

## SNS COLLEGE OF TECHNOLOGY COIMBATORE-35



## 19FTT304 BAKING AND CONFECTIONERY TECHNOLOGY UNIT –III

## PREPARATION OF WAFERS

Wafers: Wafers are an unusual product. They are often incorrectly included with biscuits, possibly because they are both made from soft wheat flour. Wafers, unlike biscuits, are a low fat, low sugar product. They normally consist almost entirely of flour. There is a very wide difference between the various sorts of wafers. Some wafers are made to serve with ice cream others are made to cover in chocolate and sold as confectionery. All wafers have in common that they are baked to low moisture content, as are biscuits. Wafers can be either yeast raised or chemically raised, e.g. by baking powder. Yeast raised wafers do not contain much sugar after fermentation. Wafers are normally made from a low to medium protein soft wheat flour. Too high a protein flour produces too hard a wafer. Conversely, too low a protein content will give very fragile wafers. Depending on the colour and use of the finished wafer some wafers are made from brown flours.

Making of wafers: Obviously the process is slightly different depending on whether the wafer is yeast or chemically raised. In essence the ingredients are mixed into a batter then baked. There is no need to develop the gluten, indeed gluten development is unhelpful. One particular problem in wafer batters is the separation of strings of gluten. This can be avoided either by mixing the batter cold or by careful selection of the flour used. If the product is handmade on a small scale the flour used is less critical than if the product is made on a large scale on an automated plant. Mixing cold and baking the product before the gluten separates may be a useful small scale solution but on a large scale where the batter has to be pumped to the ovens to be baked it will not work

Baking wafers: On a small scale, wafers are baked by pouring the batter on a heated metal plate and bringing a second plate that is hinged down on the first, trapping the batter between the two plates. The plates are likely to have been treated with a releasing agent and may have a pattern inscribed on them. The plates will be equipped with a system for venting the steam produced in cooking. The heat is then applied and the wafer cooks very quickly.Large-scale wafer ovens are essentially the small-scale system scaled up. One problem with the mass production of some wafers is that they are too delicate to use mechanical handling and must be moved manually.

Maturing wafers: Maturing is important practically because the wafers change dimensionally. If wafers are just cooled and covered with chocolate they will subsequently crack the chocolate. This can be avoided by first maturing the wafers. The process can be accompanied by two ways-

- 1. By storing wafer sheets in a hot cabinet at a temperature of 40-450C for some hours or preferably overnight.
- 2. By storing in rooms with relative humidity and controlled temperature.