

## Salt is not just salt

Jozo fine salt containing iodine was used in the investigation. In an investigation with saveloy, pure salt (vacuum salt) was compared with other kinds of salt: Himalaya salt, Læsø salt, coarse cooking salt Guerande (French), Dead Sea salt and Gourmet salt flakes. The results only showed a difference in taste between vacuum salt and Gourmet salt flakes. In saveloy, the salt type is less significant for the taste.

## New challenges

Despite numerous trials concerning the salting of meat, we still have to investigate the following topics:

- How fast does surface salting penetrate the meat?
- What do the consumers like?



## Projectpartners



DET BIOVIDENSKABELIGE FAKULTET  
FOR FØDEVARER, VETERINÆRMEDICIN OG NATURRESSOURCER  
KØBENHAVNS UNIVERSITET

## Financing

Pig Levy fund  
The Danish Food Industry Agency

## For further information contact:

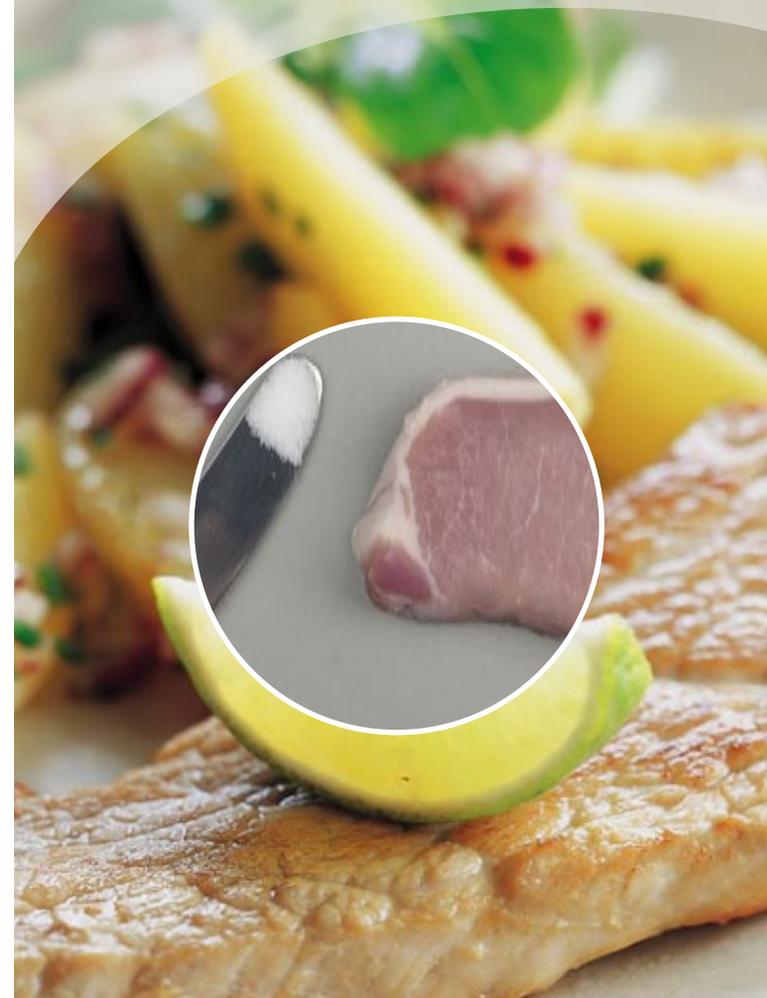
Camilla Bejerholm  
Email: CB@dti.dk  
Tlf: +45 7220 2559

Margit Dall Aaslyng  
Email: MDAG@dti.dk  
Tlf: +45 7220 2684

## Danish Meat Research Institute

Maglegaardsvej 2  
DK-4000 Roskilde  
Tlf: +45 7220 2000  
dmri@dti.dk  
www.dti.dk

# What do we know about salting pork?



# Salting pork?

Salting meat is an old tradition and it is customary to salt meat just before or after cooking.

- What is the significance of salting?
- Can the amount of salt be reduced without affecting eating quality?
- When should meat be salted?
- Does salting affect cooking loss?
- Is the choice of salt type significant?

The following aspects of salting have been investigated:

- Salt concentration
- Gourmet salting
- Salting methods and technology
- Cooking loss
- Salt type



## A pinch of salt is enough

No matter whether salt is added to pork patties or to whole meat cuts, even tiny concentrations of salt enhance the salty taste in meat.

Even 0.1 % salt is enough to be tasted. The more salt that is added, the more salty the meat will taste. Salting also affects other taste sensations. In pork patties, the fried meat taste in the crust is increased already at low salt concentrations, though high concentrations do not increase the effect. Even a pinch of salt is enough to be tasted.

High salt concentrations are required to influence the consistency. In pork loin steaks, increased juiciness is obtained at salt concentrations from 0.4%.

If salty taste has a positive influence on the consumers' preference for meat, perhaps even small concentrations of salt can increase the consumers' preference.

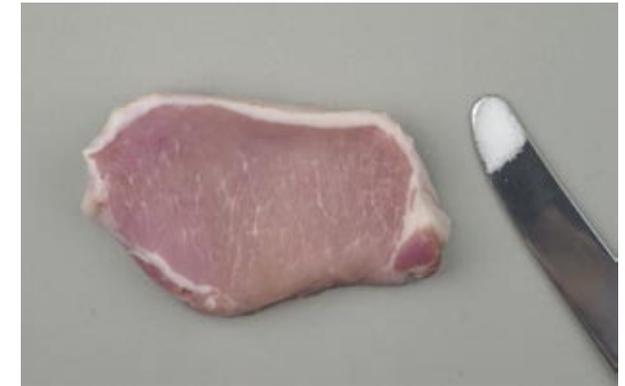
## Gourmet salting for the fine taste

Gourmet salting is a light surface salting of meat shortly before it is cooked. At home in the consumers' kitchen, the method fits easily into the daily cooking routine because the salting time can be used for preparing the accompaniments.

Gourmet salting increases tenderness, juiciness and the salt taste in both the loin and the outside ham muscle.

Gourmet salting of pork loin steaks with a pinch of salt on each side is adequate (0.4 g for each pork loin steak weighing 125 g). The effect is not increased substantially with higher salt concentrations or increased salting time. After just 15 minutes of salting, both tenderness and juiciness are improved.

In practice, gourmet salting can, for example, be used to make pork loin steaks more tender, since meat with low pH is often a little tough compared with meat with high pH.



Meat with low pH will, after gourmet salting, be just as tender as meat with high pH that has not been gourmet salted.

## New salting technology

In the industry, meat is often salted by brine injection followed by equalization, which usually takes place in a tumbler.

However, new test results show that a special pressure treatment can be used to make products with the same salty taste even though the salt content is low. This pressure treatment also results in loose texture and juicy meat.

## Salting reduces cooking loss

Both the cooking loss and the total loss (cooking loss + salting loss) are reduced when gourmet salting pork loin steaks. The effect on cooking loss is already achieved after one hour of salting. Differences in cooking loss as a result of pH differences in the meat can be equalized by salting with 0.8 % salt for one hour - however, 0.3 % salt is not sufficient.