Lesson Plan: Fun and Tasty Ways to Eat More Kale

This lesson will introduce the different varieties of Kale and briefly summarize the nutrients it contains. These nutrients should be discussed with respect to their health benefits. The lesson will discuss the ways to cook and prepare kale and demo at least two different methods. The participants will be allowed to taste each in hopes of broadening their palates. A handout and materials list is provided in addition to templates for pre- and post-assessment, PowerPoint, and lecture.

Target audience: Anyone wanting to eat healthier who is also old enough to cook (14 and up). This lesson plan and handout are appropriate reading for grades 6-7 and up, according to the Flesch Readability test.

Goals: To educate on the physiological benefits of eating kale and encourage participants to creatively incorporate kale into their diets.

Behavioral Objectives:

- Participants will be able to identify two health benefits of eating kale.
- Participants will be able to come up with at least one new way to incorporate kale into their diets.

Content Points:

Use PowerPoint slides to show varieties of Kale. Introduce Kale and discuss what type of vegetable it is, when it is in season and what nutrients it contains. Engage participants whenever possible to see how much they know. The pre-assessment you gave before this lesson should help determine how much background information is necessary.

Include these key points:

- Kale is a form of cabbage and belongs to the cruciferous vegetable family. Ask Participants: (*Can you name other vegetables*? Brussels Sprouts, Broccoli, Asparagus). Kale's peak season is between mid-winter and early spring.
- One cup of Kale is only 36 calories but it is rich in fiber (5g/cup), Manganese and Vitamins A, C and K. Kale is also a good source of Calcium, B6, Potassium, and Iron. (Zelman, 2010, p.1) The fiber in kale helps lower blood cholesterol and reduces the risk of heart disease. This is effect is most potent when kale is eaten steamed/cooked.(Zelman, 2010, p.1)
- Vitamins A, C and K are antioxidants. Antioxidants help cells recover from free radicals and can help you stay healthy. Vitamin A is a type of carotenoid, which can be stored in the body. It is vital for vision. The body uses Vitamin C to make the proteins needed for proper formation of tendons and skin cells. Vitamin C also helps wounds heal (Vitamin C, 2012, p.1). Vitamin K helps blood clot normally but is also thought to prevent cancers from forming (Zelman, 2010, p.1).
- Kale contains over 45 different antioxidant compounds (Kale, 2012, p.1) including carotenoids like Vitamin A and flavonoids like quercetin and kaempherol which have anti-inflammatory effects. Kale also contains isothiocyanates and these compounds are thought to help prevent breast, ovarian, prostate, and colon cancers (Kale, 2012, p.1).
- To summarize, Kale is great for keeping bones, eyes and skin healthy, fighting off inflammation and disease and lowering cholesterol.

DEMO: Mention different ways to cook/prepare kale: raw, baked, sautéed blanched or blended in smoothies or dips.

Choose a recipe (or two) based on pre-assessment and time allotted. Detailed Recipes are on the handout.

SESAME-COCONUT KALE:

These are sweet and crunchy. Little kids can help make this and it is a great substitute for chips or popcorn. These do not keep well, so make amount appropriate to what will be eaten.

Preheat oven to 350F. Put pre-washed and pre-cut kale in a large mixing bowl and massage it with 2 Tbsp Sesame Oil (Available at both Safeway and Trader Joe's). Mix until coated. Add shredded coconut. Spread on cookie sheet or large sheet of tin foil and sprinkle with remaining shredded coconut. Bake for 10-15 minutes or until crispy. Allow Participants to sample.

KALE PESTO:

You can make this savory side in class as a demo or make it the night before then bring it in for tasting.

Before the lesson: Pre-rinse and chop a bunch of Lacinato kale or purchase a pre-rinsed and cut bag. Pass out paper plates and crackers. In a blender or food processor, combine 2 cups of kale, a few cloves of garlic, olive oil, lemon juice, pine nuts (walnuts and hazelnuts are excellent substitutions), and parmesan. Pour into bowl and pass around for sampling.

KALE DOLMAS:

Perfect for parties and lunchboxes! This one is great for engaging participants, but is time intensive. Be sure to prep in advance. To save time, make the filling the night before. This lesson uses a store-bought risotto mix, but there are several filling ideas available on yummly.com.

The night before: Make risotto according to directions on box. Allow risotto to cool and store in a Tupperware container.

The morning of or an hour before the lesson: Carefully wash large kale leaves and trim excess stem. Fill a large pot of water and bring it to boil. Blanch leaves, a few at a time for 3-4 minutes in order to soften the leaves for easy folding. Lay leaves flat on a cookie sheet, plate or

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cutting board and cut out the stem, about a third of the way up from the bottom. Leave one leaf raw so you can demo how to cut the stem for the class. Store leaves in Tupperware.

Before the PowerPoint presentation starts, set a pot of water to boil. Set up a plate, knife, and tongs.

After PowerPoint, pass around paper plates and blanched kale leaves. While those items move around the class, blanch the kale leaf and discuss what you are doing and why.

Carefully remove the thickest part of the stem from the kale leaf, as you did previously and show class how you are doing it. Pass around the risotto filling and advise participants to serve themselves one spoonful in the middle of their leaf. Make sure you get some as well.

As a class, fold the bottom of the kale leaf up towards the top and over the filling. Take right side of leaf and fold it towards the middle, also covering the filling. Then roll the kale leaf, starting from the bottom, up towards the top. Voila! The dolma is now finished and ready to eat. To serve these warm, microwave the filling before giving the lesson.

*There is a great tutorial at <u>http://www.gooseberrymooseberry.com/2012/07/stuffed-kale-rolls-dolma.html.</u>

SCRIPT: You may use this script as a guide for your presentation, but by no means are you limited to it.

Hello everyone, how are you today? Does everyone have a handout? My lesson is all about ways to incorporate more kale into your diet. I'm going to talk a little bit about the nutritional benefits of kale and then I'm going to demonstrate some fun recipes. Hopefully you will all leave here with more adventurous taste buds.

(Start PowerPoint and cover content points):

Kale is a green leafy vegetable belonging to the cruciferous vegetable family. *Can you name any other cruciferous vegetables? (Asparagus, Broccoli, Brussels Sprouts).* It is high in Vitamins A, K, and C and contains over 45 antioxidants (*refer to content points*!!).

In the pre-assessment that I sent out, all of you indicated that you had tried Kale, which is great!! Many of you eat it raw or sautéed with garlic. Some of you marked that you eat it, but you don't particularly like it. There are many ways to eat kale besides eating it by itself. If you don't love kale, try incorporating into other foods. You can put it on a pizza, make kale chips, and add it to quesadillas, eggs, smoothies or pasta. Have you ever tried Grilled Cheese with Kale? It is amazing. You can use kale as a filling for enchiladas or lasagna or use big kale leaves as wraps. *

Many of you answered that savory and sweet are your favorite flavors so today we will make Sesame-Coconut Kale Chips. They are sweet, crunchy and delicious! These are also a great substitute for potato chips or movie popcorn. They don't store particularly well (unless you have a dehydrator), so only make what you think you will eat. I've also brought in some kale pesto for you to sample. It is really easy to make and you can find the recipe on your handout. I will need one volunteer! This person should have clean hands and be willing to get them dirty (*Pick Volunteer*). I have some kale here; it has been cleaned and chopped. We are going to add the sesame oil and massage it into the kale with a little bit of the coconut. Next, we are going to spread the mixture out on a cookie sheet and sprinkle the remaining coconut over it. Now it is

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ready to go into the oven and bake for 10-15 minutes at 350F. (*If you can, have some already made and demo a smaller portion of kale so that participants can try the chips right away*).

Kale is a versatile vegetable that can be incorporated into your diet in many different forms. I hope you I've enjoyed these simple and tasty recipes. Remember that eating is supposed to be enjoyable and nutritious, so be creative and eat kale whenever possible!

Post Evaluation (done by show of hands or verbal response by participants): *How many of you learned about a new way to eat kale? What are two health benefits to be gained by eating kale? What are some ways to sneak kale into your diet? Did this lesson inspire you to try kale in different ways? Would you make or eat any of these recipes again?*

*(If you make the dolmas):

How many of you have tried Dolmas? They are usually found in Greek or Mediterranean restaurants and are made with Grape leaves. Dolma comes from the Turkish work dolmak which means to fill (Stuffed Kale Rolls, 2012, p.1).

For those of you who love Kale, I'm sure you will like these dolmas. For those of you who don't love kale, but force yourself to eat it, this lesson is great for you. Due to time constraints, I've done most of the prep work for these kale treats, but the handout going around has the recipe on it in addition to the recipe for sesame-coconut kale chips which are sweet, crunchy and delicious.

In the pre-assessment that I sent out, I asked you all what your favorite flavors were and the overwhelming response was savory. So, in hopes that you actually enjoy eating these dolmas, I prepared a savory mushroom risotto filling, and we are going to form the dolmas as a group.

I made the filling last night, from a box. Traditional dolma recipes use rice sweetened with currants, mint and allspice, or fill grape leaves with meat. I've prepared the leaves in advance and I'll show you how to prepare them while you all grab a leaf.

----Blanch kale leaf and trim stem while describing what you are doing---

Does everyone have a leaf? Please spoon yourself some filling and place it in the center of your kale leaf. We are using dinosaur kale because it has nice broad leaves. Now roll the bottom of the leaf over your risotto. Then fold one long edge in. Now roll the kale from the bottom towards the top and voila! Kale dolmas. Eat up!

Materials List: You will need to bring plates (or Dixie cups) for all of these recipes.

DOLMAS:

- Dinosaur/Lacinato Kale leaves (enough for each participant to get one leaf)
- Pot of Water(for blanching)
- Tongs
- Knife or scissors
- Filling (Make in advance)
- Spoon
- Access to stove

PESTO:

- Chopped Kale (frozen or raw)*
- Garlic
- Lemon Juice (bottled or fresh)
- Parmesan
- Olive Oil
- Blender/food processor
- Mixing bowl and serving spoon
- It is nice to serve this with crackers, bread or carrots.
 *please defrost kale before mixing so the final product is not watery

SESAME COCONUT KALE:

- Access to an oven
- Chopped Kale
- Sesame oil
- Shredded coconut
- Baking sheet or large sheet of aluminum foil
- Serving implement (spatula, tongs, or spoon)

Pre-Assessment: Have participants fill out these simple questions to help you tailor your lesson to each class.

- 1. Do you eat Kale? If not, why not?
- 2. If so, how do you normally cook it (or do you eat it raw)? How often do you eat it?
- 3. Your opinion of kale is:
- a) Kale is nutritious so I eat it, but I don't like it very much.
- b) I love it and eat it with everything.
- c) I like it, but it gets boring.
- d) I have never tried it. What is kale?
- 4. My favorite taste is:
- A) Spicy C) Savory
- B) Sweet D) Salty

Works Cited:

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