

Steam

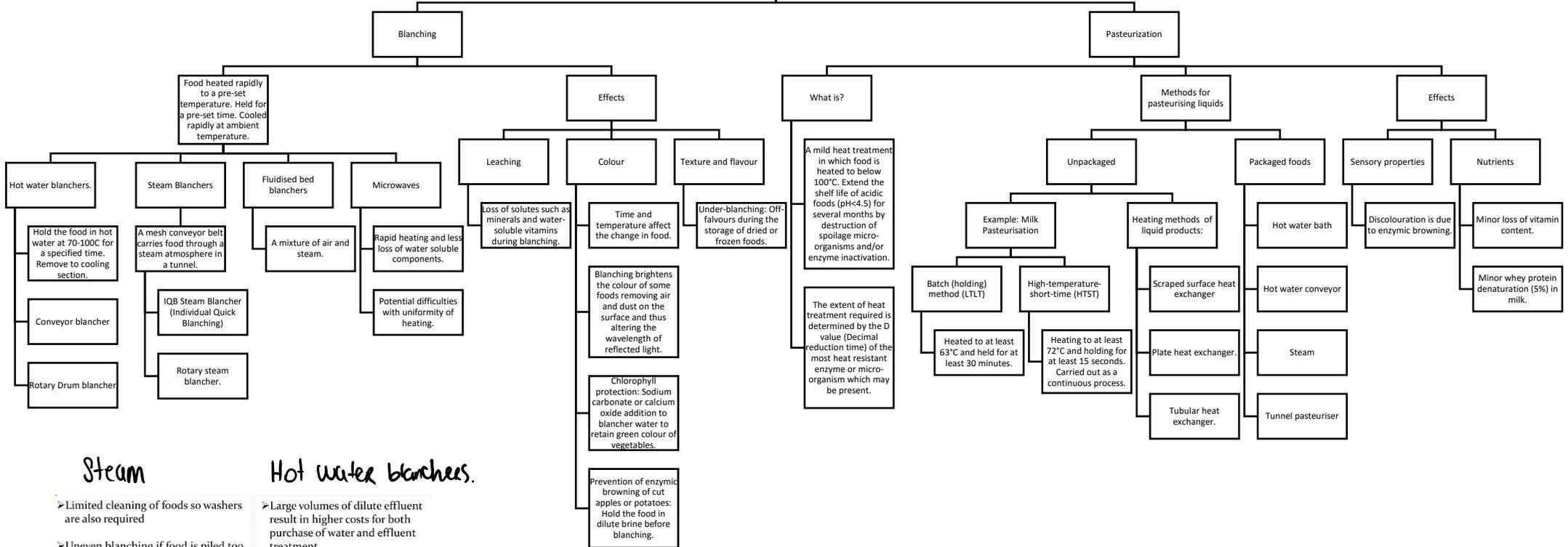
- Advantages: *no contact directly with water*
- > Smaller loss of water-soluble components and higher product yield
 - > Smaller volumes of effluent and lower disposal costs than water blanchers, particularly with air cooling instead of water
 - > Better energy efficiency
 - > Better retains product colour, flavour and texture

Hot water blanchers

- Advantages:
- > Lower capital cost than steam blanchers → *cheaper*
 - > More uniform product heating
 - > Use less floor space

Thermal Processing I

Preservation of food using heat treatment. Reduce/destroy microbiological activity and enzyme activity.



Steam

- > Limited cleaning of foods so washers are also required
- > Uneven blanching if food is piled too high on the conveyor
- > Some loss of mass in the food
- > Larger, more complex equipment with higher maintenance costs
- > More difficult to clean

Hot water blanchers.

- > Large volumes of dilute effluent result in higher costs for both purchase of water and effluent treatment
- > Risk of contamination of foods by thermophilic bacteria
- > Turbulence may cause physical damage to some products

Because of the contact of the water.