Name: _____ Date: _____

Soy Milk Sets Into Tofu

Circle group

Tofu looks plain, but making it is a small science project. It starts with dried soybeans. They are soaked in water until they are plump. Then they are ground with fresh water into a thick, pale mash. The mash is heated and strained. What pours through is soy milk. The pulp stays behind in the cloth.

Now the soy milk is still a liquid. To make it solid, the maker stirs in a coagulant. One old choice is nigari. It is a mineral mix left when salt is taken from seawater. Another is a calcium salt called gypsum. Either one makes the proteins in the milk clump together.

The clumps are called curds. They float in a thin yellow liquid. This is much like how milk separates when cheese is made. The curds are scooped into a mold lined with cloth. A weight on top presses out the extra liquid.

How long the tofu is pressed changes it. A short press makes a soft, wobbly block. A long press squeezes out more water. It makes a firm block that holds its shape in a hot pan. People in East Asia have made tofu for many centuries. Now it is eaten all over the world.

Questions

1. What are dried soybeans soaked in before they are ground?

_____

_____

2. What does a coagulant do in making tofu?

_____

_____

3. Name one old coagulant.

_____

_____

4. What are the clumps in the soy milk called?

_____

_____

5. Why is a weight put on top of the curds in the mold?

_____

_____

6. How could a maker get tofu firm enough to fry?

_____

_____

Words to know

soybeans: small round beans that are rich in protein
strained: poured through a cloth or sieve to remove solids
coagulant: something added to a liquid to make it clump
curds: the soft lumps that form when milk thickens
mold: a container that gives food its shape

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Soy Milk Sets Into Tofu

Triangle group

Tofu looks plain, but making it is a small science project. It begins with dried soybeans, which are soaked in water until they are plump. Then the beans are ground with fresh water into a thick, pale mash. The mash is heated and strained, and what pours through is soy milk. The leftover pulp stays behind in the cloth.

At this point the soy milk is still a liquid. To turn it into something solid, the maker stirs in a coagulant. One traditional choice is nigari, a mineral mixture that is left when salt is taken from seawater. Another is a calcium salt called gypsum. Either one makes the proteins in the milk clump together.

The clumps are called curds, and they float in a thin yellow liquid. This is much like the way milk separates when cheese is made. The curds are gently scooped into a mold lined with cloth. Weight is placed on top to press out the extra liquid.

How long the tofu is pressed decides what it becomes. A short press leaves a soft, wobbly block that is nearly like pudding. A long press squeezes out more water and makes a firm block that holds its shape in a hot pan. People in East Asia have been making tofu for many centuries, and it is now eaten all over the world.

Questions

1. What are dried soybeans soaked in before they are ground?

_____

_____

2. What is a coagulant used for in making tofu?

_____

_____

3. Which substance is one traditional coagulant?

_____

_____

4. What are the clumps that form in the soy milk called?

_____

_____

5. Why is weight placed on top of the curds in the mold?

_____

_____

6. How could a maker get tofu firm enough to fry?

_____

_____

Words to know

soybeans: small round beans that are rich in protein
strained: poured through a cloth or sieve to remove solids
coagulant: something added to a liquid to make it clump
curds: the soft lumps that form when milk thickens
mold: a container that gives food its shape

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Soy Milk Sets Into Tofu

Square group

Tofu may look plain and unremarkable, but producing it is something like a small science experiment. The process begins with dried soybeans, which are soaked in water until they have swollen and softened. The beans are then ground together with fresh water into a thick, pale mash. After the mash has been heated and strained, the liquid that pours through is soy milk, while the leftover pulp remains behind in the cloth.

At this stage the soy milk is still entirely liquid. To make it solidify, the maker stirs in a coagulant. One traditional choice is nigari, a mineral mixture that remains after salt has been extracted from seawater. Another is a calcium salt known as gypsum. Either substance causes the proteins in the milk to clump together.

These clumps are called curds, and they drift in a thin yellow liquid, much as milk separates when cheese is being made. The curds are gently ladled into a mold lined with cloth, and a weight is set on top to press out the surplus liquid.

The length of time the tofu is pressed determines what it will become. A brief press yields a soft, wobbly block that is nearly like pudding, whereas a lengthy press squeezes out far more water and produces a firm block that keeps its shape in a hot pan. People in East Asia have been making tofu for many centuries, and today it is enjoyed all over the world.

Questions

1. What are dried soybeans soaked in until they have swollen and softened?

_____

_____

2. What is the purpose of the coagulant in making tofu?

_____

_____

3. Name one traditional coagulant used by tofu makers.

_____

_____

4. What are the clumps that form in the soy milk called?

_____

_____

5. Why is a weight set on top of the curds in the mold?

_____

_____

6. How could a maker produce tofu that is firm enough to fry?

_____

_____

Words to know

soybeans: small round beans that are rich in protein
strained: poured through a cloth or sieve to remove solids
coagulant: something added to a liquid to make it clump
curds: the soft lumps that form when milk thickens
mold: a container that gives food its shape

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: Soy Milk Sets Into Tofu

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: Soy Milk Sets Into Tofu

Easier · 204 words · Flesch-Kincaid grade 2.8

1. Water.
2. It makes the proteins in the soy milk clump together.
3. Nigari, or a calcium salt called gypsum.
4. Curds.
5. To press out the extra liquid.
6. By pressing it longer so more water is squeezed out.

Triangle: Soy Milk Sets Into Tofu

This passage · 225 words · Flesch-Kincaid grade 4.8

1. Water.
2. It makes the proteins in the soy milk clump together.
3. Nigari, or a calcium salt called gypsum.
4. Curds.
5. To press out the extra liquid.
6. By pressing it longer so more water is squeezed out.

Square: Soy Milk Sets Into Tofu

Harder · 242 words · Flesch-Kincaid grade 7.9

1. Water.
2. It causes the proteins in the soy milk to clump together.
3. Nigari, or a calcium salt known as gypsum.
4. Curds.
5. To press out the surplus liquid.
6. By pressing it for a longer time so that more water is squeezed out.