## PRODUCING AN ORGANIC TEXTILE FIBER FROM MILK RESIDUES IN GERMANY

The <u>Qmilc Gmbh start-up enterprise</u> has developed in Hannover (Germany) an innovative process to produce a textile fiber from milk which cannot be used for consumption.

This textile fiber is kind to the skin, easy to dye and biodegradable. Unlike other milk fabric, QMilch does not use chemical additives in its creation process.

Qmilk fiber is made from 100% renewable resources and thanks to its eco-efficient production technology has many advantages both for consumers and the environment:

- Production of 1 kg of fiber requires 5 minutes only, ensuring a particular level of cost efficiency and a minimum of CO2 emissions.
- Production uses much less water (2L for 1kg of fabric) compared to the production of cotton (20,000L for 1 kg).
- Qmilk fiber is biodegradable and leaves no traces; the production process is waste-free;
- It is naturally antibacterial and ideal for people that suffer from textile allergies.
- Fabrics made from Qmilk fiber provide high wearing comfort and a silky feel.
- The organic fiber is tested for harmful substances and dermatologically tested for skin and body compatibility.

Fashion designer and microbiologist Anke Domaske created the Qmilk start-up company in 2011, after a successful research process for chemically untreated clothing. She realized that casein, the main component of cheese, was the perfect raw material for textile fibers. A technique to produce textiles from casein was already developed in the 1930s in Europe, but fibers were treated with large amounts of chemicals. Domaske devised a way to keep the procedure free of chemicals.

The procedure is not in competition with food production; on the contrary it allows a good use of a waste to be disposed. Casein which is the main resource of Qmilk products, is obtained from spoiled milk that is no longer tradable and cannot be used as food. This raw milk would be thrown away otherwise and in Germany every year 1.9 million tons of milk must be disposed of. This milk still contains valuable ingredients and offers great potential for technical



purposes and using a raw material Qmilk only extend its product life cycle.

The Qmilk start-up company collected 5.5 million Euros from various venture capitalists, banks, sponsors and partners to build a pilot plant that can produce thousands of tons of organic fibers a year. The company's plans are to scale up production from 17-tonnes/year to 1,000-tonnes/year.

In 2013 Anke Domaske was recognized by the MIT Technology Review as <u>Innovator Under 35</u>, a leading community of innovators, pioneers and social changemakers for her contribution in reducing the amount of waste by creating non-allergenic clothes.

To know more

**QMilk website** 

**QMilk in Facebook** 

Article in de.qmilk.eu

MIT Innovators Under 35

Article in ippinka.com

**Qmilk in Youtube** 

Article in Haz.de

Article in lostateminor.com

Article in Nydailynews.com

Article in startupfashion.com

