
Points to Note in Safe Preparation of Fresh Apple Juice and Pear Juice

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Fresh Fruit Juice

- Popular in Hong Kong
- Produced in
 - Fruit juice stores
 - Restaurants
 - Domestic setting etc.
- Apple and pear juice are among the more popular choices

Cyanogenic Glycosides

- Exist in many plant materials, including some food plants
- Found in bamboo shoots, bitter apricot seeds (北杏), stone fruit kernels (peach, apricots, plum, prune, cherry), cassava etc.

Cyanogenic Glycosides (2)

- Exist in the *seeds* of apples and pears
- Do not exist in the flesh of apples and pears
- Toxic cyanide can be detected in juice when apple and pear seeds are processed with the flesh to express juice
- Level of cyanide in juice varies according to cultivar and juicing methods

Cyanogenic Glycosides (3)

- A recently published NZ study reported the presence of low level of hydrocyanic acid in apple juice, at up to 5.4 mg/kg level
- Even though the level is not high, young children are more sensitive to the effects of cyanide due to lower body weight
- The study suggested in NZ, the risk of cyanogenic glycosides from food is similar to those from pesticides from food

Cyanogenic Glycosides (4)

- As apple juice is potentially frequently consumed and in significant amount in NZ, cyanogenic glycosides is potentially a food safety issue in NZ
- Since cyanogenic glycosides exist in the seeds of apples and pears, by removing apple and pear seeds before juicing, the juice could be without cyanides

Tips on Preparation

- Before juicing, one should:
 - Wash exterior of fruits thoroughly
 - Remove seeds of apples and pears

The End