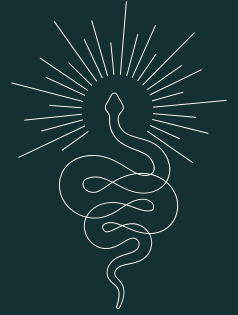


# Lubricants for Intimacy

Cultivate Pelvic Health  
& Physical Therapy  
Dr. Danielle L. Moreau PT, DPT, PRPC



## What is lube?

Lube is a product used for sexual intimacy that increases pleasure, can decrease discomfort if present, and improve appreciation of good sensations by reducing tissue dryness or friction. Here are the general benefits of using a lube:

- Increases pleasure
- Prevents dryness or irritation of tissues
- Some lubricants increase tissue moisturization

## How do I choose a lube that works for my body?

Not all lubes are created equal! There are so many options when it comes to lubricants for intimacy. It can be helpful to know some of the benefits and drawback of different types of lube, and ingredients to watch out for that can cause irritation or infection.

Feeling a little overwhelmed by the choices?! Know that it is totally normal to try different lubes until you find the best matches for your body and the specific fun activities that you like to do! You may decide to have a few different kinds on-hand to cover all of your intimacy needs.

### Ingredients to avoid

- Polyquaternium 7, 10, or 15: synthetic polymer that can be damaging and irritating to the skin
- Non-oxynol-9: oil-dissolving spermicide that causes severe skin irritation
- Menthol: “cooling” and capsaicin: “warming”
- Chlorhexidine: a preservative that destroys the natural flora which helps to protect against harmful bacteria
- Glycerin: many people tolerate glycerin just fine, but is not good for individuals who are prone to yeast infections as it promotes the growth of yeast
  - Not great for anal sex because it can stimulate bowel activity (glycerin is a common ingredient in many suppositories for constipation!!)
- Propylene glycol: a preservative often found in antifreeze
- Parabens: some individuals with a history or family history of reproductive cancer choose to avoid parabens as they are mildly estrogenic
- Oils: oils can be used externally to increase pleasure with stimulation to the genitals but should be avoided with internal use for people who are prone to infections
- Synthetic oils: Vaseline, petroleum jelly, and mineral oils should never be used for sexual intimacy as this can cause infection
- Known allergens or skin irritants: anything that irritates skin on other areas of the body shouldn't touch the genitals either!
  - For individuals with gluten allergies avoid: oat beta glucan, Vitamin E

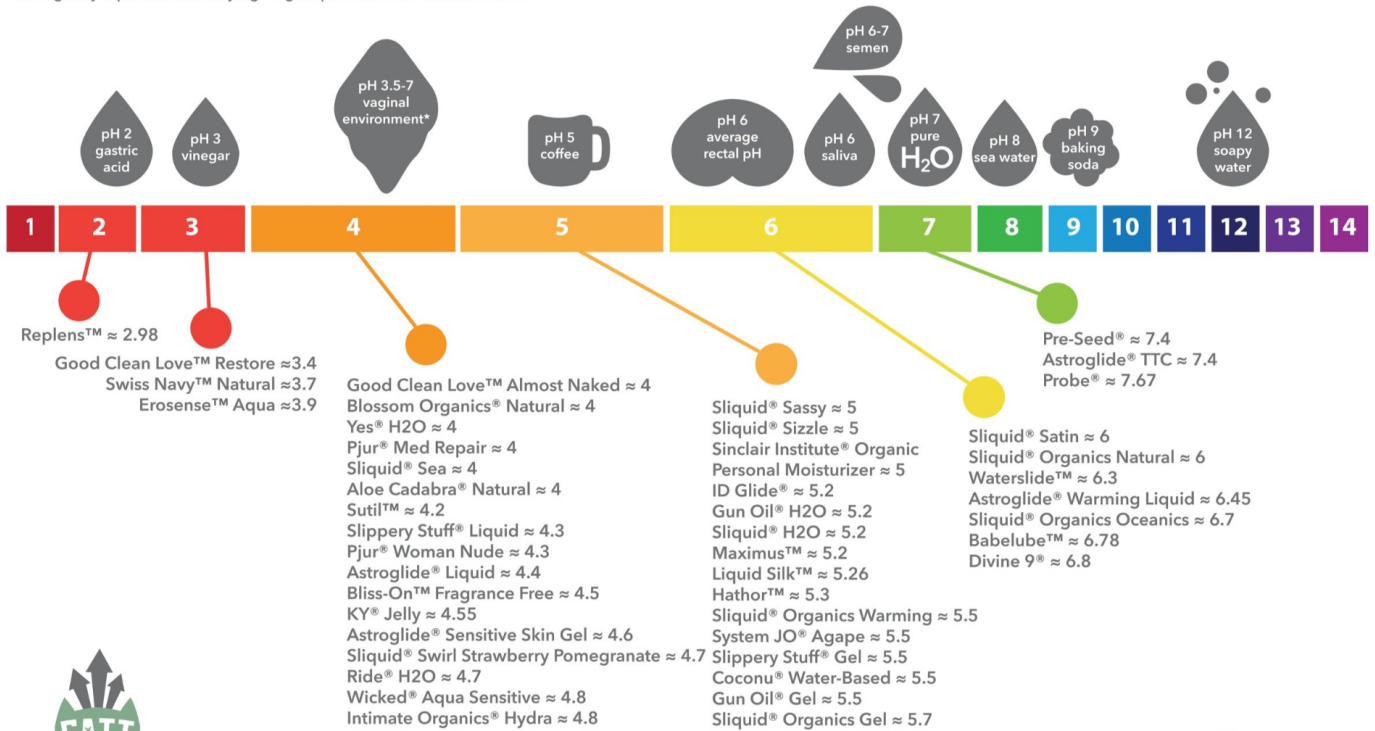
Other important lubricant properties include **pH and osmolality**. We want the pH and osmolality to match or be very close to the mucous membrane of the vagina or anus. Fact: hyperosmolar lubricants (AKA high osmolality) can dehydrate the mucous membranes making them more susceptible to microtrauma and increase potential

infection transmission. Source: Fuchs EJ, Lee LA, Torbenson MS, Parsons TL, Bakshi RP, Guidos AM, Wahl RL, Hendrix CW. Hyperosmolar sexual lubricant causes epithelial damage in the distal colon: potential implication for HIV transmission. *J Infect Dis.* 2007 Mar 1;195(5):703-10. doi: 10.1086/511279. Epub 2007 Jan 23. PMID: 17262713.

Check out these two amazing graphics from Smitten Kitten that compares the pH and osmolality of lubricants and our body's mucosal tissues!

## pH LEVELS OF WATER BASED LUBRICANTS

\*The range of "normal" vaginal pH is far greater than what has traditionally been understood. Vaginal pH varies widely in relation to hormonal levels and different bacterial populations, and the range stated here accounts for normal pH fluctuations that happen over a menstrual cycle and throughout life. A higher pH correlates to lower estrogen. A pH higher than 4.5 has often been seen as an indicator of bacterial vaginosis -- however, recent studies<sup>1</sup> have shown that most people with vaginas can regularly experience relatively high vaginal pH without the occurrence of BV.

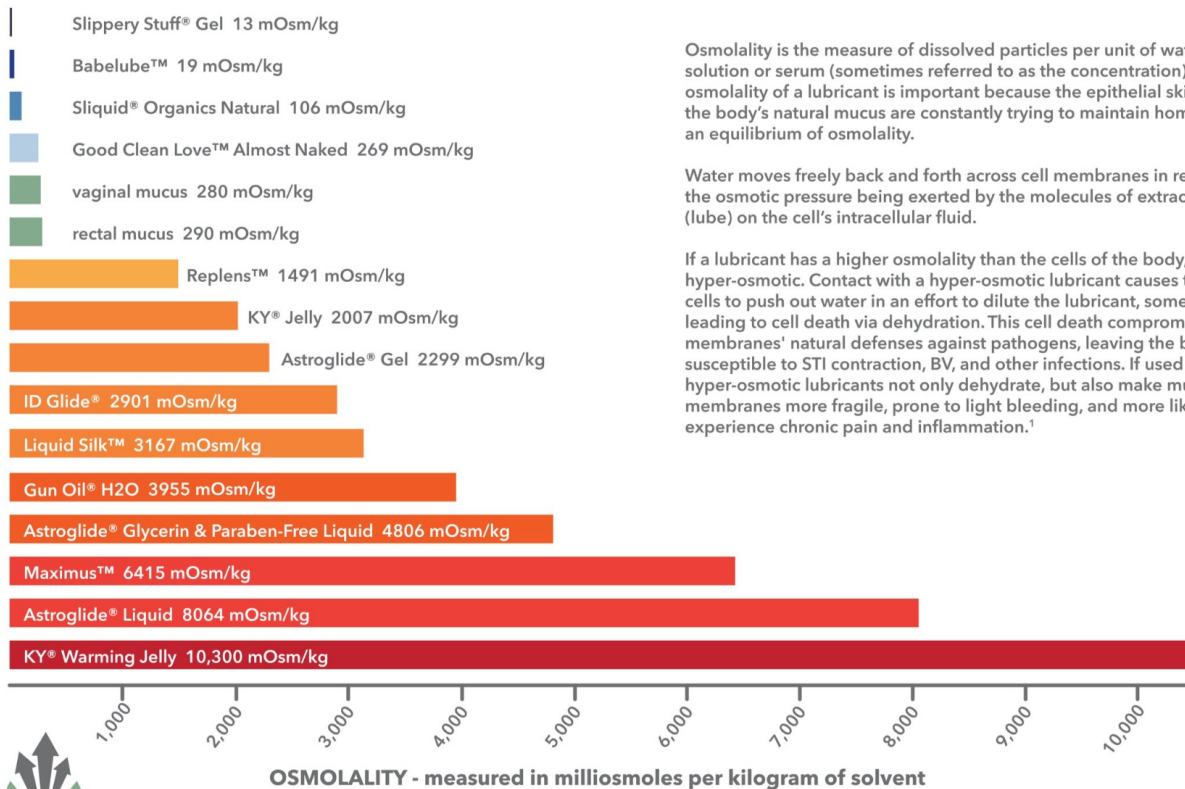


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<sup>1</sup>Cone, Richard A. "Vaginal microbiota and sexually transmitted infections that may influence transmission of cell-associated HIV." *Journal of Infectious Diseases* 210.suppl 3 (2014): S616-S621.

Smitten Kitten  
www.smittenkittenonline.com

# OSMOLALITY OF WATER BASED LUBRICANTS



Osmolality is the measure of dissolved particles per unit of water in a solution or serum (sometimes referred to as the concentration). The osmolality of a lubricant is important because the epithelial skin layer and the body's natural mucus are constantly trying to maintain homeostasis, or an equilibrium of osmolality.

Water moves freely back and forth across cell membranes in response to the osmotic pressure being exerted by the molecules of extracellular fluids (lube) on the cell's intracellular fluid.

If a lubricant has a higher osmolality than the cells of the body, it's called hyper-osmotic. Contact with a hyper-osmotic lubricant causes the body's cells to push out water in an effort to dilute the lubricant, sometimes leading to cell death via dehydration. This cell death compromises mucous membranes' natural defenses against pathogens, leaving the body more susceptible to STI contraction, BV, and other infections. If used frequently, hyper-osmotic lubricants not only dehydrate, but also make mucous membranes more fragile, prone to light bleeding, and more likely to experience chronic pain and inflammation.<sup>1</sup>



## Types of Lube

**Water-Based Lubricants:** water-based lubricants are often where people start and provide great moisture, a cushioned texture (especially gels) and slipperiness! Water based lubes come in a variety of textures for you to try and feel closest to our body's natural lubrication. **Cons:** Water-based lubes typically dry out quickest because the water molecules are absorbed into the tissues more readily and quickly. It is recommended to rehydrate the lube with a spritz of water, add more lube, or possibly try a different lube formulation that won't dry out (such as silicone).

- Brands We Love
  - Slippery Stuff
  - Good Clean Love Almost Naked
  - AH!Yes Water-Based (WB)

**Silicone-Based Lubricants:** silicone is the best for reducing friction, and a small amount goes a long way. This is the best option for any area that will be receiving more vigorous movement or rubbing, and it doesn't dry out because it is not absorbed! **Cons:** silicone lubes can be hard to remove and therefore can stain sheets - so use a cheaper set or throw down a towel! Also, silicone lubes **cannot be used with silicone toys/vibrators** as it will degrade the material of the toy.

- Brands We Love
  - Uber Lube
  - Sliquid Silver
  - Pjur Back Door

Hybrid Lubricants: the best of both worlds! If you like the more gel-like feel of a water-based lube but need it to last longer, a hybrid is a great option.

- Brands We Love
  - Sliquid Organics Silk: aloe/silicone hybrid

Oil-Based Lubricants: many people enjoy the feel of oil-based lubes, which is similar to that of silicone. **Cons:** oil based lubricants are not a good option for internal use for people who are prone to infection and **are not compatible with latex condoms (use a polyurethane or nitrile condom instead)**. They are also **not compatible** with safe-sex barriers made of **polyisoprene**.

- Recommended Brands
  - Coconu
  - Ah!YES Oil-Based (OB)
  - If you are going to use a natural oil (such as coconut oil) externally, choose an unrefined oil.

## My Rules for Purchasing, Storing, and Using Lube

Purchase your lube from the manufacturer or in a store whenever possible (either a drug store, or your local feminist sex shop!). Be aware Amazon shoppers: make sure the product is being sold by the manufacturer and not a third party. This creates more room for potential contamination or alteration of the product - it's simply a less-safe option.

### My Go-To Local Sex Shops

- Mister Sister in Providence, RI
- Good Vibrations Cambridge, MA
- Online: Shop Enby, Smitten Kitten

Always check the expiration date! Keep your lube in an area without significant light exposure and that does not experience temperature fluctuations or extreme conditions. Keep sample packs away from sharp objects where it could be punctured.

If you are planning to try a new lube, complete a "patch test" 24 hours beforehand. Apply the product to the skin of the inner thigh and monitor for any changes to the skin or symptoms of irritation.

Resources I Used to Create this Handout:

- Smitten Kitten's Hassle-Free Guide to Lubricants: <https://www.smittenkittenonline.com/blogs/smitten-kitten-blog/smitten-kittens-hassle-free-guide-to-lubricants/> Accessed 3/9/2024.
- Fuchs EJ, Lee LA, Torbenson MS, Parsons TL, Bakshi RP, Guidos AM, Wahl RL, Hendrix CW. Hyperosmolar sexual lubricant causes epithelial damage in the distal colon: potential implication for HIV transmission. J Infect Dis. 2007 Mar 1;195(5):703-10. doi: 10.1086/511279. Epub 2007 Jan 23. PMID: 17262713.
- Wallace, Kathy. "All About Lubricants." Accessed 3/9/2024. <https://kathewallace.com/resources/downloads/lubricants/>. Open Access Handout.

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