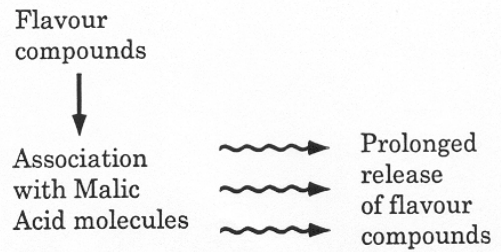


# Malic Acid in Fruit-Filled Cookies

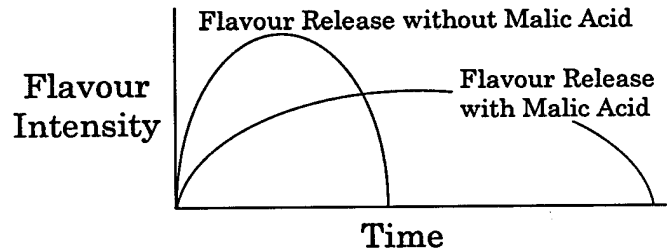
## Enhances Fruit Flavours

Malic Acid enhances fruit flavours by prolonging their release. Receptor cells are stimulated by these fruit flavours over a longer period of time and this prolonged stimulation is translated by the brain as **stronger fruit flavour**.



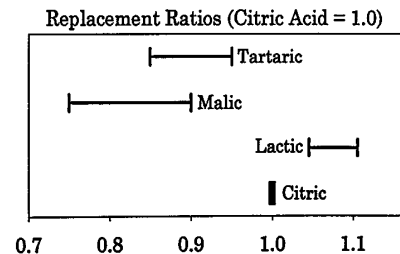
## Results in a Smoother, more Natural Tasting Flavour Profile

By prolonging the release of various flavour compounds, **Malic Acid acts as a flavour blender** and creates a smoother, more natural tasting flavour profile.



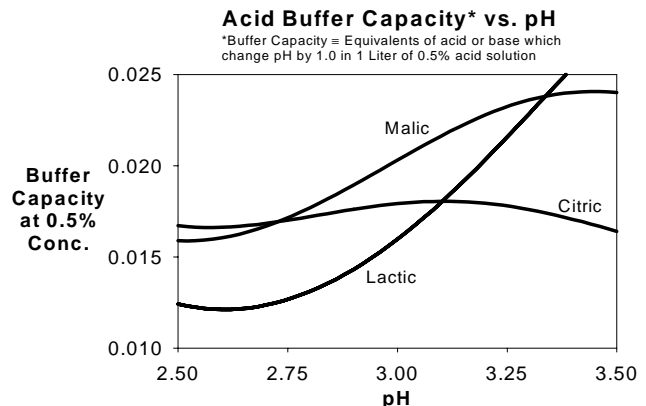
## Provides more Sourness than other Acidulants

Malic Acid is the strongest acidulant in terms of sourness of all the acidulants used in fruit fillings, as shown by the replacement ratios at right. The result: **Malic Acid provides more sourness per unit weight** than other acidulants.



## Provides more Buffering Capacity than other Acidulants

As shown in the graph, Malic Acid provides more buffering capacity than other acidulants used in fruit fillings when the pH is close to 3.2, the pH of most pectin-based gels. Using Malic Acid helps to stabilise the pH of fruit fillings, which in turn **stabilises texture and flavour**.



**RECOMMENDATIONS FOR USE: Use 0.2 – 0.5% in the fruit filling; Incorporate at the end of the process to minimise sucrose inversion and acid hydrolysis of gelling agents.**

