WHY USE LUBE?

• Makes sexual activities safer & safer sex barriers more effective
• Increases pleasure, decreases friction and irritation
• Allows for more comfortable use of sex toys
• Takes pressure off the body to “perform”
• Makes sexual activities possible for many folks

But not all lubes are created equal…
TYPES OF LUBRICANTS

Water Based

Silicone Based

Hybrid

Oil Based
## Compatibility

**Sex Toys and Safer Sex Barriers**

<table>
<thead>
<tr>
<th>Toy Material</th>
<th>Lube Type</th>
<th>Silicone</th>
<th>Abs Plastic</th>
<th>Glass, Steel, Wood, Stone</th>
<th>Safer Sex Barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water Based</strong></td>
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<tr>
<td><strong>Silicone Based</strong></td>
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<tr>
<td><strong>Hybrid</strong></td>
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<tr>
<td><strong>Oil Based</strong></td>
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</tbody>
</table>

*Oil Based Lubricants ARE compatible with Polyurethane or Nitrile barrier methods, which are uncommon, but do exist: Trojan Supra Condoms (Polyurethane), Black Dragon Nitrile Gloves, or the FC2 Receptive Condoms (Nitrile).
**Epithelium:** the outermost layer of skin on the mucous membranes of the genitals, a primary defense against pathogen transmission

**Vulvovaginal Microbiome**
- **Vaginal Lining & Ectocervix:** Stratified squamous, non-keratinized epithelium
- **Endocervix:** Single layer, non-keratinized, columnar epithelium
- **Mucosal Vulva & Vaginal Vestibule:** Non-keratinized mucocutaneous (transitional) epithelium
- **Labia Majora:** Keratinized epithelium

**Anal Microbiome**
- **Rectum & Colon:** Single layer, columnar, non-keratinized epithelium
- **Anus:** Mucocutaneous epithelium containing both keratinized and non-keratinized stratified squamous epithelium types

**Penile Microbiome**
- **Urethral Opening:** Non-keratinized stratified squamous epithelium
- **Preputial Mucosa (under intact foreskin):** Mucocutaneous, lightly keratinized epithelium
OSMOLALITY

The measure of dissolved particles per unit of water in a solution, measured in mOsm/kg.

The osmolality of a lubricant is important because the epithelial layer and the body’s natural mucus are constantly trying to maintain an equilibrium of water pressure; water flows freely through the cell walls of non-keratinized epithelium and mucus.
ISO-OSMOTIC LUBRICANT

The lubricant has a similar osmolality to the cells of the mucous membrane.
HYPO-OSMOTIC LUBRICANT

The lubricant has a lower osmolality than the cells of the mucous membrane.
HYPER-OSMOTIC LUBRICANT

The lubricant has a higher osmolality than the cells of the mucous membrane.
<table>
<thead>
<tr>
<th>Product</th>
<th>Osmolality (mOsm/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slippy Stuff® Gel</td>
<td>13</td>
</tr>
<tr>
<td>Babelube™</td>
<td>19</td>
</tr>
<tr>
<td>Sliquid® Organics Natural</td>
<td>106</td>
</tr>
<tr>
<td>Good Clean Love™ Almost Naked</td>
<td>269</td>
</tr>
<tr>
<td>Vaginal mucus</td>
<td>280</td>
</tr>
<tr>
<td>Rectal mucus</td>
<td>290</td>
</tr>
<tr>
<td>Replens™</td>
<td>1491</td>
</tr>
<tr>
<td>KY® Jelly</td>
<td>2007</td>
</tr>
<tr>
<td>Astroglide® Gel</td>
<td>2299</td>
</tr>
<tr>
<td>ID Glide®</td>
<td>2901</td>
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<tr>
<td>Liquid Silk™</td>
<td>3167</td>
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<tr>
<td>Gun Oil® H2O</td>
<td>3955</td>
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<tr>
<td>Astroglide® Glycerin &amp; Paraben-Free Liquid</td>
<td>4806</td>
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<tr>
<td>Maximus™</td>
<td>6415</td>
</tr>
<tr>
<td>Astroglide® Liquid</td>
<td>8064</td>
</tr>
<tr>
<td>KY® Warming Jelly</td>
<td>10,300</td>
</tr>
</tbody>
</table>

Osmolality - measured in milliosmoles per kilogram of solvent
World Health Organization Advisory Note:

“Most commercial personal lubricants have high osmolalities (2000-6000 mOsm/kg)... the normal osmolality of female vaginal secretions is 260-290 mOsm/kg and in human semen it is 250-380 mOsm/kg... Ideally, the osmolality of a personal lubricant should not exceed 380 mOsm/kg to minimize any risk of epithelial damage.... It is therefore recommended on an interim bases that procurement agencies should source lubricants with osmolalities of not greater than 1200 mOsm/kg.”

**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\(^1\) have shown that most people with vaginas can regularly experience relatively high vaginal pH without the occurrence of BV.\(^1\)**

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Ingredients To Watch Out For

- Glycerin(e)
- Propylene Glycol
- Nonoxynol 9
- Chlorhexidine Gluconate
- Petroleum Oils
- Polyquaternium-15
- Benzocaine
- Sugars
Other Common Irritants

**PRESERVATIVES**
- Parabens
- Sodium Hydroxide
- Potassium Sorbate
- Benzyl Alcohol
- Diazolidinyl Urea
- Nonoxynol-9
- Chlorhexidine Gluconate
- Citric Acid
- Polyquaternium-15

**PETROCHEMICALS**
- Propylene Glycol
- Butylene Glycol
- Ethylenes
- Petroleum
- Mineral Oil

**FRAGRANCES AND FLAVORS**
- Honey
- Maltodextrin
- Menthol
- Essential Oils

**SURFACTANTS**
- Sulfates
- Glycols
- Nonoxynol 9
- PEGs
- Polyquaterniums
- Chlorhexidine Gluconate
Certain behaviors, predispositions, and health conditions make people more vulnerable to the potential negative effects of lubricants:

- Frequency of use
- STI status
- Safer sex barrier use
- Cancer treatment (surgery, radiation therapy, and/or chemotherapy)
- Menopause & Post menopause
- Dermatitis
- Diabetes
- Kidney Disease
- Chronic skin conditions
- Chronic pain and/or inflammatory conditions
- Seasonal allergies and/or anaphylaxis
Currently, the FDA regulates some personal lubricants in two categories:

- Medical Devices
- Condom Safe
Organic Certifications are given by a variety of agencies with different criteria:

- USDA certification of an entire product requires 85% or more of the content of that product is USDA certified organic.

- Individual ingredients in a largely nonorganic product maybe USDA certified as organic, and that product can advertise and label using the USDA certification seal.

- Use of the terms “natural” or “organic” on labeling or marketing DO NOT indicate a product is entirely, or even partially organic.

- “Organic” NEVER indicates a product is hypoallergenic, or is necessarily healthy for the genitals.
QUESTION TIME!

Ask me all your questions!

THANK YOU!


