

CLIMATE SOLUTIONS

# WHAT YOU CAN LEARN ABOUT SALMON FROM ITS PACKAGING



By [Naema Ahmed](#) and [Allyson Chiu](#)

If you've ever shopped for salmon, you've probably found yourself wavering between a jumble of options. But a scan of the packages — typically emblazoned with various claims about sustainability and nutrition — might not be much help.

This problem isn't unique to salmon, the [second most popular seafood](#) eaten in the United States after shrimp. Many shoppers want to make better choices for themselves and for the environment, but product labels are often confusing or sparse.

"A lot of packaging doesn't include the information needed," said Ben Halpern, a professor at the University of California at Santa Barbara.

We examined more than a dozen packages of salmon sold at major grocery stores and spoke with experts about how to better understand common labels. Here's what we learned.

## Wild-caught or farmed?

Most salmon packaging will clearly state whether the fish was wild-caught or farmed. If a package doesn't specify wild-caught or farm-raised, you can probably [assume it's farmed](#).



In the United States, wild salmon stocks are [generally well managed and highly regulated](#), which means they are less likely to be overfished. An added bonus: Wild salmon is a nutrient-rich and lean source of protein.

But wild-caught fish [can be more expensive](#) than farmed options and is not always as easy to find.

Farm-raised fish is generally cheaper, though it is [less environmentally friendly](#), according to several experts. Salmon farms have historically relied on the widespread use of antibiotics and pesticides. Captive fish can also escape their pens and change the genetic makeup of wild stocks.

However, some major salmon-producing countries have [improved their farming practices](#) over the years and many farms now use fewer chemicals.

Some farmed-raised salmon might not be as pink as their wild counterparts, which naturally get their color by eating wild shrimp. But farmed fish can also be dyed during processing, so keep an eye out for labels that say "COLOR ADDED." In other cases, farms could use feed containing a type of carotenoid, or naturally occurring pigment, that gives their flesh a pinker color.

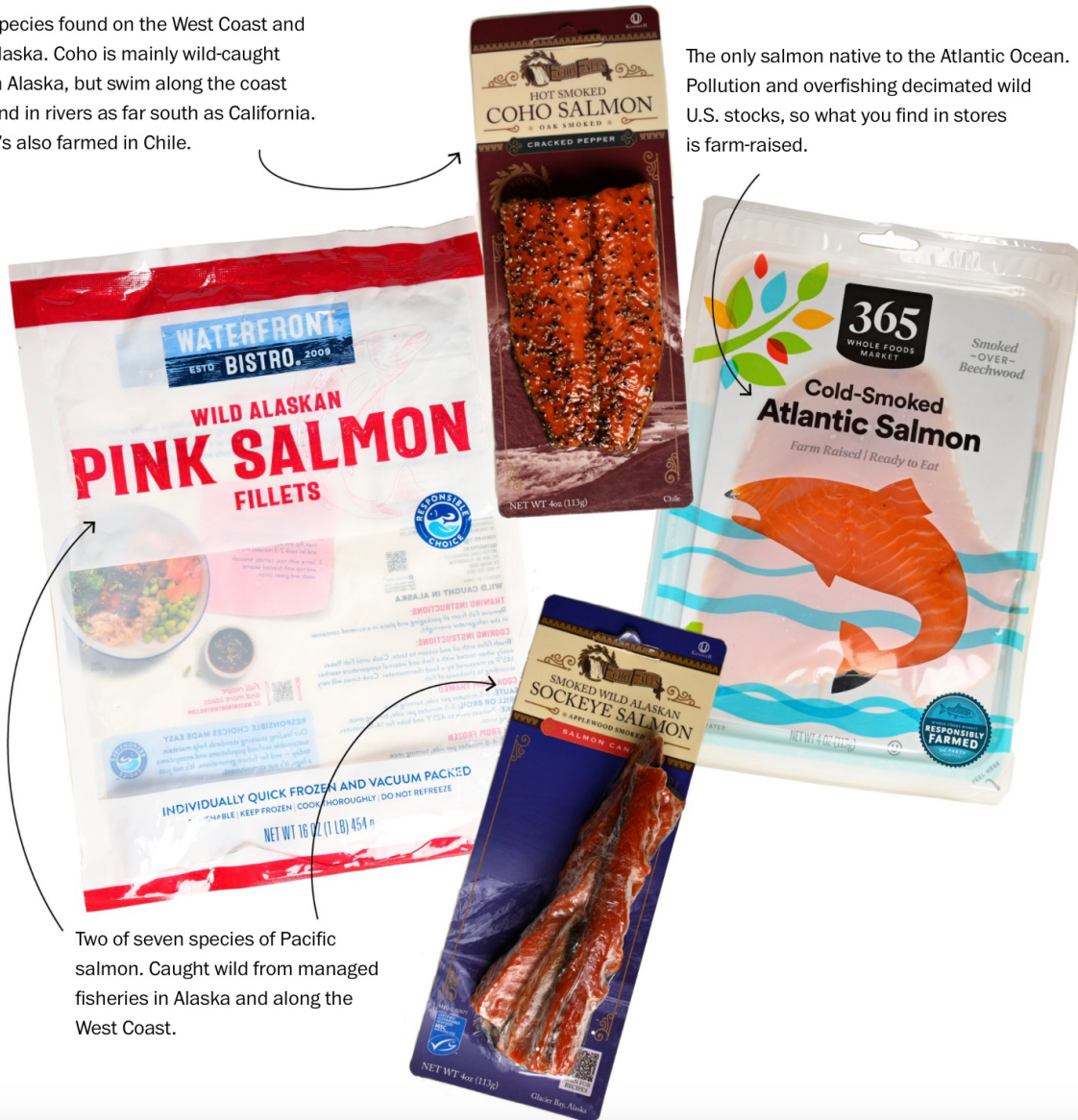
The filets of farmed fish tend to be fattier, but that can keep them more moist when cooked.

“Farmed salmon is really overall a strong option,” said Halpern.

## Sockeye, Atlantic, pink or coho?

Species found on the West Coast and Alaska. Coho is mainly wild-caught in Alaska, but swim along the coast and in rivers as far south as California. It's also farmed in Chile.

The only salmon native to the Atlantic Ocean. Pollution and overfishing decimated wild U.S. stocks, so what you find in stores is farm-raised.



Two of seven species of Pacific salmon. Caught wild from managed fisheries in Alaska and along the West Coast.

THE GLOBAL SEAFOOD SUPPLY CHAIN CAN BE MURKY. If a product includes details about the species of salmon, you can be more confident that the fish you're buying is what the packaging says it is. This information helps [combat seafood fraud](#) and signals a greater level of transparency and traceability for the product.

Be wary of packaging that doesn't include specifics about the type of salmon inside.

Some packaging will include the scientific name of the salmon, which provides more confidence that the label accurately reflects the fish you're getting. The scientific name might be in parentheses in the ingredients section on the back of the package.

INGREDIENTS: PINK SALMON (ONCORHYNCHUS GORBUSCHA), SODIUM TRIPOLYPHOSPHATE (TO RETAIN MOISTURE).

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**ORANGE SALMON TERIYAKI**

1. Mix together teriyaki sauce, ginger, orange zest and juice.
2. Pan fry thawed salmon 3-4 minutes then flip and add sauce. Reduce heat and let cook 2-3 minutes more.
3. Serve with rice, carrots, broccoli and top with toasted sesame seeds and green onion.

**WILD CAUGHT IN ALASKA**

**THAWING INSTRUCTIONS:**  
Remove fish from all packaging and place in a covered container in the refrigerator overnight.

**COOKING INSTRUCTIONS:**  
Brush fillet with oil and season to taste. Cook until fish flakes easily when tested with a fork and internal temperature reaches 145°F as measured by a food thermometer. Cook times will vary according to thickness of fish.

**INGREDIENTS:** PINK SALMON (ONCORHYNCHUS GORBUSCHA), SODIUM TRIPOLYPHOSPHATE (TO RETAIN MOISTURE).

**CONTAINS:** FISH (SALMON)

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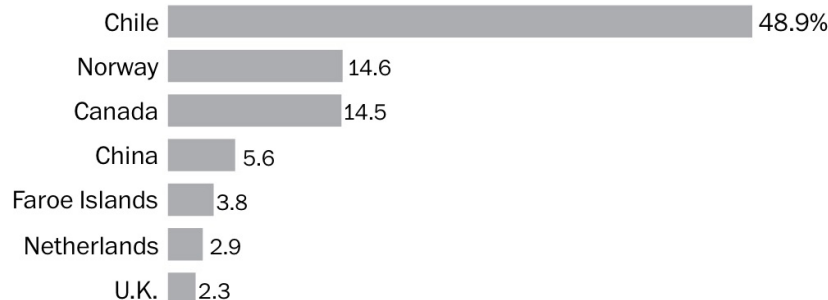
**That's an automatic green flag for me,**  
said Max Valentine, director of

## What about its origin?

WHERE YOUR FISH WAS CAUGHT OR FARMED is one of the most important pieces of information for gauging sustainability. Fishing and farming practices and regulations can vary widely depending on country.

Most wild salmon in the United States is [fished in Alaskan waters](#). Meanwhile, a majority of farmed fish sold domestically is imported from Chile, Canada or Norway.

Where the U.S. is getting its salmon from

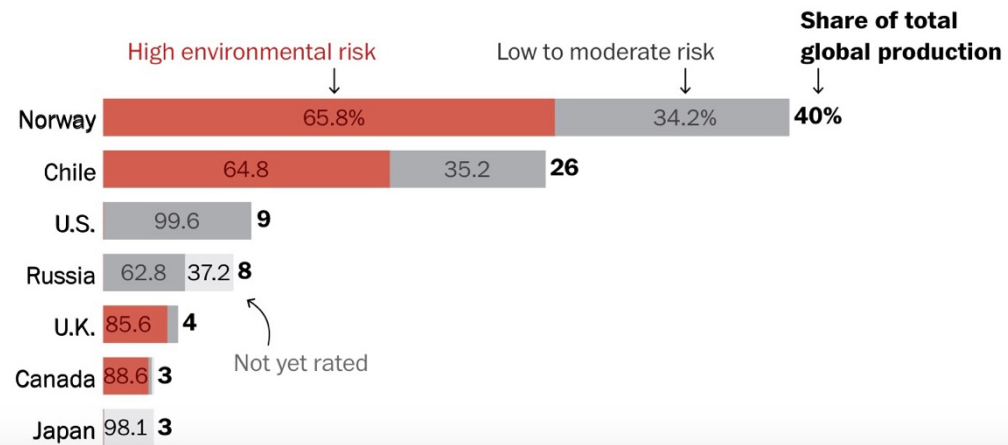


Note: Countries by share of total volume imported in 2023

Source: NOAA Fisheries

The Monterey Bay Aquarium Seafood Watch program rates salmon as high risk if they're overfished or come from farms that use too many chemicals for disease and parasite control or have high rates of escapes into the wild.

Sustainability ratings for largest salmon producing countries



Note: Share of global production in 2021

Source: Seafood Watch

To figure out if you're buying sustainably farmed fish, look at the species in addition to the country of origin. For example, Chinook salmon from New Zealand is raised responsibly, according to Seafood Watch. You should generally avoid farm-raised Atlantic salmon from [Canada](#), [Chile](#), [Norway](#) or [Scotland](#), according to the program. For more information, check Seafood Watch's [sustainable salmon guide](#).

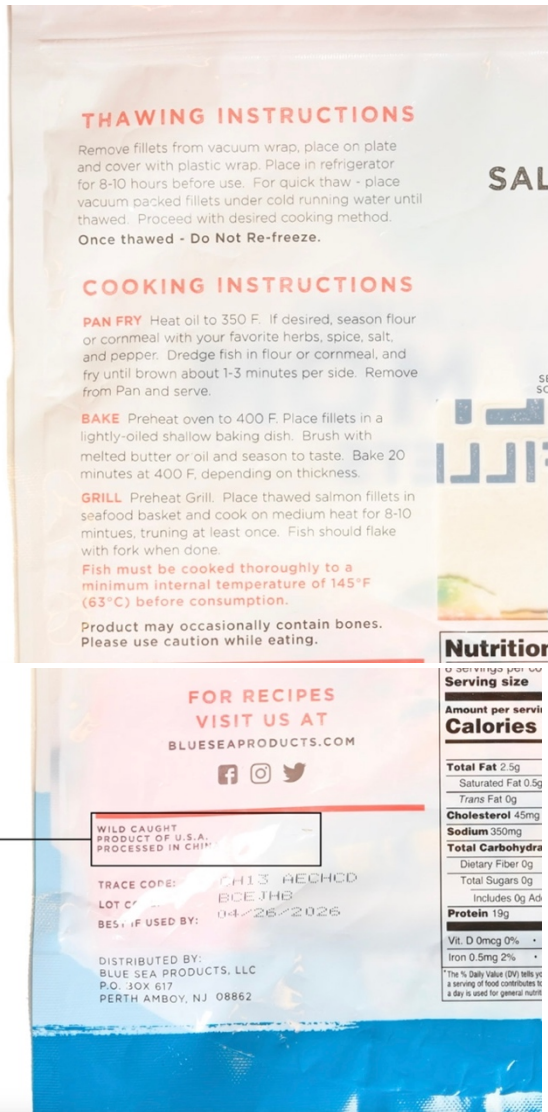
But knowing the exact origin of the fish you're buying can be tricky.

If the label says "PRODUCT OF" a country, it may not be where the fish was caught or farmed. That designation only tells you where the fish was last "substantially transformed," Valentine said.

Sometimes you'll find two countries listed on the same package, such as this one. The fish was caught in U.S. waters, but sent to China to be processed and imported back to be sold in American super markets.

"This comes with a decent amount of risk," Valentine said. "There's opportunities for fraud and mislabeling and importers buying products that they don't actually realize are not what they're paying for."

WILD CAUGHT  
PRODUCT OF U.S.A.  
PROCESSED IN CHINA



Take a fish stick, for example. The country you see listed in the package is likely not where the fish was caught, but where it was transformed into a fish stick. "It becomes a product of that country, even if it was caught in Alaskan waters," she said.

### What's up with eco-labels?

MANY SALMON PRODUCTS HAVE VARIOUS SUSTAINABILITY LOGOS with phrases such as "RESPONSIBLE CHOICE" or "SUSTAINABLY SOURCED." These are not all created equal and it's important to distinguish vanity labels from vetted certifications.

Indicates the fishery is certified by the Marine Stewardship Council and is recommended by Seafood Watch.



These labels belong to specific grocery stores.

“We have to be careful with labels because they can be self-created or self-certified,” Valentine said.

Seafood Watch generally [recommends](#) wild-caught fish certified by the Marine Stewardship Council, an international nonprofit focused on ending overfishing. For farmed fish, it suggests looking for the label from the Aquaculture Stewardship Council, another nonprofit, dedicated to increasing sustainability in seafood farming.

But while these certifications can be a good indication that your fish is sustainable, don't rely on them, Halpern said.

“They're not a true signal because you can be sustainable and not have gotten certified,” he said.

### So, how do you choose?

DON'T GET DISTRACTED BY BUSY LABELS. The information on salmon packaging should be clear and easy to understand, Valentine said.

Think about what's important to you. If it's cost, farmed Chilean salmon tends to be more affordable, but may not be as sustainable as wild-caught options. If it's sustainability, experts recommend [wild-caught Alaskan salmon](#) processed domestically — but keep in mind that it probably comes with a higher price tag. If it's taste or nutrition, wild-caught sockeye salmon might be your pick. Some experts say the fish has a stronger salmon flavor than other species.

Regardless of the kind of salmon you buy, fish is a better choice for the environment than chicken, beef and other types of land-based animal protein.

Wild and farmed salmon generate less pollution and disturb less habitat than the same amount of pork, beef or chicken protein, according to Halpern's [study](#) from the National Center for Ecological Analysis and Synthesis.

“Salmon and other fish are just a far more sustainable way of getting animal protein than almost anything else we can eat,” he said.

[https://www.washingtonpost.com/climate-solutions/interactive/2024/salmon-labeling-wild-farm-species-explained/?itid=hp\\_ts-1-sallys-mix\\_p001\\_f013](https://www.washingtonpost.com/climate-solutions/interactive/2024/salmon-labeling-wild-farm-species-explained/?itid=hp_ts-1-sallys-mix_p001_f013)