

Cooking with Less...

In the United States, **More is Better!** seems to be the status quo. But for years, we've known that overindulgence in foods high in non-nutritive value and high in calories may lead to chronic health problems. Despite being a country that is preoccupied with body image and weight loss, obesity continues to rise. Whether you're faced with losing weight, diabetes, or heart disease, or just want to adopt a healthy diet, cooking with less...sugar, fat, or sodium, is important.

Why consume less sugar, fat, and sodium? Chronic disease develops in response to a variety of risk factors, including genetics, physical activity, and smoking. But according to the Kentucky Department for Public Health, four of the top six leading causes of death are diet related. Diet influences the development of many chronic diseases, including heart disease, some types of cancer, stroke, and diabetes.

With well-documented research supporting the relationships between fat and heart disease, sugar and diabetes, sodium and hypertension, and fiber and some types of cancer, consuming less...sugar, fat, and sodium, makes sense. Here are some guidelines for reducing these three ingredients without sacrificing quality.

Sugar. Sugar is the number one additive in the United States. The United States Department of Agriculture consumption figures show we went from two pounds of sugar per year per person in 1790 to 140 pounds of sugar in the 1990s. These figures include waste. Nutritive sweeteners are carbohydrates, which supply the body a source of energy.

One teaspoon of sugar = 4 grams of carbohydrate and 15 calories.

Nutritive sweeteners include brown sugar, corn syrup, corn sweetener, dextrose, fructose, fruit juice concentrate, glucose, high fructose corn syrup, honey, invert sugar, lactose, malt sugar, maltose, maple syrup, molasses, raw sugar, sucrose, sugar alcohols, and turbinado sugar.

Follow these guidelines when baking with sugar:

- ◆ Use ½ cup per cup of flour in cakes.
- ◆ Use 1 Tablespoon sugar per cup of flour in muffins and quick breads.
- ◆ Use 1 teaspoon sugar per cup of flour in yeast breads.
- ◆ If you reduce the amount of sugar in a recipe adding a small amount of vanilla, cinnamon, or nutmeg can enhance the sweet flavor.



Fat. Fat is a concentrated source of energy that offers about twice the calories ounce-for-ounce of either protein or carbohydrates. It is generally recommended that adults consume no more than 30% of total calories from fat.

Besides energy, fats are used for energy storage, organ insulation, and transporting the fat-soluble vitamins A, D, E, and K. Fats also add flavor and texture in foods, giving us a feeling of fullness after eating.

Follow these guidelines when cooking with fat:

- ◆ 1 to 2 Tablespoons per cup of flour is the minimum amount of fat needed in quick breads.
- ◆ Pureed fruits such as applesauce or prune paste can replace fat. Substitute equal amounts up to ½ cup total.
- ◆ English muffins and French bread can be made without fat.
- ◆ Substitute low fat or skim milk in all recipes.

Sodium. Sodium is an important mineral to the body. It helps keep body fluids in balance; helps the body to absorb certain nutrients; and also aids in muscle performance and sending nerve messages.

Sodium and salt are mistakenly thought to be the same ingredient. Actually, sodium is a mineral while salt is a naturally-occurring chemical compound made up of 40% sodium and 60% chloride. Salt is the major source of sodium in the diet.



Follow these guidelines when using salt in recipes:

- ◆ Use ¼ teaspoon salt per cup of flour in yeast breads
- ◆ Use half the salt in other baked products.
- ◆ Reduce or omit salt when foods such as cheese, canned soup, canned vegetables, ham or other cured meats are also in the recipe.
- ◆ Omit salt when cooking pasta, rice, or hot cereals.
- ◆ Use herb or vegetable powders in place of half of seasoned salts.

Ingredient Substitution. Beyond reducing the amount of an ingredient in the diet, you may opt to make an ingredient substitution. Non-nutritive sweeteners or sugar substitutes are being used more and more as our dietary habits change and the quality of sweeteners improve. Capitalize on the non-nutritive sweeteners. The many sweeteners on the market allow you to use recipes and keep the calories down to a minimum.

Granular products pour and measure just like sugar. Liquid products 10 drops = 1 teaspoon of sugar; 20 drops = 1 packet of non-nutritive sweetener = 2 teaspoons of sugar. Low calories brown sugar products are also available. Other store and name brands are available besides the ones listed. The label will provide you with the number of calories per serving.

Saccharin: Instant Necta Sweet[®], Hermestas Originals[®], Sweet 'n' Low[®], Sugar Twin[®]

Acesulfame K: Sunnette[®], Sweet One[®], DiabetiSweet[®]

Aspartame: Equal[®], Nutrasweet - The Original[®], Nutra Taste[®]

Sucralose: Splenda[®]

Remember Saccharin products lose their sweetness when heated over 104° F. Aspartame contains phenylalanine so it is a concern for individuals diagnosed with PKU (phenylketonuria) but is good for cooking and baking. At this time, Splenda® and DiabetiSweet® seem to give the best results when cooking and baking.

Fruit Substitutions. Beyond using processed sweeteners, nature has provided us with a wholesome sweetener, available in a variety of colors and delicious flavors in the way of fruit. Whereas sugar supplies added calories and no vitamins and minerals, fruit contains a rich supply while providing considerably fewer calories. Fruits also contribute fiber, which may reduce the risk of developing heart disease and some types of cancer.

When substituting fruit juices for milk or water in recipes that require baking, add ¼ to ½ teaspoon baking soda per cup of juice. Some suggested unsweetened fruit juices are apple, apricot, guava, grapefruit, lemon, lime, mango, orange, papaya, peach, pear, and pineapple.

Is there such a thing as healthy desserts? In the grand scheme of a healthy diet, desserts are normally portrayed as a nonessential luxury, eaten purely for pleasure. But with a little creativity, lighter desserts can allow you to have your cake, and eat it, too!

References:

- Barkie, K. **Sweet & Sugar Free**, St. Martin's Press: New York, 1982.
- Bastin, S. *Non-nutritive Sweeteners*, University of Kentucky Cooperative Extension Service, FCS-3-105, 2000.
- Buhr, D. **I Can't Believe This Has No Sugar Cookbook**, St Martin's Griffin: New York, 1997.
- Duyff, R. **The American Dietetic Association's Food & Nutrition Guide**, Chronimed Publishing: Minnesota, 1996.
- Food Talk E-mail Newsletter*, University of Nebraska Cooperative Extension in Lancaster County, <http://www.ianr.unl.edu/ianr/lanco/family/FoodTalk.htm>



Prepared by Sandra S. Bastin, Ph.D., R.D., L.D., Extension Specialist, Food and Nutrition

Educational programs of the Kentucky Cooperative Extension Service serve all people regardless of race, color, age, sex, religion, disability, or national origin.

Issued 12-2001; FN-SSB.157