From the earliest times up to the beginning of recorded history, man has probably prepared some type of meat product comparable to sausage. In all instances the evaluations made of the residues in caves, mounds or tombs are opinions. Some evidence is based on the practices of primitive tribes or on travelers and explorers comments of foods and food preparation of the aborigines or primitive groups.

The food economy and preservation methods have always been a big factor for survival of man and undoubtedly the use of offal and the drying of meat in some form was practiced by early man. Samples of meat, including a mutton joint were uncovered in a tomb in ancient Jericho. Clay tablets from Babylon give some fragmentary information about chopped meat in a goat's stomach (possibly a type of Haggis).

At about 1000 B.C., "an approximation since Homer's birth date is uncertain, dates ranging from 830 to 1159 B.C. are given by various early writer's." Homer mentions often in the Odyssey details of the slaughter of beef, goats and sheep. He gives in detail the slaughter of a heifer as part of a religious ceremony. The collection of the blood from the animal and the manner of slicing and roasting the meat reflects the importance the Greeks placed on animal products as food. The prize of a sausage was awarded Odysseus when he defeated the sturdy beggar Iros in a boxing match. The sausage was described as a type of black pudding, stuffed with blood and fat and sizzled on the hearth.

In the tomb of Rameses III a painting depicts the manner in which the Egyptians prepared their food. The butchering of a cow is given in detail and is not too different in appearance from the methods used in the 1920's in the U.S. In another tomb a model of a shop in which the shop worker is carrying dried meat indicates that preservation by drying was a common practice of that time in Egypt.

The classic Greek meals have been depicted on vase paintings and other works of art. Athenaeus in the Deipnosophistae gives accounts of feasts and foods and cites many experts on foods. Unfortunately, the cook books and reports he cites have not been uncovered to date, however his works are available in the Bohn's Classical Library. He indicates that Charides of Athens was a specialist on seasonings and Aphthonetus a specialist in sausage. This suggests that at this time the Greeks were highly diversified in food preparations that included sausage and other meat products.

Apicius in his Roman Cookery describes puddings, loaves, and molded sausage like products. Pliny the Elder, Cato and Columella all describe methods of meat preservation including instructions for salting and pickling that are comparable to and possibly are the predecessors of our present methods of dry salt ham and of pickled pork items.

Sausage is mentioned in scrolls, household records and in the record books of manor house stewards. For example, the inventory of a 9th Century Bavarian Abbey listed twenty smoked porkers with sausages.

Many of the slaughter customs and practices are governed by ancient laws and rules. The French and Germans even in the 13th Century had inspection requirements for pork and beef products. The English slaughter houses as early as the 12th Century had separation of products and special establishments for offal material, tripe and intestines. In some instances the butcher received as part of his fees; the head, hide and offal material. The offal such as the stomach, lungs, liver, heart and spleen and the intestines became a challenge and he prepared items such as puddings, loaves and sausage to properly utilize these items. This custom of the offal to the butcher was practiced in the 1920's in country or farm slaughter in the U.S. The offal called pudding meat was set aside for the neighbors who helped with the slaughter. In the past year a visit to a slaughter-packer operation in the near south carried an office sign regarding custom slaughter as follows:--Beef: the hide, head and offal belong to the plant plus a 10 dollar charge for slaughter and two dollar handling fee at the shipping dock.

Pemmican the meat item of unusual stability and nutritive quality can be prepared from a variety of animal sources from bears to caribou and in the West it and jerky were the two meat items prepared from bison that aided in the survival of the aborigines. Pemmican and its counterparts have been described by explorers, trappers and factors of the Hudson Bay Company. This amazing product was prepared in large quantities by the Plains Indians or by tribes that followed the buffalo (bison). The tongue, hump rib and intestines of the buffalo were considered delicacies by the early trappers. Survival of the trappers and trading posts of the Hudson Bay Company was possible only by the judicious use of pemmican. Large caches of pemmican have been recorded to be used by many of our early frontier military posts.

Dr. E. N. Horsford in his report on the Army Ration of 1864 gives an interesting account of sausage as a means of improving the use of beef for feeding the Army. He had spent several years in Liebig's Laboratory in Germany and on returning to the U.S. was appointed a professor at Harvard with the specific assignment of the Application of Science to the Useful Arts in 1847. In his report to the U.S. Army he mentioned that the Germans were quite skilled in sausage preparation and utilized all of the edible components of the animal. He listed the necessary equipment for sausage manufacture and suggested means of making cloth casings coated with gelatin when other sources were not
available. Sausage up to 1864 was not a part of the Army ration. However, many references to sausages being supplied by settlers indicate that the product was a popular item for supplementing the rations at Army camps and posts.

The National Provisioner, the meat industry journal published an interesting review of the meat industries 60 years from 1891 to 1951. Meat industry practices, reproductions of advertisements for equipment and sausage accessories were of special interest.

We have some meager evidence that sausage and meat specialty items have been used over the centuries and in some instances prior to written records. The vagueness of the prior experience emphasizes the need for better record keeping of our existing methods. Some of the best descriptions or illustrations of the prior art has come from church windows, margins of Psalter's, Bibles with illustrations, calendars, almanacs and special paintings.

In regard to paintings the Dutch masters have added considerable knowledge to the slaughter and meat processing of their times. One of the best is "The Butcher's Shop (1551) by Pieter Aertszen of Amsterdam. The painting is now at the University of Uppsala, Sweden and is most vivid in depicting the products of that time. Pieter Aertszen, Dutch painter 1507-1573, known for his painting of homely scenes in which he reproduced articles of furniture and cooking utensils with great fidelity. The importance to us is the details of the shop and the products, such as the ring sausages and especially the linked sausage. The double links of small sausage are certainly comparable in appearance with frankfurters and weiners sold in the city markets in Baltimore during the 1920's.

The following few slides are offered for your judgements as to what can be obtained from church windows, old prints and the old master's in various museums.

BIBLIOGRAPHY


Butcher Shop 15th Century France (Église Notre-Dame de Semur en Auxois Vitrail)

Butcher Shop 14th Century Germany (Nuremberg 1436)

Butcher Shop 15th Century Germany

The Butcher Shop
Aertszen, Peter (1551) Amsterdam
Sausage Preparation
18th Century Germany

Anglo-Saxon Pig Slaughter
(Old English Church Window)

Scroll 16th Century English
Larry Borchert: Dr. Robert W. Bray is our final speaker. He is Associate Dean and Director of the University of Wisconsin Experiment Station. He took his B.S. and Ph.D. at Wisconsin and his Masters at Kansas State.

Bob is not regarded by most of us as an historian. But when you've been associated with the industry as long as he has, and when you've been so intimately involved with significant institutions within that industry, such as the International Livestock Exposition, the RMC, the American Meat Science Association, and Meat Science education, you gradually become considered part of the history of that industry itself. For that reason, we have asked Dr. Bray to present the concluding paper of this session entitled, "The History of Meat-Based Agriculture in America." Bob.

R. W. Bray: Thank you, Larry, you certainly got me off the hook. I am not an historian.