 scales and 27 to 36 strong scutes. The breast is completely covered in scales.

Tuna (Tuny)

Why **unclean:** Partially scaled fish with mostly non-overlapping, embedded scales



In March 2004, the United States [FDA](#) issued guidelines recommending that pregnant women, nursing mothers, and children limit their intake of tuna and other predatory fish.^[86] The Environmental Protection Agency provides guidelines on how much canned tuna is safe to eat. Roughly speaking, the guidelines recommend one 6-ounce (170 g) can of light tuna per week for individuals weighing less than 110 pounds (50 kg), and two cans per week for those who weigh more.^[87] In 2007 it was reported that some canned light tuna such as [yellowfin tuna](#)^[88] is significantly higher in mercury than skipjack, and caused [Consumers Union](#) and other activist groups to advise pregnant women to refrain from consuming canned tuna.^[89] In 2009, a California appeals court upheld a ruling that canned tuna does not need warning labels as the methylmercury is naturally occurring.^[90]

A January 2008 report revealed potentially dangerous levels of [mercury](#) in certain varieties of [sushi](#) tuna, reporting levels "so high that the Food and Drug Administration could take legal action to remove the fish from the market."^[91]

Scales

"Tunas have a few small visible scales on the sides of their head and have rudimentary (undeveloped) scales imbedded under the surface of their skin throughout their body. Rudimentary scales are extremely small, almost microscopic, non-overlapping scales. Tunas are a scale-less, smooth-bodied skin fish, which is why they are unclean." [Scripture Truth Ministries](#)

Whiptail

Why **unclean**: Mixed scales with scutes

Whiptail fish have scutes and are this unclean

SUBFAMILY MACROUROIDINAE (WHIPTAILS). Basically worldwide in tropical to temperate waters, benthic to bathypelagic. Single low dorsal fin; mouth subterminal; head enlarged; chin barbel absent; seven branchiostegal rays; pelvic fins either rudimentary with 5 rays or absent; no light organ;. Maximum length 40 cm.

Two monotypic genera, *Macrouroides inflaticeps* (pelvic fin absent) and *Squalogadus modificatus* (small pelvic fin of five rays).

SUBFAMILY TRACHYRINCINAE (TRACHYRINCINES). Almost worldwide in temperate waters. Second dorsal-fin rays usually somewhat longer than those of anal fin, starting close behind first dorsal fin; mouth wide and subterminal; snout long and pointed; prominent fossa in temporal region; seven branchiostegal rays; body **scales** spinous; a row of keeled scutes along dorsal and anal fins; pelvic-fin rays 3 to 4 in *Idiolorhynchus* and 6 to 7 in *Trachyrinchus*; abdominal vertebrae 14; no light organ. Maximum length 60 cm.

Two genera, the monotypic *Idiolorhynchus andriashevi*, lacking a chin barbel, and *Trachyrinchus*, with six species having a small barbel.