



PICKLED CABBAGE (KIMCHI)

Kimchi is probably the most important processed food product in Korea. It is an essential dish, eaten at most mealtimes. Production is estimated at over one million tons, mainly at household level. Daily consumption is estimated at 150 to 250 grams per person.

Kimchi is a general name for a range of closely related fermented products. It is similar to Sauerkraut in Europe and the United States. There are numerous variations of *kimchi* depending on the production technique. The main pickled cabbage *kimchis* are *tongbaechu-kimchi*, *tongkimchi* and *bossam-kimchi*. This section refers to *kimchi* produced from cabbage, the following section deals with pickled radish products.

Raw material preparation

Appropriate cultivars of Chinese cabbage, with light-green coloured soft leaves and compact structure with no defects, are required for production of *kimchi*. After removing outer leaves and roots from the cabbage, it is cut into small pieces.

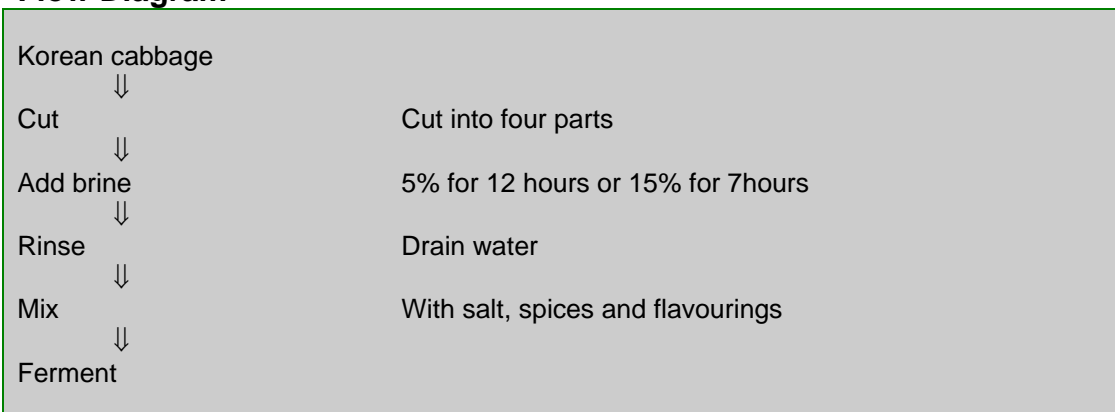
Processing

The prepared cabbage is placed in a salt solution (8-15%) for two to seven hours to obtain 2.0-4.0% (w/w) salt content in the cabbages. This is then rinsed several times with fresh water and drained to remove extra water by centrifugation or by standing still.

Kimchi fermentation is carried out by various micro-organisms present in the raw materials and ingredients of *kimchi*. Among the two hundred bacteria isolated from *kimchi*, the important micro-organisms in *kimchi* fermentation are known to be *Lactobacillus plantarum*, *L. Brevis*, *Streptococcus faecalis*, *Leuconostoc mesenteroides* and *Pediococcus pentosaceus*.

After fermentation, the product can be left to mature for several weeks if refrigeration is available. If stored in the warmth, the *kimchi* deteriorates rapidly.

Flow Diagram



Reference and further reading

- *Kawal: Fermented Green Leaves*, Practical Action Technical Brief
- *Gundruk: Pickled Leafy Vegetable*, Practical Action Technical Brief
- *Traditional Foods: Processing for Profit* by P. Fellows, IT Publications, 1997