

# About Soap from Tallow

## **This short article is only about soap.**

As you know, we, well mostly Sarah, have been making soap from beef tallow. Sarah will make a batch or two on each of the Lard Rendering days (February 9 and 23). There should be enough so that each of you who wishes can take some bars home.

## **I will explain a little about making soap.**

Soap is made by the combination of grease and lye (and some water). The grease, technically a triglyceride can be either animal fat or vegetable oil. The lye, a caustic chemical, can be either sodium hydroxide or potassium hydroxide or a mixture of both. When those ingredients are combined in the correct way, saponification (soap making) results. The end products of saponification are soap (chemically a salt) with glycerol.

Animal fats were the original material used in soap making. Oils have been substituted over the last century for several reasons but initially so manufacturers could use waste material from other processes. Since then many special and no doubt beneficial oils have been developed for special soaps. Boutique soaps are almost always made with vegetable oils. I am not criticizing boutique soaps. I really don't know anything about them.

Our grandmothers (or great grandmothers) made their soap with animal fat. They got their lye originally from wood fire ashes. That lye is mostly potassium hydroxide (Potash) with some sodium hydroxide. The potassium tends to make softer soap and the sodium tends to make harder soap. Because grandma had no way of knowing the relative amounts of each in a pail of wood ash, she added table salt (sodium chloride) to provide additional sodium for hardening. Basically this meant that grandma's soap could vary from batch to batch and could be pretty caustic at times. Some of us remember our mother's using a drain cleaner "Lewis Lye" in place of wood ashes. Lewis Lye is sodium hydroxide. That worked, but using a product intended as a drain cleaner could have some obvious drawbacks. In recent years plain sodium hydroxide has gotten hard to locate. Most drain cleaners now contain multiple chemicals not conducive to soap making.

## **Sarah's Soap.**

Sarah uses "food grade" sodium hydroxide, water and our own rendered beef tallow. Nothing else. It is the real thing. Pure and simple. Last year Sarah gave some of you soap. Since then a number of you have told me that you prefer this soap because of the way it treats your skin. I use a bar of Sarah's soap in my shower and a bar at my wash basin. A bar lasts for months. It works and feels good. This pure tallow soap does not produce much lather. If my hands are really greasy from farm work, I use a strong emulsifier like Dawn. Of course the enzymes in Dawn remove my natural skin oil too.

I have pasted below, portions of an article that I found on the Internet. Unfortunately I did not keep track of where I lifted the information from. Search the Internet if you want to learn more.

## “The Skin Care Ingredient You Absolutely Must Try!

What Beauty Ingredient do many beauty product manufacturers vilify while selling you on their expensive, patented formulas? If you compare labels between the “naughty” skin care product and theirs, which one would have a toxic slew of chemicals including, say, 5 ingredients linked to cancer, 3 penetration enhancers that may increase exposure to carcinogens, parabens and 20 chemicals that have not been assessed for safety

Most important, which product is uniquely compatible with our skin’s biology, leaving it supple and nourished after use? If you haven’t guessed yet, it’s time to let you in on a little beauty secret I’ve been keeping for the past few months.



On the left we have Sample A (which we won’t mention for liability reasons), and on the right we have beef tallow! Now, I’m not picking on Sample A specifically, it’s just they happen to claim on their “dirty little secrets” page that tallow leaves scum on skin, boasting that they never use it in their soaps, lotions, etc. What is this scum, you ask? And why do cosmetic manufacturers make a big deal about not using tallow?

*Good questions!* I’ll get into the no-good, horrible, make-your-skin-so-soft-you-won’t-believe-it “scum” in just a minute, but first I want to say that many companies do use tallow in lipsticks and such. For the most part they like to keep that quiet, because tallow is a natural product that cannot be patented. Fractionated compounds that don’t remotely resemble nature with the word “natural” slapped on the label – now THAT can be patented!

Marketers who sold the public soy as a viable “alternative” to meat have made very convincing arguments that plant-based products are generally better for us and the environment, but it’s simply not true. As we’ll discuss soon, knowing the source of each product is vitally important for making that determination.

## The Perfect “Food” For Skin

Now, as you may have noticed, I said earlier that tallow is the perfect first food for skin, not lard. That’s because as I continued to experiment and study I discovered a few things:

- **Tallow is uniquely compatible with the biology of our cells.** About 50% of the structure of our cell membrane comes from saturated fats, with remaining amounts consisting of monounsaturated and to a lesser degree polyunsaturated fats. It is the saturated fats that give cell membranes the “necessary stiffness and integrity” necessary for proper function. In a research article which I was privileged to preview before publication, I recently learned that:

“Healthy, ‘toned’ skin cells with sufficient saturated and monounsaturated fats would undoubtedly make for healthy, toned skin. Interestingly, **tallow fat is typically 50 to 55 percent saturated, just like our cell membranes**, with almost all of the rest being monounsaturated, so it makes sense that it would be helpful for skin health and compatible with our cell biology.” There are other points of biological compatibility, too, such as the fact that tallow and sebum consist primarily of a type of lipid called triglycerides. (“Sebum” actually means “tallow” in Latin, so we are not the first to make this connection!)

- **Tallow is much easier to use than lard** – Because its composition is so similar to our own it absorbs very easily, leaving skin soft and supple. In contrast, lard has less saturated fat (what “tones” cell membranes) and more polyunsaturated fats (which our diets tend to have in overabundance).
- **Tallow contains skin nourishing ingredients that plant-based oils do not** – Though I am still a huge fan of coconut oil (which by the way, has an excellent saturated fat ratio) and continue to plan to use it as a sunscreen and a whole body moisturizer (because it spreads more quickly and I’m always in a hurry!), the skin on my face is visibly more toned with tallow. I think that may be because of the abundance of fat soluble vitamins (A,D,K and E) that naturally occur in pastured tallow, along with the potent anti-inflammatory conjugated linoleic acid (CLA) and anti-microbial palmitoleic acid.

What about “organic” and “natural” skin care lines? How do they stack up to pure, one-ingredient products like tallow and virgin coconut oil? Unfortunately, I have to agree with this Organic Consumers Association press release, which says:

A visit to any health food store unfortunately reveals that the majority of products in the personal care section with ‘organic’ brand claims are not USDA-certified and contain only cheap water extracts of organic herbs and maybe a few other token organic ingredients for organic veneer. The core of such products are composed of conventional synthetic cleansers and conditioning ingredients usually made in part with petrochemicals.

### Ready To Give Tallow A Try? *Great!*

**If you’re interested in making it yourself**, I highly recommending using only suet from grass-fed cows/sheep – not only will the finished product be richer in minerals, fat soluble vitamins and micronutrients, it will also be much more pure. Pesticides, antibiotics and synthetic hormones are stored in fat, so animals raised using factory/conventional practices are not recommended!”

Well, do with that what you will.

Best regards.

Tom