

## FL ProStart Teachers Workshop: Knife Skills (with Asian-Style Preparations)

Wednesday, June 15, 2022 With <u>Cynthia.Mejia@ucf.edu</u>

#### **Knife Cuts Resources:**

- UCF Rosen ProStart Videos Knife Skills Part 1: https://www.youtube.com/watch?v=oY47J4VTBt8
- UCF Rosen ProStart Videos Knife Skills Part 2: https://www.youtube.com/watch?v=X0U4a5EyyoY
- 3. Sample Lesson Plan: <a href="https://mytrainingbc.ca/youthexploreskills/activity/Cook/pdf/6IntroductoryKnifeSkills.p">https://mytrainingbc.ca/youthexploreskills/activity/Cook/pdf/6IntroductoryKnifeSkills.p</a> df
- Sample Lesson Plan Utah State University:
  <a href="https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1143&context=extension\_curall">https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1143&context=extension\_curall</a>
- 5. Viking Knife Skills Handout: http://www.kpsearch.com/df/sharpeningshop/pdf.pdf
- 6. Knife Skills PPT: https://www.sps186.org/downloads/basic/290619/Knife%20Skills%20.pdf

#### **Recipe Resources:**

- 1. Chinese Vegetable Stir-Fry: <a href="https://thewoksoflife.com/everyday-vegetable-stir-fry/#recipe">https://thewoksoflife.com/everyday-vegetable-stir-fry/#recipe</a>
- 2. Singapore Noodles: https://thewoksoflife.com/singapore-noodles-mei-fun/
- 3. Fried Rice: https://www.gimmesomeoven.com/fried-rice-recipe/
- 4. Vietnamese Summer Rolls: <a href="https://thewoksoflife.com/vietnamese-summer-rolls-shrimp/">https://thewoksoflife.com/vietnamese-summer-rolls-shrimp/</a>
- 5. Chinese Spring Rolls: https://thewoksoflife.com/homemade-spring-rolls/#recipe

# **Introductory Knife Skills**

# **Description**

The knife is an important basic tool used in the kitchen. In this activity students will learn the parts of a knife; about types of knives, and the materials used to construct them, as well as the importance of using correct, consistent cutting techniques.

# **Lesson Objectives**

Students will be able to:

- handle a knife safely
- handle a knife correctly
- · correctly place the guiding hand when cutting
- · identify a variety of commonly used kitchen knives correctly
- · identify a variety of knife cuts by their shape and size
- · demonstrate a variety of knife skills, and
- compare the difference between honing and sharpening knives.

## **Assumptions**

- Students have received orientation on the subject of kitchen and food safety.
- The teacher will be familiar with and will utilize correct knife skill techniques using appropriate resources.
- The teacher will provide a variety of ingredients for knife cutting activity.
- The facility will supply the correct knives and equipment required to complete the activity.

The following Activity Plan is to be completed prior to this Activity Plan:

Workstation Set-up

# **Safety Considerations**

- Ensure the use of required personal protective equipment.
- · Practise safe knife handling and use.
- Use correct knife cleaning procedures.
- Ensure the proper sanitizing and storage of knives upon completion of the activity.



# **Terminology**

## **Knife Materials**

**carbon steel**: Carbon steel is steel that contains a certain percentage of carbon, which determines the characteristics of the steel.

**high-carbon stainless steel**: High-carbon stainless steel is carbon steel that also contains chromium, giving it the best qualities of both carbon steel and stainless steel.

**stainless-steel alloy**: Often used in making cutlery, stainless steel is an alloy of iron that contains 10.5% or more of chromium. The alloy is able to resist tarnishing and rust.

# **Types of Knives**

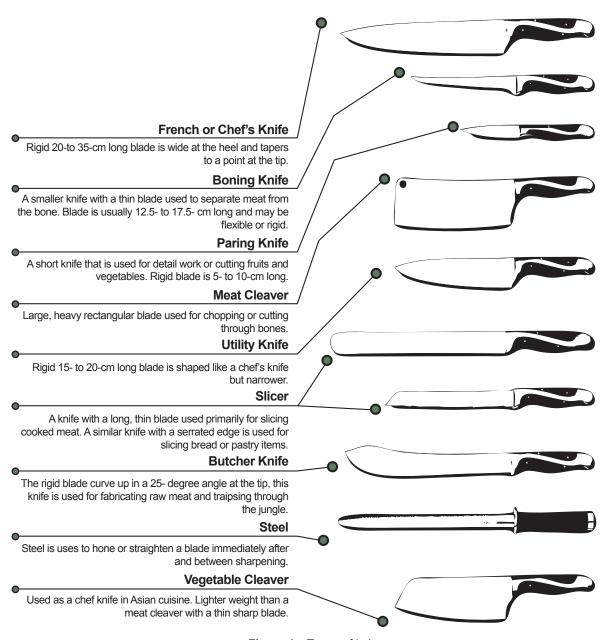
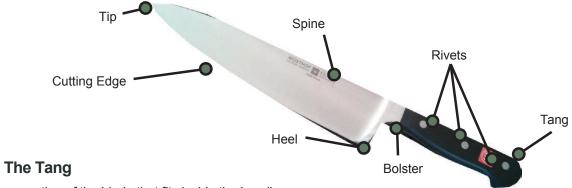


Figure 1—Types of knives

## **Knife Parts**



- a portion of the blade that fits inside the handle
- the best knives are made with a full tang running the length of the handle
- they also have a bolster where the blade meets the handle
- cheaper knives may have a ¾ length tang or a thin "rattail" tang
- a full tang is best because it provides support, durability and balance

Figure 2—Kinife parts

# **Knife Cuts**

Large, medium, small dice Batonnet Chop Mince Shred



Figure 3—Knife cuts



Figure 4—Knife cut dimensions

## **Estimated Time**

2 70-minute classes

## **Recommended Number of Students**

Up to 24

## **Facilities**

Home Economics teaching lab and/or Culinary Arts teaching kitchen

## **Tools**

- · chef's knives
- paring knives
- vegetable peeler
- cutting boards

## **Materials**

An assortment of foods required for knife skills practice (potatoes, carrots, onion, celery, etc.)

## Resources

Draz, John, and Christopher Koetke. *The Culinary Professional.* 3rd ed. Goodheart-Willcox, 2017. Pages 173–180 and 188–197.

Gisslen, Wayne. *Professional Cooking for Canadian Chefs.* 8th ed. John Wiley & Sons, Inc., Hoboken, New Jersey. 2014

# **Demonstrating Skills And Knowledge**

## **Procedure**

## **Day 1: Teacher-led Activity**

## Knife cut station set-up and knife cutting demonstration

- 1. The teacher will demonstrate the proper procedure for setting up a knife cutting station.
- The equipment at the station will consist of a cutting board, chef 's knife, paring knife, vegetable peeler, a container of clean water to store knife cuts, clean towel, sanitation, and compost. Class discussion about the importance of sanitation in the kitchen is recommended.
- 3. The food at the station will consist of three potatoes, two medium carrots, and one onion.
- 4. The teacher will demonstrate the proper cleaning and peeling of each of the vegetables.
- 5. The teacher will introduce the class to each of the knives and their specific uses.
- 6. The teacher will demonstrate large, small, and medium dice using each of the three potatoes.
- 7. The teacher will demonstrate the batonnet (French fry cut) using the carrot.
- 8. The teacher will demonstrate rough chop and mince with the onion.
- 9. Class discussion to involve the importance of consistency in knife cuts as well as knife safety, correct technique, and specific sizes of each cut.
- 10. Encourage the class to compare and contrast the knife cuts and to discuss the possible uses for each of the cut vegetables.
- 11. The class will store and label each of the vegetables properly for future use.
- 12. The class will break down the station and clean the demonstration table.

#### Day 2: Student-led Activity

- 1. The student will set up a proper knife cutting station.
- The equipment at the station will consist of a cutting board, chef's knife, paring knife, vegetable peeler, container of clean water to store knife cuts, clean towel, sanitation, and compost. Class discussion about the importance of sanitation in the kitchen is recommended.
- 3. The food at the station will consist of three potatoes, two medium carrots, and one onion.
- 4. The student will clean and peel all of their vegetables, making sure to store peeled potatoes in the container of water.
- 5. The students will use each of their three potatoes to cut small, medium, and large dice.
- 6. The students will cut batonnet with each of their carrots.

- 7. The students will use one half of their onion to produce rough chop and the other half to produce mince.
- 8. As students finish their knife cuts, have them display each of them on their cutting boards. Remind students of the importance of keeping their station clutter-free and sanitized. Compost to be separated from usable waste.
- 9. Have the class compare their own knife cuts—is the large dice all the same size?
- 10. Have the class compare their knife cuts with the knife cuts of other students.
- 11. Have the class combine the knife cuts for storage. All large dice in one container, all medium dice in one container, and so on.
- 12. The class will store and label each of the vegetables properly for future use.
- 13. The class will break down the station and clean their stations.

## **Evaluation Guidelines**

The students and teacher can evaluate the knife cuts through measurement and comparison in order to establish consistent practice moving forward.

Students can be evaluated on consistency of cuts, minimization of waste, and following of proper safety and sanitation procedures.

Emphasis should be placed on student participation and effort. The students can expect to see improvement in their basic knife skills as they progress through each of the cook Activity Plans.

## **Extension Activities**

Students should be encouraged to practise their knife skills in an everyday setting in order to see improvement in their knife skills. Additional knife cuts can be discovered as the students progress through the cook Activity Plan.

Creating recipes or dishes that utilize the knife cuts will help the students to understand their importance.

# **Everyday Chinese Vegetable Stir-Fry**



5 from 5 votes

Use whatever vegetables you have on hand to make this everyday vegetable stirfry. It's a great way to use up bits of vegetables you don't know what to do with, and to get a big dose of colorful veggies into your diet!

Prep Time	Cook Time	Total Time
15 mins	5 mins	20 mins

Course: Vegetables Cuisine: Chinese Servings: 4 Calories: 137kcal Author: Sarah

## **Ingredients**

- 1/3 cup water (or chicken stock)
- 1 tablespoon Shaoxing wine
- 2 teaspoons oyster sauce (or vegetarian oyster sauce)
- 1/4 teaspoon salt
- 1/4 teaspoon sugar
- 1/4 teaspoon sesame oil
- 1 pinch ground white pepper
- 2 tablespoons vegetable oil
- 4 slices ginger
- 1 cup sliced mushrooms (button, baby bella, oyster, or shiitake 1 cup = about 3 ounces/85g)
- 1 cup carrots (thinly sliced on a diagonal; 1 cup = about 1 medium carrot/100g)
- 1 cup celery (thinly sliced on a diagonal; 1 cup = about 2 ounces/60g)
- 1 cup asparagus (cut into 2-inch lengths on the diagonal; 1 cup = 40g)
- 1 cup bell pepper (any color; de-seeded and thinly sliced; 1 cup = about 1/2 medium bell pepper/90g)
- 1 cup long hot pepper (red or green, de-seeded and thinly sliced; 1 cup = about 1 long hot pepper/60g)
- 3 cloves garlic (minced)
- 2 teaspoons cornstarch (mixed into a slurry with 1 tablespoon/15 ml water)

## Instructions

- 1. In a liquid measuring cup, combine the water (or chicken stock), Shaoxing wine, oyster sauce, salt, sugar, sesame oil, and white pepper.
- 2. In a wok over medium heat, add the oil and ginger. Cook until the ginger is lightly browned at the edges, and then add the mushrooms. Stir-fry for 1 to 2 minutes, until the mushrooms are tender.
- 3. Add the carrot, celery, asparagus, bell pepper, and long hot pepper. Stir-fry for 1 minute, and then add the garlic and the seasoning mixture you prepared earlier. Bring the mixture to a simmer, and cook for 1 minute, until the vegetables are tender.

4. Combine the cornstarch and water into a slurry, and pour into the simmering sauce. Stir-fry until the vegetables are coated in sauce, with just a small amount of standing liquid. Serve.

Everyday Chinese Vegetable Stir-Fry by The Woks of Life. Recipe URL: https://thewoksoflife.com/everyday-vegetable-stir-fry/

# Singapore Noodles (Singapore Mei Fun)



A popular dish on any Chinese take-out menu is Singapore Noodles, or Singapore Mei Fun. Make it at home with our restaurant-style recipe!

Prep Time	Cook Time	Total Time
25 mins	10 mins	35 mins

Course: Noodles and Pasta Cuisine: Chinese Servings: 4 Calories: 402kcal

Author: Bill

## **Ingredients**

- 5 ounces dried vermicelli rice noodles
- 12 large frozen shrimp (peeled, deveined, and butterflied)
- 2 1/2 tablespoons vegetable oil (divided)
- 2 eggs (beaten)
- 2 cloves garlic (chopped)
- 4 ounces char siu (Chinese Roast Pork) (can substitute Virginia ham or Chinese Sausage/traditional sweet Lop Cheung)
- 3 dried red chili peppers
- 9 ounces napa cabbage (shredded, about 3 cups)
- 1 medium carrot (about 2.5 ounces/70g)
- 1 tablespoon Shaoxing wine (can substitute dry cooking sherry)
- 2 tablespoons curry powder or to taste
- 1 teaspoon salt or to taste
- 1/4 teaspoon sugar
- 1/8 teaspoon white pepper
- 2-4 tablespoons chicken stock or water (optional)
- 1/2 teaspoon sesame oil
- 1½ teaspoons soy sauce (can substitute GF soy sauce to make this gluten-free)
- 1 scallion (julienned)
- 1/2 of a red onion (about 2.5 ounces/70g, thinly sliced)

## **Instructions**

## Prepare the noodles, shrimp, and eggs:

- 1. Rehydrate the rice noodles either by soaking in cold water overnight, soaking in hot water for at least 30 minutes, or boiling for 1 minute (check package instructions before boiling).
- 2. Drain the noodles in a colander just before you're ready to cook. It's ok if the noodles aren't completely dry. Use kitchen shears to cut the long strands into 8-10 inch lengths, so they are easier to stir-fry and eat.
- 3. On to the shrimp. We call for a dozen large shrimp in this recipe. You can also use a larger quantity of smaller shrimp if you like, as long as it's about 6-8 ounces/170-225g. Peel the shrimp, butterfly them from the back, and de-vein. Rinse and pat dry before cooking.

4. Heat your wok over medium heat, and add 1 tablespoon of oil. Add the eggs, and when they've cooked and bubbled along the sides, flip them over. Break the egg up into rough strips with your wok spatula. Remove from the wok and set aside.

## Put it all together:

- 1. Heat your wok over medium heat, and add 1 ½ tablespoons of oil and the garlic. Cook for 15 seconds, and add the shrimp and roast pork (or ham or Chinese Sausage). Stir-fry for another 15 seconds.
- 2. Add the Shaoxing wine around the perimeter of the wok and stir-fry for another 15 seconds. Then add the dried red chili peppers, napa cabbage, and carrots. Stir-fry for 30 seconds, and add the rice noodles. Stir-fry for 1 minute, lifting the rice noodles with your spatula to loosen them.
- 3. Next, sprinkle the curry powder, salt, sugar and white pepper evenly over the noodles. It's best to measure these out in a pinch bowl before starting the dish. The amount of curry powder we use for this recipe is what our family likes but do use more or less according to your own personal taste and preference.
- 4. Stir-fry using a scooping and lifting motion to loosen the noodles and uniformly combine them with the spices, vegetables and meat. Start on one side of the wok and work your way around, making sure to firmly scrape the bottom of the wok with your spatula to prevent sticking. A hot wok is a must! You'll see the curry color gradually coat everything to create a uniform color. It takes about 2 minutes to combine and warm everything through.
- 5. At this time, you can add some chicken stock or water if the noodles seem a bit dry. Use your own discretion on how much to add, because it depends on how hot your wok is and how much moisture was in your re-hydrated noodles and vegetables. Err on the side of more moisture, because they will not be as tasty if they have excessively dried out in the wok.
- 6. Add the sesame oil, soy sauce, and the cooked egg. Mix thoroughly again for another minute until everything is combined and heated through—you should see more steam rising.
- 7. Next, add the scallions and red onion, and continue to stir-fry for another 20 seconds. Plate and serve with chili oil.

Singapore Noodles (Singapore Mei Fun) by The Woks of Life. Recipe URL: https://thewoksoflife.com/singapore-noodlesmei-fun/

# FRIED RICE

 $\star\star\star\star\star\star$  4.9 from 1060 reviews

O prep time: 5 MINUTES Cook time: 10 MINUTES total time: 15 MINUTES

yield: 4 -6 SERVINGS 1X

## **INGREDIENTS**



3 tablespoons butter, divided

2 eggs, whisked

2 medium carrots, peeled and diced

1 small white onion, diced

1/2 cup frozen peas

3 cloves garlic, minced

salt and black pepper

4 cups cooked and chilled rice (I prefer short-grain white rice)

3 green onions, thinly sliced

3-4 tablespoons soy sauce, or more to taste

2 teaspoons oyster sauce (optional)

1/2 teaspoons toasted sesame oil

## **INSTRUCTIONS**

- Heat 1/2 tablespoon of butter in a <u>large sauté pan</u>\* over medium-high heat until melted. Add egg, and cook until scrambled, stirring occasionally. Remove egg, and transfer to a separate plate.
- Add an additional 1 tablespoon butter to the pan and heat until melted. Add carrots, onion, peas and garlic, and season with a generous pinch of salt and pepper. Sauté for about 5 minutes or until the onion and carrots are soft. Increase heat to high, add in the remaining 1 1/2 tablespoons of butter, and stir until melted. Immediately add the rice, green onions, soy sauce and oyster sauce (if using), and stir until combined. Continue sautéing for an

additional 3 minutes to fry the rice, stirring occasionally. (I like to let the rice rest for a bit between stirs so that it can crisp up on the bottom.) Then add in the eggs and stir to combine. Remove from heat, and stir in the sesame oil until combined. Taste and season with extra soy sauce, if needed.

Serve immediately, or refrigerate in a <u>sealed container</u> for up to 3 days.

Find it online: <a href="https://www.gimmesomeoven.com/fried-rice-recipe/">https://www.gimmesomeoven.com/fried-rice-recipe/</a>

# Vietnamese Summer Rolls with Seared Shrimp



5 from 10 votes

These Vietnamese summer rolls are perfect for warm weather gatherings, featuring juicy seared shrimp, rice noodles, marinated vegetables, and fresh herbs.

Prep Time	Cook Time	Total Time
50 mins	10 mins	1 hr

Course: Appetizers and Snacks Cuisine: Vietnamese Servings: 16 Calories: 139kcal

Author: Sarah

# **Ingredients**

## For the peanut sauce:

- 3 tablespoons creamy peanut butter
- 1/3 cup hot water
- 2 teaspoons chili oil (or chili garlic sauce)
- 1 tablespoon soy sauce
- 1 clove garlic (minced)
- 1 teaspoon sugar

## For the rolls:

- 1 pound shrimp (medium size; peeled, deveined, tails removed)
- · Salt and pepper
- 2 cloves garlic (minced)
- 1 teaspoon granulated sugar
- 1 tablespoon fish sauce
- Juice of 1 lime
- 1 cup bean sprouts
- 1 medium carrot (peeled and julienned)
- 1 scallion (julienned)
- 4 oz. rice vermicelli noodles
- 16 rice paper wrappers
- 1 bunch Thai basil
- 1 bunch cilantro
- 1 bunch mint

#### Instructions

- 1. Start by making the peanut dipping sauce. Combine the peanut butter and hot water until smooth. Then stir in the rest of the sauce ingredients. Set aside.
- 2. Toss the shrimp with salt and pepper to taste. Heat a cast iron skillet over high heat until smoking. Sear the shrimp, tossing once or twice, until they are pink and just cooked through, about 2 minutes. Set aside.

- 3. Whisk together the garlic, sugar, fish sauce, and lime juice in a large bowl. Toss in the bean sprouts, carrot, and scallions, and set aside.
- 4. Boil the rice noodles according to the package instructions. Drain thoroughly and rinse under cold water. Set aside.
- 5. Now you are ready to assemble. Fill a pie plate halfway with tepid water. Immerse a wrapper into the water, and hold it there for about 5 seconds. It will still be quite stiff, but will soften very quickly as you assemble the rolls.
- 6. After 5 seconds has elapsed, immediately pull the wrapper out of the water and lay it on a clean work surface. Start by laying down a few pieces of shrimp horizontally across the middle of the wrapper. Add some of your rice noodles, the marinated vegetables, and a few leaves of each of the three herbs (basil, cilantro, and mint)
- 7. Fold the sides of the wrapper over the filling, and then roll from bottom to top into a cigar. Place on a serving plate. Continue until all the rolls are assembled. Serve with peanut sauce!

Vietnamese Summer Rolls with Seared Shrimp by The Woks of Life. Recipe URL: https://thewoksoflife.com/vietnamesesummer-rolls-shrimp/

# **Chinese Spring Rolls**



4.97 from 27 votes

These dim sum-style Chinese spring rolls and tangy, old-school dipping sauce are from an old family recipe. Find out how to make our spring roll recipe yourself!

Prep Time	Cook Time	Total Time
1 hr	10 mins	1 hr 10 mins

Course: Appetizers and Snacks Cuisine: Chinese Servings: 18 Calories: 155kcal

Author: Bill

## **Ingredients**

## For the pork and marinade:

- 8 ounces finely shredded pork loin (225g)
- 1/4 teaspoon salt
- 1/2 teaspoon sesame oil
- 1 teaspoon Shaoxing wine
- 1/2 teaspoon cornstarch
- 1/4 teaspoon white pepper

## To assemble the filling:

- 2 tablespoons oil
- 1 clove garlic (minced)
- 10 dried shiitake mushrooms (soaked until softened and thinly sliced)
- 2 medium carrots (julienned, about 1 cup)
- 1 cup bamboo shoots (julienned; fresh is preferred, but canned is fine too)
- 1 small napa cabbage (julienned, about 6 cups)
- 1 tablespoon Shaoxing wine
- 2 tablespoons light soy sauce
- 1 teaspoon sesame oil
- ½ teaspoon salt (or to taste)
- white pepper (to taste)
- 1/4 teaspoon sugar
- 2 tablespoons cornstarch (dissolved in 2 tablespoons cold water)

## For wrapping:

- 1 package spring roll wrappers (8" squares; this recipe makes about 20 spring rolls)
- 1 tablespoon cornstarch (dissolved in 1 tablespoon boiling water for sealing the spring rolls)
- Canola oil (or peanut or vegetable oil, for frying)

## For the dipping sauce:

- 2 teaspoons sugar
- 2 teaspoons hot water
- 1 teaspoon Worcestershire sauce

1 tablespoon soy sauce

### **Instructions**

- 1. Mix the pork with the marinade ingredients and set aside for about 30 minutes. In the meantime, prepare the rest of the ingredients. Cut all of the vegetables to approximately the same size. You want everything the same size so each ingredient blends together.
- 2. Brown the pork over high heat in 2 tablespoons of oil, and add the garlic, mushrooms and carrots. Stir fry for 30 seconds, and add the bamboo shoots, napa cabbage, and Shaoxing wine. Continue stir-frying for a minute. Adjust the heat to simmer the mixture, as the napa cabbage will release a lot of moisture.
- 3. Stir in the soy sauce, sesame oil, salt, white pepper, and sugar. At this time, you have the option of adding 1/4 cup of the decanted water from soaking the dried mushrooms. It strengthens the mushroom flavor, so this is purely according to your personal preference. You may also have to simmer the filling longer to reduce the additional liquid.
- 4. Continue simmering the filling for another 3 minutes--until the napa cabbage is completely wilted--and stir in the corn starch slurry to thicken. How much slurry you add depends upon the wetness of the filling (this varies if your cabbage had more moisture or if you did add the optional mushroom water), but there should be no standing liquid at all.
- 5. Transfer the filling to a large shallow bowl, and let cool. Place into the refrigerator to cool further—at least one hour. It's best to start with a cold filling for easier wrapping. The key to wrapping spring rolls is making sure that they're tight, yet not overstuffed. It's best to use fresh spring roll wrappers if you can, as freezing the wrappers can result in the spring roll skin being a bit too damp.
- 6. Place the wrapper on a flat surface so that a corner is facing toward you. Use about two spoonfuls of the mixture per spring roll, and spoon it about 2 inches from the corner that is closest to you. Roll it over once, and, like you're making a burrito, fold over both sides. Continue rolling it into a cigar shape. With your fingers, brush a bit of the cornstarch water onto the corner of the wrapper that is farthest from you to seal it.
- 7. In case you're wondering, we did try egg wash instead of the cornstarch mixture to seal the spring roll but the egg wash "stains" the spring roll, so it's best to use the cornstarch mixture.
- 8. Place each roll on a tray. This recipe makes about 18-20 spring rolls. You can also freeze these spring rolls on the tray overnight, and transfer them to a zip-lock bag when they are completely frozen for future use. We usually fry some fresh and freeze the rest, unless we are hosting a party, in which case, these go like hot cakes!
- 9. To fry the spring rolls, fill a small pot (which requires less oil) with oil until it's 2 to 3 inches deep. Heat the oil slowly over medium heat until it reaches 325 degrees. Gently add the spring rolls one at a time, frying in small batches. Carefully roll them in the oil so they cook evenly until golden brown and transfer them to a plate lined with paper towels.
- 10. Prepare the dipping sauce by adding all ingredients to a small sauce pan. Mix and heat until just simmering and pour into a small bowl. Serve the spring rolls hot with the dipping sauce!