

# TEXTURE INNOVATION IN EMULSIFIED MEAT

## SENSEFI® IN SAUSAGES

SenseFi® provides succulent fat reduced sausages by restoring the right texture and balancing flavours hence providing a full fat eating experience. SenseFi® is a dietary fiber based on a sustainable and renewable natural source.

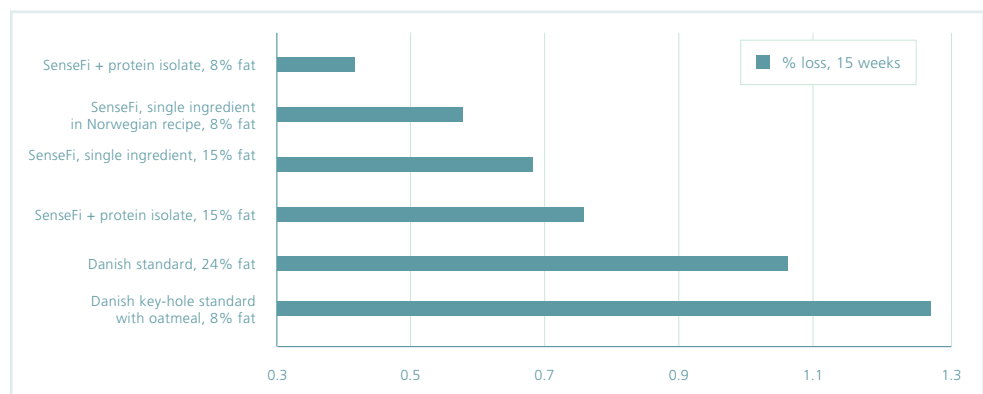
### THE MULTIFUNCTIONAL PROPERTIES OF SENSEFI® DELIVERS:

- Improved quality with succulent texture, better bite and clean taste
- Improved health and nutrition by fat reduction and fibre addition
- Prolonged shelf life by reduced syneresis after freezing and re-heating
- Improved profit by increased yield
- Cost-savings through reduction of lard, meat, functional proteins and spice-blends

### THE SCIENCE OF SUCCULENCE

Fat reduced sausage with SenseFi® is much closer to full fat sausage in terms of succulent texture and good bite. Traditional fibres, stabilizers and protein can bind additional water, but they tend to give a dry, gummy texture with some off-taste. Additionally, SenseFi® mimic lard and meat texture and does have a neutral taste. The chart shows DMRI study on freezing loss in Frankfurter sausage after 15 weeks storage at -18°C. Both benchmarks, Danish 24% and 8% fat, got higher freezing loss than all series with SenseFi®.

FIGURE 1.  
*Freezing loss in Frankfurter sausage after 15 weeks frozen storage.*



BAKERY FILLINGS



BEVERAGES



DRESSINGS



EMULSIFIED MEAT



FROZEN YOGHURT



ICE CREAM



MAYO



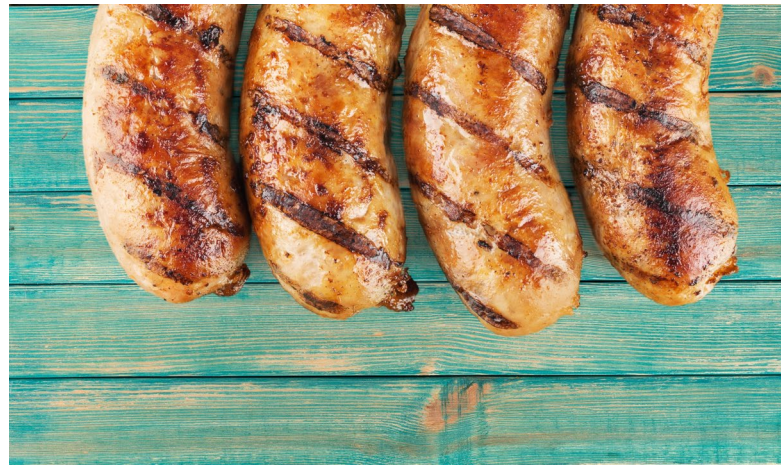
SOUR CREAM



YOGHURT

## ENJOY SAUSAGES **WITHOUT WORRYING ABOUT THE FAT!**

When fat is removed from the formulation it is replaced primarily with water. This water needs to be bound and structured to deliver a texture that is close to the fat that has been removed. SenseFi® has a unique ultra high water holding capacity and when hydrated it forms opaque semi gels that impart creaminess, smoothness and richness to foods. SenseFi® is also a very robust ingredient that shows excellent stability at all pHs, temperatures, salt, sugar contents and shear forces.



### 15% FAT SAUSAGE

Ingredients	% by weight
Water	32.25
SenseFi®	1.00
Pork (7% fat)	25.00
Pork (22% fat)	25.00
Pork lard (67% fat)	10.00
Potato flour	4.00
Sodium chloride	1.00
Nitrite salt 0.6%	0.60
Spicemix	0.80
Phosphate E451	0.15
Dried onion	0.20
<b>TOTAL</b>	<b>100.00</b>

### <10% FAT KEY-HOLE\* SAUSAGE

Ingredients	% by weight
Water	32.55
SenseFi®	1.50
Pork (12% fat)	50.00
Pork jowls (50% fat)	7.00
Beef trim (20% fat)	2.00
Potato flour	4.40
Sodium chloride	1.00
Nitrite salt 0.6%	0.60
Spicemix	0.65
Phosphate E451	0.20
Dried onion	0.10
<b>TOTAL</b>	<b>100.00</b>

*\*The Keyhole was established in Sweden in 1989 and has now become a common Nordic label for healthier food products in Denmark, Norway, Iceland and Sweden.*

## PROCESSING STEPS IN MEAT CHOPPER

1.

Disperse SenseFi and 1/3 of water in a meat chopper at high speed to a creamy structure.

3.

Add rest of ingredients and water and chop 5 turns at low knife and bowl speed followed by high knife and bowl speed until a nice paste.

2.

Add grounded meat, salt, nitrite and 1/3 of water and chop at high speed to fine consistency.

4.

Stuff into casing, 22-24 mm.

**RECOMENDED LABELLING: POWDERED CELLULOSE OR E460**