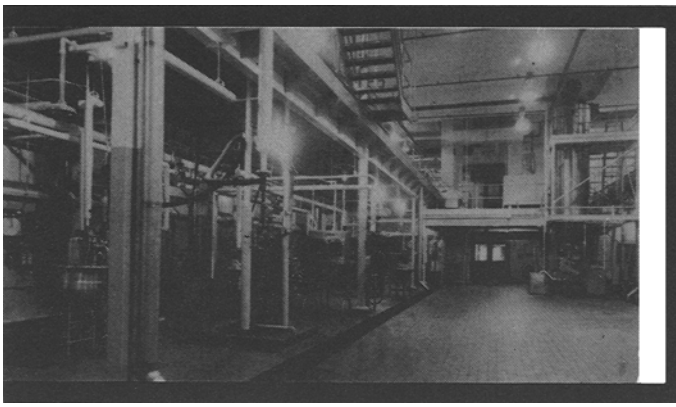
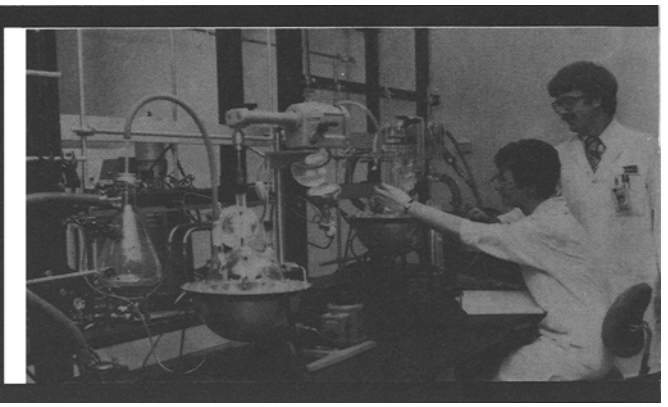


The 20,000-sq. ft. main pilot plant houses small-scale processing operations for edible oils, lecithin and soy proteins. It enables testing new processing concepts, equipment and procedures before full-scale plant introduction.



The Food Oils Section of the Edible Oils Research Group conducts basic research on vegetable oil processing, including refining, hydrogenation and deodorization.

Central Soya R & D unit fully operational

Central Soya officially unveiled its new $9 million corporate research and development complex on the outskirts of Fort Wayne, Indiana, with an open house for trade press representatives in mid-July.

The four-building complex replaces the firm's former R&D center in Chicago and also provides space for engineering and technical departments previously housed in Central Soya's downtown Fort Wayne offices.

Fats and oils as well as edible protein research facilities are in the 37,000-square-foot laboratory building and the 20,000-square-foot pilot plant building. Central Soya did not have a pilot plant facility at its Chicago R&D center.

Laboratories use modular design with all utilities provided from the ceilings, except floor sewer drains. There is generous space for expansion of staff, but fats and oils research director Bernard F. Szuhaj said there have been no additional staff members hired since the move to Fort Wayne about a year ago.

The fats and oils group works on three major areas: margarine and salad products, lecithin, and refined oils. Dan Sullivan, whose group works on margarine and salad products, does support work for Central Soya's J.S. Filbert subsidiary. At the present time, Dr. Sullivan said, the group is working on expanding the Mrs. Filbert's product line, particularly for institutional markets.

New to Central Soya's research effort since the move to Fort Wayne is an attempt to integrate all levels of research personnel in product development. Thus the fats and oils researchers may sit down with marketing, manufacturing, technical and executive personnel during the development of a product, helping with new products from concept to marketing, according to Dr. L.D. Williams, Central Soya's vice-president for research. Dr. Williams said there has been a conscious effort to have less structured and regimented operations than are found at more traditional research facilities.

Central Soya has done work not only with soybean oil, but also corn, palm and cottonseed oil. At the time of the tour, some sunflower oil also was on site for study.

Dr. Szuhaj said the lecithin research team is seeking new information and potential uses for lecithin. Central Soya, offering 40 lecithin-based products, is a leader in lecithin research, he said.

Refined oil research includes work on product and process improvement, providing custom blend products, customer technical service, and pilot plant work. In the fats and oils section of the pilot plant, there are units for caustic refining and degumming of crude soybean oil, deodorizer and a Votator. The hazard building portion of the pilot plant includes hydrogenation and bleaching equipment. All pilot plant equipment is constructed with materials used in Central Soya's actual processing units.

Soy protein research is directed by Dr. Philip T. Tybor. The program is designed to provide new protein products and applications as well as quality assurance. The pilot plant includes a spray drier, extruder and other equipment used in protein processes developed or purchased by Central Soya.

The laboratory building also includes test kitchens, demonstration and flavor profile rooms, cold rooms for work with meat, and laboratories for microbiology, analytical and other groups. All air in the building passes through only once, then, as it is expelled, it is cycled past incoming air for heat exchange.

The adjoining 27,000-square-foot office building includes corporate food research office, corporate engineering and technical departments, research library and general office facilities.

A 12,000-square-foot service building houses a steam boiler for the pilot plant and lab.

The existing buildings obviously include room for expansion of research staffs and, company officials said, the building is designed so that a second floor could be added.

Director of research for Central Soya is Dr. Joseph Endres, a former member of the AOCS Governing Board.