

Pectin & Acid Levels of Different Fruit For Making Jam & Jelly with Homemade Pectin



The gel set of jam or jelly is determined by a balance of; pectin, acid, and sugar.

Pectin, found in and between the walls of plant cells serves as a glue to hold the plant cells together. Pectin is a natural polymer and some fruits have more than others. The amount of natural pectin determines how the gel in a jam or jelly sets up. Acid and sugar are also important components that determine the set of a gel. The following list should help when creating your own jam recipes from apple-based homemade pectin.

*Keep in mind, **under ripe fruit** tends to have more natural pectin.*

***Over ripe fruit** should not be used for jams & jellies since it's natural pectin disappears with age.*

Fruit with high levels of natural pectin.

- Apples
- Sweet & pie cherries
- Crabapples
- Cranberries
- Grapes
- Lemons
- Limes
- Oranges
- Most varieties of plums

Fruit with low levels of natural pectin.

- Apricots
- Blueberries
- Elderberries (red & blue)
- Figs
- Nectarines
- Peaches
- Pears
- Raspberries
- Rhubarb
- Strawberries

Acidity also plays a key role in determining gel set.

If there is too much acid the gel sets too quickly and the jam/jelly will weep.

If the acid level is too low the gel won't set. Lemon juice is often added to low acid fruits to increase their acidity.

Remember:

Low acid fruits require the addition of more acid to make the gel set.

Fruit naturally low in acid.

- Sweet Apples
- Sweet Cherries (Eating cherries)
- Blueberries
- Elderberries (red & blue)
- Figs
- Nectarines
- Peaches
- Pears
- Italian plums

Fruit naturally high in acid.

- Sour apples
- Pie cherries
- Crabapples
- Grapes
- Lemons
- Limes
- Oranges
- Some old varieties of plums
- Apricots
- Raspberries
- Strawberries

Sugar links with pectin to form a polymer and creates the gel we're looking for in jams & jellies. It also ties up active water in the cells of fruit which inhibits the growth of unwanted micro-organisms. *Ripe fruit is higher in sugar than unripe fruit.*