

**SCHOOL OF BIOTECHNOLOGY,  
DEVI AHILYA UNIVERSITY, INDORE**

**Report On Industrial Visit To Pratap Snacks Ltd., Indore**

The School of Biotechnology, Devi Ahilya University, Indore organized an exclusive "Industrial Visit to Pratap Snacks" on **5<sup>th</sup> of March 2022, 2:15 to 5:30 PM**. The visit aimed to see the Manufacturing Process involving Food Technology, use of different ingredients to provide desirable quality to the product, Packaging Methods, Waste disposal strategies and working of Effluent Treatment Plant (ETP) of the factor.

Students were divided into 2 groups (33 each). The programme started with visit to Effluent Treatment Plant (ETP) of the factory which purifies Waste hard black water through several steps. It involved primary treatment with caustic to remove chemical and bacterial impurities. Then it goes in Secondary tank for further removal of black color and hard metal ions which are toxic to all forms of life. Then water goes in tertiary tank for further removal of big impurities and then the last stage comes where a big RO purifier has been installed which purifies all the minute organisms and impurities. Now the water is pure enough to be reuse in various activities like Gardening, washing cars and further reuse of plant in boiler etc. However, it is not advisable for drinking as it has high level of chemical caustic which is harmful for the body. The ETP plant also have a section for inorganic and organic waste which is further dumped in a tank for from where through "Aerobic" and "Anaerobic" process it is degraded to produce Methane(CH<sub>4</sub>) (a biogas) which powers high pressure and low pressure boilers.

After ETP, students were taken to the Chips and Namkeen manufacturing unit. In the first step, fresh potatoes were taken in the destoner where all the dust and big impurities are washed off. After it slice washing is carried out in which after slicing, the starch on the surface of the slice need to be washed away. Third step involves blanching in which the unique blancher separates every single slice for optimum and even blanching result ,the temperature set in three zones assure a controlled and exact blanching effect. There comes the last stage which have multi - zone frying , the unit is composed of high pressure boiler which operates at a very high temp of 220°C at pressure of 60 psi which boils the oil at 180°C for perfect frying. Ingredients and flavour are added for desired taste in a rotating hollow spherical cylinder. Then the product is allowed kept under room temperate for packaging. Various high speed automatic machines are installed in the packaging area which fills and pack the product in the desired amount in the packet along with Nitrogen gas to conserve the taste and quality of the product.

At the end of the whole informative tour the students are briefed by the people in charge through a very good presentation of how things are done and how much hygiene and precaution they take to ensure and maintain the quality. A gift hamper was given to all students.

The whole programme was well organised. It was a very informative which helped everyone imbibe knowledge to learn about the food technology and working of ETP plant. Students are extremely thankful to the institute and all the faculty members for organizing such enriching sessions.

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Some glimpses of the visit --



