Butter vs. Margarine: The Greasy Debate
By Lily Knowlton

You’re at the great divide. On one side the fancy, bright-labeled margarines catch your eye. On the other, time-tested butter with its unparalleled taste calls out. I see it all the time, people standing in the grocery store staring at all the choices. They are all thinking the same thing. Toast’s tastiest companion isn’t good for you, right? But doesn’t margarine have something in it that isn’t good? You find yourself reading every label, scanning for health claims that might help you. Finally, you reach a verdict. You take the cholesterol-free, saturated fat-free margarine thinking that you’ll sacrifice just a bit on taste to give your heart a break. But was that a smart choice? What if you knew that your heart-healthy spread wasn’t healthy after all?

Why Margarine Was Made
For years, doctors and scientists have warned about the dangers of saturated fats and cholesterol in butter. They developed margarine as the perfect replacement. It looked the same, tasted almost the same, and contained none of the unhealthy cholesterol and saturated fat.

Consumption of Butter vs. Margarine
Consumption of margarine in the US increased dramatically in the 1940’s, while butter was nearly banished from breakfast tables. As shown in the graph, margarine began to outsell butter in the late 1950’s and while the gap has grown smaller, margarine sales still top those of butter (1).

Some of these margarines are not healthier than butter, in fact, many are much worse for your health (2). Just what makes these imitation butters bad? They are called “trans fats” or “trans fatty acids” and many of the so-called “healthy” butter replacements are loaded with them.
What Are Trans Fats?

Trans fats are a chemically altered type of fat. They are created when liquid vegetable oils are made into a solid through the process of hydrogenation. Ingredient labels list them as “partially hydrogenated oils”. They are mostly found in packaged foods like cakes, cookies, crackers, candy, bread, and of course, margarine.

How Are Trans Fats and Margarines Made?

As mentioned above, trans fats are made through hydrogenation. This was developed early in the 20th century, as a way to make a cheap and readily available butter replacement when butter supplies were low. Liquid vegetable oils go into a giant “hydrogenation tank” where hydrogen gas is added at high pressures and temperatures. This twists the structure of the fat into a “trans” form, one that is rarely found in nature. What comes out of the hydrogenation tank is very different from what went in. What started as liquid vegetable oil comes out as a grey, lumpy “partially hydrogenated” oil (3).

Clearly, no one wants to spread a grey, tasteless substance on toast, so the fat goes under further changes. It must be bleached white and then deodorized to remove foul smells from being super-heated (3). Finally, artificial color and flavors are added to mimic the appearance and taste of butter (3). Pretty complicated process, isn’t it? After all of this, many margarines still claim to be all-natural.

How Butter is Made

In contrast, making butter is very simple. Butter has been made for thousands of years, ever since animals were milked. You simply milk the cow, skim off the rich cream and mix it until it solidifies. You can even make it in your own kitchen by shaking heavy cream in a jar!

Butter Isn’t All Bad

Although butter contains saturated fat and cholesterol, it also contains many healthy nutrients. Butter is an excellent source of the fat-soluble vitamins A, D, E, and K. Vitamins must be fortified in margarines because the naturally occurring nutrients are destroyed during processing (3).
Unless your kitchen is a science lab, you would never be able to make margarine.

**The Confusing Research - Simplified**

So why did you ban butter from your bread basket in the first place? Butter naturally contains saturated fat and cholesterol, both of which are said to raise the risk of getting heart disease. Clearly, this combo does not make butter sound like a heart healthy hero. Margarine sounds much better with no cholesterol and little or no saturated fat. But what if you knew that the *trans* fats in margarine were worse?

Now, here is where it gets confusing, even for nutritionists. Butter contains saturated fat. Margarine contains *trans* fat (2). Which one is worse? Studies initially showed that margarines were healthier than butter because they contain less saturated fat. Saturated fat was found to raise cholesterol levels, which is a risk factor for developing heart disease (4). However, current research has found discrepancies in past studies. The problem was that older research did not differentiate between hydrogenated and saturated fats (5). Thus, many of the heart-unhealthy findings about saturated fats were mixed with the effects of *trans* fats. Finally, newer research has found that when taken separately, *trans* fats are linked much more closely to heart disease than saturated fats (2-11).

**Why Are Trans Fats Bad?**

Both saturated fats and *trans* fats affect our cholesterol levels. There are two types of cholesterol; one is “good” because it keeps arteries clean, the other is “bad” because it tends to collect in arteries. Having said that, it is best to keep the good cholesterol high and the bad cholesterol low.

*Trans* fats and saturated fats raise the “bad” cholesterol (10). However, *trans* fats are much worse because they raise the “bad” cholesterol significantly more than saturated fats. They also *lower* the “good” cholesterol. Saturated fats, on the other hand actually *raise* the

Eating just **4 teaspoons** of margarine a day makes you **66%** more likely to suffer from heart disease (8).
Therefore, the slight rise in “bad” cholesterol from eating butter is counterbalanced by a rise in the “good” stuff. Trans fats result in a very unhealthy ratio of cholesterol with too little of the “good” kind and too much of the “bad” one (10). The negative effect of trans fats on cholesterol levels is said to be double that of saturated fats (11).

Interestingly, margarine consumption has been on the rise since the 1940’s while butter consumption has been declining (1). At the same time, rates of heart disease have skyrocketed (12). A 21-year study found that while margarine consumption was strongly linked to heart disease, butter consumption did not correlate with the incidence of heart disease (9). Although trans fats are not the sole cause of heart disease, there is an undeniable link between the two (2-11).

**Which Spread Is Right For You**

No matter what spread you choose, it is important to keep the amount of fat in your diet to about 30% of total calories. Saturated fat should be kept to 10% and trans fats should be virtually eliminated (13). In choosing between margarine and butter, keep in mind that no amount of trans fat is healthy while a small amount of saturated fat can still be made part of a well-balanced diet.

Some margarines advertise being “trans fat-free” or having “0 grams trans fat”, but the FDA allows products to state this even if there is up to 0.5 grams trans fat per serving (2). To be completely sure that a product is trans fat-free, you must read the nutrition label and choose one that has no “partially hydrogenated oil” listed in the ingredients. Ironically, when margarine is free of trans fats, it must contain saturated fats to keep it solid. Also, remember that margarine does not naturally taste like butter, it relies on synthetic chemicals for flavor. The effect of these chemicals on our bodies is still unknown.

Keep in mind that margarine is a highly processed food. Butter, on the other hand, can be made at home. It seems that somewhere in this mess common sense was greased over. Nutritionists always say that whole, unprocessed foods are better for us, but butter is the most unfortunate exception to the rule.