

# Smoked products with NO RISK of listeria growth







Royal Greenland's high food safety and quality control management means that the Ministry of Foods, Agriculture and Fisheries of Denmark has been able to issue a declaration stating that the amount of listeria in smoked products produced at Royal Greenland's factory in Hirtshals cannot multiply to dangerous levels during the product's shelf-life.

Stabilisation

Daily cleaning

Raw materials' supplies

Three factors are of crucial importance for guaranteed food safety – checking the raw material, cleaning and stabilisation.

If these three factors are under control, it is possible to produce safe products while eliminating the risk of listeria growth throughout the entire shelf-life of the product.

## 1. Raw materials' supplies

Food safety starts even before the salmon and Greenland halibut are delivered to the smokehouse. Strict quality requirements covering our production sites, suppliers and the careful handling of the fish before it enters production ensure that the quality of the raw material is as high as possible.

## 2. Daily cleaning

It stands to reason that hygiene is extremely important when working with food production. Cleaning takes place throughout the day between each shift, and all the machines are disassembled and cleaned daily. At the same time, processing takes place in accordance with our self-monitoring programme, which is based on the principles of the HACCP system (Hazard Analysis and Critical Control Points) – a systematic, preventive approach to food safety. Moreover, tests are regularly carried out on the production environment and quality by both external and internal auditors.

#### 3. Stabilisation

As a direct result of a research project in collaboration with the National Food Institute at DTU, Royal Greenland uses acidifiers during the salting process to stabilise the products and prevent the growth of any listeria bacteria. The research project showed that it was possible to halt listeria growth during the product's shelf-life by adding naturally occurring organic acids which reduce the product's pH value. The acidifiers do not affect the product's taste, appearance or health properties.



# High quality from Danish production

At Royal Greenland we use the finest raw materials and special marinating and smoking techniques to produce a tasty selection of smoked and marinated products. All the products are produced by Dan Salmon A/S at the harbour in Hirtshals, which only smokes for Royal Greenland.

We primarily smoke Greenland halibut and cod from Greenland and salmon from Norway.

## Cold smoking

We use glowing beech dust for cold smoking. The smoke is fed into the smokehouse where the fish have been laid out. The fish is first salted and then smoked at 21-23°C for 4-12 hours depending on the type of fish. It is the aromas in the smoke that give the fish its distinctive flavour.

# Hot smoking

Hot-smoked products have a firmer consistency and the flavour is fuller than that of cold-smoked variants because the fish is exposed to heat during the process. Hot smoking occurs at about 65°C and takes approx. 8 hours.

# Marinating

Many people are familiar with gravad laks, which is an old Nordic method of preserving fish by marinating them in sugar, salt and herbs. Traditionally, herbs and spices such as dill and juniper are used, but Royal Greenland also offers modern versions with lemon, lime and several types of pepper.

