

2021 VIRTUAL EDITION

Concurrent Breakout C4 Recipe Packet

Fermented Foods & Microbial Health: Culinary Strategies and Practical Applications for a Healthy Gut

Presenters:

Justin Sonnenburg, PhD (The Sonnenberg Lab, Stanford University School of Medicine)

Erica Sonnenburg, PhD (The Sonnenberg Lab, Stanford University School of Medicine)

Chef Toni Sakaguchi '84 (CIA)

This breakout session will take a closer look at a healthy microbiome and how diet can shape each individual's community of microbes. We'll explore practical applications, culinary strategies and food choices that lead to a healthy gut, ultimately improving immunity, mood, weight and overall health. Culinary demonstrations will focus on fermentation, fiber-rich foods, and recipes that nourish the microbiota.

#CIAHKHL

WHOLE CABBAGE KIMCHI

Yield: 40 Portions

Ingredients	Amounts	
Napa cabbage, whole, firm, approximately 2 ½ pounds	1	ea.
Kosher salt	3	Tbsp.
Rice Porridge		
Water	$1\frac{1}{2}$	cup
Sweet rice flour	1	oz.
Sugar	1/2	OZ.
Brine		
Kosher salt	2	Tbsp.
Water	2	cups
Radish, Daikon, julienned	7	oz.
Carrot, julienned	7	oz.
Salt	2	tsp.
Seasoning Paste Rice Porridge (recipe above)		
Korean chile flakes	2	oz.
Garlic, peeled, minced	$1\frac{1}{2}$	oz.
Ginger, peeled, minced	$1\frac{1}{2}$	
Green onions, cut in 2" pieces	2	oz.

Method

- 1. Trim and discard the discolored outer leaves of the cabbage. Cut it in half lengthwise from the top down 1/3 of the length towards the root end. Hold both parts of the cabbage firmly and pull it in half.
- 2. Do not cut the cabbage all the way through since this will damage the tender inner leaves which are the tastiest parts. The inner leaves will still be attached to the cabbage core when the cabbage is torn in half.
- 3. Starting in the center, gently separate the cabbage leaves and sprinkle each leaf with salt. Gently press the salted leaves together and continue to salt the remaining leaves until the entire cabbage is salted. Place in a bowl and let sit for 2 3 hours until the leaves are wilted and pliable.
- 4. For the Rice Porridge: Combine the water and rice flour in a pot. Mix well and bring to a boil. Keep stirring until the porridge bubbles. Stir in sugar and cook until translucent, approximately 5 minutes. Let cool.
- 5. For the Brine: Mix the salt with the water. Stir until the salt dissolves.
- 6. Rinse the cabbage thoroughly in cold water and drain well. Taste a leaf to determine saltiness.

- 7. Mix the radish and carrots with salt to wilt it. Do not rinse.
- 8. For the Seasoning Paste: In a large mixing bowl, put the rice porridge, Korean chile flakes, garlic, ginger, and green onions. Mix with the wilted radish and carrots.
- 9. Lift up the leaves of the cabbage which are still attached to the core and push a little stuffing between the leaves in a layering process. Do this, using all the stuffing.
- 10. Place the stuffed cabbage in the storage container. Press down. If the container is not tightly packed, fill the empty space with brine. The kimchi should be submerged in liquid.
- 11. Place a layer of plastic on top with a weight to keep the kimchi submerged. A double bagged plastic bag filled with water will work as a weight, or a small glass plate with a weight on top will work.
- 12. Keep in a cool, clean, shaded place or refrigerator to ferment. The ideal temperature is between 50 70 °F.
- 13. The brine should completely cover the cabbage (do not expose the cabbage to air) cover and ferment for 3 7 days in a cool place. Sample after a couple of days.

Note: Glass jars work well for fermenting kimchi.

The kimchi must be completely submerged to help prevent molding on the exposed surface. The texture of the cabbage should be crisp, not soft.

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WHITE KIMCHI

Yield: 40 portions

Ingredients	Amounts	
Napa cabbage, whole, firm, approximately 2 ½ pounds	1	ea.
Kosher salt	3	Tbsp.
Rice Porridge		
Water	1/2	cup
Sweet rice flour		OZ.
Sugar	1	tsp.
Brine		
Kosher salt	2	Tbsp.
Water	2	cups
Red pepper, julienned	3 ½	oz.
Yellow pepper, julienned	3 ½	OZ.
Asian pear, julienned	5	OZ.
Salt	2	tsp.
Seasoning Paste		
Rice Porridge (see above)		
Garlic, minced	3/4	OZ.
Ginger, peeled, minced		OZ.
Jalapeno or serrano chile, sliced		ea.
Green onions, cut in 2" pieces	2	OZ.

Method

- 1. Trim and discard the discolored outer leaves of the cabbage. Cut it in half lengthwise from the top down 1/3 of the length towards the root end. Hold both parts of the cabbage firmly and pull it in half.
- 2. Do not cut the cabbage all the way through since this will damage the tender inner leaves which are the tastiest parts. The inner leaves will still be attached to the cabbage core when the cabbage is torn in half.
- 3. Starting in the center, gently separate the cabbage leaves and sprinkle each leaf with salt. Gently press the salted leaves together and continue to salt the remaining leaves until the entire cabbage is salted. Place in a bowl and let sit for 2 3 hours until the leaves are wilted and pliable.
- 4. For the Rice Porridge: Combine the water and rice flour in a pot. Mix well and bring to a boil. Keep stirring until the porridge bubbles. Stir in sugar and cook until translucent, approximately 5 minutes. Let cool.
- 5. For the Brine: Mix the salt with the water. Stir until the salt dissolves.

- 6. Rinse the cabbage thoroughly in cold water and drain well. Taste a leaf to determine saltiness.
- 7. Mix the peppers and pears with salt to wilt it.
- 8. For the Seasoning Paste: In a large mixing bowl, put the rice porridge, garlic, ginger, chiles, and green onions. Mix with the peppers and pears.
- 9. Lift up the leaves of the cabbage which are still attached to the core and push a little stuffing between the leaves in a layering process. Do this, using all the stuffing, with all the cabbage.
- 10. Place the stuffed cabbage in the storage container. Press down. If the container is not tightly packed, fill the empty space with brine. The kimchi should be submerged in liquid.
- 11. Place a layer of plastic on top with a weight to keep the kimchi submerged. A double bagged plastic bag filled with water will work as a weight, or a small glass plate with a weight on top will work.
- 12. Keep in a cool, clean, shaded place or refrigerator to ferment. The ideal temperature is between 50 70 °F.
- 13. The brine should completely cover the cabbage (do not expose the cabbage to air) cover and ferment for 1-2 days in a cool place. Sample after 1 day.

Note: Glass jars work well for fermenting kimchi.

This is a short ferment Kimchi.

The kimchi must be completely submerged to help prevent molding on the exposed surface. The texture of the cabbage should be crisp, not soft.

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BULGOGI MUSHROOM LETTUCE WRAPS WITH KIMCHI

Yield: 8 Portions

Ingredients	Amo	Amounts	
Kalbi Marinade			
Soy sauce, low sodium	1/2	cup	
Mirin	2	. *	
Garlic, peeled, minced	1	Tbsp.	
Ginger, peeled, minced	1	Tbsp.	
Sesame oil	2	tsp.	
Ground black pepper	1/4	tsp.	
Red chili flakes or korean chili flakes	1/4	-	
Rice vinegar	1	-	
Asian pear or green apple, peeled, chopped	1/2	cup	
Mushrooms, portabello or trumpet	1	lb.	
Onion, sliced in rings	1	ea.	
Canola oil	1	OZ.	
Assembly			
Brown rice, cooked	4	oz.	
Butter lettuce or romaine hearts	8	ea.	
leaves, cleaned			
Kimchi, julienned (store-bought, or	4	OZ.	
see recipe index to make your own)			
Cho Gochujang Sauce (recipe follows)	as	needed	
Micro cilantro	as	needed	

Method

- 1. For the Kalbi Marinade: Combine all ingredients in a blender. Blend until smooth. Reserve ¼ cup for basting.
- 2. *For the Mushrooms:* Remove the gills from the portabellos. Slice into ¼" wide pieces. If using trumpet mushrooms, slice into ¼" wide pieces.
- 3. Brush the mushrooms and onions with the Kalbi Marinade. Marinate for 15 to 20 minutes.
- 4. Preheat a grill pan over medium heat.
- 5. Lightly spray the grill pan with oil.
- 6. Lay the slices of mushrooms and onions on the pan. Grill until nicely charred, basting with the reserved marinade.
- 7. *To Assemble:* Place a spoonful of rice in the center of the lettuce leaf. Top with a few slices of mushrooms and onions. Add some kimchi, drizzle with Cho Gochujang Sauce.
- 8. Garnish with micro cilantro and serve.

CHO GOCHUJANG SAUCE

Yield: 1/2 Cup

Ingredients	Amounts	
Garlic, mashed to a paste with salt	1	tsp.
Gochujang	1/3	cup
Rice vinegar	1	Tbsp.
Agave syrup	$1\frac{1}{2}$	Tbsp.
Sesame oil	1	Tbsp.
Soy sauce, low sodium	1	tsp.
Water	$1\frac{1}{2}$	Tbsp.

Method

1. Combine all ingredients. Mix until smooth.

Variation: To make a Cho Gochujang Mayonnaise, eliminate the water. For every $\frac{1}{4}$ cup of Cho Gochujang Sauce, add $\frac{1}{2}$ cup mayonnaise.

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