



Making Jams, Jellies & Fruit Preserves

• Delicious fruits at the peak of ripeness? Time to make fruit spreads!

- Start with the right ingredients:
 - Fruit fresh and (most often) fully ripe fruit; or try canned or frozen fruit
 - Pectin plant carbohydrate (fiber) that can form a gel
 - Acid essential for gel formation and flavor
 - Sugar aids in gel formation and is a preservative

Fruit can provide: fruit, pectin and acid all in one!







And about 80 others!

What's in a name?



• Jam -thick, smooth mixture of fruit and sugar

• Fruit butter - smooth, creamy spread made by slowly cooking fruit pulp and sugar

- Preserve chunks of fruit suspended in a soft jelly
- Conserve combination of fresh and dried fruits and nuts
- Marmalade a suspension of fruit peel and pulp
- Jelly clear juice suspended in a tender gel



- Under-ripe fruit can aid in gel formation
- Using canned fruit use unsweetened fruit canned in juice
- Using frozen fruit use fruit frozen without sugar My experience says fruit can be measured BEFORE or AFTER freezing. Your thoughts?
- Proportions are critical when making jellied fruit products!

Pectin



Pectin is a natural plant carbohydrate (fiber) that, when added to the right amount of sugar, acid, and fruit, allows a gel to form on heating.

- Some fruits have enough natural pectin* to gel.
 Add pectin to other fruits to ensure a good gel, increase yield, speed the cooking process, and allow for the use of very-ripe fruit.
- Liquid and powdered pectin are not interchangeable; low-/no-sugar pectin and regular pectin are not interchangeable.

Fruits that don't necessarily need added pectin to gel: sour apples and blackberries, crabapples, cranberries, currants,

gooseberries, Concord grapes, lemons, loganberries, plums, quince

Acid

- Acid is necessary for pectin to form a gel.
- Acid adds flavor!
- Some fruits provide the acid rhubarb, crabapples, unripe berries.
- Acid is added in the form of <u>bottled</u> lemon juice.



Sugar

- Sugar imparts flavor, is essential for gel formation, adds texture and preserves color.
- Measure sugar carefully!
- Honey can be used to replace <u>some</u> of the sugar. For modifications see p. 7 of Making Jams, Jellies and Fruit Preserves
- Use Splenda or other sugar substitutes in recipes specifically designed for their use. Search <u>www.splenda.com</u>
 - cherry, raspberry, plum, peach, triple berry and more!



A Word about Freezer Spreads

- Refrigerator/freezer spreads are the easiest way to begin little cooking required and no boiling water canning
- May use other gelling agents, i.e. jello (gelatin)
- May use low-sugar or no-sugar pectin
- → Success is not guaranteed!
- → No-cook jams may be 'grainy'



Substitutions

- Berry spreads can be made with a variety of fruits: strawberries, raspberries, blackberries
- Substitute peaches for nectarines; apples for pears; unsweetened canned or frozen fruit in place of fresh

Caution:

- Don't add extra low-acid ingredients like chocolate, carrots, or hot peppers.
- Don't substitute type of pectin.
- Don't substitute low-acid squashes for acid
- fruits in fruit butter.

Challenges!

The right ingredients, used in the correct proportions, are critical for success!

- Spread too soft not enough pectin/sugar
- Spread too firm too much pectin/sugar
- Spread fails to set too large a batch, fruit too ripe, wrong type of pectin, spread cooked too long (or not long enough). See p. 15 of Making Jams, Jellies & Fruit Preserves for re-make instructions.
- Fruit floats fruit under-ripe, sugar content too high.
 - Hint: Allow jam to sit for 5 minutes before ladling into hot jars (and while you skim the foam)!



What's new?

- Soft spreads made with ClearJel (not pectin) <u>www.foodsafety.wisc.edu</u>
 - Use this technique for preparing large batches, especially of low-sugar spread.
- Try a steam juicer for clear juice for jelly.
 - Hint: Use the pulp to make
 apple, pear or blueberry butter.



July 1, 2013 ^{12 noon – 1 pm} Canning Vegetables Safely

Safely preserve your garden's bounty of vegetables with canning.

Archives will be posted to: www.foodsafety.wisc.edu/preservation.html