



Making Homemade Strawberry Jam

Welcome to this comprehensive guide on making homemade strawberry jam! We'll cover the step-by-step process and delve into the role of preserving sugar and pectin, two critical components in jam-making.

Materials Needed

Equipment

- Scale
- Bowl
- Heating device and pots
- Slotted spoon
- Heat-stable gloves
- Funnel (sterilized)

Ingredients

- 2.5 kg strawberries
- 1.25 kg preserving sugar
- 2 tablespoons vanilla extract
- Zest and juice from 2 limes

Sterilization Process

1

Prepare Jars

Gather 15 jars (230 ml each) and their lids.

2

Heat Treatment

Sterilize jars, lids, and funnel at 100°C for 30 minutes or 120°C for 15 minutes.

3

Cool Down

Allow sterilized items to cool before use.





Preparing the Strawberries

1

Wash

Thoroughly clean the strawberries.

2

Hull

Remove the green tops from the strawberries.

3

Mix

Combine strawberries with preserving sugar in a large bowl.

4

Rest

Let sit for 30 minutes to release natural juices.



Cooking the Jam

1

Transfer Mixture

Move strawberry-sugar mix to a pot. Add lime zest, juice, and vanilla.

2

Boil

Bring to a boil over medium heat, stirring constantly.

3

Thicken

Boil vigorously for 4-5 minutes until mixture thickens.



Finishing Touches



Skim Foam

Remove foam from surface with a slotted spoon for smoother texture.



Gel Test

Place a drop of jam on a cold plate. If it gels quickly, it's ready.



Fill Jars

Pour hot jam into sterilized jars using a funnel. Seal immediately.

The Role of Preserving Sugar

■ Preservation

Sugar creates an environment hostile to microbial growth, extending shelf life.

■ Gel Formation

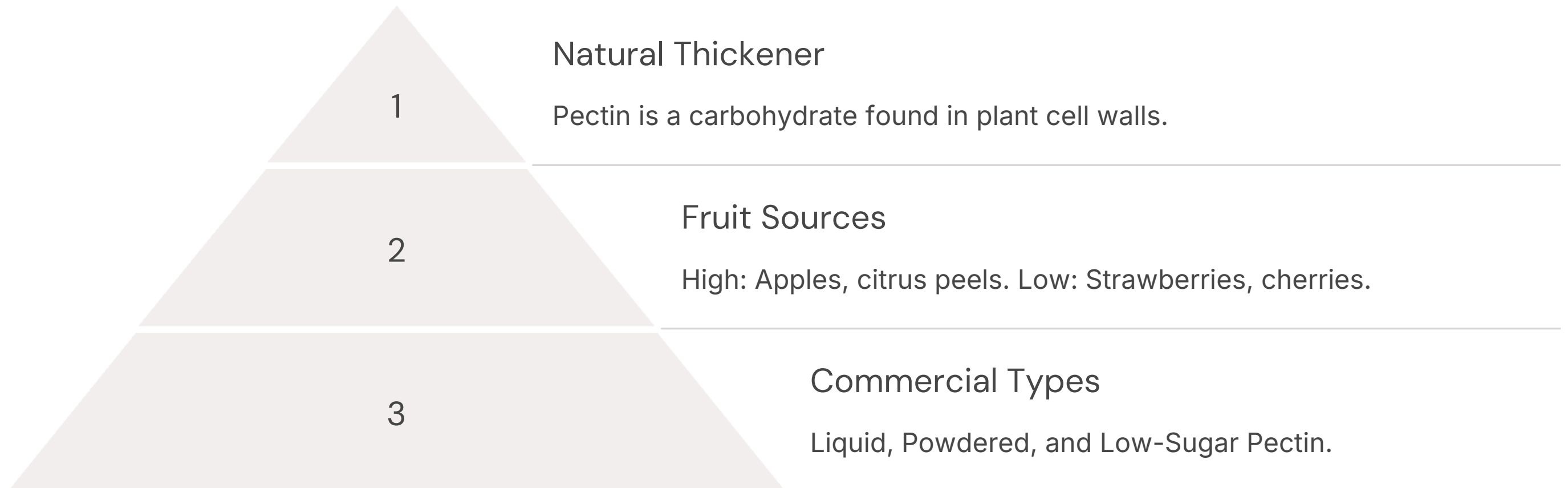
Sugar works with pectin and acid to form the gel structure.

■ Types

Gelling Sugar (with added pectin) and Preserving Sugar (large crystals).



Understanding Pectin





Natural Pectin Alternatives

High-Pectin Fruits

Use apples or citrus peels as natural thickeners.

Extended Cooking

Cook fruit longer to release its natural pectins.

Fruit Combinations

Mix low-pectin fruits with high-pectin varieties.



Storage and Shelf Life

1

Unopened Jam

Lasts 1-2 years in cool, dry, dark place.

2

Opened Jam

Refrigerate and consume within 1-3 months.

3

Freezer Jam

Up to 1 year in freezer, 3-4 weeks in fridge once thawed.



Factors Affecting Shelf Life



Sugar Content

High sugar (at least 55%) acts as a natural preservative.



Sterilization

Proper sterilization eliminates contaminants.

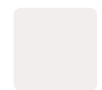


Acidity

Acidic ingredients lower pH, preventing microbial growth.



Signs of Spoilage



Visual Cues

Check for mold growth on the surface.



Odor Changes

Unusual odors like fermented or "yeasty" smells indicate spoilage.



Texture Alterations

Look for changes in texture or separation of liquid.

Best Practices for Extending Shelf Life

1

Thorough Sterilization

Use boiling water or oven at 100°C for 30 minutes.

2

Proper Sealing

Fill jars with hot jam and seal immediately.

3

Correct Storage

Keep unopened jars in cool, dark place. Refrigerate opened jars.

4

High Sugar Content

Use sufficient sugar (e.g., 2:1 fruit-to-sugar ratio) for preservation.



Conclusion

Making strawberry jam is both an art and science! By understanding the roles of preserving sugar and pectin, you can create delicious jams with perfect texture and long shelf life. Happy jam-making!