



Fibrex® in Short

An Introduction



What is Fibrex?

The sugar beet consists of:

~5% cell wall material

~18% sugar

~77% water





Production of Fibrex

Beet pulp is steam-dried at high temperature and pressure

Milled, sieved or flaked

No processing aids used during production





Fibrex grades

Fibrex[®] 575 < **0.032mm**

Fibrex[®] 595 < **0.125mm**

Fibrex[®] 600 < **0.5mm**

Fibrex[®] 608 < **2.0mm**

Fibrex[®] 610 **0.4-1.4mm**

Fibrex[®] 615 **1.2-2.0mm**

Fibrex[®] 620 **coarse, not mill**

Fibrex[®] 630 **flakes**

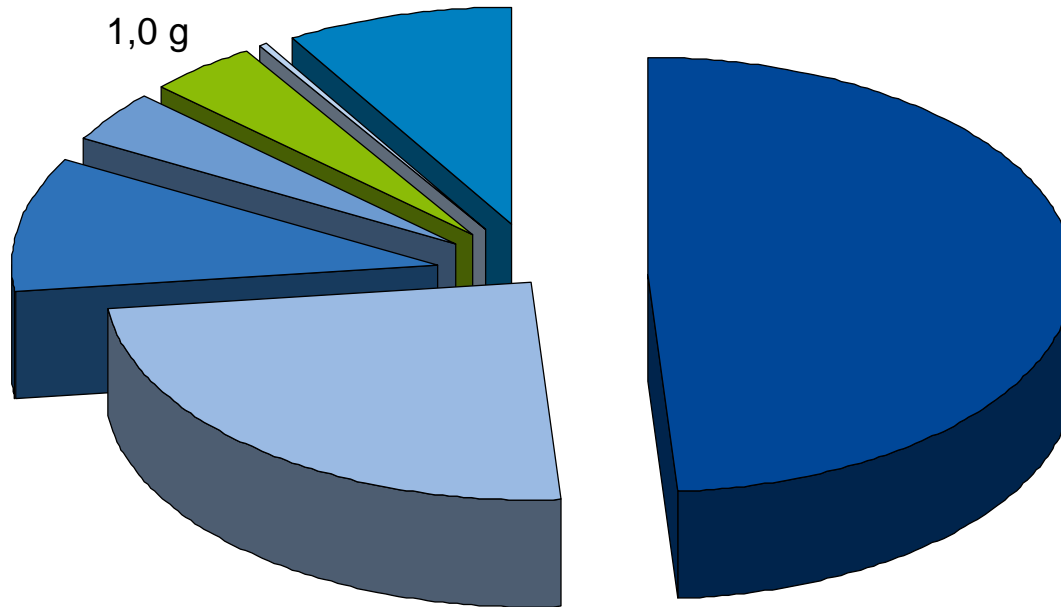




Nutritional composition, average

Protein	8,0 g
Water	8,0 g
Sugar	5,5 g
Minerals	4,0 g
Fat	1,0 g

g/100g



Insoluble fibre	1/3
+	
<u>Soluble fibre</u>	<u>2/3</u>

Total dietary
fibre 67 g*

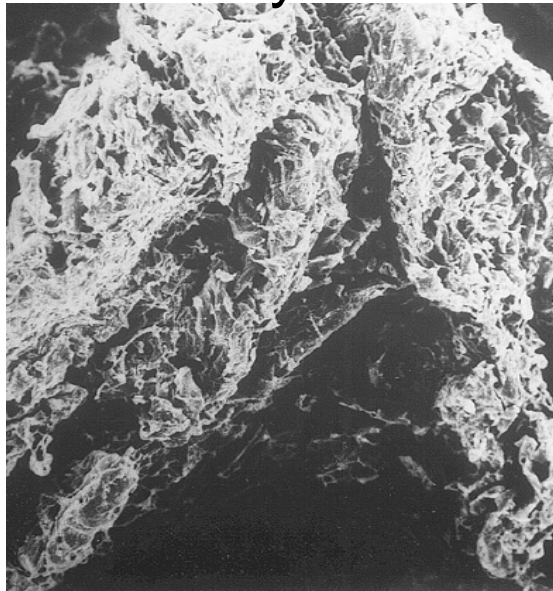
Pectin	27%
Hemicellulose	42%
Cellulose	28%
Lignin	3%

*According to AOAC



Cell structure of the sugar-beet fibre

Dry



Soaked

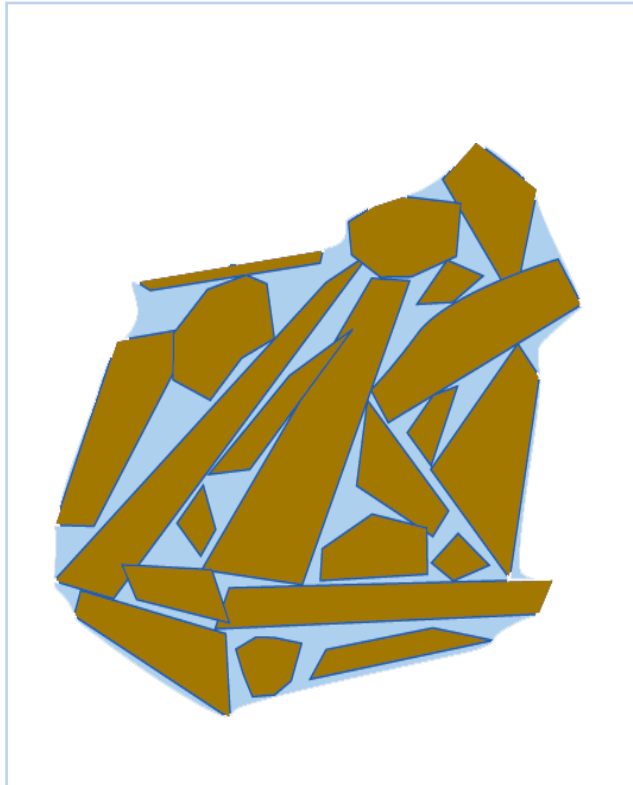


Magnified 300 times

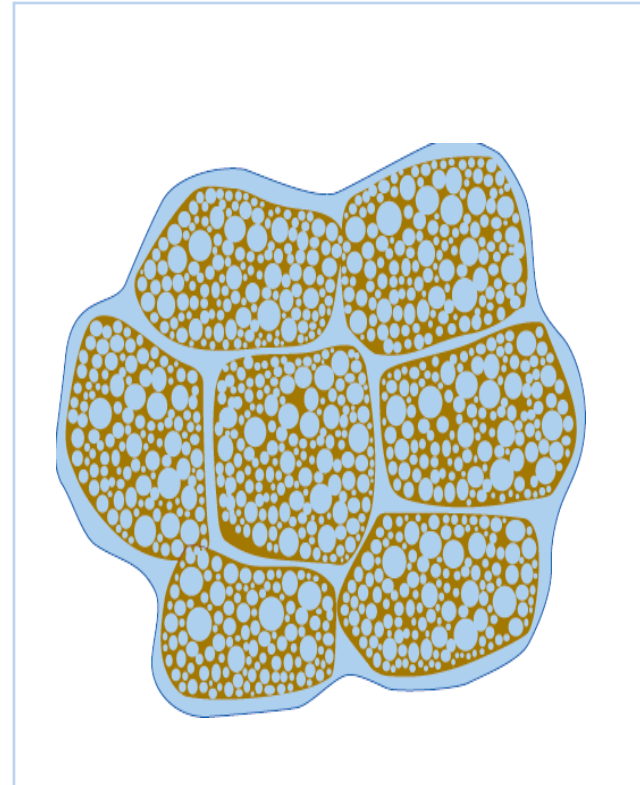


Particles versus cell structure

Lignified particles



Non-lignified cell structure





Hydration capacity of Fibrex

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Water uptake capacity: 7 times

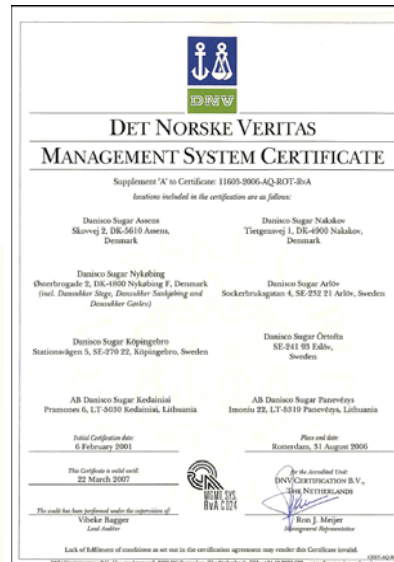
Water holding capacity*: 3.5 times,
(thermostable)



*Water retained at a pressure
of 10 k Pa

FibreX and quality

- ISO 9001
- ISO 14001
- ISO 22000
- HACCP
- Halal
- Kosher
- MSDS
- GMO free



SAFETY DATA SHEET

Product name: Fibrex Page: 1 of 15
 Revision Date: 2009-04-24 First date: 2008-04-24
 SDS ID: 0823

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name: Fibrex
 Classification: Food ingredient
 Supplier: Nordic Sugar A/S, Langelinie 1, PO Box 2702, DK-1074 Copenhagen K, Denmark
 Tel: +45 3396 2000
 Email: Lars.Eik.Hansen@nordicsugar.com
 Responsible for safety data sheet authoring: SDS_Ant@nordic.com

2. HAZARDS IDENTIFICATION

The product is not classified.

3. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains: vegetable fibre (from sugar beets)

4. FIRST-AID MEASURES

5. FIRE-FIGHTING



Main Application Areas



Bakery



Processed eat



Health



Other like snacks, soups,
vegetarian



Key words - bakery applications

Thermostable water holding capacity

Prolonged freshholding

Increased dough yield

Better dough process ability

Naturally gluten-free



Key words - meat applications

Positive effects on appearance, colour and texture.

Unique water-holding capacity. Excellent resistance to machine processing.

Reduction of frying/cooking loss.

Reduction of costs.

Natural product.

Allergen-free.





Key words - health applications

Bulking effect

Normalizing transit time

Normalized blood-glucose levels after meal

Satiety

Lower LDL-cholesterol

Bioavailability of minerals



Key words – other application areas

As a flavour carrier in tea, tobacco and spice mixes

As reinforcement and fibre boost in extrusion for snacks or cereals

For a fibre boost in müsli and granola bars

To give texture and to manage water in different fillings

