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The case of food contamination.

Turning to the case of food contamination, I would like to discuss case of rather historical importance, but very interesting one.

As you may know in Poland there a tradition of eating raw sausages, prepared with raw meat that is coarsely shredded, to which are added spices and other additives, which is filled into natural casings and smoked with cold smoke.

One day 70 people fell ill, they were all residents of a small town. They ate raw sausage, so called Polish raw sausage. It was produced by a small, local meat production plant and was transported to several shops in the town before lunch. The very first people who got sick were two salesmen selling meat and meat products in a store just across the street from the meat production plant, they first ate sausage. Initial symptoms of the disease were typical of Salmonella infection, namely malaise, general weakness, chills and prodromal symptoms of the gastrointestinal tract. Later experience was severe diarrhea, fever, dehydration. Thus were the typical symptoms of food poisoning.

These two salespersons were likely to have consumed the sausage first, even before lunch. They fell ill in the afternoon. After my arrival at the butcher shop I learned about these two people and at the very beginning I interviewed t. They worked slower but they argued that although they felt weaker, there was nothing to them. I agreed with them that I will take them on the way back to the hospital which was 17 km away. Then I carried out the epidemiological investigation.

The plant was supplied with the meat of pigs originating from the local market of small farms. The plant was equipped well with the technical installations and maintained in a good sanitary condition. Inspections of veterinary supervision were carried out regularly, surface swabs were performed three times a year by controlling the condition of the cleaning machines and equipment after cleaning. Although there were minor shortcomings both inspection and microbiological testing did not reveal any serious abnormalities.

The Salmonella poisoning was suspected on the basis of epidemiological intelligence. The manufacturer withdrew the sausage from the store in the afternoon, the sausage was secured in a separate warehouse and the official authority conducted laboratory tests. The sampled material for testing culture showed Salmonella enteritidis. But this bacterium was not cultured from surface swabs.

All employees of the plant had a valid medical examination allowing them to work. Carrier state testing was conducted once a year.

It was found, as a result of examination of workers stool taken in conjunction with the onset of consumers, that one of the workers was infected by Salmonella. She was a resident of the village and she held 40 laying hens for her own needs. In an epidemiological interview she woman admitted that from time to time she had little complaints from the gastrointestinal tract, it was reported in sporadic diarrhea since about 2 months. The employee was moved away from work for treatment and after recovery she returned to work. Stool test in chickens

also showed presence of Salmonella. All chickens were slaughtered and secured sausage was utilized. All the sick people were hospitalized and stayed in the hospital from 2 to 5 days. All were cured.

This incident got a wide media coverage from regional newspapers for following days. Journalists who are not surprisingly very active in such cases have speculated that the cause of poisoning was dirt in the plan but as we concluded the cause of human food poisoning was secondary infection of the finished product with Salmonella. One can easily assess how important is controlling of working conditions in the context of good hygiene practices which includes daily interview concerning status preasens of the workers.