Your quick guide to Canadian Farmed Salmon

Find the answers to your customers’ questions inside

Canadian Aquaculture Industry Alliance
About Canadian farmed salmon

Salmon are farmed in Europe, Iceland, the Americas, Australia, New Zealand, and Asia. In Canada, one species of Atlantic salmon and two species of Pacific salmon are farmed. Atlantic salmon, however, account for over 90% of the farmed salmon produced, and they are farm-raised on both the Atlantic and Pacific coasts of Canada. When it comes to choosing fresh farmed salmon there are several different kinds available, including King (Chinook) and Coho but Atlantic salmon is the most popular by far.

Pacific species account for all of the wild salmon caught and some of them are also farm-raised. Wild Atlantic salmon are not fished commercially in North America as they are a threatened species. Nevertheless, Atlantic salmon accounts for over 75% of all salmon consumed thanks to modern farming techniques!
Salmon is a moist and tender fish that virtually melts in your mouth. It’s beautiful and wholesome with a pleasing orange-to-red colour which becomes orange-to-pink when cooked. So it tastes as good as it looks!

**Features**

1. Large – up to 10 pounds or larger
2. Blue back
3. Silver sides and belly
4. Orange-to-red colour
5. Closed muscle fibre, no gaping holes
6. Uniform colour
7. Smooth, buttery texture
8. Mild and delicate flavour
9. Moist and tender
10. Practically melts in your mouth!
Why farm salmon? Great reasons!

Sometimes consumers wonder why we need to farm salmon. Here’s why farming salmon makes so much sense.

Farmed salmon production is part of the environmentally-sustainable solution to meet the world’s ever increasing need for more food. People want more salmon than can be sustainably caught. Even in peak catch years, wild salmon can only supply about one-third of the worldwide demand for salmon. And as more people find that salmon is a tasty solution to a healthy diet, the demand will grow. Farming salmon is the best way to keep up with demand.

We can restock what we consume

By farming salmon, we can ensure that quality salmon will be continually produced in an environmentally-sustainable manner.

Fresh farmed salmon is always available

Consumers prefer to eat fresh fish year round. Wild salmon is available only at certain times of the year – and is harvested in limited numbers to responsibly maintain the fisheries. Fresh farmed salmon is available year round.
Salmon farming cycle

1. First the salmon are spawned, and the eggs incubated. When the fish are born, they are reared at freshwater hatcheries.

2. When the young fish are strong enough, we transfer them to saltwater ocean fish farms.

3. Fish are nurtured and fed to adult size – usually up to 10 pounds. This takes 1-2 years.

4. We use advanced technology to harvest full-size salmon in a humane manner and transfer them to the plant for processing.

5. Farmed salmon are processed, packaged and shipped to you typically within one or two days.

6. We select superior adult fish and send them back to the hatchery for spawning so the salmon farming cycle can continue.
The colour of salmon

Wild salmon get their orange-to-red colour from **carotenoids** which come from krill and other small crustaceans that they consume. The carotenoids found in fish are called “astaxanthin.”

**Astaxanthin** is a naturally occurring carotenoid and is in the same family as vitamin A. Astaxanthin is also an antioxidant, which makes an important contribution to the health of the fish and to the nutritional benefits they provide when we eat them.

Farmed salmon do not have access to the same food as wild salmon. So to produce a healthy fish, astaxanthin is added to their carefully-formulated diet. It’s identical to the naturally-occurring compound that gives the fish the **healthy** colour that your customers want.

The U.S. Food and Drug Administration and the Canadian Food Inspection Agency both approve of the addition of astaxanthin. So you and your customers can rest assured that salmon is **completely safe**.
Storing salmon

Storing fresh whole fish – Dos and Don’ts

*Do*

• Keep salmon moist.

• Store at a consistent temperature of 1-2°C (34 - 35°F).

• If you use flaked ice, place fish gently on the ice, then cover with a layer of flaked ice. Only layer fish up to 18 inches deep.

• Check the ice flakes and replace them as needed.

• Drain all water and allow ice flakes to melt away from the salmon.

• Handle salmon with care. Use both hands to pick up the fish.

• Rotate inventory. Bring older product up front and place fresher product in the back.

*Don’t*

• Pick up salmon by the tail.

• Handle roughly or unnecessarily.

• Alter the temperature, as this reduces the salmon’s shelf life.
Storing fresh steaks, fillets and portions – Dos and Don’ts

Do

• Keep fish away from water or moisture.

• If wet, remove fluids on cut salmon by scraping gently with a knife’s blade. Simply hold the blade at a right angle to the salmon and move with the grain. This way the salmon will be clean and appealing.

• Rotate inventory. Bring older product up front and place fresher product in the back.

Don’t

• Allow fish to come into contact with water or ice.

• Wash or moisten the salmon.

Want to use ice to keep salmon steaks, fillets or portions cold? Place in a sealed plastic bag first. Then, layer salmon on a bed of flaked ice and cover with a layer of flaked ice. You can layer fish this way for up to 1 foot.
Checking for premium quality

Want to ensure that you have premium fish? Here’s what to look for.

Whole salmon

1. Eyes are clear, bright and slightly bulging
2. Gills are bright, reddish-pink
3. Skin is shiny, with no scars or scrapes
4. Body is stiff, straight, firm and elastic
5. Colour should be silvery white to light pink
6. Scales are silvery and firmly attached to the skin
7. Belly is intact, with no cuts, tears or discolouration
8. Flesh is tight to the bone

Plus the salmon should have no fishy odour!
Fillets, steaks, portions

1. Colour is bright, orange-to-red
2. Meat is firm, moist, with no gaping
3. Salmon should have no odour

Help your customers buy premium salmon

Customers typically want to be assured that your fish is truly fresh. You can help by sharing these handy Canadian farmed salmon freshness facts.

Quality farmed salmon has a:
• Orange-to-red colour  • Slight sheen  • Smooth, clean cut

Don’t buy salmon that has:
• A fishy odour – if it smells fishy, it’s not fresh
• Excessive gaping and holes in the muscle fibre

Bruising and red spots

Even though we handle our salmon with the utmost care, sometimes salmon are bruised during processing. This is indicated by a red spot. It’s visually unappealing but harmless. So if you see a red spot, simply remove the bruised area and discard. The remaining salmon is still visually appealing and safe to sell.

Gaping

Gapes form when the muscle fibres in the salmon separate. Gapes may be just a slight separation at the surface or may continue right through the muscle to the skin of the fillet. Minor gaping is normal but excessive gaping occurs because of poor handling, improper storage or with fish that’s less than fresh.
Freshness facts

Canadian salmon farmers put freshness first. In fact, your next salmon order is currently swimming in the cold clear waters of the North Atlantic or Pacific oceans! Plus, most of our members can:

• Harvest to order, for absolute freshness.
• Harvest salmon every day and ship your order within 24 hours.
• Employ state-of-the-art technology in farming and processing to deliver the freshest quality.
• Control the cold chain to your door with a fleet of refrigerated trucks.

Fresh salmon forms

Farmed salmon is typically the best-selling fish in the fresh counter because it’s fresh and tastes delicious.

You can attract new customers by explaining the array of convenient forms that make meal preparation easy and are appropriate for various occasions and seasons.

Make it easy for your customers – reinforce the benefits most important to them:

• Salmon is convenient and comes in easy-to-cook forms

• It’s the freshest seafood available

• Atlantic salmon’s flavour is especially mild and delicate
## Salmon forms

<table>
<thead>
<tr>
<th>About the fish</th>
<th>Benefits</th>
</tr>
</thead>
</table>
| Whole Fish     | * Most common fish available  
* Entrails are removed | * Perfect for cutting into smaller forms or serving to a larger group |
| Fillets        | * Choose to keep or remove the skin  
* Pin bones are removed | * Good for families and multiple servings  
* Ideal for serving at larger gatherings  
* Great for holidays and special occasions |
| Portions        | * Skinless and boneless | * Makes buying easy — one portion per person  
* Perfect for smaller households and families  
* Easy to make with no waste  
* Visually appealing  
* A healthy way to satisfy your customers’ fast-paced lifestyles |
| Flavoured Portions | * Rub-marinated portions often available | * Easiest to make salmon style  
* Superb flavours  
* Ready-to-bake in the oven or microwave |
| Steaks          | * Most common form  
* Low cost per pound  
* Includes bones and skin | * Ideal for individual portions — perfect for BBQs and quick meals  
* Inexpensive  
* Easy to cook |
| Skewers         | * Skinless and boneless  
* Rub-marinated portions often available | * Fun way to eat year round  
* 5 minutes in the microwave and it’s ready to eat  
* Perfect for the BBQ  
* It’s portable, easy-to-make food |

Processed fresh portions, fillets and skewers are machine boned and verified by production experts, but Canadian salmon farmers can’t guarantee that they are completely boneless. Some bones can sometimes escape detection and extraction.

**Did you know? Portions sell at a premium!**

**Portions are the fastest growing salmon cut because they’re a convenient, ready-to-cook, nutritious food that customers want.**

Contact aquaculture.ca for more information and recipes.
The benefits of omega-3

Farmed salmon has lots of excellent health benefits.

Salmon is a natural source of omega-3 polyunsaturated fatty acids. Omega-3 fatty acids are an important part of why salmon is so nutritious. Studies show a variety of benefits from increasing the intake of these good fats – including a lowered risk of coronary heart disease. All fish contain some omega-3 but fatty, cold-water fish – such as salmon, mackerel, tuna and herring – are particularly high in these beneficial fatty acids. And no readily available fish is higher in omega-3 than farmed Atlantic salmon. To get 1 gram of omega-3 per day (the American Heart Association recommended amount for people with coronary heart disease) you need to eat just two 8-ounce servings of farmed salmon a week.

As shown by two long-term Harvard studies, several weekly helpings of fish appear to protect men and women from heart disease. These studies add to the increasing amount of evidence that omega-3 fatty acids help to prevent heart disease in people with no history of heart disease and – at increased consumption levels – may dramatically cut the mortality rate in heart attack survivors.

A recent study at the Rush Institute for Healthy Aging shows consumption of fish once a week among people aged 65-94 reduced the incidence of Alzheimer’s disease by 60%, compared to those who rarely or never ate fish. This study supports the findings of two previous European studies.

Numerous studies show that omega-3 fatty acids reduce inflammation and joint pain.

DHA, one of the types of omega-3 fatty acids in salmon, is critical for normal eye and vision development in infants. Other studies suggest that omega-3 improves brain development.

Several studies indicate that omega-3 fatty acids may have a beneficial effect on various forms of depression.
Did you know?

According to a recent study, eating just 3 oz of farmed salmon or 6 oz of mackerel a week reduced the risk of death from coronary heart disease by 36%.

Health experts recommend eating 2-3 servings of fish a week. Farmed salmon is a great fish choice because it contains omega-3 fatty acids.

Did you know?

A serving of salmon (113g) contains about 2.5 grams of the omega-3 fatty acids that your body needs to be healthy.

Low in saturated fat

<table>
<thead>
<tr>
<th>Saturated fat content - grams per 100 grams</th>
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</thead>
<tbody>
<tr>
<td>Farmed Atlantic Salmon: 2.2 g</td>
</tr>
<tr>
<td>Chicken: 6.4 g</td>
</tr>
<tr>
<td>Beef: 5.9 g</td>
</tr>
<tr>
<td>Pork: 8.4 g</td>
</tr>
<tr>
<td>Fresh Yellowfin Tuna: 0.2 g</td>
</tr>
<tr>
<td>Swordfish: 1.1 g</td>
</tr>
</tbody>
</table>

1 Average of white and dark meat with skin, raw
2 Ground beef, 85% lean, 15% fat, raw
3 Fresh loin blade, bone in, raw

Rich in high-quality protein

Salmon provides as much high-quality, complete protein as chicken, ground beef, pork or tuna. This, combined with its low fat content, makes farmed salmon a heart-healthy, body-building food.

<table>
<thead>
<tr>
<th>Food</th>
<th>Protein</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmed Atlantic Salmon</td>
<td>19.9</td>
</tr>
<tr>
<td>Ground Beef</td>
<td>15.0</td>
</tr>
<tr>
<td>Chicken (breast)</td>
<td>20.9</td>
</tr>
<tr>
<td>Chicken (thigh)</td>
<td>17.3</td>
</tr>
<tr>
<td>Pork Loin</td>
<td>15.8</td>
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</tbody>
</table>

1 Grams per 100 grams

Healthy eating tips

Here are a few handy hints that you can pass on to your customers.

1 Bake, broil or grill your salmon instead of pan-frying it.

2 Limit the amount of oil you use.

3 Flavour your salmon with seasonings like dill, lemon or pepper instead of butter or oil.

4 If you do use oil, make it olive oil. Research suggests that, like salmon, this monounsaturated fat lowers the risk of heart disease.

5 Pair your salmon with a healthy side dish like steamed broccoli, carrots or vegetable stir-fry. Not only will these colourful veggies look good, they’re good for you too.
**Canadian Farmed Salmon is completely safe!**

Farmed salmon is a safe, nutritious and tasty food choice recommended by Health Canada and food nutritionists.

Occasionally, some media reports cause confusion and uncertainty for your customers. Salmon, farmed or wild, is an excellent option for adding beneficial omega-3 fatty acids to your diet.

While mercury has been a problem in some fish, it is not a problem in farm raised salmon (or in wild salmon). In fact, FDA testing consistently rates salmon among the fish with the lowest mercury levels. In fact, farmed salmon usually has no detectable levels.

In Canada, less than 3% of salmon feed is medicated – and some farms use no medication at all. Antibiotics are only used in salmon feed to treat a specific disease. These antibiotics are always administered under the direct supervision of a licensed veterinarian. And for salmon sold in the U.S., only drugs approved by the FDA are permitted. Strict withdrawal periods are enforced by government agencies to ensure antibiotics have been cleared from the animal’s system before they can be harvested.

Hormones are not used in salmon grown for human consumption.

The fact is, much research suggests a diet containing salmon contributes to good health.

It is important to understand that all Canadian farmed salmon meets or exceeds every safeguard requirement set out by the Canadian Food Inspection Agency, the United States Department of Agriculture and the United States Food and Drug Administration.
Tell your customers salmon is easier to make than most people think

Customers’ #1 reason for not buying fish is the challenge they face in making it. You can help them by sharing these basic guidelines.

**Baking**

- Set the oven to 350°F
- Cook for 6-10 minutes for every inch of thickness

**Barbequing**

- Barbeque over medium-high heat
- For fillets, steaks and other cuts of salmon, barbeque for 6-10 minutes for every inch of thickness
- For a whole fish, barbeque for 8-12 minutes for every inch of thickness

**Broiling**

- The closer the salmon is to the heat source, the faster it will cook
- A salmon fillet placed on the top rack will cook in 6-10 minutes
Microwaving

- Place salmon in a microwave-safe dish
- Cover dish with cling wrap
- Cook on full power for 4-5 minutes per pound

Salmon is done when it flakes easily with a fork and the flesh is tender.

BBQ Salmon Rub

- 1 cup brown sugar
- 1/2 cup honey
- 1 dash liquid smoke flavouring (optional)
- 1/2 cup apple cider vinegar (or any vinegar)

Spread rub over salmon steak, fillet or portion. Then cook using your favourite method or one of the easy methods listed above.

Do your customers want more easy salmon recipes?
Tell them to visit www.aquaculture.ca
Who we are

The heart of the Canadian salmon farming industry is its people. Our salmon farming operations are in the coastal communities of Atlantic and Pacific Canada.

From this coastal base, our salmon farmers employ state-of-the-art technology in combination with skilled and dedicated people to obtain sustained quality and freshness and best-in-class environmental practices.

We serve markets in Canada and the United States with the freshest salmon in a variety of innovative consumer- and customer-relevant forms.

Respecting the environment

- Our growers live where they work and depend on producing great salmon products in the future, so our first operational objective is to act in an environmentally-sustainable manner.

- To minimize our impact on the environment, fish farms are only located in deep waters and areas of good tidal movement.

- Salmon farms are strictly controlled in Canada by federal and provincial regulations. What’s more, in Canada farms are subject to a comprehensive environmental assessment under the Canadian Environmental Assessment Act.
Caring for the salmon

We have strict health and welfare objectives for our salmon.

• Fish health care is provided by veterinarians and fish health specialists who can detect any signs of disease or distress and respond appropriately.

• We ensure that our fish are free from hunger, discomfort, pain and injury, fear and distress and that they have the freedom to practice normal behavior.

• Stocking densities are controlled and monitored to allow fish to swim and behave normally.

• Technology-enabled harvest and transportation minimize stress for the fish.

Supporting our coastal communities

Canadian salmon farmers are committed to building and supporting the communities from which we operate.

• There are over 4000 fish farmers and other employees in small coastal communities.

• Salmon farmers invest in these communities by donating to outreach and conservation programs and numerous other community initiatives.
Top tips to help you increase sales

Talk it up
• Speak to your customers about the benefits and usefulness of each cut.

Know your customer
• Suggest fillets or steaks to single people or smaller households.
• Offer portions or whole fish to larger families.

Sell convenience
• Salmon filets and steaks are both quick and delicious.

Display a range of cuts
• The appearance of salmon is highly appealing. Take advantage of it by showcasing different cuts like fillets, steaks, and portions.
• Display a whole salmon if you have enough space.
• Present the salmon cut that’s right for families, singles, older adults and young professionals.

Have a range of prices
• Appeal to different budgets – from those who want a low-cost product to those who are willing to pay more.

Present two different salmon colours, if possible.
• Consumer studies show that when two different colours of salmon are in the fish case, total sales for all salmon increase – sometimes as much as 57%!
Cross-merchandize and position salmon as the ultimate fresh, nutritious protein

Consider displaying salmon with fresh foods such as:

- Lemons
- Limes
- Fresh seasonings like dill, cilantro and parsley

You can also cross-merchandise salmon with:

- Grill items
- Cedar planks
- Baking dishes
- Aluminum foil
- Anything else related to salmon!

Stage a live cooking demonstration

Create a cooking kiosk. Grill the salmon as consumers are shopping and offer free, bite-sized samples.

**An easy idea for summer**

Merchandise salmon with barbeque sauce and other marinades!

**An easy idea for winter**

Use your cooking kiosk to poach salmon. Offer consumers the full meal that goes with it: packaged pasta, vegetables and a salad kit.
Grab attention

Use displays, posters and other point-of-sale pieces to grab your consumer’s attention. Larger displays increase sales, so don’t be afraid to go big! For more merchandising ideas to help you sell Canadian Farmed Salmon: contact the Canadian Aquaculture Industry Alliance (www.aquaculture.ca).

1 This study was published in the Journal of the American Medical Association by Dariush Mozaffarian, an instructor in epidemiology at the Harvard School of Public Health (HSPH) and in medicine at Brigham and Women’s Hospital.


3 Fish Intake, Contaminants, and Human Health - Evaluating the Risks and the Benefits Dariush Mozafarian, MD, DrPH Eric B. Rimm, ScD. Journal of the American Medical Association 2006; 296:1885-1899

For more great salmon ideas visit www.aquaculture.ca