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Loeffel Meat Laboratory

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A general research laboratory with various pieces of equipment including a Warner Bratzler shear, a small Hobart chopper for research samples, and a Spectronic 500 spectrophotometer with flow-through cell used for making colorimetic determinations. Beyond the desk and chair is a refrigerated centrifuge and at the end of the room is the Barber Colman 5000 gas chromatograph.

A view of the cooking laboratory, which is adjacent to the general research laboratory. It is equipped with a large rotary-hearth oven under the hood at the back of the room. An electrical household range and a deep fat fryer are on the left against the far wall. In addition to these ovens, the laboratory is also equipped with a microwave oven, a quartz infrared oven, an electric charbroiler, and an electric griddle. Besides serving as a cooking facility for the research complex, this room also serves as a microbiology laboratory. An anaerobic incubator is in the far corner on the right.

Photos and descriptions of Loeffel Meat Laboratory taken from the building dedication brochure and from the Meats Section of the UNL Animal Science webpage.

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Loeffel Meat Laboratory

University of Nebraska
Animal Science

"Completion of the Meat Laboratory marks another long step forward in the University's program of service to the livestock industry. It is dedicated to more efficient production of beef, pork and lamb, through research and teaching."
From the
Loeffel Meat Lab Dedication Brochure
May 14, 1954

Loeffel Meat Laboratory

A Modern Building in 1953

The Meat Laboratory was completed in 1953 and dedicated to the memory of Professor William J. Loeffel, longtime meat researcher and former Department Chairman of the Animal Science Department, University of Nebraska.

The Loeffel Meat Laboratory, a Federally Inspected facility, was designed for both undergraduate and graduate teaching, research and extension meat programs. Originally it was a three-story brick building in the northeast part of the Agricultural Campus. The building was L-shaped, 112 feet by 38 feet with a wing at the rear 60 feet long and 45 feet wide. It was designed as a low-maintenance building, meeting all modern sanitary requirements.

The first floor contained a killing floor and a receiving room, cleaning room and a balcony for visitors, along with a cutting room with adjacent coolers and freezers. It contained a processing room where experimental cutting and the meat was trimmed and packaged before delivery. On the second floor was a research laboratory equipped for chemical, histological, and bacteriological work with meat. The facility also included a modern kitchen and a lecture room seating 65 people. The basement consisted of a smokehouse, men's locker and lavatory, store rooms, refrigeration room and four coolers. There was also a laboratory for sausage making, rendering, curing and canning work. Much of the building was air-conditioned.

Following are descriptions of the different areas of the Loeffel Meat Laboratory in its early years:

This is a view of the sausage processing room located on the lower floor of Loeffel Meat Laboratory. The room is a multi-purpose type laboratory which is air conditioned and can be held at temperatures near 50 degrees. On the left is the vacuum chop vertical cutting mill, capable of handling gas injections for curing, vacuum chopping, or air chopping. The bowl is a tip-over bowl for dumping into tubs. Adjacent to the vertical cutting mill is a Hobart Emulsifier. This emulsifier with the conical shaped hopper is used in the production of fine emulsions. Beyond the emulsifier is a Comitrol Flaking machine, part of a research project. A mixer can be seen in the immediate background next to the storage cabinet. In the center of the room is a Frank-A-Matic, which is used in the production of frankfurters and was on loan to the University. On the right-hand side in the distance is a grinder and stuffer. The stuffing table with clipping machine is in the front on the right.

The lard rendering and cured meat operations room contains the Townsend skinning machines at the far left along with the cure ingredient storage barrels. At the far end of the room is a bacon slicer, a pumping table and pumping scales, and a Buffalo chopper. A black iron lard kettle is on the side between two stainless steel steam kettles. In the middle of the room are processing tables, a Ty-Linker, and a peeler.

Immediately left on the slaughter floor is the closed beef knocking chute gate. In the open doorway is the rollover hog stunning chute. The hog scalding tank can be seen with steam rising from it and the dehairing machine is at the far end of the tank. Beside the scalding tank is the electric stunner for the stunning of hogs. In the foreground is the edible offal wash-up sink with overhead water spray valve. The personnel sink, knife and saw sterilizers are on the back side of the edible offal wash unit. The slaughter floor has a capability of slaughtering 8 to 10 cattle per day and 15 to 20 hogs per hour. Lambs are also slaughtered in small numbers. The slaughter room is completely well-placed for adequate drainage.

A view of the cutting room showing some of the 65 student tablet arm chairs that are located on risers. This room has a projection screen set up for the use of an overhead projector for visuals as well as for slides and movies. It is equipped with dimmer lighting and capable of being blacked-out with drapes. The temperature of this room is normally kept at 65 degrees in the summer and 70 degrees in the winter. Midday clean-up to maintain the 50 degree temperature is required by USDA-MID.