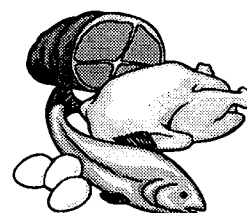
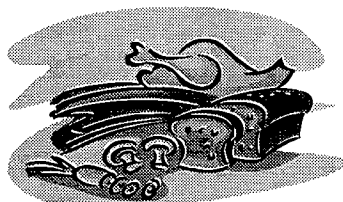
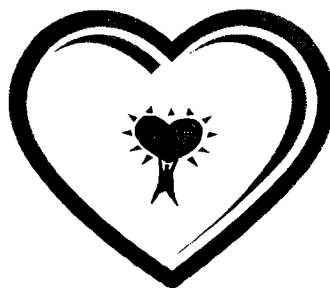
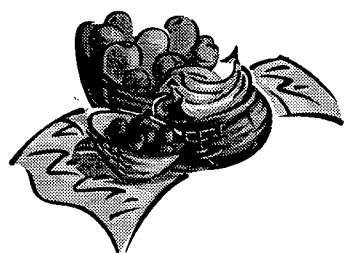


Spring 2001

Heart to Heart

During this session you will:

- ◆ *Review the risk factors for women and heart disease.*
- ◆ *Assess personal knowledge about the role of diet in heart disease and clarify dietary misconceptions.*
- ◆ *Explore heart-healthy flavoring ideas.*



Next Steps Follow-Up

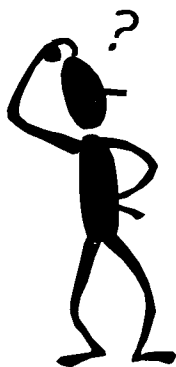
- ◆ What big or little success did you have over the holidays?
- ◆ What strategy or skill have you used during the past few months that you will continue to use?

Women and Heart Disease

Hear disease is not just a condition that affects the men in your life – father, husband, brother or son. It is also the leading cause of death in American women. Each year over 5 times as many women die of heart disease than of breast cancer.

Men vs. Women. The main difference between heart disease in men and women is the timetable. Until about age 60, men have a higher rate of heart attacks. But, after age 60, a woman's chance of experiencing a heart attack is equal to a man's.

- How much do you already know about heart disease?



What is heart disease? The term 'heart disease' describes several conditions that relate to the heart and blood vessels. Heart attacks and strokes may first come to mind. However, high blood pressure, chest pain (angina), poor circulation, and abnormal heartbeats are also heart disease.

The good news is that many of the dietary changes you are currently making as part of the WHI Dietary Study may also reduce your risk of heart disease.

This session offers some information about heart disease risk factors and explains the potential role of diet in reducing risk. The session also provides some low-fat flavoring ideas.

Heart Disease Risk Factors

The first step in protecting yourself from heart disease is to understand the factors that may place you at a higher risk.

- **What concerns do you have about heart disease?**

Scientists have identified certain factors that appear to point to increased risk of heart disease. These risk factors can be put into two categories: 1) factors that cannot be changed, and 2) factors that can be changed.

The risk factors that you cannot change are: family history of heart disease, age, sex, ethnicity and menopause.

The three major risk factors that you can do something about are: smoking, high blood pressure, and high blood cholesterol. Other risk factors, such as overweight, diabetes and physical inactivity, also are risk factors you have some control over.

Although growing older is a risk factor that cannot be changed, it is important to realize that a number of other risk factors (e.g., high blood cholesterol) can be reduced at any age.

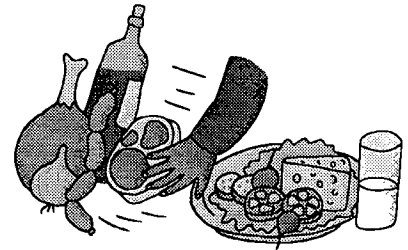
Any one risk factor will increase your chances of developing or worsening heart disease. However, the more risk factors you have, the more important it is for you to think about changes you could make.

If you have access to the internet, and would like more information about risk of heart attack or stroke, look at the following American Heart Association website*: www.americanheart.org/risk/quiz.html

Changing Habits.

We all know that changing habits isn't

easy. However, you have already begun to take an active role in your own health by participating in the WHI Dietary Study. So, let's take a closer look at the role diet may play in reducing the risk of heart disease.



(* The information in the above website is not an endorsement by WHI of the specific information.)

Role of Diet in Heart-Healthy Living

There is a lot of conflicting and sometimes confusing information about the role of diet in heart disease. The worksheet on page 10 shows some common statements made about the role of diet in heart disease.

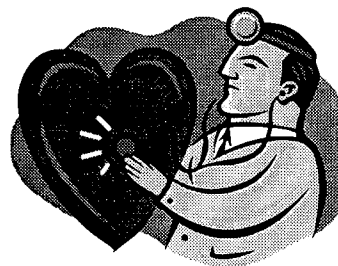
- What are your thoughts about these statements - true, false or maybe?

Fruits, Vegetables and Grains.

These foods reduce risk of heart disease in a number of different ways. They have a role in many of the following areas: reducing blood cholesterol levels and high blood pressure, helping maintain body weight, and helping to prevent fatty deposits from forming in the blood vessels. Researchers also believe that the minerals and phytochemicals in fruits and vegetables may help prevent strokes.

A B vitamin found in many vegetables and fruits lower blood levels of homocysteine, a risk factor for heart disease. In addition, the soluble fiber found in oats, legumes and some fruits helps lower LDL ('bad') cholesterol levels.

For more information about the potential role of these foods, go back and review the Spring and Fall 2000 session materials.



Fat.

Saturated fat. Eating less saturated fat is the best way to lower your LDL ('bad') cholesterol levels. Animal products, such as meat and dairy foods are the major sources of this fat. In addition, tropical fats, such as coconut and palm oil (found in some commercial foods) and cocoa butter (found in chocolate) also contain saturated fat.

Some great ways to reduce the amount of saturated fat in the diet are: select lower-fat dairy foods and cuts of meat, trim the fat off meat, and remove the skin from poultry. In addition, cut back on the use of high-fat commercial snacks and baked goods, such as chips, crackers and cookies.

Unsaturated fat. There are two types of unsaturated fats:

- ◆ Polyunsaturated fat found in some margarines and many cooking and salad oils, such as corn, soybean, and sunflower oils.
- ◆ Monounsaturated fat found in olive, canola and peanut oils.

Both of these types of unsaturated fats can modestly lower blood cholesterol levels. However, like all fat, they contain a lot of calories and can add to weight gain; so go easy.

Trans Fat. It has been established that trans fats can increase LDL ('bad') cholesterol and reduce HDL ('good') cholesterol levels. Trans fats are found in prepared foods containing partially hydrogenated vegetable oils (e.g., cookies, crackers and other baked goods). They are also found in commercially prepared fried foods and some margarines.

People were confused when news reports stated that margarine was not a good substitute for butter because it contained small amounts of trans fat. However, leading authorities continue to recommend margarine, particularly the tub or liquid types, because they contain unsaturated fats that help reduce LDL ('bad') cholesterol and very little trans fat. Butter, on the other hand, contains both saturated fat and cholesterol.

For more information about the different types of fat, review the Winter '98 session materials: *Not All Fats Are Created Equal*.

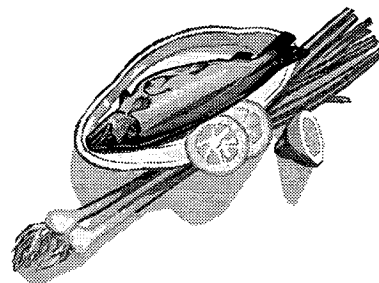
Fish. There is growing evidence that there is a type of unsaturated fat in fish that can protect the heart in several ways. For this reason, the American

Heart Association has recommended eating at least 2 servings of fish per week. Fattier fish, such as salmon or albacore tuna provide a good source of this type of unsaturated fat.

Dietary Cholesterol. Only animal foods contain dietary cholesterol. Foods high in dietary cholesterol tend to increase LDL ('bad') cholesterol levels, but to a lesser degree than saturated fat. Luckily, as you reduce the amount of total fat and saturated fat in your diet, you automatically reduce the amount of dietary cholesterol.

Here are a couple of important facts about dietary cholesterol in foods:

- ◆ Meat and poultry have similar amounts of dietary cholesterol. Trimming the fat from meat or removing the skin from poultry reduces the fat content in these foods, but does NOT change the dietary cholesterol content.
- ◆ Be aware of misleading food labels. Foods that are plant-based, such as Crisco® or peanut butter do not contain cholesterol so they can be labeled 'no cholesterol'. However, they are still very high in fat and calories.



Alcohol and Salt.

Alcohol. Over the last several years, a number of studies have reported that moderate drinkers are less likely to develop heart disease than those people who don't drink or drink too much. Small amounts of alcohol may help protect against heart disease by raising levels of HDL ('good') cholesterol.

On the other hand, alcohol use has also been linked to the following heart and cancer-related health problems:

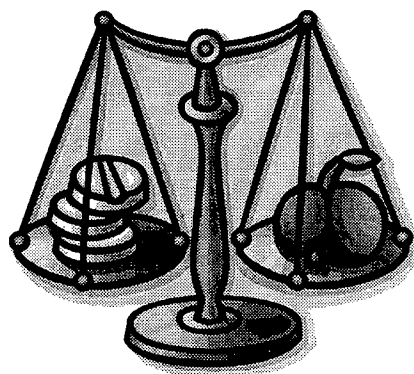
- ◆ increased blood triglycerides
- ◆ increased risk of high blood pressure and stroke
- ◆ increased risk of breast cancer

So, if you currently don't drink, protecting your heart is not a good reason to start. If you do drink, the recommendation is to limit your use to no more than one drink a day for women and no more than two for men.

Salt. There is a large amount of evidence indicating that a high intake of salt causes blood pressure to increase in about 30% of the American population. So, if you have high blood pressure, you may want to consider using less salt.

Antioxidant Supplements. You may have read that vitamins, especially Vitamin E and beta carotene, protect against heart disease. However, while eating foods rich in antioxidants (e.g., fruits and vegetables) has been shown to lower the risk of heart disease, there is not enough evidence to suggest that supplements can do the same.

For a summary of dietary changes that can help reduce the risk of heart disease, look at the recommendations on the next page.



Below are a list of recommendations from the American Heart Association. These recommendations are based on the best scientific evidence currently available. They provide a foundation for reaching and maintaining overall health.

What Can I Do to Reduce My Risk of Heart Disease?

Include Foods From All Major Food Groups:

- ◆ Eat a variety of fruits and vegetables and grain foods, including whole grains.
- ◆ Include fat-free and low-fat milk products, fish, legumes (beans), skinless poultry, and lean meats.

Maintain a Healthy Body Weight:

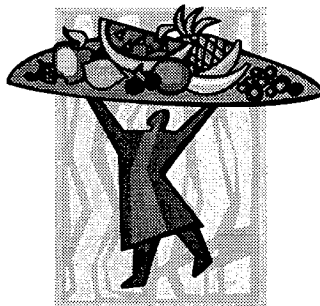
- ◆ Balance the number of calories you eat each day with the number you use.
- ◆ Maintain a level of physical activity that keeps you fit.

Maintain a Healthy Blood Cholesterol:

- ◆ Limit intake of foods high in saturated fat and cholesterol, such as full-fat milk products, fatty meats, tropical oils, partially hydrogenated vegetable oils, and egg yolks.
- ◆ Substitute grains and unsaturated fats from vegetables, fish, legumes (beans) and nuts.

Maintain a Healthy Blood Pressure:

- ◆ Emphasize vegetables, fruits and fat-free or low-fat dairy foods in your diet.
- ◆ Maintain a healthy body weight.
- ◆ Eat less salt.
- ◆ If you currently drink, have no more than one alcoholic drink per day.



New Flavor Adventures

According to consumer research when it comes to choosing one food over another, taste ranks first. Most people eat what they like.

Look at some of the flavoring ideas below and on the handout *Secrets of Flavoring with Less Fat* (pgs. 11-15). Some of the ideas may be new, while others may be old favorites.



- ◆ Use chicken or vegetable broths as a simple way to add flavor when cooking. If your chicken broth is not fat-free, consider storing the broth in the refrigerator. All the fat will congeal on top and can be easily removed.
- ◆ Use some of the new non-stick sprays, such as Lemon or Garlic PAM™ for flavorful cooking.
- ◆ Use low-fat or fat-free yogurt as a flavorful marinade, dip or dressing. Just season with herbs and spices, or add mustard.
- ◆ Use a flavored mustard, such as one made with wine, dill, honey or champagne. Experiment with them in your salad dressings. Spread them on fish or chicken before cooking.
- ◆ Use fruit juices, preserves, and just plain fruit to add remarkable flavor to all types of dishes. Fruit juice can be used as a marinade or a cooking liquid. Preserves can be spread on poultry before cooking and fruit can be added to salads.
- ◆ Cook with wine to provide excellent, no-fat flavor. Most of the alcohol will evaporate during cooking.

- What flavoring ideas appeal to you and why?
- How might you incorporate some of these flavoring ideas into your meals?

Next Steps

Hearth disease remains the leading cause of death for American women. But the message is clear: by taking an active role in

your own heart health, you can make a difference.

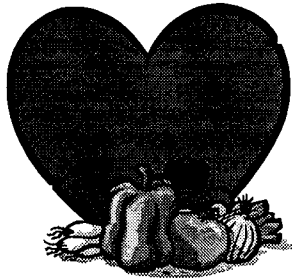


Questions for Thought

- ◆ What similarities do you see between your WHI nutrition goals and the American Heart Association recommendations?
- ◆ Based on what you've read or discussed in this session, what one recommendation or fact do you want to remember?

1) Maybe, 2) False, 3) False, 4) False, 5) False, 6) True, 7) True, 8) False, 9) False, 10) Maybe, 11) True

Worksheet Spring 1 Answers:



Diet and Heart Disease?

Think about the role that diet plays in heart disease. Look at the statements listed below and place a check in the box that you think best describes each statement. For answers, look at bottom of page 9.

Statement	True	False	Maybe
1. Vegetable oils, such as olive or canola oil, can help protect against heart disease.			
2. Butter is better to use than margarine.			
3. Cholesterol-rich foods are the biggest contributor to high blood cholesterol levels.			
4. Shortening, such as Crisco® is a better choice than butter to use in baking because it contains no cholesterol.			
5. Trimming fat takes all the cholesterol from meat – so does removing poultry skin.			
6. Increasing dietary fiber can help lower cholesterol.			
7. Eating fruits and vegetables can help reduce blood pressure.			
8. You can reduce the risk of heart disease by taking antioxidant supplements.			
9. Most of the sodium that Americans eat comes from the salt shaker at the kitchen table.			
10. Moderate drinking reduces the risk of heart disease for all adults.			
11. Eating fish reduces your risk of heart disease.			



Secrets of Flavoring with Less Fat

Flavoring Tips:

- To boost the flavor of spices or seeds, toast them in a dry no-stick skillet over medium heat, for about 3-5 minutes, shaking the skillet often. This helps release the essential oils that give these items their flavor.
- Marinades and spice rubs provide a variety of flavorful combinations for the low-fat cook. (Look at pages 12-15 for ideas.)
- Use chicken, vegetable or ham bouillon or broth or stock to add flavor without fat. Try it in mashed potatoes instead of butter or milk.
- Use no-fat sour cream to add creaminess to a sauce. Unlike the full-fat version, the no-fat sour cream will not break down when it is heated.
- Add lemon zest to rice, barley and salads to bring flavors into sharper focus.
- Consider using some lower-fat commercial soups to add a flavorful sauce to a mixed dish (i.e., Healthy Choice™ soups and Campbells' Healthy Request™ soups).

Tips for Marinades:

- After mixing marinade, set aside a portion to use for basting. Pour remainder into a glass dish just big enough to hold the meat or fish. Foods do not need to be completely covered in the marinade, but the meat, poultry or fish should be turned several times to guarantee even flavoring.
- Depending on intensity of flavor you want, marinate fish 30 minutes to 1 hour; chicken 2 to 8 hours; red meat usually overnight.
- Do not marinate for more than 24 hours because the food will become mushy.
- Marinate meat, poultry and seafood in the refrigerator, never at room temperature.
- Drain or blot excess marinade from food before broiling or grilling, because wet food tends to steam rather than brown.
- Do not contaminate cooked food with leftover marinade. Always place the cooked food on a clean platter.
- Discard all leftover marinade. Never use marinade that has been in contact with raw meat.

MARINADES

Teriyaki Marinade:

1/2 cup orange juice
3 Tb soy sauce
2 Tb dark brown sugar
1 tsp crushed fresh garlic
3/4 tsp ground ginger

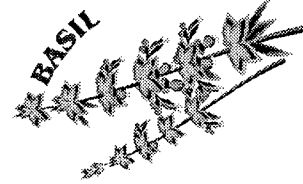
Makes 3/4 cup. Combine all ingredients in a small bowl and stir well to mix.



Lemon-Herb Marinade:

1/4 cup lemon juice
2 Tb dark brown sugar
2 tsp crushed fresh garlic
2 tsp dried oregano, rosemary or thyme
1 tsp ground black pepper
1/2 tsp salt

Makes 3/8 cup. Combine all ingredients in a small bowl and stir well to mix.



India Spice Marinade:

2 tsp cumin seeds
1 tsp mustard seeds
1 Tb paprika
1/2 tsp cayenne
1/2 tsp salt
1/2 tsp turmeric
1/2 cup nonfat plain yogurt
2 Tb fresh lime juice
1 small onion, chopped
4 cloves garlic, minced
1 Tb finely chopped fresh ginger

1. In a small dry skillet, toast cumin and mustard seeds over medium heat, stirring constantly, until fragrant, about 2 minutes. Transfer to a spice grinder or mortar, pestle, and grind to a fine powder. Add paprika, cayenne, salt and turmeric.

2. In a blender or food processor, combine yogurt, lime juice, onions, garlic and ginger. Blend until smooth. Add spices and blend to combine.

Makes about 1-1/3 cups, enough to marinate 2 pounds of boneless chicken or fish fillets.

RUBS

One of the easiest ways to increase the flavor of meat while cutting back on fat is to rub the surface with spices or herbs. Rubs can be put on dry, though adding a teaspoon of water or broth will help them spread more evenly. Always use fresh herbs, unless otherwise indicated.

Cajun Spice Rub:

- 1 Tb paprika
- 1 tsp garlic powder
- 1 tsp onion powder
- 1/2 tsp dried thyme
- 1/2 tsp dried oregano
- 1/8 tsp ground black pepper
- 1/8 tsp ground red pepper

Mix together. Makes about 2-1/2 tablespoons rub.

Mexican Spice Rub:

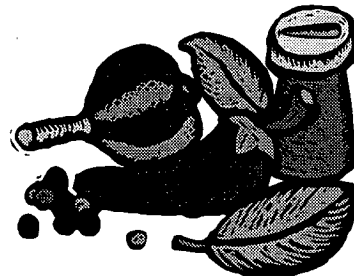
- 1 Tb chili powder
- 1 Tb fresh chopped cilantro
- 2 cloves garlic, minced
- 1/2 tsp ground cumin
- 1/8 tsp ground red pepper

Mix together. Makes about 2-1/2 tablespoons rub.

Thai Spice Rub:

- 2 Tb chopped fresh lemongrass
- 1 Tb grated fresh ginger
- 2 cloves garlic, minced
- 1/8 tsp ground red pepper

Mix together. Makes about 2-1/2 tablespoons rub.



Moroccan Spice Rub:

- 1 Tb chopped fresh mint
- 2 cloves garlic, minced
- 2 tsp grated fresh ginger
- 1/2 tsp ground cinnamon
- 1/2 tsp ground cumin

Mix together. Makes about 2-1/2 tablespoons rub.

Spicy Tex-Mex Rub:

- 1 Tb chili powder
- 1 Tb dark brown sugar
- 2 tsp lemon pepper
- 1 tsp ground cumin
- 1/2 tsp garlic powder
- 1/4 tsp salt

Mix together. Makes about 4 tablespoons rub.

Rosemary Rub:

2 Tb dried rosemary
1 Tb dried, grated lemon rind
1 Tb light brown sugar
3/4 tsp coarsely ground pepper
3/4 tsp garlic powder
1/4 tsp salt
1 Tb prepared mustard

Combine all ingredients, except mustard in a small bowl and mix well. Add the mustard, and stir until mixture forms a thick paste. Makes about 4 tablespoons rub.

Jamaican Jerk Rub:

1/4 cup ground allspice
1 Tb ground cinnamon
1 tsp freshly ground nutmeg
1 tsp dried thyme
1 bunch scallions, thinly sliced
2 cloves garlic, peeled
2 habanero or Scotch bonnet chile peppers, seeds and membrane removed*
2 Tb dark rum
2 Tb orange juice
1 tsp salt
freshly ground black pepper to taste

In a small skillet, toast allspice, cinnamon, nutmeg and thyme over medium-low heat, stirring frequently, for 3 to 5 minutes, or until fragrant. Transfer to blender or food processor. Add scallions, garlic, peppers, rum, orange juice, salt and black pepper; blend to a smooth paste.

Makes about 1/2 cup rub for 3 pounds of bone-in chicken.

*Note: Habanero or Scotch bonnet chiles are extremely hot. Wash your hands thoroughly after working with them and be careful not to touch your eyes.



French Herb Crust:

3 Tb chopped fresh parsley
1 Tb chopped fresh chives
2 tsp chopped fresh thyme
2 cloves garlic, minced
2 tsp grated orange rind

Mix together. Makes about 5 tablespoons.

Greek Herb Crust:

2 Tb chopped fresh parsley
1 Tb chopped fresh oregano
1 Tb grated lemon rind
2 cloves garlic, minced

Mix together. Makes about 4 tablespoons.

Italian Herb Crust:

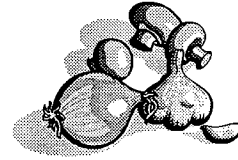
3 Tb chopped fresh parsley
2 Tb chopped fresh basil
2 cloves garlic, minced
2 tsp grated lemon rind

Mix together. Makes about 5-1/2 tablespoons.

Traditional Herb Crust:

3 Tb chopped fresh parsley
1-1/2 Tb chopped fresh rosemary
2 cloves garlic, minced

Mix together. Makes about 3-1/2 tablespoons.



Other Sample Combinations:

These ideas may inspire you to create your own blends.

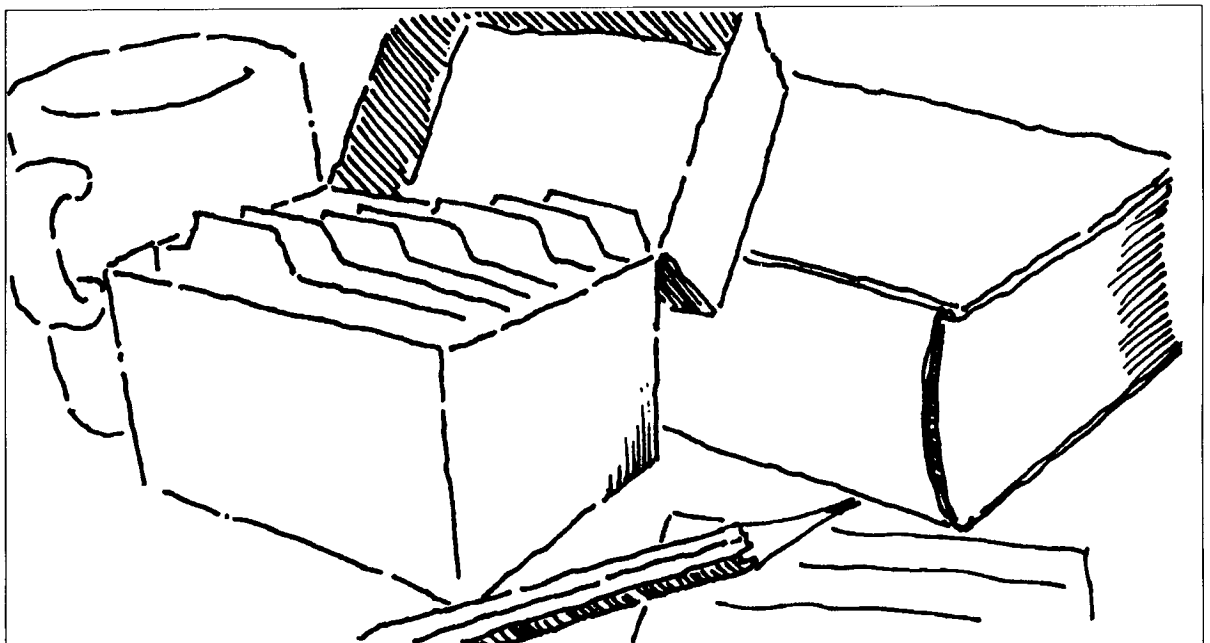
- Orange juice, tomato puree, honey, grated orange peel, minced garlic, chopped thyme and ground black pepper.
- Lemon juice, minced garlic, chopped oregano and snipped chives.
- Yogurt, chopped mint, minced garlic and hot pepper sauce.
- White wine vinegar, chopped basil, minced shallots and ground black pepper.
- Lime juice, yogurt, curry powder and minced garlic.
- Buttermilk, ground cumin, ground ginger, turmeric, chopped coriander and minced garlic.
- Chicken stock, orange juice, soy sauce, grated ginger and five-spice powder.



Spring 2001

Recipes

- ◆ *Fat-Free "Pesto"*
- ◆ *Unlikely Chicken*
- ◆ *Salmon Cooked in Foil*



Fat-Free "Pesto"

2 cups fresh basil leaves, stems removed (packed tightly)
1/2 cup fat-free salad dressing (the vinaigrette type,
not the creamy type)
freshly ground pepper to taste

Put basil and salad dressing into food processor and process until smooth. Season with pepper.

Makes 1 cup, about 8 (2 Tb) servings

Fat: 0 grams

Recipe from Low-Fat Living for Real People, Linda Levy and Francine Grabowski, M.S., R.D.

Unlikely Chicken

This recipe combines three no-fat flavor enhancers: yogurt, fruit preserves, and mustard. Put them all together, and they look rather--ahem--strange. Just goes to show that you can't always judge a recipe by reading it! This is good hot or cold, and kids love it.

4 small (4 ounces) halves chicken breast, boneless and skinless
1/3 cup fat-free plain yogurt
1/3 cup apricot or raspberry all-fruit preserves
1 tablespoon Dijon mustard

Preheat oven to 350°F.

Rinse chicken breasts in cold water; pat dry with paper towel. Place in a small, shallow baking dish in a single layer. Combine yogurt, preserves, and mustard, spread over the chicken breasts, and bake uncovered for 45 minutes.

Makes 4 servings

Fat: 3 grams

Recipe from Low-Fat Living for Real People, Linda Levy and Francine Grabowski, M.S., R.D.

Salmon Cooked in Foil

Cooking in foil holds in juices and has the added advantage of leaving you with a pan that needs little or no scrubbing.

1 pound fresh salmon fillet

1 scallion, chopped

**4 pieces sun-dried tomatoes that come marinated in olive oil;
drained well and blotted with paper towels, then snipped in strips**

**1 tablespoon fresh tarragon (or other herb of your choice), snipped
in small pieces**

1/4 cup dry white wine

freshly ground pepper to taste

heavy aluminum foil, large enough to make an envelope around fish

Preheat oven to 450°F.

Lay salmon on foil. Sprinkle with scallion, sun-dried tomatoes, and tarragon (or other herb). Grind fresh pepper over all. Carefully pour wine over fish, seal aluminum pouch, lay in ovenproof dish and bake for 25 minutes.

Makes 4 servings

Fat: 7 grams

Recipe from Low-Fat Living for Real People, Linda Levy and Francine Grabowski, M.S., R.D.