GENERAL GUIDELINES FOR JUDGING FOOD PRESERVATION

While specific guidelines vary from one division of the fair to another, these general guidelines apply to all exhibits—from Art to Zucchini:

- Know when and where to enter your exhibit
- Read and follow entry instructions—have the required number of pieces or articles and the specified documentation
- Enter the correct category—study the fair book to be sure
- Label your exhibit—for exhibits with more than one piece, label as such

Exhibits are evaluated against standards or ideals—rather than compared to other entries.

Passing the initial screening

- Foods prepared & processed using current USDA information
- Canned or dehydrated within last 12 months
- Correct class
- Proper jar type & size
- Properly sealed

Food Preservation
- Safety first
- Quality second

STANDARDS OF QUALITY—EQUIPMENT

Safety First
Check the jars
- Jars made for canning
- Appropriate for product
- Jar clean & in good condition
- 2-piece metal lids
- No paraffin

Reason for seal failure
- Something on rim
- Jar chipped, cracked
- Head space to big or too small
- Under processed
- Not enough time &/or heat for vacuum
- Spoilage gases
- Instruction not followed to prepare flats
- Old flats or compound mix failed
- Screw band tightened too much or too little
- Seal disturbed while wiping away water
- Jarred in transport

Examine condition of Screw Band
- Present
- Clean
- Rust free
- Not bent or dented
- Easily removed

Examine condition of Flat
- Clean
- Not sticky
- No rust or corrosion
- Tightly affixed to jar

STANDARDS OF QUALITY FOR FOOD PRESERVATION

Name or exhibitor number
Name or class of Item
# pieces—piece 1 of #
STANDARDS OF QUALITY - HEADSPACE

**Recommended headspace**
- ¼ inch headspace for jams, jellies & preserves
- ½ inch headspace for most fruits, tomatoes, pickles & relishes
- 1 to 1¼ inch headspace for most vegetables, except tomatoes
- 1 ¼ to 1 ½ headspace for Lima beans
- 1¼ inch headspace for meats
- There are exceptions to the recommended headspace and it is important to check a professional canning guide when judging

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Controlling headspace
The unfilled space above the food in a jar and below its lid is termed headspace.

In general directions for canning specify leaving ¼-inch for jams and jellies, ½-inch for fruits and tomatoes to be processed in boiling water, and from 1- to 1¼ inches in low acid foods to be processed in a pressure canner.

This space is needed for expansion of food as jars are processed, and for forming vacuums in cooled jars. The extent of expansion is determined by the air content in the food and by the processing temperature.

Air expands greatly when heated to high temperatures; the higher the temperature, the greater the expansion. Foods expand less than air when heated.

STANDARDS OF QUALITY—VISUAL JUDGING

**Judging for Quality**
Evaluate against:
- Standards
- Ideal
Then compare to other entries—which entry comes closest to meeting the ideal for the products.
Home canned foods are judged by visual inspection only never tasted.

**Signs of Spoilage**
- Gas bubbles
- Mold
- Leaky Seals
- Bulged flats
- Bad odor
- Cloudy Liquid
Check the jars. **Jars must be made for home canning and be made of clear, uncolored glass.** Do not use older jars that do not accept screw bands & flats. Jars must be in good condition. Jars come in a wide variety of sizes and shapes. Choose the size and shape of jar appropriate for the food product being preserving. Jars should be free of stains and clean, including under the screw band.

Check the seal. Jars that not properly sealed must be disqualified. Seals may have been disturbed during processing or transporting. Screw bands should remove easily. Neither bands nor flats should be rusted or corroded in any manner.

Check for appropriate headspace. All foods should be below the liquid. Product should not touch lid. Liquid should be clear for most. Mature, starchy foods may have slightly cloudy liquid. Tomatoes can be canned with juice or water. However cloudy liquid can indicate bacterial spoilage.

Visually inspect contents. Inspect the thickness, consistency and tightness of the pack. Condition of the contents affect safety. Food should be packed for economy not fancy packed for show. Jar space should be well filled, but not packed so tight that appropriate processing cannot occur.

Food product should be at its best texture, flavor and maturity. Never process products that are not in peak condition. All pieces should be uniform in size. There should be no loose peel, foreign matter or insects in the jar. Product should be free of spots and blemishes.

Color should be uniform and natural for the product when cooked. Artificial colors should not be used except in some relishes.

The product should look firm but tender. Overripe or over processed products look soft and mushy and may have ragged edges.

### Standards of Quality—Judging Safety

#### Fruits
- 1/2 inch head space for most
- Pack utilizes jar space
- Covered by clear liquid—No floating fruit
- Ripe, but not overripe
- Pieces retain their natural shape, not mushy
- Natural for product, halved or uniform pieces and neatly peeled
- Color appropriate for the food when cooked

#### Pickles and Relishes
- 1/2 inch head space
- Natural color (exception—cinnamon rings)
- Whole product retains original shape
- Firm and Crisp—not soft or shriveled

#### Vegetables
- 1 to 1 1/4 inch headspace for most (1/2 inch for tomatoes)
- Pack utilizes jar space
- Covered by liquid—No floating vegetables
- Liquid is clear without clouding or sediment—exception starchy vegetables and soup mixtures which include starchy vegetables
- Tomatoes may be canned in juice or water
- Uniform size/color and neatly peeled

#### Meats
- 1 1/4 inch headspace for most
- Up to 1/2 inch fat on most meats
- Product is well trimmed and not stringy
- Liquid varies with type, but should cover product and may be gelatinous
- Uniform color and piece size

#### Jelly, Jam, Preserves, Marmalade, Butter, Conserve, etc.
- 1/4 inch headspace
- Natural color (exception—Pepper Jelly)
- No foam on top
- Jelly has natural, clear sparkling color
- Jelly is firm enough to hold shape but not so stiff that product does not move when jar is tilted
- Jam and Marmalade are firm enough to hold their shape and move slightly when tilted.
- Jam has evenly crushed or small pieces of fruit distributed throughout
- Preserves and Conserves have thick syrup with uniform pieces of clear fruit
- Butters have a thick, even texture that flows smoothly when tilted, uniform color, evenly distributed spices
Advantages of hot-packing

Many fresh foods contain from 10 percent to more than 30 percent air. How long canned food retains high quality depends on how much air is removed from food before jars are sealed.

Raw-packing is the practice of filling jars tightly with freshly prepared, but unheated food. Such foods, especially fruit, will float in the jars. The entrapped air in and around the food may cause discoloration within 2 to 3 months of storage. Raw-packing is more suitable for vegetables processed in a pressure canner.

Hot-packing is the practice of heating freshly prepared food to boiling, simmering it 2 to 5 minutes, and promptly filling jars loosely with the boiled food.

Whether food has been hot-packed or raw-packed, the juice, syrup, or water to be added to the foods should also be heated to boiling before adding it to the jars.

This practice helps to remove air from food tissues, shrinks food, helps keep the food from floating in the jars, increases vacuum in sealed jars, and improves shelf life. Preshrinking food permits filling more food into each jar.

Hot-packing is the best way to remove air and is the preferred pack style for foods processed in a boiling-water canner. At first, the color of hot-packed foods may appear no better than that of raw-packed foods, but within a short storage period, both color and flavor of hot-packed foods will be superior.

STANDARDS OF JUDGING—JELLY

Soft spreads have four main ingredients—fruit, sugar, pectin and acid.

The consistency of these products ranges from a firm set for jellies to a soft, honey-like consistency for preserves.

Jelly is made from juice that has been strained from the fruit. It is usually prepared in a manner that keeps the juice crystal clear and shimmering.

Jelly is gelatinized enough to hold its shape when removed from the jar yet soft enough to spread easily.

Judging Jelly consistency without opening the jar.

- Jelly should be clear when held up to a light. It should be free of any fruit particles.
- The color should be clear, natural, sparkling and uniform.
- Turn the jar on its side and give it a single sharp shake.
- If it doesn’t loosen, try tapping the bottom edge of the jar against the heel of your hand.
- Rotate the jar slowly at an angle or on its side.
- Jelly should pull away cleanly, without breaking and without leaving any residue on the jar.
- The shape of jar should be retained and the entire mass of jelly should roll around inside the jar in one mass.

Open jar judging

- Jelly should have a slightly firm consistency and texture.
- Jelly should quiver and cut easily.
- Jelly should retain its shape when cut.
- There should be no crystals present in the product.
- Jelly should have the flavor of fresh fruit. With a balance of sweet and tart flavor

Adapted from USDA Complete Guide to Home Canning

http://nchfp.uga.edu/publications/publications_usda.html