

Wood Fiber Products in Health Care

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Agenda

Background

- Wood as a raw-material
- Why in the Kotka area in Finland

Wood Fiber Products in Health Care – project

Research methods

Results

Next steps

Background

- **There are many disposable products, which are not produced from wood fiber or pulp, in use within health care**
- **Some of these products can perhaps be replaceable by a product made of wood fibers**
- **The disposable products increase waste amounts if they cannot be reprocessed or combusted**

Background

- **Wood fibers are widely available and are a cost efficient alternative for disposable products**
- **The wood fiber is a natural and renewable material that can be reprocessed or combusted to produce energy**
- **Handling of wood causes less pollution and is less energy consuming than the treatment processes related to most competing materials**

Background

Why in Kotka in Finland

- **Kotka is located in South-Eastern Finland; the leading area for the wood processing industry in Finland**
- **Kotka has a well developed health care system, especially for elderly people living at home, thus providing a good research environment for this project**



Wood fiber products in health care - project

The goal of our research project:

- **Is to find out which kind of wood fiber based products that are in use within health care today**
- **Which products made of non-wooden materials can be replaced by products made of wood fibers**

Research methods

- **Literature survey; products and applications**
- **Questioning**
- **Observation**
- **Group interviews**
- **Brainstorming on:**
 - **new products and solutions**
 - **improving existing products**



Research methods

Questioning and Observation

Target group:

- **People, who work within health care in the City of Kotka, and their patients**

Target locations:

- **Home care units, hospitals and support organizations**



Research methods

Group interviews and Brainstorming

Target group:

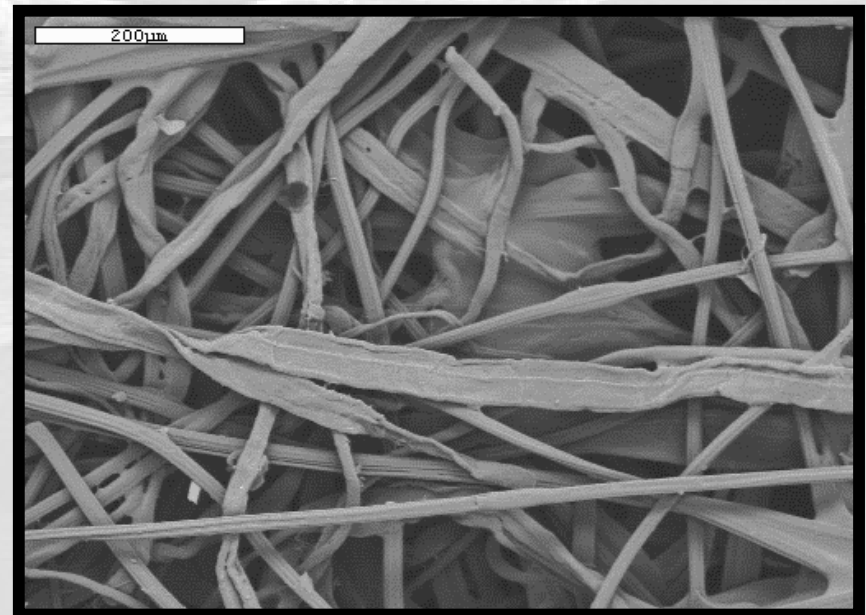
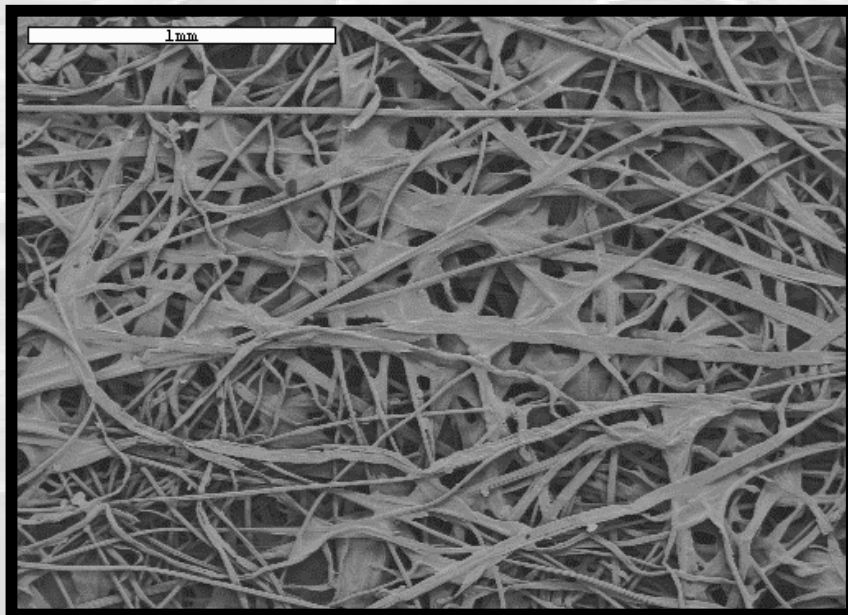
- **End users, especially nurses**
- **Product specialists**
- **Product designers**

Results

- **Survey on legislation and standards**
- **Survey on the usage of wooden fibers and their suitability for health care products**
- **Product analysis to find out if a product can be replaced by products made of wood fibers**
- **Survey on waste handling related to health care products**

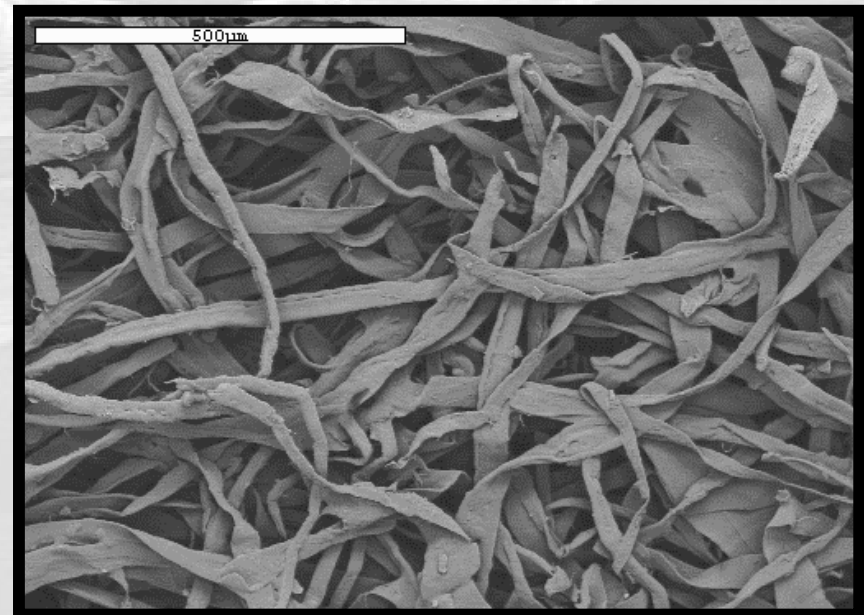
Results

Washcloth 1 (SEM-pictures)



Results

Washcloth 2 (SEM-pictures)



Results

- New products made of wood fibers need to be as easy or easier to use as are the products, which they replace
- When there are more products made of wood fibers, it will be easier to assort and handle the wastes
- This research project has shown that there are many package materials, which can be replaced by wood fibers
- We have identified several product ideas and we will choose a couple of the ideas for more detailed studies





Results

- **There is clearly a need for products made of sustainable materials**
- **Products made of wood or wood fibers are in most cases sustainable**

Next steps

There are products in use made of wood fibers that do not fulfill all the needs of the professionals within health care:

There is a clear need to continue the project and find ideas for new and improved disposable products

It is possible to simplify the handling of wastes by using more products based on wood fibers

Industrial partners will be needed to make the product ideas available as usable products

**Thank you for your attention!
Questions?**



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2007, International Congress for Reprocessing of Medical Products, ÖGSV-WHFSS 2007, 3.-5.5.2007, Baden, Austria.