Sweetening Without Sugar: Diabetic Living

Whether you are watching your weight or managing your diabetes or just trying to eat a balanced diet, one of the main ways to monitor your carbohydrate intake is to limit the amount of added sugars in your diet. There are several sugar substitutes available that can help you cut back on sugar intake.

Some sugar substitutes will not affect blood glucose levels and some may have a small effect. The following information is for educational purposes only. Mention of specific products does not constitute endorsement.

Sugar substitutes are grouped into two categories: non-nutritive sweeteners which provide no calories, and nutritive sweeteners which provide some calories.

All sugar substitutes on the market in the US are considered Generally Recognized as Safe (GRAS) or approved as food additives by the Food and Drug Administration. They are given an Acceptable Daily Intake (ADI) which is the amount a person can safely consume every day over a lifetime without appreciable risk. The ADI is determined by review of all available safety and toxicological date on individual food additives.

Included in this issue of A Matter of Health is information for choosing wisely when using sugar substitutes because there is a difference; tips for retirement saving because we all hope to retire someday, and the time to prepare for retirement is now. Don’t forget to add a little exercise into your daily routine because its effects are beyond physical; and lastly, try the diabetic-friendly bread pudding recipe using a sugar substitute.

If you have any questions, please feel free to contact me at 870-779-3609, chaley@uaex.edu, or visit Room 215 in the Miller County Courthouse, 400 Laurel, Texarkana, Arkansas.

Sincerely,
Carla Haley-Hadley
County Extension Agent-Interim Staff Chair

Because One Day You’re Going to Want to Retire

You only get one shot at saving for retirement, as in now. It might not feel like it, but the future is hurtling towards us at the speed of time itself – and time can be a relentless thing. When it catches up with you, Social Security might be a thing of the past; pensions may be as extinct as dinosaurs; and you could very well live to 100 or beyond (with no income to speak of).

It’s a scary thing, that ticking clock. But time is also your biggest ally.

Thanks to the mathematic marvel that is compound interest, the abundance of retirement planning tools available to you, and your new found sense of financial realism, the future is now a thing that can be faced with confidence.

Continued on next page “Retire”
Let’s get started:
Contribute to your 401k at least to your employer’s match. If your employer matches any portion of your 401k contributions and you’re not maxing that option out, you are leaving free money on the table.

Don’t miss out on the benefits of compound interest. A 21 year old who saves $3,000 per year until age 65 at 8% growth will have $1,156,517, while someone who waits until age 28 to save the same amount will only have $657,948, even though the first person only put away $21,000 more.

How much will you need in order to retire? While it may be decades off, you can still get a ballpark idea of how much you’ll need using your current lifestyle expenses as a starting point.

Once you’ve set yourself up with your employer-sponsored plan (if you have one) and are maxing out your contributions, consider starting an IRA or Roth IRA to save even more.

If retirement is still a future dream for you, pick an age that you’d like to retire, then figure out how much you need to save each month from now until then to get there. Can’t find that much money? Adjust your financial planning accordingly.

Don’t wait to see if there is money “left over” each month; treat saving as another bill to make sure it happens.

Substituting sugar alternatives in favorite desserts can be frustrating because no artificial sweetener has all the properties of sugar. Sugar not only sweetens a food but also provides volume, texture, color, and moistness in many recipes. Many sugar substitutes on the market cannot be substituted for sugar in equivalent amounts because they are from 200 to 13,000 times sweeter than sugar. Even granulated versions of the sugar substitutes cannot provide the same volume, texture and moistness of regular sugar.

Sugar substitutes work best in foods that rely on other ingredients for volume, moistness or texture. Alternative sweeteners substitute well in recipes for beverages, puddings, salad dressings, sauces, pies, and frozen desserts. Using sugar substitutes in cakes and cookies is usually less successful. Also some sugar substitutes tend to taste better in recipes with acidic ingredients like fruit or yogurt. All sugar substitutes are sweeter when they are combined with other sweeteners. For example, one packet of saccharin and one packet of aspartame in a recipe will be sweeter than two packets of aspartame.

Non-Nutritive Sweeteners
Non-nutritive sweeteners are also known as intense sweeteners and are calorie-free. They are so intensely sweet that only a very small amount is needed to sweeten food. Examples include:

- Saccharin
- Aspartame
- Acesulfame-K
- Sucralose
- Neotame

Using Substitutes in Recipes
Manufacturers of sugar substitutes recommend using recipes that have been specially formulated for their product. All of the major sugar substitute manufacturers have websites with recipes online. Most will send recipe booklets upon request.

If you like to experiment with recipes, substituting in dessert recipes can be fun. However, if you are not into experimentation, using recipes from a diabetic or “lite” cookbook may be more reliable. Even recipes from a published cookbook may not meet your standards for taste and eye appeal.

While sugar-free desserts are usually lower in sugar and calories, they are not usually something you can afford to eat every day. They may still be high in total carbohydrates.

For more information and recipes for individual sweeteners go to the following websites:

http://truvia.com/
## Non-Nutritive Artificial Sweeteners

<table>
<thead>
<tr>
<th>Sweetener</th>
<th>Calories</th>
<th>Sweetness</th>
<th>Metabolic Effects</th>
<th>Stability</th>
<th>Functions</th>
<th>Taste Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saccharin</td>
<td>0</td>
<td>300 times</td>
<td>Excreted unchanged</td>
<td>Stable under high temps (302°F)</td>
<td>Soft Drinks, other beverages and foods</td>
<td>Tastes bitter</td>
</tr>
<tr>
<td>- Sweet ’N Low®</td>
<td></td>
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<tr>
<td>- Weight Watchers®</td>
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<tr>
<td>- Sucaryl®</td>
<td></td>
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<tr>
<td>- Sugar Twin®</td>
<td></td>
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<tr>
<td>- Adolph’s®</td>
<td></td>
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<tr>
<td>- Sweet 10®</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Aspartame</td>
<td>0</td>
<td>200 times</td>
<td>Metabolized aspartic acid, phenylalanine and methanol *Caution for PKU</td>
<td>Loses taste after long storage periods</td>
<td>Varies on type of Aspartame used</td>
<td>Does not taste bitter</td>
</tr>
<tr>
<td>- Equal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Nutrasweet</td>
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<tr>
<td>- Nutrataste</td>
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<tr>
<td>- InstaSweet</td>
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<tr>
<td>Acesulfame-K</td>
<td>0</td>
<td>200 times</td>
<td>Excreted unchanged</td>
<td>Stable in cooler environments</td>
<td>Table top sweetener, baking, cooking</td>
<td>Slight aftertaste</td>
</tr>
<tr>
<td>- SweetOne</td>
<td></td>
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<tr>
<td>- Sweet-N-Safe</td>
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<tr>
<td>- Sunette</td>
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</tr>
<tr>
<td>Sucralose</td>
<td>0</td>
<td>600 times</td>
<td>Not metabolized or stored in body</td>
<td>Highly stable</td>
<td>Baking, cooking with acidic ingredient</td>
<td>Lactose may be present in small amounts but should not cause problems in lactose-intolerant individuals</td>
</tr>
<tr>
<td>- Splenda</td>
<td></td>
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</tr>
<tr>
<td>Neotame</td>
<td>0</td>
<td>700-13,000 times</td>
<td>Partially absorbed, rapidly metabolized completely eliminated in body wastes and does not collect in the body</td>
<td>Stable</td>
<td>Substitute in baking cup-for-cup</td>
<td>No current health concerns or possibility of reaching toxic levels</td>
</tr>
</tbody>
</table>

## Nutritive (Sugar Alcohols)

<table>
<thead>
<tr>
<th>Sweetener</th>
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<th>Functions</th>
<th>Taste Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylo Sweet</td>
<td>10 calories per teaspoon</td>
<td>Like Sugar</td>
<td>Low glycemic index; may have GI discomfort gas and result in laxative</td>
<td>Stable with exception in yeast breads</td>
<td>Baking, with exception of yeast and crystallized candies</td>
<td>Similar taste to sugar</td>
</tr>
<tr>
<td>Zsweet</td>
<td>0</td>
<td>Like sugar</td>
<td>Does not raise blood glucose. Highly digestible-does not cause a laxative effect</td>
<td>Stable</td>
<td>Baking (use for ½ of sugar)</td>
<td>Similar taste and texture of sugar</td>
</tr>
<tr>
<td>Stevia</td>
<td>0</td>
<td>Like sugar</td>
<td>No effect on blood glucose levels</td>
<td>Stable</td>
<td>Cooking/Baking, general sweetener</td>
<td>Similar to sugar</td>
</tr>
</tbody>
</table>
Because One Day You’re Going to Want to Retire Continued

Will you be eligible for Social Security? Will you receive an inheritance someday? Are you a veteran? All of these and other income sources could potentially aid in your retirement plans; just make sure you don’t rely on them alone.

When you establish retirement accounts such as a 401k or IRA, you are asked to name a beneficiary – someone who would receive the account if something should happen to you. Make sure that the person you choose is still the person you want to receive the account as you go through life’s changes.

Proper diversification and asset allocation will help to secure long-term growth for your savings. Revisit and rebalance at least annually.

A retirement plan is an ever-changing roadmap and should be adjusted for any major life changes or, at the very least, annually to account for current savings amounts, rates, etc. Make adjustments for any shortfalls as they show up.

www.feedthepig.com

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Move More in Your Daily Life

Exercise doesn’t have to be an all-or-nothing proposition. You don’t have to spend hours in a gym or force yourself into monotonous or painful activities to experience physical & emotional benefits. Add just a little physical activity to your weekly routine. It can have a profound effect on your mental and emotional health. Whatever your age or fitness level – even if you’ve never exercised a day in your life – you can find simple, fun ways to add more movement into your life and start to feel better, look better, & enjoy life more.

Exercise moderately for 30 minutes, five times a week is one of the best things you can do for your physical and mental health. Can’t find 30 minutes in your busy schedule? That’s okay, two 15-minute workouts or three 10-minute workouts can be just as effective. If even that sounds like too much, don’t despair. Even just a little activity is better than none. Take a short walk on most days and gradually build up the length of your sessions. It takes about 4 weeks for an activity to become a habit so commit to maintaining your schedule for at least that long. As it becomes a habit, slowly add extra minutes or try different activities.

Forget “no pain, no gain.” Research has shown that mild to moderate activity is enough to change your life for the better. Moderate means that you breathe a little heavier than normal but are not out of breath and your body feels warmer as you move, but not overheated or very sweaty.

Exercise is good for more than just your body. We all know that it can help you control your appetite, lose weight, shed inches, and lower your risk for a variety of serious diseases, but the benefits don’t stop there. Exercise is as effective as antidepressant medication at relieving depression and boosting your mood. It can also help you to relieve stress and anxiety, improve your self-esteem, sleep better, and cope with life’s challenges in a healthy, positive way.

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Apple Raisin Bread Pudding

4 cups light white bread cubes (about 6 slices)
½ cup apple juice
1 medium apple, chopped
½ cup Splenda®
12 ounces fat-free evaporated skimmed milk
1 cup raisins
2 large eggs
1 ½ teaspoons cinnamon
Non-stick cooking spray

Preheat oven to 350°F. Spray an 11x7-inch baking dish with non-stick cooking spray.

Combine bread cubes, apple, and raisins in large bowl. Beat eggs in medium bowl. Stir in evaporated milk, apple juice, Splenda®, and cinnamon; mix well.

Pour egg mixture over bread mixture, pressing bread into egg mixture. Let stand for 10 minutes. Pour into baking dish. Bake for 40 to 45 minutes or until set and apples are tender. Serves 12.

½ cup = 112 calories, 4g protein, 1g fat, 22g carbohydrates, 35mg cholesterol, 120mg sodium, 1g fiber

From University of Illinois Extension, “Recipes for Diabetes”