# Make Fried Dough Twists (Sanzi)

Sanzi is a fried dough snack of the Hui people of the Xinjiang (shin-jiang) Uyghur (WEE-gur) Autonomous Region of China. To make sanzi, dough is made from flour, oil, Chinese prickly ash, and egg white. The dough is shaped into spaghetti-like noodles. These noodles are then deep-fried and arranged in a circular pattern and stacked to form a beehive-like pyramid. Throughout Xinjiang you can find sanzi for sale in Uyghur supermarkets or local bakeries.

Try making fried dough twists inspired by the snack on display in the *Secrets of the Silk Road* exhibition. Does it remind of you anything you have eaten before?

# **Ingredients:**

- 4 1/2 cups flour
- 1 cup milk
- 2 eggs
- 1 tsp. of salt
- 2 Tbsp. of oil
- 4 Tbsp. of sugar
- 2 tsp. of active dry yeast
- Frying pan or deep fryer
- Additional oil
- Tongs
- Paper towels
- Plate



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#### **Directions:**

- 1. Place the yeast into warm milk and stir until combined.
- 2. Place all ingredients in a big bowl and knead until doughy. Place to the side.
- 3. When the dough doubles in size, split the dough into several small balls about three inches wide.
- 4. Place both hands on top of one piece of dough. Knead right and left and back and forth to shape each ball of dough into a long, skinny roll about 8 inches long.
- 5. Repeat step 4 with three other balls of dough.
- 6. Stack the four skinny rolls on top of one another so that the ends line up. Pinch the ends on both sides together.
- 7. Bring both sets of ends and pinch them together to form a circle.
- 8. Twirl the circle to form a twist.
- 9. Repeat steps 4 through 7 until all balls of dough are twirled into a twist.
- 10. Place about ¼ inch of oil into frying pan or in deep fryer according to deep fryer directions.
- 11. Place dough twists into heated oil. Use tongs to turn the twists to heat evenly.
- 12. Place a paper towel onto a plate.
- 13. When golden brown, lift each twist from the oil and place them onto the plate. Place a paper towel on top of the twists to drain additional oil.

Recipe based from the following website:

http://www.achinesefood.com/2009/01/20/chinese-traditional-food-fried-dough-twisthemp-flowers.html

More about *sanzi*: http://www.travelchinaguide.com/cityguides/xinjiang/turpan/dinning.htm and http://www.farwestchina.com/2010/03/xinjiangs-best-food-sanzi-uyghur-fried.html



# MAKE YOUR OWN FELT (PAGE 1 OF 2)

Felt is a lightweight and relatively waterproof unwoven fabric of matted or compressed fibers, such as wool. Nomads of the Xinjiang (*shin-jiang*) province often used felt for their clothes and their homes, called *yurts*. Felt-making requires no weaving and could be made easily while the nomads of the Tarim Basin moved from place to place. To make felt, nomadic horsemen would tie up bundles of woolen fibers and place them under their horses' saddles. The weight and movement of the rider during a day's riding would compress the fibers into a rudimentary fabric. This process would be repeated several times until the felt was dense enough to be used for making clothing or shelter.

### Materials (to make a 20" square piece of felt):

- Bathtub
- One color of 5-6 oz. of dyed Merino wool top pure wool roving
- Several bath towels
- Straw beach mat, Chinese blind, or sushi rolling mat (larger than 24 inches)
- · Liquid laundry detergent
- Empty squeeze bottle (such as those used for dish soap)
- Gloves
- Ruler
- Additional dyed Merino wool top pure wool roving (Optional)
- Bits of yarn (Optional)

## **Directions:**

- 1. Place the liquid laundry detergent into the squeeze bottle.
- 2. Place some towels on the bathroom floor.
- 3. Place the mat on top of the towels.
- 4. Pull all the wool off of one color of roving into small clumps, about 4-6 inches in length.
- 5. Lay the wool pieces on top of the mat. Be sure to lay each piece vertically and overlap each piece slightly to form a 24" square.
- 6. Squeeze a thin layer of laundry detergent in rows, approximately two inches apart, over the entire square of wool.
- 7. Lay another layer of wool roving on top of the first layer. This time, arrange the wool horizontally.
- 8. Squeeze another thin layer of laundry detergent.
- 9. Repeat steps 5 through 8 until the square of wool is  $1 \frac{1}{2}$  2 inches high. There should be about 4 6 layers of wool until the square reaches that height.
- 10. Optional: Place a different color of roving and/or bits of yarn on the top layer of the square. Add another thin layer of laundry detergent.



# MAKE YOUR OWN FELT (PAGE 2 OF 2)

- 11. Roll the mat over the wool square.
- 12. Fill the bathtub with 1-2 inches of hot water.
- 13. Put on gloves and immerse the rolled mat into the water. Turn the roll back and forth to ensure the wool is thoroughly wet for 3 4 minutes.
- 14. Remove the mat from the bathtub, and unroll it gently onto the towel. The felt is quite fragile at this point, so gently lift it from the mat. Turn the felt on the straw mat so bottom of the piece is now located on the left side of the mat.
- 15. Reroll the felt and place it back into the hot bathtub water. If the water has cooled, drain the tub, and refill with hot water. Roll and turn the beach mat for another 3 4 minutes. Turn the felt another 3 or 4 times, and reroll in the hot water for about 3 5 minutes between each turn.
- 16. Test the felt by rubbing it with your finger. The fibers shouldn't move and the felt should be quite thick. If it is still soft, turn it again and keep rolling it in the hot water.
- 17. Remove the felt from the mat and rinse in cool water.
- 18. Place the felt on a dry towel and roll the towel. Place it on the floor and stomp on it (barefoot) to remove the excess water.
- 19. Lay the felt flat to dry onto a dry towel.

Activity adapted from: http://www.allfiberarts.com/library/felt/blfelt.htm



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# MAKE A POINTED CAP (PAGE 1 OF 2)

Switch or staple a felt (or paper) hat inspired by the one on view in the *Secrets of the Silk Road* exhibition, which was worn by a nomad over 1000 years ago!

#### **Materials:**

- Two pieces of felt or paper. Each piece should be 14" X 16"
- Pen and scissors
- Either a needle and thread or a stapler (safety pins may also be used on the felt)
- Pointed hat template (found on next page)

#### **Directions:**

- 1. Fold each piece of felt/paper in half the long way.
- 2. Place the hat template onto the felt/paper so the straight edge of the template lines up with the folded edge
- 3. Trace the pattern and cut out.
- 4. Repeat steps 1-3 to produce a second cut piece of felt/paper.
- 5. Place the two pieces of felt/paper on top of each other. Leave a 1/4" seam allowance and sew, safety pin, or staple the slanted edges together along both sides.
- 6. Fold up the bottom 2 inches of the hat. Sew, safety pin, or staple the seam on the outside of the hat.

Adapted from an activity produced in The Sam Noble Oklahoma Museum of Natural History's *Life as a Herder: The Steppes of Asia Teacher Guide*:

http://www.snomnh.ou.edu/schoolprograms/documents/LifeHerderTeacherGuide091007.pdf





MAKE A POINTED CAP (PAGE 2 OF 2) – TEMPLATE. ENLARGE TO LEGAL SIZE (8.5" X 14") Penn Museum
UNIVERSITY OF PENNSYLVANIA MUSEUM
OF ARCHAEOLOGY and ANTHROPOLOGY

# MAKE YOUR OWN MUMMIES (PAGE 1 OF 4)

Conduct a science experiment as a family. Mummify an apple by freeze drying, a similar way the Tarim Basin mummies were mummified. Then, mummify an apple the ancient Egyptian way by making your own natron, chemicals used to mummify. Document the changes that you observe.

The Freeze-Dried Mummification activity will take 7 days to complete. The "Embalming" Mummification activity will take 5 days.

# Freeze-Dried Mummification of an Apple Project Needs:

- Freezer
- Apple, cut into paper thin slices (make sure adults help with this). The thinner the cut, the less time the experiment will take.
- Cookie cooling rack, metal mesh tray, or any other tray with perforation
- Worksheet to record observations (found on page 2)

#### **Directions:**

- 1. Adults will slice an apple into paper thin slices.
- 2. Arrange apple slices onto the rack or tray and put them in the freezer. Be sure to do this fairly quickly or else the apple slices will discolor.
- 3. In half an hour, look at the apples. You can touch them, but will not remove them from the freezer.
- 4. Record your observations on the worksheet provided.
- 5. Every day throughout the week, look at the apple slices. Record daily observations on the worksheet.

What will happen is that the water in the slices will sublimate away. That is, the water in the slices will be released as water vapor, instead of melting.

- 6. After a week or so (depending on the temperature of the freezer and how thick the slices are), the slices will be completely dry. To test apple for complete drying, take one slice out and let it thaw. It will turn black almost immediately if it is not completely dry.
- 7. When all of the slices are completely dry, they can be "reconstituted." Put the slices in a mug and add ¼ cup of boiling water. Record observations on the worksheet.
- 8. If the apple slice did not turn black, try eating it.



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Activity adapted from from TLC's How Food Preservation Works webpage: http://recipes.howstuffworks.com/menus/food-preservation4.htm and Science Fair Adventure's Apple Mummy Science Fair Project webpage: http://www.sciencefairadventure.com/ProjectDetail.aspx?ProjectID=142



# Make Your Own Mummies (Page 2 of 4) - Worksheet

Make Your Own Mum Freeze-Dried Observa		
Experiment Start Date:		Experiment Conclusion Date:
Time Apple Slices Were Place	ed into the Freezer:	
Observations of Apple Slices	s after ½ Hour of Freezin	ng:
RECORD DAILY OBSE		
Day Two Date:	Time Observed	Observations
Day Three Date:		
Day Four Date:		
Day Five Date:		
Day Six Date:		
Day Seven Date:		
Day Seven: Is your apple completely dry thawing:	₁? To test apple for com	plete drying, take one slice out and let it thaw. Observations after
If your apple slice did not tu and add ¼ cup of boiling wa		y dry. If the slice did not turn black, place several apple slices in a mug vations:
After placing in boiling water	er, try eating the apple s	lices. Record your observations:



# MAKE YOUR OWN MUMMIES (PAGE 3 OF 4)

# "Embalming" with "Natron" Mummification of an Apple Project Needs:

- Apple, cut into fourths
- 1 plastic bag (Ziplock bag is preferred)
- 1 disposable bowl
- 1/4 cup of salt
- 1/2 cup of sodium carbonate (powdered bleach detergent)
- ½ cup of bicarbonate of soda (baking soda)
- Disposable gloves
- Worksheet to record observations (found on page 4)

#### **Directions:**

- 1. Adults will cut the apple into four equal sections. Only two sections of the apple are needed for the experiment, so eat the other two sections!
- 2. Record your observations of the apple.
- 3. As a family, measure and mix the salt, powdered bleach detergent, and baking soda into the disposable bowl. This is the natron, the embalming agent.
- 4. Put on a pair of disposable gloves and completely submerge one fourth of the apple into the natron. Place the bowl aside were it will not be exposed to moisture.
- 5. Place one fourth of the apple into a Ziplock bag. This is the "control" apple.
- 6. On a daily basis for an additional four days, put on disposable gloves and remove the apple from the natron. Record your observations on the worksheet.
- 7. On a daily basis for an additional four class days, also open the Ziplock bag. Record your observations on the worksheet.
- 8. Evaluate your predictions for the control apple and the embalmed apple. How accurate were you?

#### As a family, can you answer the following questions, based on what you observed?:

- a. Which method of mummification is a natural process? Which method involved chemicals?
- b. Which method of mummification more like the process the ancient Egyptians used to preserve their dead?
- c. Which method of mummification retained the natural appearance of an apple the best?



Cat Mummy ca. 2nd century BCE. Penn Museum



# Make Your Own Mummies (Page 4 of 4) - Worksheet

# Make Your Own Mummies "Embalming" with "Natron" Observations Worksheet Experiment Start Date: \_\_\_\_\_\_Experiment Conclusion Date: \_\_\_\_\_\_ I predict that the apple in the Ziplock bag will: \_\_\_\_\_\_ I predict that the apple in the salt, powdered bleach, and baking soda mixture will:

# RECORD DAILY OBSERVATIONS OF EACH APPLE SLICE IN THE TABLE BELOW:

	Mummified Apple	Control Apple
Day One Date and Observations:		
Day Two Date and Observations:		
Day Three Date and Observations:		
Day Four Date and Observations:		
Day Five Date and Observations:		
Day Six Date and Observations:		
Day Seven Date and Observations:		



# MAKE YOUR OWN SILK HAND FANS (PAGE 1 OF 2)

When first created 3,000 years ago, Chinese fans were simply used to block the sun and keep cool. Over the years, they have evolved into works of art, status symbols, props for theater and dance, romantic gifts, and memorials of the dead.

The character for "fan" has the same sound as the character for "kindness" or "good." Therefore, fans are viewed as good luck charms and expressions of generosity.

Round fans symbolize union or reunion and are often inscribed with romantic poems, calligraphy, or floral designs representing wealth and longevity. Folding fans have a history of symbolizing scholarship.

Follow the directions below to make your own flat and folding fans.

#### **Rectangular-shaped Flat Fan Materials:**

- Coat hanger
- Wire cutters
- 8 x 22 in. long uncolored silk fabric or 200x mesh nylon or polyester (simulated silk fabric)
- Hot glue and glue gun
- Dye-Na-Flow silk paints and paint brushes, or Crayola Fabric Markers
- Tassel (optional)
- Small bolt of ribbon (optional)

#### **Directions:**

- 1. Cut off the top part of the coat hanger with wire cutters. Discard the twisted part. Straighten the triangular-shaped piece. This will form the fan and handle.
- 2. Shape the straight piece of wire into a rectangle that is wider and rounder at the top. Allow room for a handle with the wire doubled. Join the wire by twisting it at the point where the handle meets the rectangle.
- 3. Cut the silk to the size of the rectangle, adding an inch all around. Hot glue the silk to the wire backing. Turn under the extra inch and glue it to the back to keep it from fraying.
- 4. (Optional) When dry, hot glue some ribbon around the perimeter of the fan to cover up the wire. You may also wish to tie a tassel or extra ribbon around the handle.

Activity adapted from eHow: http://www.ehow.com/how\_4841373\_silk-hand-fans-home.html



# MAKE YOUR OWN SILK HAND FANS (PAGE 2 OF 2)

#### **Folded Fan Materials:**

- Thin, bendable poster board, 8 ½ x 22 in. long
- 8 ½ x 22 in. long uncolored silk fabric or 200x mesh nylon or polyester (simulated silk fabric)
- Hot glue gun
- Dye-Na-Flow silk paints and paint brushes, or Crayola Fabric Markers
- Masking tape
- Ribbon (optional)

### **Directions:**

- 1. Fold the poster board in one-inch folds, one at a time. After the first fold, turn your fan over and turn the paper in the opposite direction. For the third fold, turn the paper over again to make your fold. Continue this way until the entire paper is folded.
- 2. Center the fabric on top of the folded poster board. The fit won't be exact, but the extra length will give you room to fit the silk over the folds.
- 3. Hot glue a thin line of glue along the folds of the poster board, not the creases. Gently press the silk over the glue, gluing one fold at a time. Once the glue has completely dried, trim any excess fabric.
- 4. Create the hand holder for the fan with masking tape. Gather the folds together and tape a bottom portion of the fan. Make sure the tape is tight so the fan doesn't open at the bottom end.
- 5. (Optional) Hot glue ribbon around the handle to cover up the masking tape.
- 6. When completely dry, decorate the fan with the markers or paints.

Activity adapted from eHow: http://www.ehow.com/how\_4829089\_make-chinese-fans.html



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