

## Fresh water in the fiord

We are sitting in our little boat close to the place where a huge glacier spits its ice out into the fiord. All around us there are ice floes of all sizes and in white and blue colours. The water has a beautiful turquoise colour.

The Danish author Carsten Jensen tell in his novel 'Sidste rejse' (Last Journey) how the principal character in the 1800s in a rowing boat sailed into the fiord of Qaqortoq in South Greenland together with an Inuit. They did not understand each other's language. The sunshine made the principal character very thirsty. He got surprised when the Inuit bent his upper body over the railing and drank of the water in the fiord.

As the principal character of the novel of Carsten Jensen, we expect that the water in the fiord is salty and thus not quench

the thirst. It is not always so. The huge influx of water from the mountains and the glaciers add so much water that the water in the surface of the fiord is fresh.

But that must taste like brackish water? No, not necessarily. When fresh water falls into the fiords there is a layering. The fresh water is lighter than the salt water. If there is calm weather the fresh water will be located in the surface. Actually, two layers of water masses will be formed and can stay unmixed, and the layers are also able to flow in opposite directions.

In the summer there is less wind in the fiords and the heat of the sun also can contribute to the separation of the fresh water and the salty water because the hot water (the fresh water) is lighter than cold water.



A small piece of ice in the turquoise fresh water inside the Godthaabsfiord, June 2013