

# **Skin Care and Topicals**

*Multidisciplinary Atopic Dermatitis Program (MADP) Clinic*



# **Skin Care**

# Bathing

- Most experts recommend *daily or every other day*
  - Baths should last for **5 to 10 minutes**
  - Bathe with warm water
- Avoid bathing with harsh soaps
- Apply topical medications (if applicable) prior to moisturizer after bathing



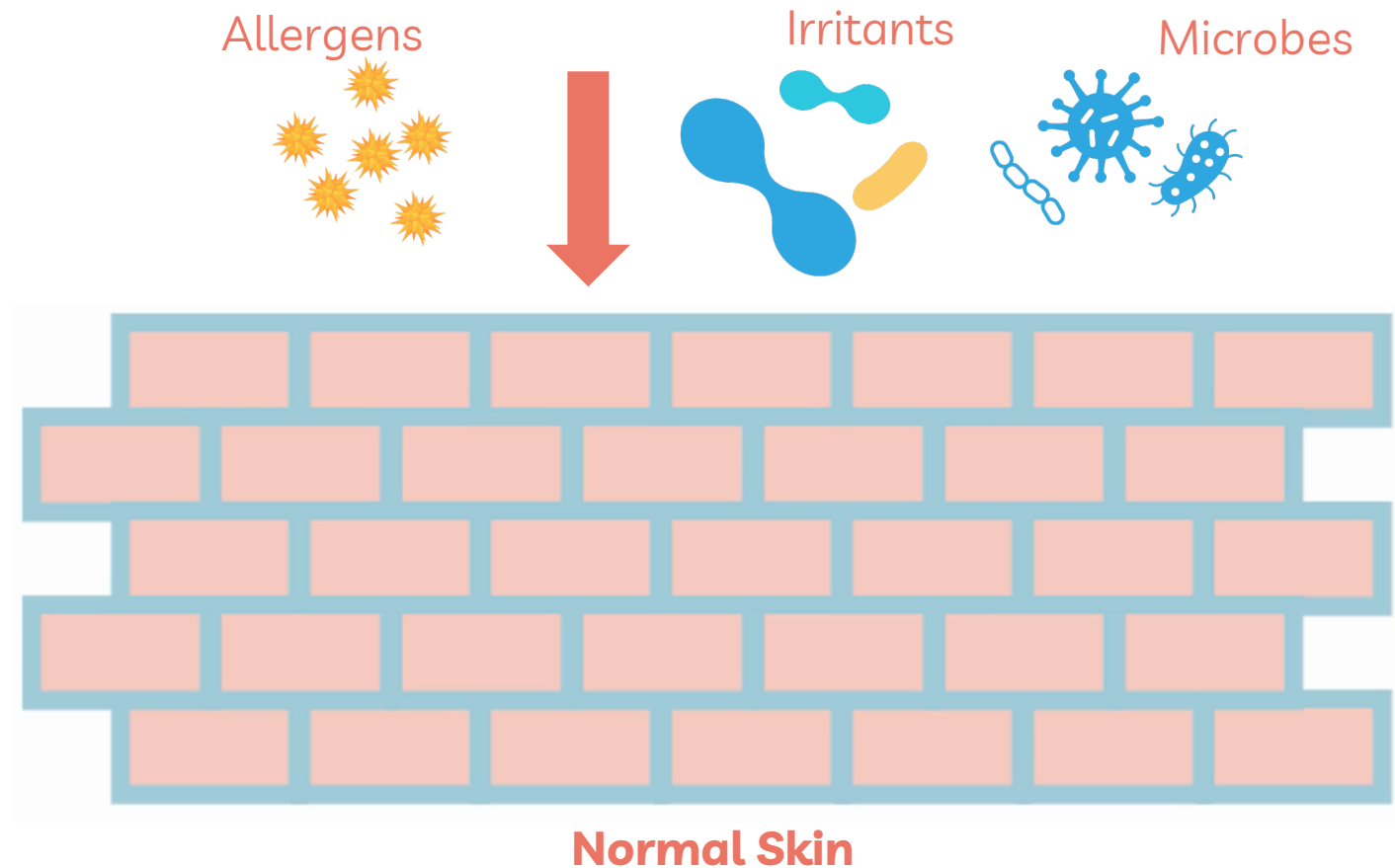


# Moisturizers

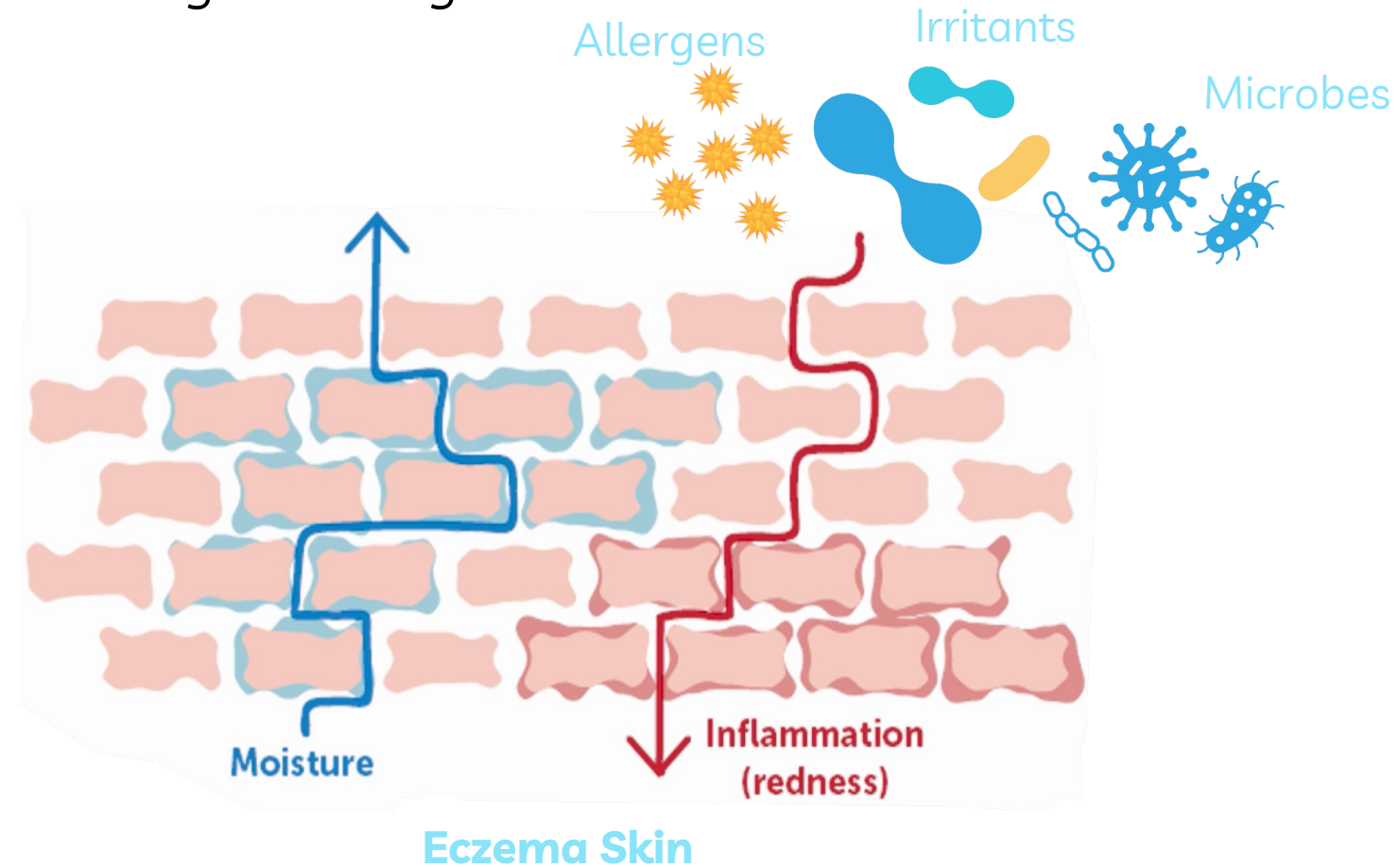
- Best first line therapy to keep eczema under control
- Frequent use of moisturizer is essential to improve and maintain skin condition
  - **Apply 2x a day**



- Our skin provides a barrier that helps control temperature and hydration
- Helps stop allergens, irritants, and microbes from getting through skin

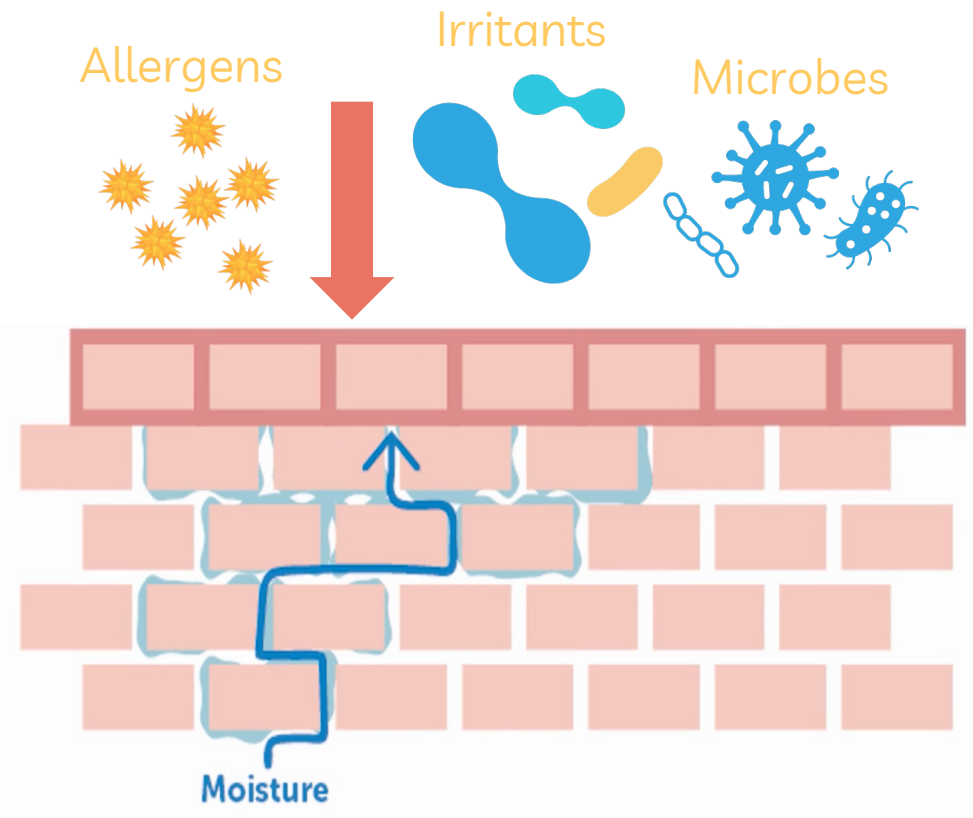


- In people with eczema, the skin barrier does not work as well
  - Skin tends to be dry and itchy



# Moisturizers

- Moisturizers fill the gaps between the cells
  - This reduces water loss from the skin and increases hydration
- Helps reduce water loss, improve dryness, decrease itch and protect skin from things that make eczema worse
  - (Allergens, irritants, and microbes)



**Well-Managed Eczema Skin**

# Moisturizers



- Not all moisturizers are as good at hydrating skin
  - **Ointments** generally work best
  - Thicker moisturizers better than thinner ones
- Avoid moisturizers with scents or perfumes
- Specialized moisturizers may contain specific products or ingredients that are helpful to individuals, ie ceramides



**Lotion**  
(water based)

**Cream**  
(oil based)

**Ointment**  
(oil based)

- **Least** hydration
- Easy to rub in

• In between; moderate

- **Best** hydration
- Slowest to absorb

← Thinnest

Thickest →

\*\*Brand names above serve as examples. Many others available not listed.



# Wet Wrap Therapy

Recommended for severe eczema flares

- Rehydrates and calms skin
- Helps topical medication work better
- Once a day until flare calmed
  - Best left overnight and removed day after



- Soak/wet skin
- Apply topical medication to affected skin



- Dampen gauze in warm water
- Wrap wet gauze around affected area



- Grab dry gauze, wrap a second layer on top



- Cover gauze layers with surgical netting/socks/"Coban"
- Leave overnight or several hours

## • Materials

- Topical medication
- Gauze
- Bowl with warm water
- Surgical netting, sock with ends cut, or "Coban" self-adhesive wrap

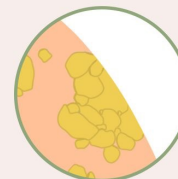
# Skin Infections and Eczema

- Bacterial infections
  - Most often from Staph
  - Antibiotics to treat infection
  - Oral antibiotics for severe infections
- Topical antibiotics for localized infections
  - Work differently from topical steroids, usually used together
- Viral infections
  - Most often eczema herpeticum
  - Antivirals to treat infection
  - acyclovir, valcyclovir

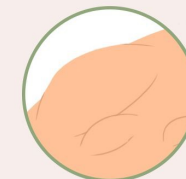
- Bleach baths recommended as preventative measure for recurrent bacterial infections



## Infected Eczema Signs



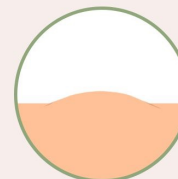
Dry, yellow crusting



Fluid-filled blisters



Open sores



Swollen skin



Warm or hot skin



Enhanced redness

## Bleach Baths



- Add bleach to water
  - **Full tub:**  $\frac{1}{2}$  cup bleach
  - **Half tub:**  $\frac{1}{4}$  cup bleach
- Soak for 10 minutes
- Rinse with fresh water, gently pat dry
- Apply topical medication to affected areas
- Apply moisturizer to entire body

*Medical provider will let you know how often to have bleach baths*

## Spray Bottle Method

- In spray bottle:
  - **Ratio:** 1 teaspoon bleach to  $\sim \frac{1}{2}$  gallon water
- Spray all affected areas in shower
- Leave on for several minutes
- Rinse with fresh water, gently pat dry
- Apply topical medication to affected areas
- Apply moisturizer to entire body





# Topical Therapies

# Topical Steroids

- Medicine cream or ointment
  - Standard for treating inflammation
  - Used when moisturizers not strong enough

## *Inflammation*

- Red, bumpy, oozy, or flaky skin
- Range from weak to strong types of topical steroids
- Follow instructions from medical provider for **safe** and **proper** use

## *Directions*

- Once to twice every day
- Apply on skin inflammation
- Ask medical provider how much medicine to place



# Commonly Used Topical Steroids

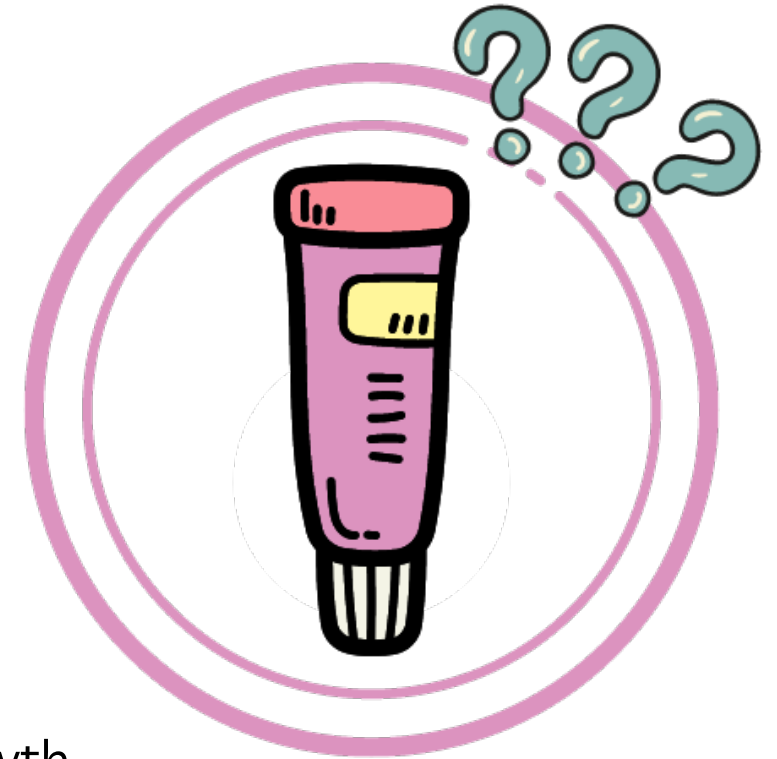


Class and Potency	Drug Name, Concentration (Vehicle)
Class 1 – Very Potent	<ul style="list-style-type: none"><li>• Clobetasol, 0.05% (ointment, cream, gel, solution)</li></ul>
Class 2 - Potent	<ul style="list-style-type: none"><li>• Fluocinonide, 0.05% (ointment, cream, gel, solution)</li><li>• Mometasone, 0.1% (ointment)</li><li>• Betamethasone, 0.05% (cream, foam, ointment, solution)</li></ul>
Class 3-5 - Medium	<ul style="list-style-type: none"><li>• Triamcinolone, 0.1% (cream, ointment)</li></ul>
Class 6 – Low	<ul style="list-style-type: none"><li>• Fluocinolone, 0.01% (oil)</li><li>• Desonide, 0.05% (ointment, cream, foam)</li></ul>
Class 7 – Least Potent	<ul style="list-style-type: none"><li>• Hydrocortisone, 1%, 2.5% (cream, ointment)</li></ul>

# Possible Side Effects

- Skin thinning\* and stretch marks
- Slow growth?
  - Only if steroids are taken as a *pill*
  - *Very rare* if steroid is taken as a topical
  - *Severe eczema*, if not treated, can cause slow growth

\* *See next slide*



# Topical Steroid Safety



- Skin thinning is a very rare side effect
- Should not occur unless
  - Highly potent topical used on clear skin over long period of time
  - Moderately potent topical used on sensitive area
    - Face armpits, groin
    - Use weaker topical instead, shorter time period

**Eczema** → **Clear Skin** → **Skin Thinning**

- Continue using topical steroid until skin is clear or as directed by your medical provider
  - Generously apply to affected/inflamed area





# Non-Steroid Topical Medication

- Also helps decrease inflammation
- May be used on any skin surface
  - Especially used for sensitive areas
    - Face and skin folds (groin, armpits, knee and arm fold)
- Used to control eczema during frequent breakouts
- May be used “proactively” or as “preventative therapy” for frequently flaring areas
- Application may cause slight burning and stinging
  - Typically resolves after first couple uses

<b>Topical Calcineurin Inhibitors</b>	<b>Topical Phosphodiesterase-4 Inhibitors</b>	<b>Topical JAK Inhibitors</b>
<ul style="list-style-type: none"><li>• Tacrolimus ointment 0.03%, 0.1% (Protopic)</li><li>• Pimecrolimus cream 1% (Elidel)</li></ul>	<ul style="list-style-type: none"><li>• Crisaborole ointment (Eucrisa)</li></ul>	<ul style="list-style-type: none"><li>• Ruxolitinib cream 1.5% (Opzelura)</li></ul>

## Ruxolitinib



- FDA approved for adults and +12 years
  - September 2021
- Phase 3: 2 to < 12 years

### Clinical Trials

- Higher score of clear to almost clear after 8 weeks of continuous use
- 75% improvement from start of trial
- Reduction of itch as early as **12 hours** within use; improved nighttime itch

- JAK1 and JAK2 inhibitor
- Topical cream, apply thin film on affected area twice daily
  - Up to 8 weeks continuous use
- May use on delicate/thinner skin
  - Face, eyelids, genitals, and skin folds

### Limitations of Use

- Should not be used for more than 20% body surface area



# Black Box Warning

## JAK Inhibitors

### *Black Box Warning*

- FDA required for medication with serious safety risks
  - Cancer, major cardiac events, serious infections, blood clots
    - Actual rates are same or marginally higher than *not* being on the drug
- Based on studies in patients with rheumatoid arthritis on alternative JAK inhibitor not used in eczema
  - Older population (> 65 years) may have already had risk factors or other comorbidities
    - History of CAD, HTN, smoking increased risk of adverse events



# Black Box Warning

Tacrolimus and Pimecrolimus



## *Black Box Warning*

- FDA required for medication with serious safety risks
- Based on data from **oral** use in transplant patients
  - Oral tacrolimus, when used as a transplant drug, increase risk for skin cancer, lymphoma and other adverse events
- Reports from older population (> 55 years) of adverse events
  - May have already had risk factors associated with cancers



# Long-Term Eczema Control

- **Mix and match topical therapies**
  - Topical steroid + non-steroid cream/ointment
  - Safe combination to minimize and prevent rash
- **Proactive treatment**
  - Focus on “hot spots” to control eczema
    - For example: Applying steroid or non-steroid 2-3 times a week

# Summary

- Goal:
  - Minimal eczema rashes
  - Less itch
  - Undisturbed sleep from itching or scratching
- Many ways to treat and control eczema
- Read more about eczema
  - [www.nationaleczema.org](http://www.nationaleczema.org)
  - Search “Rady” and “Eczema”
    - <https://www.rchsd.org/programs-services/dermatology/eczema-and-inflammatory-skin-disease-center>
- Reach goal by:
  - Using good skin care
  - Avoiding triggers
  - Using medicines regularly or as needed

**Eczema is complicated. Please reach out if you have any questions 😊**