## Dining with the Dean Assignment

You will create a 3 course meal including the following:

1) Appetizer
2) Main Dish
a. With 2 sides
3) Dessert

## Rules:

1) You may use recipes we've made in class, in the classroom cookbooks, or from home. (It must be in class today though.)
2) You must include one home ingredient, or one ingredient you will bring from home. It can not be a condiment, seasoning, or a spice.
3) You must follow the judge's dietary requests. Your judge has requested:
4) You must represent each food from the MyPlate Plan.
5) You must also follow correct portion sizes.
6) You must stay below $\$ 30$ for the entire meal, according to the pricing sheets provided.

## Judging:

The judges will be judging you on the following: Color, Presentation, Texture, Creativity, and Taste.

Day 1: With a partner, create a 3-course meal. Complete with recipes and pricing for each of the 3 courses. Fill in the following charts provided:

Appetizer:
Main Dish:

Side:
Side:
Dessert:

Pictures of entrees: (Please draw and color what your plate presentation will look like.) Appetizer:

Main Dish:

Dessert:

Pricing-List all ingredients, including individual pricing. Please show all work used to reach final total. (Use the back of this paper if needed.)

## MyPlate:

How does this meet the "MyPlate" daily requirements?

How will you measure portion sizes?

How will you present this to your group, so they will want to pick yours?

## Day 2:

Present your plan to your group. The group leader should lead voting on what plan to use for the actual competition. Make a plan of action on who will be responsible for preparing each dish. Remember to assign the house ingredient as well. Turn in a shopping list to the teacher for final approval.

Day 3: Cook and prepare your food to serve to the judge. Remember, it's important to maintain proper temperatures of food, whether cold or hot. Try and have all foods ready at the same time.

Prize: The winning team will be exempt from taking notes the following class period. You will receive print outs instead. Please know though, that you will still be responsible for the information on the test. They will also receive extra credit, to be determined by the teacher.

Good Luck! :

# Dining with the Dean 



## Main Dish



Dessert

$\square$


When selecting fresh fruit look for:

1. Condition:
2. Denseness:
3. Color:
4. Aroma:
5. Size:
6. Shape:

| What is enzymatic |  |
| :--- | :--- |
| browning? |  |
| How can it be |  |
| prevented? |  |$\quad$.

## HOW TO STORE FRESH FRUIT:

|  | 1. |
| :---: | :--- |
| Preparation | 2. |
| Methods | 3. |
|  | 4. |
|  | 5. |
|  | 6. |
|  | 7. |

a. Unripe fruits:
b. Bananas:
c. Berries/cherries/grapes:
d. Citrus fruits:
e. Other ripe fruits:
f. Cut fruits:


## IMPORTANT TERMS TO KNOW: Define and give examples for each term below.

Produce:
Mature Fruits:
Immature Fruits:
Ripe Fruits:
Unripe Fruits:
Melons:
Drupes:
Pomes:
Tropical Fruits
Berries:
Citrus Fruits:


Using the terms above, circle or highlight each word below.

| S | R | J | C | I | U | A | B | V | Q | V | P | U | R |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W | T | J | X | I | G | N | J | Q | S | X | R | P | V |
| E | Q | R | V | Y | T | J | R | P | E | I | O | J | B |
| X | B | A | 0 | M | S | R | L | I | W | G | D | R | E |
| P | C | M | C | P | M | T | U | M | P | P | U | H | R |
| S | $\bigcirc$ | E | I | Y | I | E | H | S | R | E | C | A | R |
| E | M | M | Z | Z | U | C | L | C | F | S | E | F | I |
| P | F | D | E | R | R | 0 | A | 0 | M | R | D | K | E |
| U | R | B | W | S | D | L | P | L | N | Y | U | B | S |
| R | T | K | G | M | X | Q | I | Y | F | E | P | I | R |
| D | J | M | E | H | G | K | P | W | D | R | L | D | T |
| B | I | M | M | A | T | U | R | E | F | R | U | I | T |
| S | M | C | V | I | H | P | Q | K | T | Q | Y | I | C |
| M | A | T | U | R | E | F | R | U | I | T | T | W | T |

Identify the types of fruits: berry, pome, drupe, citrus, melon, tropical
a.
b.
c.
d.
e.
f.

# Station 1 <br> 1. Nutrients in Fruits <br> 2. What is Enzymatic Browning? <br> 3. Preparation Methods 

Station 2<br>Define the Terms

## Station 3

Define the Terms

## Station 4

# How to store fresh fruits 

Station 5<br>Word Search

## Station 6

What to look for when selecting fresh fruit

## Station 7 <br> Fruit Identification and <br> Extra Credit

## NUTRIENTS PROVIDED BY VEGETABLES

1.Vegetables contain many vitamins and minerals
2.Bell peppers, tomatoes and raw cabbage contain vitamin C
3.Leafy greens contain folic acid, vitamin K, Calcium, and Magnesium. They are also an important source of fiver carbohydrates, and phytochemicals.
4.They contain no cholesterol and are low in fat, calories and sodium
5. Many contain antioxidants (vitamin A and C and lycopene) which will help lower risks of cancers and heart disease.

# HOW TO PRESERVE NUTRIENTS IN VEGETABLES 

1. Cooking affects flavor, texture, and the nutritional value.
2. Some nutrients in vegetables dissolve in cooking water or are destroyed by heat
3. Vitamin $C$ is both heat sensitive and water soluble; Vitamin B is lost in water
4. Cook most vegetables for a short time in a small amount of water.


## PREPAR ATION METHODS

## 1. Micro-wave

## 2. Baking



## 3. Steam



## 4. Stir-fry

5. Simmer

6. Sauté


## SELECTING VEGETABLES

# 1. Ripeness: buy what you can use during the storage life of the vegetable. (2-5 days) (root veggies: 1-several weeks) 

2. Color and Texture: bright characteristic color and crisp texture
3. Shape: typical for vegetable.
(Misshapen may have inferior texture)
4. Size: Should be heavy for its size (large= overripe; small= immature)
5. Condition: Avoid wilted, decayed, or damaged veggies. Root vegetables, bulbs and tubers should not be sprouting.

## STORING VEGETABLES

Potatoes: Cool, dark, dry place. Don't put in the refrigerator; humidity will cause mold and spoilage.

Onions: Cool, dry area. Place in woven bag or basket for air circulation.

Other Vegetables: Store in refrigerator in plastic bags, air-tight container or refrigerator crisper. Let tomatoes ripen before refrigeration.


## VEGETABLES



|  | 1. |
| :---: | :---: |
|  | 2. |
| SELECTING | 3. |
| VEGETABLES | 3. |
| 3 | 4. |
|  | 5. |


| Nutrients in Vegetables |
| :--- |
| 1. |
| 2. |
| 3. |
| 4. |
| 5. |
| 6. |


| How to Preserve Nutrients in Vegetables |  |
| :--- | :--- |
| 1. |  |
| 2. |  |
| 3. |  |
| 4. |  |

## Eggs

## Functions of Eggs

1. 
2. 

## Terms:

Hard cooked:
Soft cooked:
Scrambled:
Fried:
Poached:
Foam:

Soft peaks:
Stiff peaks:

## How to store eggs:

## Milk

## Terms:

Pasteurization:
Homogenization:

| Types of milk: |  |
| :--- | :--- |
| Whole milk: |  |
| Reduced-fat milk: |  |
| Low-fat milk: |  |
| Nonfat milk: |  |
| Buttermilk: |  |
| Chocolate milk |  |
| Nonfat dry milk: |  |
| Evaporated milk: | Sweetened condensed milk: |
| Lactose free milk: |  |

Serving sizes and Amounts for specific age groups


Functions of Fat:
1.
2.
3.
4.
5.
6.

Fat soluble vitamins $\qquad$
HDL vs. LDL

| Saturated | Mono-unsaturated | Poly-unsaturated |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
|  |  |  |

## Math-in-CTE Lesson Plan Template

| Lesson Title: What Grade is Your Fiber Intake? | Lesson \#: 4 Standard \#4 Objective \#2 (1-47 minute class perio |  |
| :---: | :--- | :--- |
| Author(s): | Phone Number(s): | E-mail Address(es): |
| Natalie Wilson (FACS) | $801-726-5721$ | nawilson@wsd.net |
| Sheri Heiter (Math) | $801-710-3552$ | sheiter@wsd.net |
| Occupational Area: Foods I |  |  |
| CTE Concept(s): Diet Analysis/Fiber Personal 3-Day Analysis of Diet Content/Benefits of Fiber in the Diet |  |  |
| Math Concepts: Graphing, Basic Arithmetic, Percentages, |  |  |
| Lesson Objective: | Students will identify how much fiber is in the various foods they eat, and will evaluate their daily diets to <br> determine adequate fiber intake. They will assign a letter grade to their personal fiber intake. |  |
| Supplies Needed: | http://www.toyourhealthllc.com/forms/Intake-Diet-Tracker.pdf, Fiber Chart, Computer Lab w/Internet <br> Access, Calculators, Fiber Song, Fiber Content Chart, Sample 1 Day Menu |  |


| THE "7 ELEMENTS" | TEACHER NOTES <br> (and answer key) |
| :--- | :--- |
| 1. Introduce the CTE lesson. | Resource1 (given the previous week) - Dietary Analysis form |
| Be sure students have their completed three-day diet analysis <br> forms for this exercise using the template suggested above under <br> "Supplies Needed." | Resource 4 Fiber Song |
| Play the Fiber Song | Project the quiz. Resource 5 <br> Review the answers listed. <br> If you don't consume enough dietary fiber, your digestive system <br> won't properly process waste to eliminate it from the body. In other <br> words, your body won't be able to produce effective bowel <br> movements. |
| What fappens if you don't get enough fiber? |  |


|  |  |
| :---: | :---: |
| 2. Assess students' math awareness as it relates to the CTE lesson. <br> Guide students through calculating their percent correct on the quiz. $\frac{\text { Number Correct }}{4}=$ ? Multiply by 100 (move the decimal two places to the right) to obtain the final percentage. Perhaps discuss with students the fact that percent means "part of a 100." Also, the number correct in this formula is known as the numerator, while the 4 is known as the denominator. <br> How will we know if we are getting enough fiber? | $\begin{array}{ll} \frac{0}{4}=0 \text { mult by } 100=0 \% & \frac{3}{4}=0.75 \text { mult by } 100=75 \% \\ \frac{1}{4}=0.25 \text { mult by } 100=25 \% & \frac{4}{4}=1.00 \text { mult by } 100=100 \% \\ \frac{2}{4}=0.5 \text { mult by } 100=50 \% & \end{array}$ <br> We will know if we are getting enough fiber if we are having regular bowel movements that are produced without excessive effort or straining. |
| 3. Work through the math example embedded in the CTE lesson. <br> See notes at the side... <br> Show examples of various food packaging for students to determine fiber content (i.e. Bottle of pop vs. bottle of juice; cereals; fruits vs. other snacks). | *Note: We've used an average value of 28 grams of fiber for each day. Not all people's systems will function optimally at this level. Some people will need the entire 35 grams, while others will require much less. <br> *Note: I have a notebook prepared for student use containing a list of common foods along with their fiber content. You may want to use a website or a chart that you project for group use. <br> Students should use their fiber charts (in whatever form you've chosen to use) to double-check fiber content as you work through these examples as a group. |

Choose a selection of foods to represent a snack/meal. Calculate the total amount of fiber contained in these foods. Determine the percent of the daily recommended fiber content this snack/meal will provide. For example, if the snack we selected contained an apple and string cheese. fiber content would be 3 grams for the apple and 0 grams for the cheese.

Using an average value of the recommended daily allowance of 28 grams per day, compute the percentage of the daily
recommendation this snack provided as follows:

$$
\frac{\text { number of grams of fiber in this snack }}{\text { average recommended daily allowance }}=\frac{3}{28}=.107
$$

Now, move the decimal to the right two places (which is the same as multiplying by 100) to get $10.7 \%$ of the daily recommended daily fiber intake is met by this snack.

## Resource 2 - Sample Daily Diet Plan

Use
http://www.wehealny.org/healthinfo/dietaryfiber/fibercontentchart.html or classroom fiber content chart Resource 3 to determine the fiber content in the sample menu items.
*Note - remind students that when adding fiber content values involving a decimal, that the decimals must be lined up so that proper place values are added together.

$$
\text { For example: } 2.00
$$

$+\quad .25$
2.25

Some students mistakenly assume the answer to be 27.
The total number of grams of fiber consumed with this diet is 30.25 .

| Calculate the percentage of fiber consumed for the entire day by taking the number of grams consumed and dividing by our approximate recommended amount of 28 grams. | Find the percent of the recommended amount by performing the follow steps: $\frac{30.25}{28}=1.080$ <br> Multiply by 100 (Move the decimal two places to the right to obtain 108\%). <br> This sample daily diet plan contains over $100 \%$ of the recommended amount of fiber! That's an A+. (Note - Teachers should make their indivic grading scales available to the students for this portion of the exercise.) <br> The instructor should prompt the students to suggest two additional values for the fiber intake for days 2 and 3 . Compute the percentages for each day using the steps listed above. The x -axis (horizontal) represents the day while the y -axis (vertical) represents the number of grams of fiber consumed. |
| :---: | :---: |
| Construct a bar graph (using appropriate labels and titles) to represent the fiber intake for the sample diet. | Some students may need one-on-one help to construct graphs. |



Students will calculate their overall fiber consumption percentage for the three day period.

What if my body really requires the full 35 grams of fiber per day? What would my grade be now?

Add the three daily percentages and divide by three. Move the decimal place two places to the right (multiply by 100) to arrive at your answer..

$$
\begin{aligned}
& 108+54+68=230 \\
& \frac{230}{3}=76.7 \%
\end{aligned}
$$

Compute the percentage using this data.
Take $\frac{30.25}{35}=0.864$.
Multiply by 100 (move the decimal two places to the right)
$=86.4 \%$ of the recommended daily intake. This represents a B grade now.

| What if you got 23 grams a day and your body really needed 35 ? What would your grade be? <br> What about if you got 15 grams a day and your body really needed 25 ? | $\frac{23}{35}=0.657$ <br> Multiply by 100 (move the decimal two places to the right) $=65.7 \%$ of the recommended daily intake. D grade. $\frac{15}{25}=0.6$ <br> Multiply by 100 (move the decimal two places to the right) $=60 \%$ of the recommended daily intake. $D$ - grade |
| :---: | :---: |
| 5. Work through traditional math examples. <br> What if you are eating out and your food bill comes to $\$ 25.00$. You were very impressed with your server and you want to tip $20 \%$. How much should you leave for a tip? | Convert $20 \%$ to a decimal by moving the decimal place two places to the left. $25 \times 0.20=\$ 5.00$ |
| Another night you spent $\$ 45.00$, how much tip would you leave if you want to tip $20 \%$ ? How much would you leave for a tip if you only want to tip $15 \%$ <br> You currently earn $\$ 10.75$ per hour. You have done such a great job your boss offers you a $3 \%$ raise. How much per hour would you now make | $\begin{aligned} & 45 \times 0.20=\$ 9.00 \mathrm{tip} \\ & 45 \times 0.15=\$ 6.75 \mathrm{tip} \end{aligned}$ $10.75 \times 0.03=0.323$ <br> This means you will receive an additional 0.32 (cents) per hour. In o words, you will now earn $\$ 11.07$ per hour. You could also have multip 10.75 by 1.03 to get 11.07 in only one step. The one in front of the simply preserves the original salary amount. |
| 6. Students demonstrate their understanding. <br> Students will complete their three-day diet record/analysis and produce ab graph representing their daily fiber intake for that period of time. | Each student's product will be different based on their own record of what they have eaten for the three days. |


| Student understanding is assessed formatively as the lesson progres |  |
| :--- | :--- |
| through group participation results. |  |
| 7. Formal assessment. |  |
| Students will submit the three-day diet record/analysis form and graph. |  |
| Students will assign a letter grade for their overall fiber intake for the th <br> day period. | The overall letter grade for the sample is a "C." |
| If the letter grade assigned was below an "A," the student should also |  |
| include a paragraph indicating how they would alter their diet to include m |  |
| fiber. |  |

## NOTES:

# Station 1 <br> 1. Nutrients in Fruits <br> 2. What is Enzymatic Browning? <br> 3. Preparation Methods 

Station 2<br>Define the Terms

## Station 3

Define the Terms

## Station 4

# How to store fresh fruits 

Station 5<br>Word Search

## Station 6

What to look for when selecting fresh fruit

## Station 7 <br> Fruit Identification and <br> Extra Credit

## BREAKFAST

1 cup shredded wheat 4.4 g
$1 ⁄ 2$ cup milk

1 banana 3 g

## LUNCH

Turkey sandwich/ turkey, whole wheat bread 2 slices 6 g , lettuce .2 g , tomato .5 g , cheese Apple 4 g

DINNER

Chicken breast
$1 / 2 \mathrm{c}$ carrots 3.4 g
$1 / 2$ c mashed potatoes 3 g

White dinner roll 1 g

Apple juice .25 g

SNACK
$1 / 2$ trail mix 4.5 g

U.S. Department of Agriculture, Agricultural Researct Service. 2004. USDA National Nutrient Database for Standard Reference, Release 17. Nutrient Data Laboratory Home Page, http://wwow.nalusda.goy/fnic/foedcomp

# 势 FIBER CONTENT OF FỢDS 


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U.S. Department of Agriculture, Agricultural Researcti Service. 2004. USDA Natonal Nutrient Database for Standard Reference, Release 17. Nutrient Data Laboratory Home Page, htro:/wnw.nalusda.covifnic/foodcomg

## Fiber Quiz

1. Name the two types of fiber.
2. What is the purpose of fiber?
3. How much fiber do we need?
4. Do most Americans get enough fiber in their diet?

Fiber Quiz Key

1. Soluble and Insoluble
2. To help eliminate waste from the body
3. 20-35 grams
4. NO
