

Eating the Rainbow

Session 2: April 2, 2014

In our Spring 2014 JW Iron Chef Club we're studying the science of cooking!

In our second session, we'll talk about how different colored veggies provide different nutrients for our bodies and why trying to "eat the rainbow" is a good rule of thumb for good nutrition.

Using ingredients of many colors, students will prepare a salad and homemade vinaigrette to take home and share with their families. Instead of a recipe, we'll experiment with the 3:1 ratio of oil to acid in our vinaigrettes.

Questions to Discuss and Contemplate:

How do you think adding an emulsifying agent will change your vinaigrette?

How do you think changing the ratio of oil to acid will change your vinaigrette?

A vinaigrette is a temporary emulsion. Can you think of a common food that is an example of a permanent emulsion? (Hint: you use it on sandwiches and to make egg salad.)

Write down different combinations of oils, acids, and herbs. Predict which recipe will yield the tastiest vinaigrette.

Making a Balanced—and Delicious—Vinaigrette

The "magic ratio" in vinaigrette is 3 parts oil to 1 part acid. Using this ratio will help you create a balanced vinaigrette that is not too oily or too acidic.

You can make your vinaigrette from a wide range of oils (such as olive, canola, safflower) and acids (white wine vinegar, Balsamic vinegar, cider vinegar, lemon juice). And you can add other ingredients to change the flavor of your vinaigrette and to help it stay together (emulsify).

On the next page is a basic recipe for vinaigrette plus a list of oils, acids, and herbs.



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GARDEN STATE ON YOUR PLATE:
A PROGRAM OF PRINCETON SCHOOL
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Basic recipe for vinaigrette:

1 part acid + 3 parts oil + salt + pepper

You can also add: emulsifying agent, such as honey, or mustard + aromatic or herb

Oils

- Olive
- Safflower
- Canola
- Soybean
- Nut
 - Walnut
 - Hazelnut
- Avocado

Acids

Vinegars:

- Wine Vinegars: red wine, white wine, Champagne, sherry
- Rice Vinegar
- Coconut Vinegar
- Balsamic Vinegar
- Cider Vinegar
- Raspberry Vinegar

Citrus:

- Lemon Juice
- Lime Juice
- Orange Juice

Herbs

- Basil
- Oregano
- Chives
- Thyme
- Marjoram
- Dill
- Tarragon
- Parsley

Other

- Shallots
- Garlic