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ARCTIC CHARR (*Salvelinus alpinus*)

Is a member of the Salmon family – and resembles a salmon in appearance. Arctic Charr have a pale coral coloured flesh with a taste somewhat milder than Atlantic salmon but these are freshwater fish and suitable for on land farming.

Where they are farmed.

The only UK farm is in Dorset. Their primary business is to produce eggs for the Scandinavian charr and trout farmers. They have a 17 year breeding programme in place to supply the very best quality eggs and what that means is that the fish they select to grow on are the fittest and finest available.

We are supplied directly from the farm, fish are killed daily to order, and will be with you in two days. They are 1-2kgs I size, Typically, 1.3-1.5kg gutted. They are killed using the Ike Jime method.

How they're farmed... *Dorset Charr are raised in a land-based system. Arctic Charr eggs are hatched within specialized on-site hatchery facilities. The young fish remain in the hatchery until they reach 100 grams; the fish are then transferred to tanks at the grow-out facilities. While they take almost a year to reach 100 grams, Arctic Charr exhibit a rapid growth spurt during the grow-out phase – reaching market weight (1-2.5kg) within the next 12 months. The water source is an underground chalk spring, which provides extremely pure water which has a constant year round temperature of 10-12 deg C. A state of the art re-circulation unit is in place, with equipment to remove all particulate material before the clean water is returned to the outlet stream. The extracted organic materials used as fertiliser by local farmers. There are no disease or lice problems in this closed system.*

In the wild in winter, Charr gather close together in pockets of unfrozen fresh water– they are therefore accustomed to living in very close quarters with one another. As a result, farmed Charr must also be stocked at high densities in the rearing tanks; when stocked at low densities, the Charr grow poorly and have a higher incidence of illness. The wild Charr are native to the Arctic and it is thought that the few wild populations still found in Scotland and the Lake district became stranded there after the last ice age.

What they eat... *They are fed nutrient-dense, dry pellets. Using ingredients that are tested for quality and purity, feed manufacturers tailor-make feeds to suit the exact dietary requirements of the fish at each stage of their life cycle. Currently, the main ingredients are fishmeal and fish oil. The fishmeal and oil are primarily made from forage fish that are too small and bony to be used for human consumption. Feed manufacturers are developing new feeds that will replace some of the fish-based ingredients with sustainable ingredients from other sources such as vegetables – yet still provide high quality, nutritious farmed. Feed manufacturers also add essential vitamins, minerals. Unlike salmon, these fish have feed which does not have artificial colouring so the flesh colour is pale pink and entirely natural.*

Marine Conservation Society states that 'farmed Arctic Charr is a good choice to make when looking for an oily fish'. *They have the highest sustainability rating of 1 out of 5.*



How they're killed-- the Ikejime method, sashimi quality.

Ike Jime is a Japanese fish killing technique. A spike is quickly inserted into the brain and the main blood vessels are severed at the head and tail. This kills the fish which is then placed in ice water to bleed out for two minutes. Then from the tail end, a piano wire is inserted the full length of the backbone, disrupting the entire spinal cord. The wiring process is known as Shinkeijime.

The rationale behind this method is that the spike in the brain instantly renders the fish paralysed and clinically dead. When a fish is killed, it still has some ATP (adenosine triphosphate) in the muscles. ATP is the energy source that activates muscles. It takes ATP to contract muscles, and this will keep the heart pumping while the fish is immersed in the ice water, vacating blood from the entire cardiac system. The introduction of the piano wire disrupts the remaining 'communication system' to the muscles and the muscles 'relax' or as the Japanese explain that the muscle "doesn't know it is dead." Rigor is long and slow (up to 24 hours) as the small amount of ATP left is very slowly depleted.

The death struggle of a wild caught fish results in a rush of ATP turning into lactic acid and a fast and short rigor (1-2 hours). When lactic acid is produced in the muscle, the increased acidity is detrimental to the final flesh texture. When a fish is frightened or struggling as in most farmed fish slaughter or wild catch, it releases other compounds into the bloodstream, which also affect quality and shelf life.

Cooking and eating *The result of the Ike Jime technique is not only a more humane slaughter but longer shelf life, cleaner appearance, no taint from blood residue and superior flesh texture resulting in enhanced overall eating quality. This is why Japanese chefs prefer it for sashimi.*

Charr are a good high quality substitute for farmed salmon as they have a more delicate texture and clean mild flavour. They are not unnaturally orange! They have a high oil content and so are well suited for dry-heat cooking methods such as grilling and smoking. The very low surface bacteria count means they can be dry aged on the bone in a cold fish fridge (1-4 Deg C with less than 50% humidity) to get enhanced umami flavour from 11 up to 20 days. This is popular in Scandinavia.

PRICES AND ORDERING *They are killed to order so let us know by 10 am and they will be harvested that day. You will have them within 48 hours. Deliveries Wed to Friday.*

Size typically 1.5-2.0kgs Price is £12.95 per kilo.

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