



THE PLAIN DEALER

Fat substitute no magic potion

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My question concerns a product called Z-trim. It sounds like one of those "too good to be true" stories. Can you give me info on this product?

- L.G., Shaker Heights Well, you know the old saying: If it sounds too good to be true . . .

Z-trim is a fat substitute developed by none other than the U.S. Department of Agriculture and licensed to a company called FiberGel Technologies. It's made from corn bran, an agricultural byproduct. The bran is processed into microscopic fragments that absorb water to produce a smooth mouth feel similar to fat. A tablespoon contains no calories and 0.6 grams of fiber.

Z-Trim comes as a tasteless dry powder that can be mixed with water. One 8-ounce container makes 10 pounds of gel that can then be used in recipes. It's also packaged as a prepared gel, oddly called "Carb-Cutting Gel." Both are available directly from the company, along with chocolate chip and oatmeal cookies made with the product.

Prepared Z-trim or "Carb-Cutting Gel" can be used either to replace fat in some recipes or to dilute fat in commercial products such as butter, mayonnaise or cream cheese. For example, FiberGel recommends that you mix a cup of butter with one-fourth to one-half cup Z-trim. Because Z-trim has no calories, the resulting mix has one-fourth to one-third fewer calories, measure for measure (about 66 calories per tablespoon, as opposed to 100 calories in a tablespoon of natural butter). It becomes "light" butter, if you will.

Although Z-trim can be heated, it's unlikely to work well for frying in its pure form.

Z-trim is not unique. Another product, Oatrim, made from oats, was developed by George Inglett, the same USDA researcher who invented Z-Trim. Oatrim has been around longer. It is used in more commercial products and is available from a number of online sources. Oatrim has the benefit of being high in beta glucan, which is the element in oats that reduces blood cholesterol. It does supply some carbohydrate and calories. (See the accompanying Calorie Control Council Web link for other examples of fat replacers.)

Are fat replacers the answer to the obesity problem in the United States? Simplese, a protein-based fat replacement, has been around since 1988, and we aren't getting any thinner. A look at some of the recipes at the Z-Trim site provides a clue.

I compared the Z-Trim chocolate chip cookie recipe with the standard one found on the Nestle's Tollhouse chips bag. The Z-Trim recipe has 4 tablespoons less butter and ½ cup less flour and adds 3 tablespoons Z-trim. The recipe on the Tollhouse bag makes five dozen cookies. One Z-trim cookie, therefore, has about 10 fewer calories, 1 gram less fat and 1 gram less carbohydrate. Fiber contents are dead even, given the loss from the flour and the little bit added from the Z-trim. If you eat one cookie, it won't make a difference. If you eat five dozen cookies, you're in trouble either way.

As it says on the Web site: "When Z-Trim is used to lower calories in your food, and you do not exceed your current calorie intake, then you may eat what you want without fear of gaining weight." Well, certainly. That said, the product is natural and a good way to recycle otherwise wasted corn bran. And anything that

helps reduce the calorie density of the foods we eat is a step in the right direction.

One P.S. to the manufacturer: FiberGel could use some help from a qualified nutritionist. I would assume that the role of the product in weight management is key in the marketing strategy. But none of the recipes on the Web site included yields, nutritional information or comparison to a standard product.

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