

Cooley-Dickinson Hospital: Reducing Trans-Fat Products Served to Patients and Employees Creates Opportunity to Expand Sustainable Food Purchases

COOLEY DICKINSON HEALTH CARE
Member of DARTMOUTH-HITCHCOCK ALLIANCE

JA Rayder¹, DFS English², NS Braunstein, MS, RD¹

¹University of Massachusetts Amherst Dietetic Internship, ²Cooley Dickinson Hospital, Northampton, MA



Abstract

BACKGROUND: Trans-fat appears to be the most harmful of all fats. It causes an estimated 30,000 premature heart attack deaths each year in the United States. Trans fat increases low density lipoproteins and decreases high density lipoproteins increasing one's risk for cardiovascular disease. Trans fat can be difficult for consumers to avoid because 80 percent of the trans fat in the average diet comes from partially hydrogenated vegetable oils found in many baked, processed and deep-fried foods. It is recommended that one should consume no more than 1% of total calories from trans-fat. (<2g for a 2000 calorie diet). Cooley-Dickinson Hospital (CDH) is a 135 bed community hospital. CDH currently buys it's fresh produce from local farmers in it's endeavor to implement sustainable, local food choices. CDH is currently in the process of becoming a trans-fat free facility. Hospitals should be setting the example by eliminating trans-fat from their facilities to benefit the patient, it's employees and the community. **RESULTS:** Analysis of current products and new products showed that some but not all items are worth changing. To change to a trans-fat free pudding would result in a 90% increase in cost for that food item due to the trans-fat free pudding being sold in individual 5oz containers rather than the 10# cans. Another alternative was for CDH to make the pudding from a mix reducing the trans-fat and costs. Mixes could be made from milk from local dairy farmers to promote the use of local foods. Food items to be changed within reasonable budget restraints include grill oil, spaghetti sauce, shortening, fudge cookies and soft chocolate chip cookies. **CONCLUSION:** The costs to becoming a trans-fat free facility will remain relatively the same. Transferring to a trans-fat free menu may be hard to do at this present time as some items containing trans-fat do not yet have trans-fat free substitutes in the food service industry. Strides, however, are being made by the manufacturing companies to reduce the amount of trans fat in their products.

Objectives & Methods

OBJECTIVE

To reduce the use of trans-fat foods at Cooley Dickinson Hospital by identifying products containing trans-fat and choosing healthier trans-fat free substitutions within budget limitations.

METHODS

Nutrition Professional went through all hospital inventory to gather nutrition information about each product. This was done by manually going through kitchen, cafeteria, storeroom, refrigerators and freezers to find products containing trans-fat.

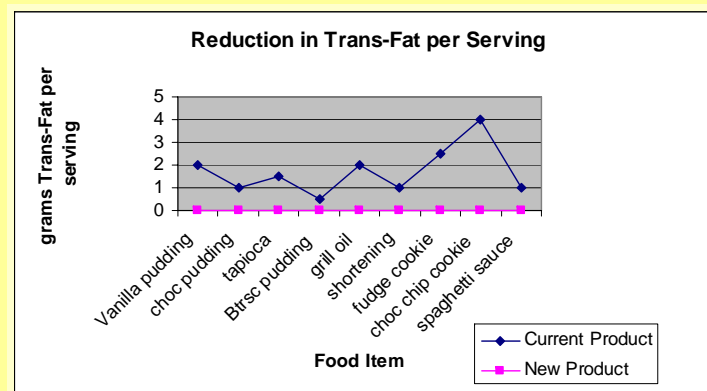
A list of all foods containing 0 grams trans-fat was given to CDH by its main food supplier. From this list, we generated substitutions for the foods containing trans-fat.

We generated a report through CDH's main food supplier containing our yearly costs for all items purchased. We then compared these costs and amounts purchased to the cost of the trans-fat free substitutions.

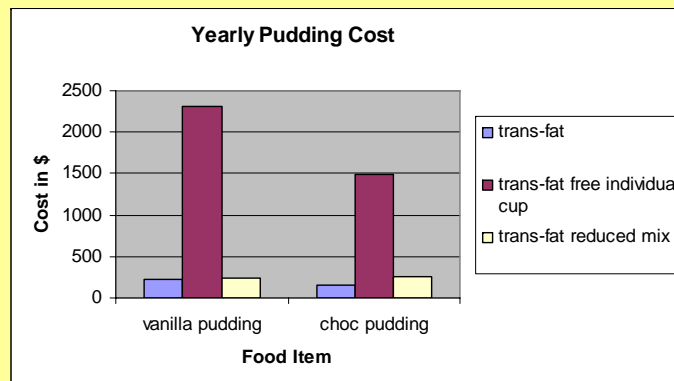
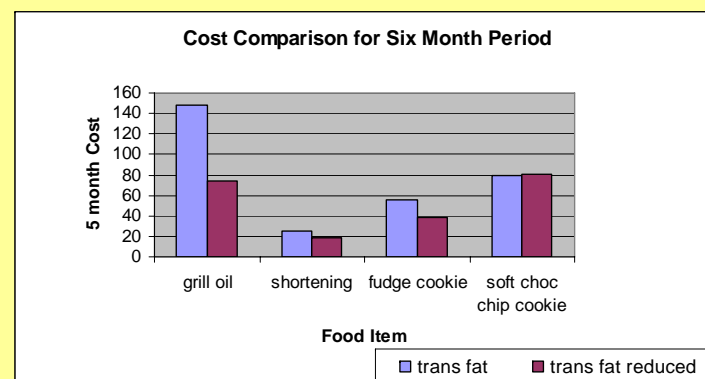
We then evaluated whether food item changes could be made based on our food budget.

Results

Product changes resulting in reduced trans-fat



Cost of trans vs. trans-fat free foods for past six months



Trans-fat free substitutions and projected yearly cost

Brand	Trans Fat Product	Yearly Cost	Brand	New Product	Projected Yearly Cost
US Food	Tapioca Pudding	\$658	Jello	Tapioca Pudding Mix	\$305
Flavor Fry	Pan and Grill Shortening	\$356	Harvest Value	Shortening, canola frying liquid	\$178
Richtex	All-Vegetable Shortening	\$75	Crisco	Shortening	\$51
Grandma's	Fudge chocolate Chip Cookie	\$137	Nabisco	Chocolate Chip Cookie	\$98
Famous Amos	Chocolate Chip Cookie	\$200	Nabisco	Oreo mini bite size	\$201
McCain	French Fry 3/8"	\$7,010	McCain	McCain signature regular fry	\$7,010
US Food	Vanilla Pudding	\$550	Jello	Vanilla Pudding Mix	\$235
			US Blue	Vanilla Pudding (Individual Cups)	\$5,536
US Food	Butterscotch Pudding	\$398	US Blue	Butterscotch Pudding Mix	\$151
			US Blue	Butterscotch Pudding (Individual Cups)	\$2,203
US Food	Chocolate Pudding	\$348	Jello	Chocolate Pudding Mix	\$249
			US Blue	Chocolate Pudding (Individual Cups)	\$3,571
				Total (individual cups option)	\$19,153
				Total (Recommended)	\$8,478
				Total	\$9,732

Currently finding substitutions for these products

Brand	Current Product	Amt Trans-fat/serving	Yearly Cost
Hilltop HR	hearth Blueberry Muffin Mix	1.5g per 1/3c	\$2129
Gold Medal	honey + Bran Muffin Mix	1.5g per 1/4c	\$110
Gold Medal	chocolate Brownie Mix	1g per 1/4c	\$291
Gold Medal	gingerbread Mix	1g per 35g	\$507
Krusteaz	easy Buttermilk Pancake Mix	0.5g per 1/2 c	\$1185
Continental	yellow Cake Mix	1g per 1/3 c	\$355
Continental	devil's Food Cake Mix	1g per 1/3c	\$201
El Pasado	aged cheddar cheese sauce	2g per 1/4 c	\$281
Chef-mate	chili con carne w/beans	1g per 1c	\$112
La Choy	chow mein noodles	1.5g per 1/2c	\$50
Rich's	1/2 sheet baked brownies w/nuts	"partially hydrogenated"	\$250
Pepperidge Farm	vanilla Cake	3.5g per 1/8 cake	\$16
Pepperidge Farm	apple dumpling	4g per 1 dumpling	\$42
Chef Pierre	chocolate cream pie	2.5g per 1/6 pie	\$208
Sara Lee	chocolate mint cream pie	"partially hydrogenated"	\$651
Chef Pierre	coconut custard	2.5g per 1/6 pie	\$50
Edwards	peanut butter pie	2g per 1/6 pie	\$18
Chef Pierre	strawberry cream pie	2.5g per 1/6 pie	\$187
Chef Pierre	lemon meringue pie	1.5g per 1/10 pie	118
Sara Lee	cheesecake berry cup	1g per cup	\$152
Sara Lee	cake, layer lemon cream	"partially hydrogenated"	\$154
Sara Lee	cake, banana full sheet	"partially hydrogenated"	\$114
Sara Lee	cake, full sheet carrot iced	"partially hydrogenated"	\$123

Summary

The process of becoming a trans-fat free facility may need to be performed as a long-term project as we wait for food manufacturers to offer more precise nutrition information and come up with trans-fat free products. Many of the pies that CDH has to offer have some trans-fat. One possibility to reduce the trans-fat and to increase the use of local entrepreneurs is to buy home-made pies from a local source.

CDH already carried the following trans-fat free substitution items in its effort to become a more healthful hospital facility:

- onion rings
- frying oil
- peanut butter cookies
- raisin oatmeal cookies
- sugar cookies
- pumpkin pie
- pecan pie

CDH will continue be aware of new trans-fat free options as they become available by the food manufacturers in its effort to become a trans-fat free facility.

The costs of becoming a trans-fat free facility are expected to remain approximately the same as the current costs.

Conclusions & Implications

- A reduction in trans-fat served at CDH may result in:
- ❖ healthier and happier patients and employees
 - ❖ possible reduction in pre-mature heart attacks related to trans-fat intake
 - ❖ Greater sense of pride in community for caring for health at higher standards