

# National Nutrition and Food Technology Research Institute

## Pilot Plant

Innovation and health promotion in food and beverages have been part of our mission at NNFTRI since early 1960s. The path to accomplish these is through researches mainly focusing on formulation, sensory evaluation, bioactive components and hazard detections, which can be converted into industrial products. Requirement to construct a well-equipped and professionally managed facility arose from such an insight and led to establishment of a unique "Food Technology Pilot Plant". Ever since, the pilot plant has been an asset to the organization, and furthermore, a resource for industries, addressing their food production challenges and improvement. Developed code of conduct for the pilot plant enables clients/researchers from the departments of food science and technology, and private sector to have access to the facility. These research projects are in line with fulfilling the degree programs requirements or proposed research subjects as well as providing services to industrial applicants.

The two-story pilot plant has been organized to accommodate equipment for the processing of dairy, cereal, meat and canned foods followed by packaging at pilot scale as well as setting up a rheological laboratory. The rheology laboratory amassed practical test instruments capturing rheological attributes, ranging from

rigid solids to fragile products as well as thin to thick liquids.

A short list of food processing equipment includes spray drier, separator, incubator, homogenizer, MAP packaging system, spiral dough mixer, dough sheeter, electrical oven and can capping machine. Main high-tech rheological tools and related accessories can be shortlisted as rheometer, particle size analyzer, ultra turax and texture analyzer.

NNFTIR has long been benefiting from professionals and experienced faculties in edible oil industry who at the same time played major roles in consulting this sector of food production and related products, as well as regulatory affairs at national level. Next immediate stage in promoting the pilot plan, therefore, will be equipping the facility with edible oil related appliances.

