



Which lip balm works the best?

By Anthony Cappellini

What Makes a Lip Balm "The Best"?

The best lip balm provides coverage that is:

- Long-lasting
- Complete
- Stays in its original shape

PROBLEM:

Dry, cracked lips



Background Information

- There are a lot of lip balms that are available to be purchased
- Aquaphor and Chapstick are recommended by dermatologists (7 Long Lasting, 2019)
- Shea butter is long-lasting (USN, 2019)
- Burt's Bees is made out of beeswax unlike any other products (Burt's Bees, 2019)

Research

According to US News (2019), pharmacists recommended these lip balms:

Chapstick (22%)

Burt's Bees (17%)

Blistex (15%)

Evolution of Smooth-eos (1%)

LIP BALMS

Lip Balm #1—Burt's Bees

- Original formula
- Made from beeswax
- Vitamin E moisturizes
- Peppermint oil adds refreshing tingle



Lip Balm #2—Evolution of Smooth ("eos")



- Sweet Mint
- Deeply hydrates and seals in moisture
- Contains sustainably sourced ingredients

Lip Balm #3—Blistex



- Medicated Lip Balm
- No flavors, colors or fragrances
- Made from cocoa butter (moisturizing properties)
- Made from shea butter (maintains skin elasticity)

Lip Balm #4—Chapstick



- Classic Original
- 45% petroleum jelly to protect the skin
- Defends lips from dry, cold weather
- #1 pharmacist recommended

Lip Balm #5—Aquaphor

- Original formula
- #1 dermatologist recommended
- Seals in moisture and reduces dryness
- Preservative and fragrance free



Materials

- 5 lip balms
- 5 oranges (peels represent human lips)
- Spray bottle of H₂O
- Index cards
- UV light
- Fan
- Refrigerator

Hypothesis

- Based on research, Chapstick would be the best because pharmacists have rated it the highest of the tested balms, coming in at 22%.
- Evolution of Smooth (“eos”) would be the worst, coming in at 1%.

Variables and Control

Control

Original surface
area covered by
lip balm

Independent Variable

Types of lip balms

Dependent Variable

Residue left by lip
balm after steps of
procedure

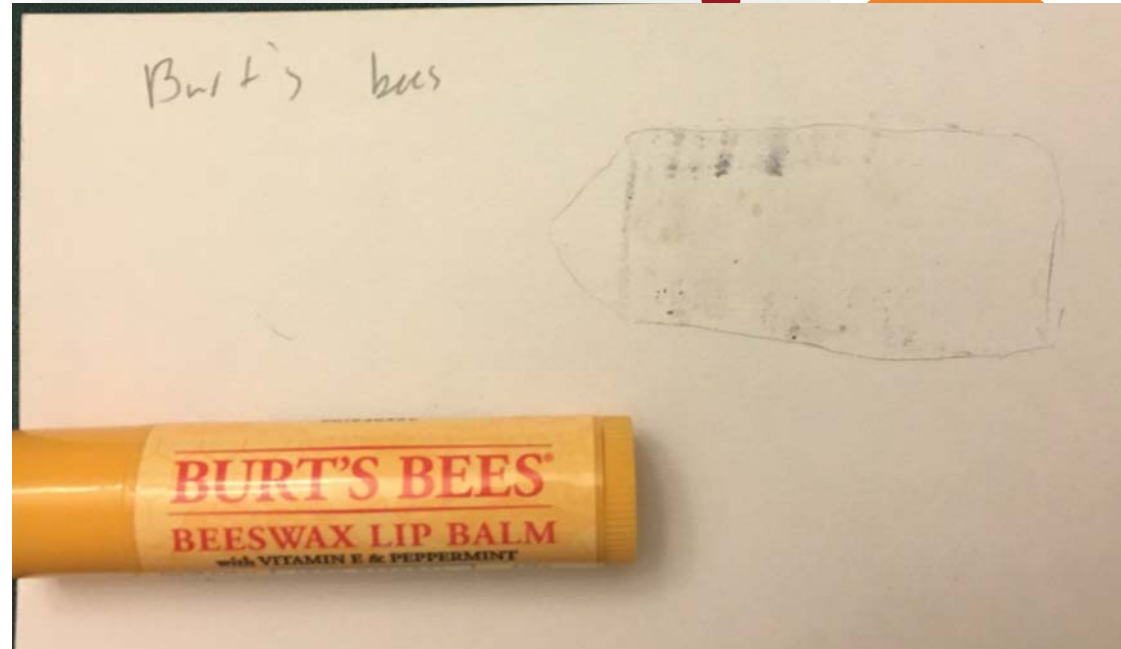
Procedure

1. Apply 5cm x 2cm rectangle of each lip balm on orange using cut out index cards.
2. Place orange 10 cm in front UV light for 2 minutes.
3. Spray with water 3 times.
4. Put orange in refrigerator for 1 minute.
5. Place orange 20 cm in front of fan on High for 7 minutes.
6. Gently roll orange back and forth on new index card with light pressure (like rubbing lips together).

RESULTS

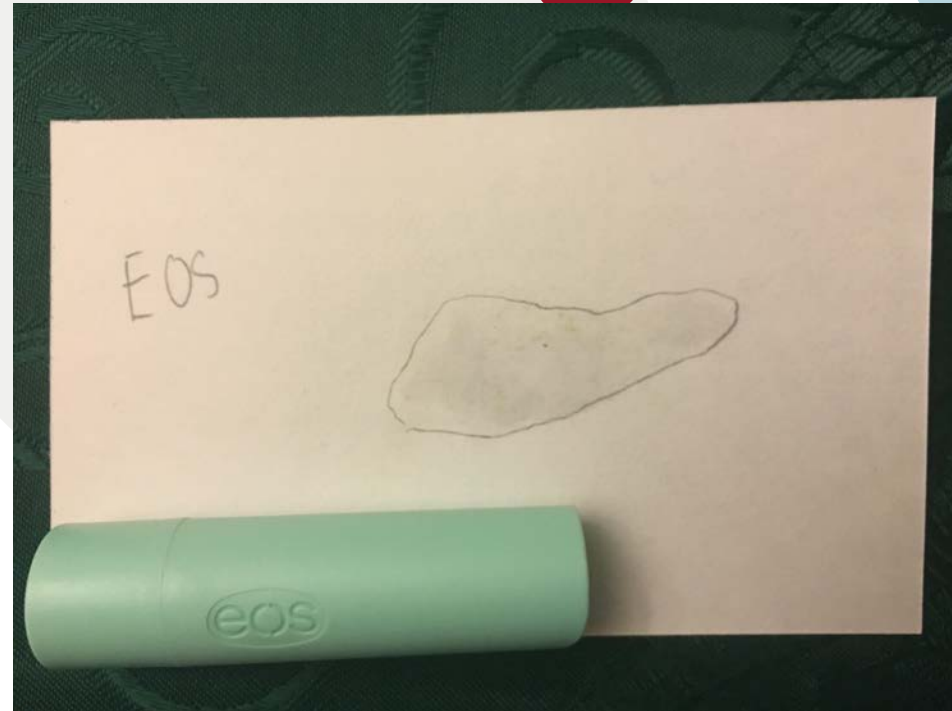
Lip Balm #1—Burt's Bees Observations

- Dotty
- Very minimal coating
- Smooth going on
- 6.0cm x 2.6cm



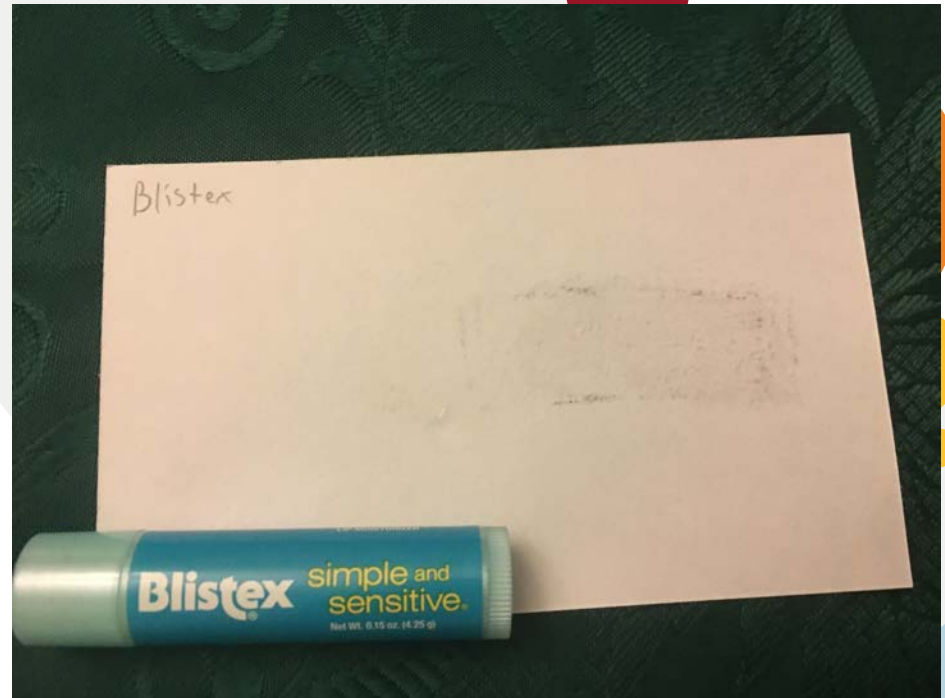
Lip Balm #2—eos Observations

- Consistent coating
- Clumpy
- Odd shape
- 5.1cm x 2.9cm



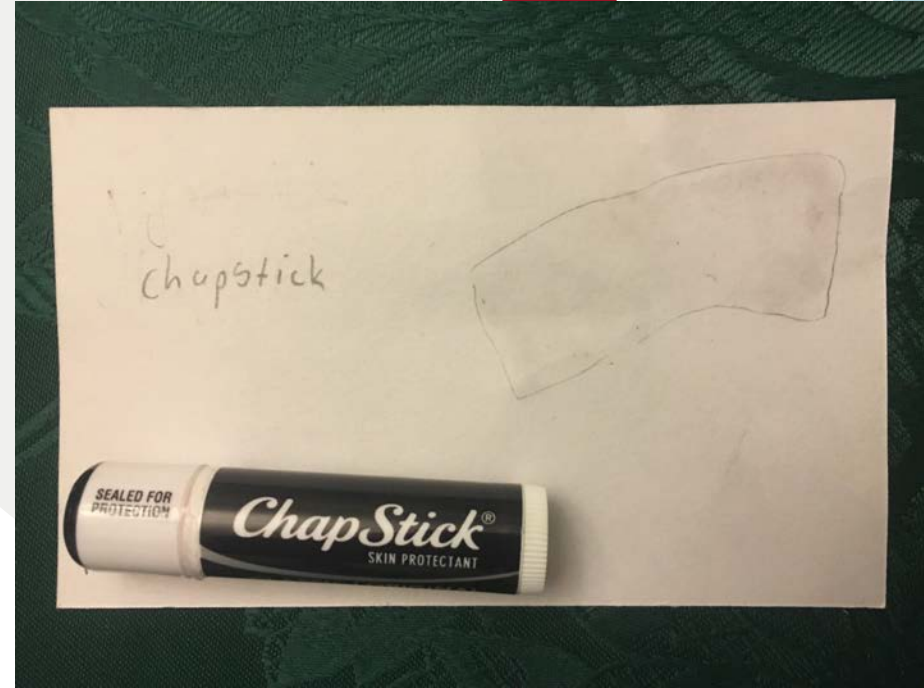
Lip Balm #3—Blistex Observations

- Consistent coating
- Smooth and clean
- Rounded edges
- 5.7cm x 2.9cm



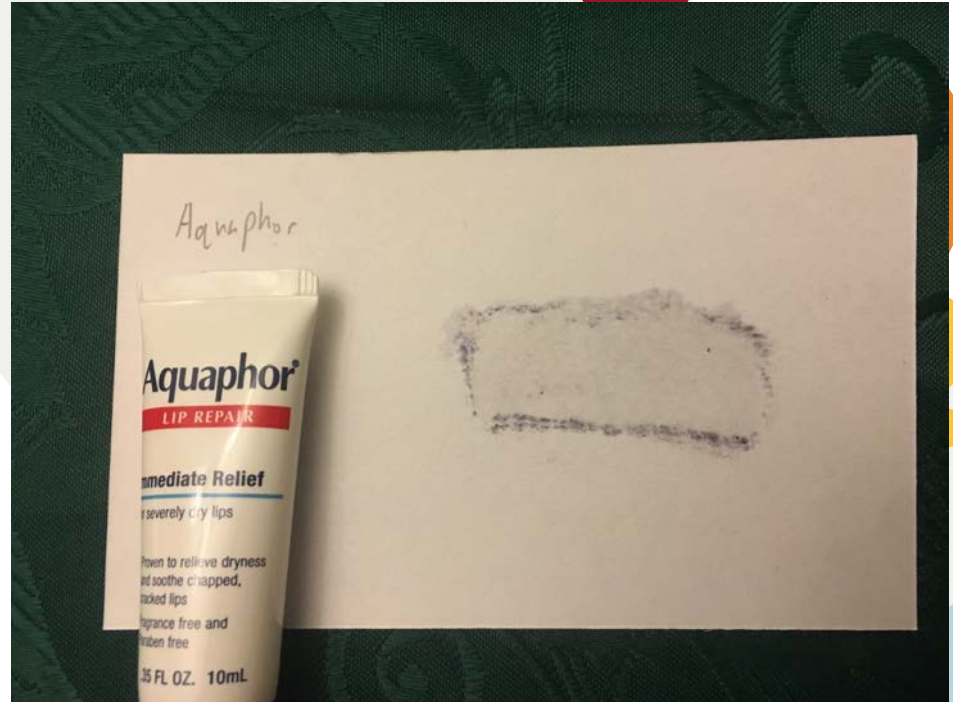
Lip Balm #4—Chapstick Observations

- Very minimal coating but present
- Waxy but smooth
- 6.1cm x 2.8cm



Lip Balm #5—Aquaphor Observations

- Full coverage
- Lots of balm still present
- Liquidy going on
- 5.7cm x 3.2 cm



Results

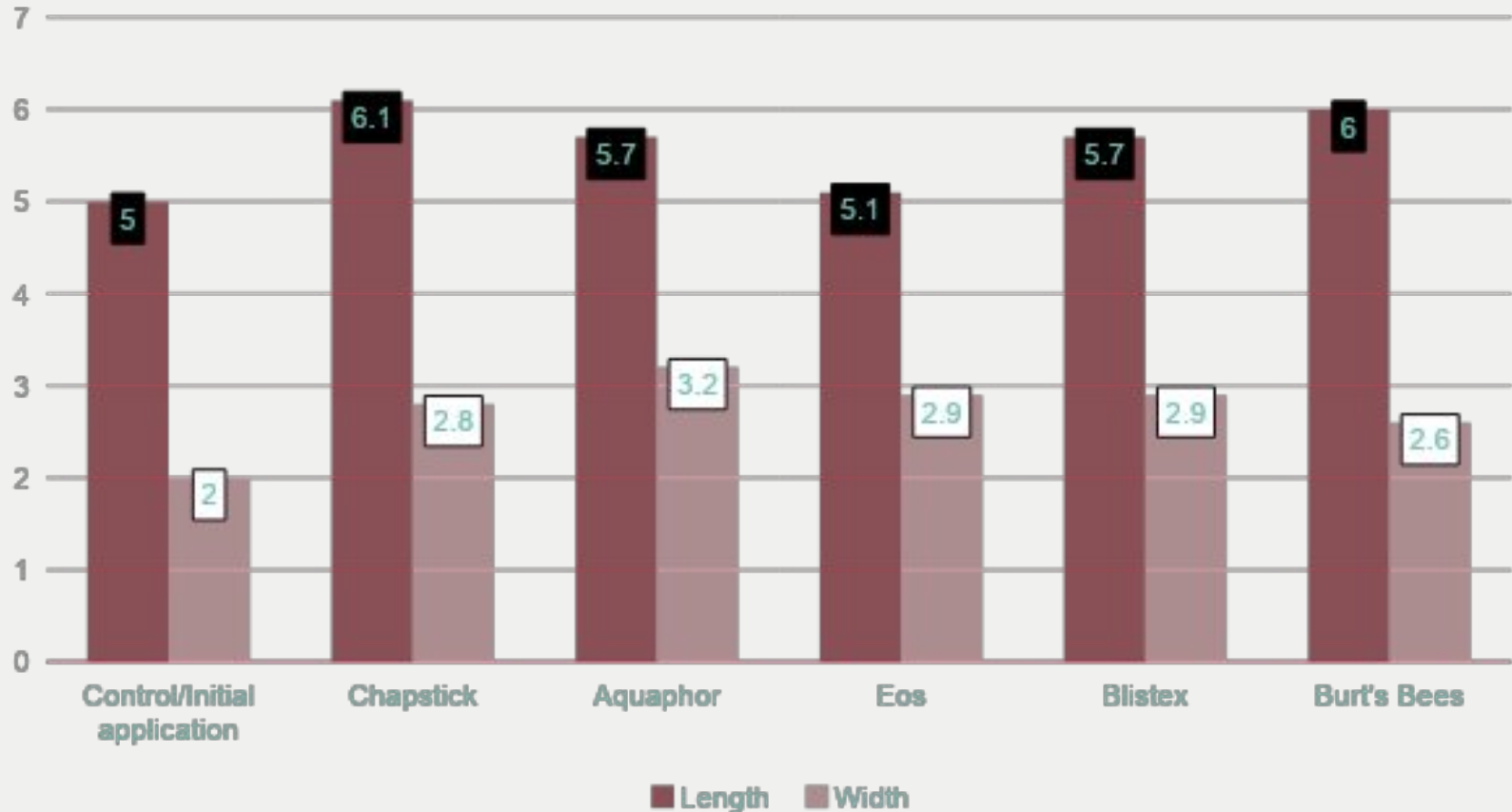
Lip Balm	Application	Residue Description
Burt's Bees	Full coverage, smooth	Very minimal
Eos	Full coverage, thick	Consistent, clumpy, odd shape
Blistex	Full coverage, smooth and clean	Consistent, rounded
Chapstick	Full coverage, waxy	Very minimal but present
Aquaphor	Full coverage, liquidy	Lots of balm still present

Measurements by Lip Balm

Lip Balm	Length	Width
Chapstick	6.1cm	2.8cm
Aquaphor	5.7cm	3.2cm
Eos	5.1cm	2.9cm
Blistex	5.7cm	2.9cm
Burt's Bees	6.0cm	2.6cm

Original coverage application 5.0cm x 2.0cm

Measured Residue in cm



Data Analysis

- Evolution of Smooth ("eos") was closest to the initial application shape dimensions (5.1cm x 2.9cm)
- Burt's Bees had the most similar shape
- Aquaphor had the most lip balm remaining
- Chapstick had the least amount of coating left

Data Interpretation

- Aquaphor was the best lip balm of the five that the researcher tested:
 - Full coverage
 - Most amount of lip balm still present after the procedure
- Chapstick was the worst because it lacked effective coverage after the procedure

Conclusion

- The original hypothesis was that Chapstick would be the best and Evolution of Smooth ("eos") would be the worst
- The findings from this experiment did not support either initial hypotheses, so they were rejected

Future Recommendations

- Use different lip balms
- Do more trials
- Make a longer procedure
- Use pigs' feet to simulate a human lip



**Thank you for your
attention! Any
questions?**

Resources

"Blistex Ingredients" ["Blister Ingredients"]. *Blistex*, www.blistex.com/products/simple-and-sensitive/.

"Burt's Bees" ["Burt's Bees"]. *Burt's Bees*, www.burtsbees.com/product/beeswax-lip-balm-twin-pack/15599-00-1.html. Accessed 20 Oct. 2019.

"BYRDIE" ["BYRDIE"]. *BYRDIE*, 9 Sept. 2019, www.byrdie.com/best-lip-balms. Accessed 19 Oct. 2019.

"Chapstick" ["Chapstick"]. *Chapstick*, labeling.pfizer.com/ShowLabeling.aspx?id=2586. Accessed 20 Oct. 2019.

"EOS Ingredients" ["EOS Ingredients"]. *EOS*, evolutionofsmooth.com/collections/best-sellers/products/organic-sweet-mint-lip-balm. Accessed 20 Oct. 2019.

Resources Continued

"7 Long Lasting Lip Balms You Won't Need to Reapply" ["7 Long Lasting Lip Balms You Won't Need to Reapply"]. *Essence*, edited by Nikki Brown, 5 Sept. 2017, www.essence.com/beauty/makeup/lips/best-lip-balms/. Accessed 19 Oct. 2019.

"13 Best Lip Balms for Chapped Lips" ["13 Best Lip Balms for Chapped Lips"]. *The Strategist*, 21 May 2019, nymag.com/strategist/article/the-best-lip-balms-on-amazon.html. Accessed 19 Oct. 2019.

"The Today Show" ["The Today Show"]. *The Today Show*, 12 June 2017, www.today.com/style/17-long-lasting-lip-colors-won-t-wear-t112193. Accessed 19 Oct. 2019.

"USN" ["USN"]. *USN*, health.usnews.com/health-products/top-rec-lip-balms-87. Accessed 19 Oct. 2019.