



BREAK THE ECZEMA MYTHS

What you need to know to help your patients

25 Key Messages About Atopic Eczema



PREFACE

Patients are our teachers.

This is certainly the case in the stimulus for this simple booklet that illustrates different aspects of Atopic Eczema.

Over the last 2 decades, many patients with mismanaged Atopic Eczema have inspired me to share the challenges that I encounter in my daily practice.

With the internet becoming a way of life and explosive growth in the use of digital gadgets, people are exposed to a myriad of data and myths spread faster than truth does.

Myth is harmful as it can often delay people from seeking treatment. Furthermore, early treatment is the most crucial in Atopic Eczema in order to minimize irreversible effects that related to chronic itch and inflammation.

For the benefit of our patients, it is time to verify the facts and bust the harmful myths about the triggers, treatment modalities and natural course of Atopic Eczema.

To tailor a book that address these challenges, I have devoted a great deal of effort and time compiling the clinical photographs, frequently asked questions and common myths about Atopic Eczema.

Lastly, no labor of this type would be possible without the support of my parents.

Author

Dr. Leong Kin Fon
President of Malaysia Eczema Society
Eczema Myth buster



FROM CONFUSION TO CLARITY, ONE CONSULT AWAY

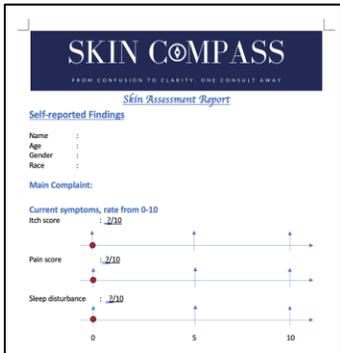
SKIN COMPASS

Whatsapp: +6012-9569023 // // // skincompassmy@gmail.com

Are you lost and confused by several different clinical diagnoses?"

"The **bottleneck** in treating many skin problems is often **misdiagnosis** and **misleading myths**.

We can help you with:



Comprehensive skin report backed by dermatologist: for clinicians and patients

DSLR photography (Diffuse and ring flash)	Glamorous photography (Built in)	Smartphone photography (2 or 3 point light)
 ~ 18,000 ringgits	 Canfield VECTRA XT Fullbody 360 3D Imaging Cosmetic Procedure Visualizer System ~ 75,000 ringgits	 ~ 5,000 ringgits

Smartphone photography course for diagnostic dermatology

"How to Chat with GPT" course coming soon.
We would love to hear from you --- how can we help more?

We are supporting Malaysia Eczema Society financially.

Text us! Or scan to learn more about our services





About Malaysia Eczema Society

The Persatuan Ekzema Malaysia or Malaysia Eczema Society (MES) was founded in 2019 by a group of medical professionals. It is a non-profit organization whose mission is to improve the quality of life for individuals with eczema.

Our Mission

To educate & raise public awareness of the needs of individuals with eczema

To provide emotional support, optimal self-care tips & guidance to both eczema patients & their family members via educational videos, webinars & social media contents

To organize charity programs to support severe eczema patients

In Malaysia, over 10% of the population has varying degree of atopic eczema. Amongst them, some have severe recalcitrant eczema who require intensive and holistic support. This becomes incredibly tough on both the person with eczema (especially children) and their families.

Malaysia Eczema Society has started to adopt a few families with severe eczema and offers them both medical and psychosocial support.

Below shows some progress we have made to date:

Cases Adopted By Malaysia Eczema Society



Malaysia Eczema Society

1 Donate to Malaysia Eczema society or adopt our patients

CIMB bank
Persatuan Ekzema Malaysia
Account No: 8010 5928 57

2 Join us as myth buster

Email to us:
leongpengchoon40@gmail.com

3 Register & enroll on our patient education & empowerment course

Email to us:
leongpengchoon40@gmail.com

Sincerely,
Dr Leong Kin Fon, President of Malaysia Eczema Society

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01 A BIRD'S EYE VIEW OF ATOPIC ECZEMA

MESSAGE 1

ECZEMA IS LIKE FIRE BURNING A TROPICAL DRY FOREST

WHAT IS ECZEMA?

In simple terms, **Eczema** means skin inflammation and it is analogous to “skin on fire”. When harmless irritants or allergens outside our body triggers the immune system to “over-react”, it produces uncontrolled eczema. It is likened to “setting the skin on fire”.

Inflammation is a double-edged sword, whereby it can either serve us well, or cause harm to the body instead. Inflammation plays a central role in fighting infection and healing process, but when left to run wild, this process can lead to various forms of eczema.



ECZEMA IS ANALOGOUS TO SKIN ON FIRE

NORMAL SKIN

3 LAYERS :
Epidermis , Dermis , Fat

Epidermis

Dermis
(Collagen)

Fats

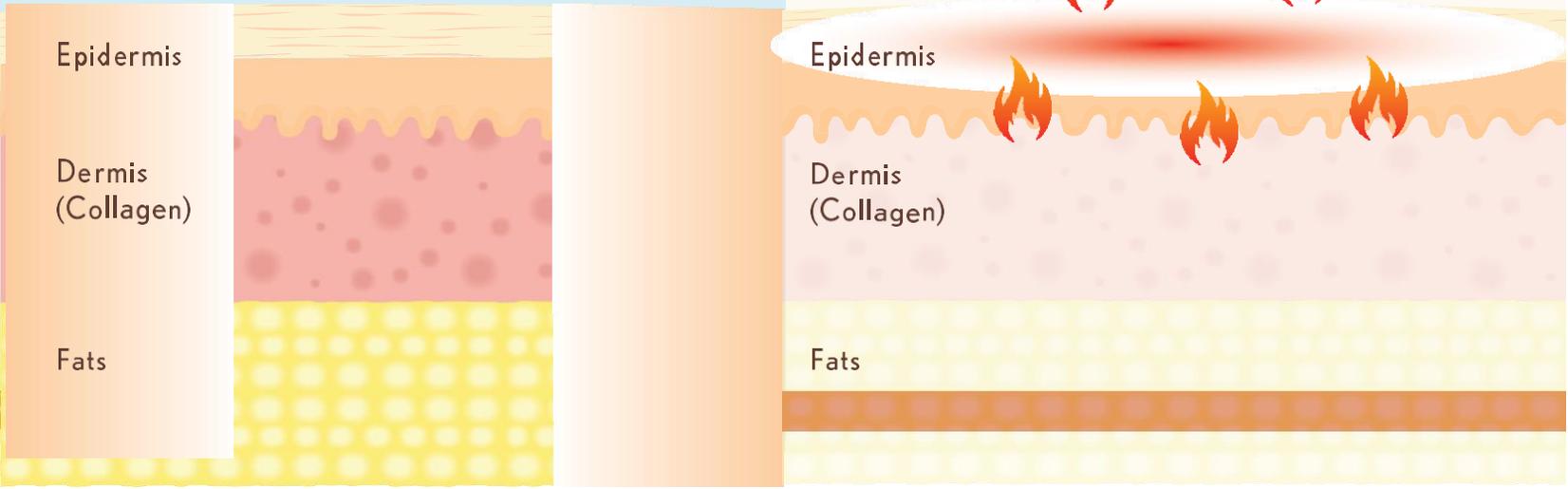
ECZEMA

Means superficial
skin inflammation

Epidermis

Dermis
(Collagen)

Fats



MESSAGE 2

ECZEMA IS LIKE THE COUNTLESS FACES OF LADY GAGA

WHAT ARE THE FACES OF ECZEMA?

Eczema has many appearances that can vary with

1

Chronicity

Acute

Dry, scaly, redness,
blister, erosion

Chronic

Thickened, discolored &
leather-like texture

2

Degree of Inflammation

Mild, Moderate & Severe

3

Background Skin Color

DID
YOU
KNOW

It can present differently
in different skin tones



Most people have the perception to equate Eczema with the **scaly-red** appearance, which holds true for **light-skinned** individuals.

However, in brown or dark-skinned individuals, Eczema rashes are **less visible** and tends to look **ashen grey, brown or purple in darker skin tones.**

Hence, your eczema may not look the same on you as it does on another individual. Eczema of different appearances may even appear in different body parts of the same patient.

DYNAMIC FACES OF ECZEMA



Figure 1 : Acute and chronic Eczema



Figure 2 : Eczema on light & dark-skinned

MESSAGE 3

EARLY ECZEMA IS LIKE SMOULDERING FIRE, WHEREBY IT SMOKES WITHOUT FLAMES

WHAT ARE THE EARLY SIGNS & SYMPTOMS OF ECZEMA?

Itchiness is the cardinal feature of eczema

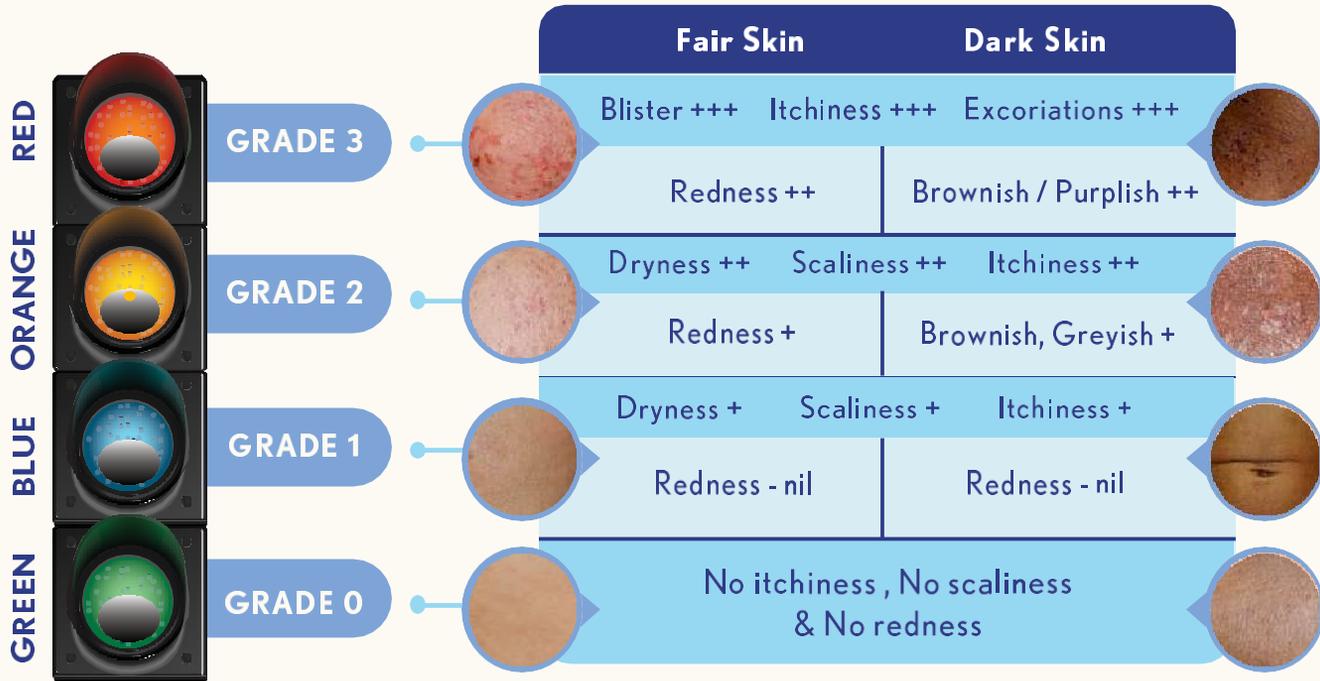
Eczema is sometimes referred to as “the itch that rashes” because the itching usually comes first. In the absence of characteristic redness among the dark-skinned, skin itchiness and scaliness may help patients in the early detection of eczema flare-up.

Based on the degree of inflammation,
Eczema can be classified into **Grades 1-3**



MODIFIED TRAFFIC LIGHT SYSTEM

How to recognize the degree of skin inflammation



MESSAGE 4

ECZEMA IS A BIG COLORFUL UMBRELLA

WHAT ARE THE VARIOUS FORMS OF ECZEMA & WHY THE NEED TO DIFFERENTIATE THEM?

EcZema is often used as an umbrella term describing various forms of specific rashes due to superficial skin inflammation. *(please refer to message 1 - 3)*

It is not uncommon to have more than one form of eczema on your body at the same time.

The different forms of eczema include:



Atopic Eczema
the most common form in children



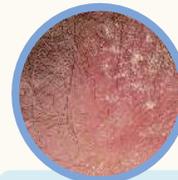
Contact Eczema



Dyshidrotic Eczema



Nummular Eczema



Seborrheic Eczema



Others

- Each form of eczema has its own set of triggers, predisposing factors, clinical appearance, long term prognosis and treatment requirements.
- Some of them are due to single factor and more likely to occur in the children.
- Others are multifactorial and have tendency to affect adolescent and young adults.
- It is important to identify the form(s) of eczema in order to identify its modifiable triggers, predict its prognosis and individualize its treatment strategy.

ATOPIC ECZEMA



SEBORRHEIC ECZEMA



NUMMULAR ECZEMA



CONTACT ECZEMA



MESSAGE 5

ATOPIC ECZEMA AND ITS SEVEN DWARFS

WHAT ARE THE 7 DISTINCTIVE FEATURES OF ATOPIC ECZEMA?

Each form of eczema has its own set of predisposing and triggering factors, age predilection, characteristic clinical patterns, natural history and common comorbidities.

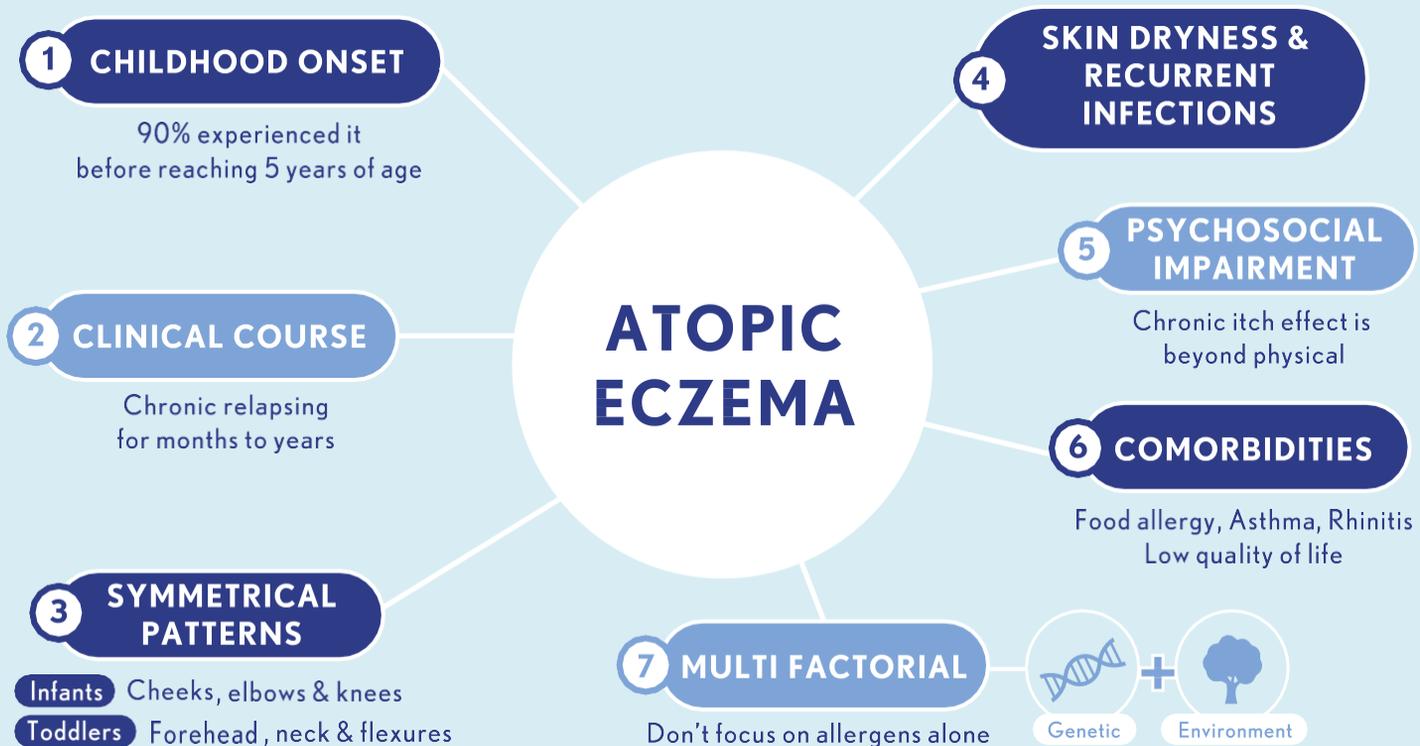
ATOPIC ECZEMA

- 👉 A special form of Eczema with characteristic features that distinguish it from others.
- 👉 The most common form of Eczema in children, often developing **before their first birthday**.



A chronic relapsing disease with tendency to improve over age.

ATOPIC ECZEMA= ECZEMA + 7 DISTINCTIVE FEATURES



Examples of Atopic Eczema with symmetrical patterns

Atopic Eczema
(Localized flare-ups)



Atopic Eczema
(Young child with flexural pattern)



02 MATHEMATICS OF ATOPIC ECZEMA

MESSAGE 6A

BASIC & ADVANCE MATHEMATICS OF ECZEMA, IS THE CONDITION CALCULABLE?

WHAT ARE THE MATHEMATICAL EQUATIONS OF VARIOUS FORMS OF ECZEMA?

Eczema can be classified in a number of ways

In terms of causes and mechanism, there are two major types: **Simple or Complex Eczema**

1 SIMPLE ECZEMA

- 👉 The mathematic of simple eczema is straightforward .i.e. $1+1=2$
- 👉 Contact eczema happens when skin comes into contact with a **common allergen** (nickel in jewellery) or irritant (overuse of alkaline sanitizer)

HOW TO IDENTIFY?

Normal skin + No history of atopy + "single" environmental irritant = **irritant** contact eczema
Normal skin + No history of atopy + "single" environmental allergen = **allergic** contact eczema

Hand Eczema

- 1 Frequent hand sanitizing
- 2 No history of eczema



Potty Seat Eczema

- 1 Since potty training started
- 2 No history of eczema



MESSAGE 6B

BASIC & ADVANCE MATHEMATICS OF ECZEMA, IS THE CONDITION CALCULABLE?

2

COMPLEX ECZEMA

Atopic Eczema has a complex mathematic and root system

$$\text{Atopic Eczema} = 0.4 - 0.2 + 0.33 + 0.6 + \sqrt{2.36(\pi) + \pi(0.55)} + \sqrt{9(1)}$$

Complex eczema occurs when the skin comes into contact with **more than one:**

Allergens

Food Allergen, Aeroallergens,
Cream

OR

Irritants

Harsh Cleanser, Physical Friction &
Scratching



HOW TO IDENTIFY?

- ✓ Normal skin + No history of atopy + “single” environmental irritant = **Simple** eczema
- ✓ Dry skin + History of atopy + “a few” environmental triggers = **Complex** eczema

Simple Eczema

Potty Seat Eczema

No past history of eczema
and allergic diseases



Complex Eczema

Toilet Seat Eczema

with existing Atopic Eczema



TEST YOUR KNOWLEDGE

Please select the mathematical equation of Atopic Eczema

- A Atopic Eczema = $0.4 - 0.2 + 0.33 + 0.6 + \sqrt{2.36(\pi) + \pi(0.55)} + \sqrt{9(1)}$
- B Atopic Eczema = $1+1$

The answer is A

MESSAGE 7

TRIM THE TREE OF “ATOPIC ECZEMA” AND SET A REALISTIC TARGET

Atopic Eczema has a complex, dynamic and ever-changing root system that spread deep and far out from the base.

TEST YOUR KNOWLEDGE

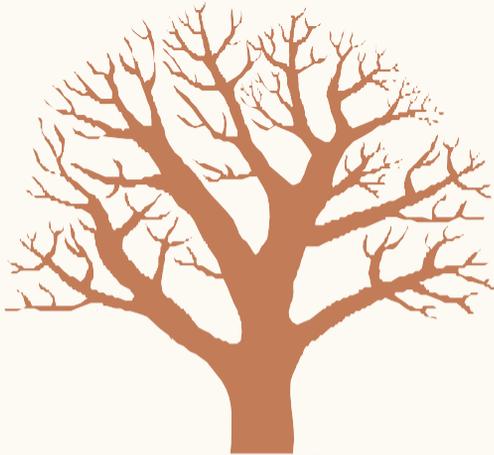
Practically, which long term strategy is feasible for patients?

- A** Learn to live with it and practice the art of pruning and potting a bonsai
- B** Uproot it once and for all, then live happily ever after

The answer is A

Which root system represents the underlying cause of Atopic Eczema?

A



OR

B



MESSAGE 8

ATOPIC ECZEMA IS A FAMILY-OWNED BUSINESS, ALONG SIDE WITH ASTHMA AND RHINITIS

Atopic Eczema is a multifactorial inflammatory skin disorder. It is due to **dynamic interaction** between multiple genetic and environmental factors.

Atopy refers to the genetic tendency to asthma, eczema and hayfever.

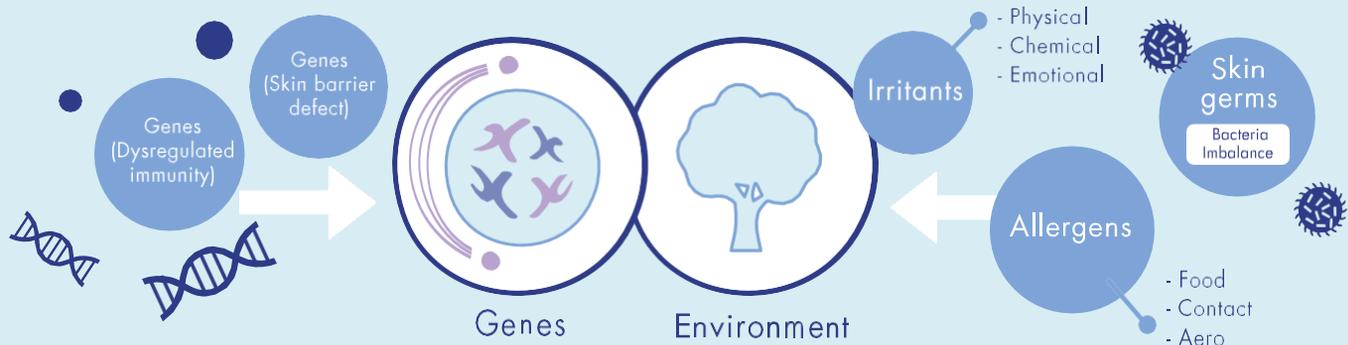
- 🌿 Despite the genetic background, some children with family history of atopy never develop Atopic Eczema.
- 🌿 On the other hand, children from a non-atopic family can suffer from it due to harsh environmental factors.



Hence, familial aggregation is due to shared environment and/or shared genes

Which mathematic represents the underlying components of Atopic Eczema?

- A. Atopic Eczema = Genetic factors alone
- B. Atopic Eczema = Environmental factors alone
- C. Atopic Eczema = Genetic factors + Environmental factors



The answer is C

MESSAGE 9

AE IS NOT ALLERGIC ECZEMA, BUT ATOPIC ECZEMA



While atopic dermatitis is not just a simple allergic reaction, it is commonly associated with other allergic disorders:



As up to 2/3 of them march on to develop asthma and allergic rhinitis

DID YOU KNOW?

- 1 Commercially available tests .i.e. skin prick test, blood for allergen specific IgE are **NOT** designed for eczema.
- 2 **Skin prick test** and **blood IgE test** are designed for immediate onset allergic reactions .e.g. hives, swollen eyes, sneezing and anaphylaxis.

These tests have average accuracy of **50-60%** and requires clinical challenge for confirmation.

**Shoe Related
Eczema**
(Mixed)

=

Contact Allergen



+

Contact Irritant



+

Bacteria
Overgrowth



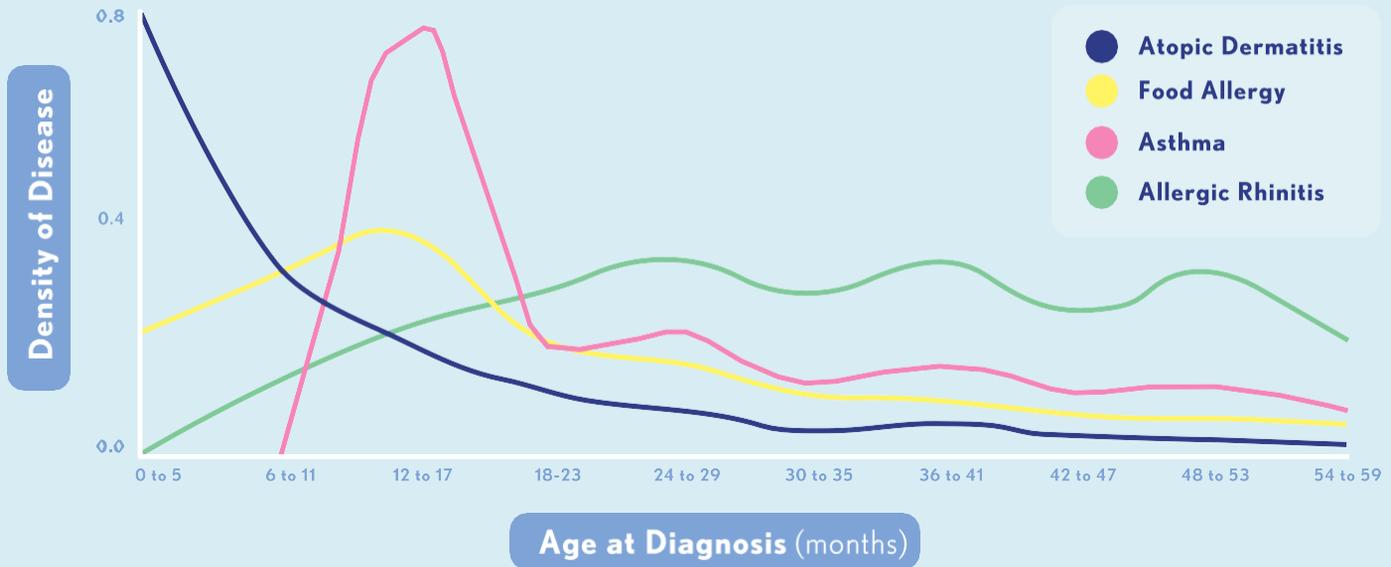
Potential allergens are Rubber Accelerator,
Leather (chromates, formaldehyde), Dyes, Glues or Nickel

ATOPIC MARCH

Atopic manifestations march from **skin** → **gut** → **airways**

The atopic march refers to the natural progression of atopic disorders as they develop over the course of infancy and childhood. Classically, it **starts with atopic dermatitis in infants**, progresses to food allergy, then onwards to allergic rhinitis and asthma in older children.

Atopic Eczema is associated with a defective skin barrier. The allergens penetrate through the porous inflamed skin and trigger the immune system to “over-react”, leading to abnormal immune response.



MESSAGE 10

ECZEMATOUS SKIN IS EXTREMELY “EMO”

The environmental triggers of Atopic Eczema are multiple, dynamic, cumulative and vary according to age group and local climate.



Learn to identify the triggers and classify them into

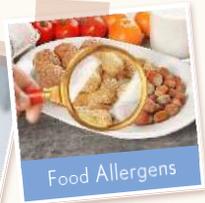
Modifiable

- Sweat related to hot and humid weather
- Prolonged exposure to chlorinated swimming pool (> 15 minutes)
- Friction related to tight clothing and shoes
- Itch scratch cycle
- Harsh cleanser or creams
- Imbalance between friendly & harmful bacteria .i.e. overpopulated by *Staph.aures*
- Others: food allergens, aeroallergens, stress

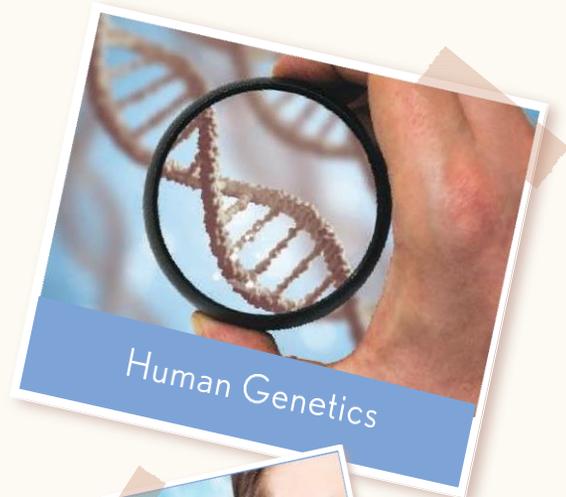
Non-Modifiable

- Atopic Eczema runs in family but it is not a pure genetic disease & its course is not predestined
- Genetics play a “significant but not absolute” role in determining who will get eczema
- Eczema is not caused by single gene, rather many genes that act together to “increase” the chance of eczema developing

MODIFIABLE



NON-MODIFIABLE

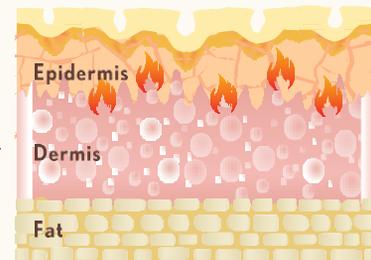
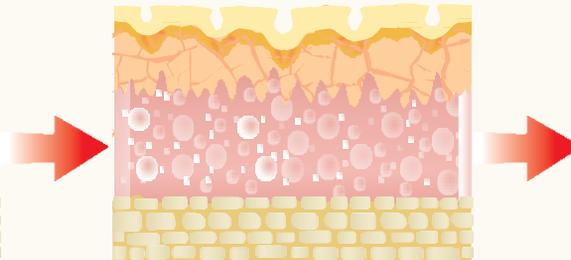
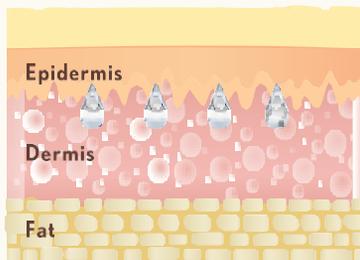


MESSAGE 11

DRY FOREST PRONE TO WILDFIRE, DRY SKIN SUSCEPTIBLE TO ECZEMA

Dry skin is very common and the key component in all stages of eczema. It is due to dynamic interaction between both **internal and external factors**.

Internal	External
Genetic: Reduced in filaggrin production	<ul style="list-style-type: none">Harsh cleanser & dry air conditioning roomEczema itself, alkaline skin productsExogenous proteases from house dust mite<i>Staph.aureus</i>



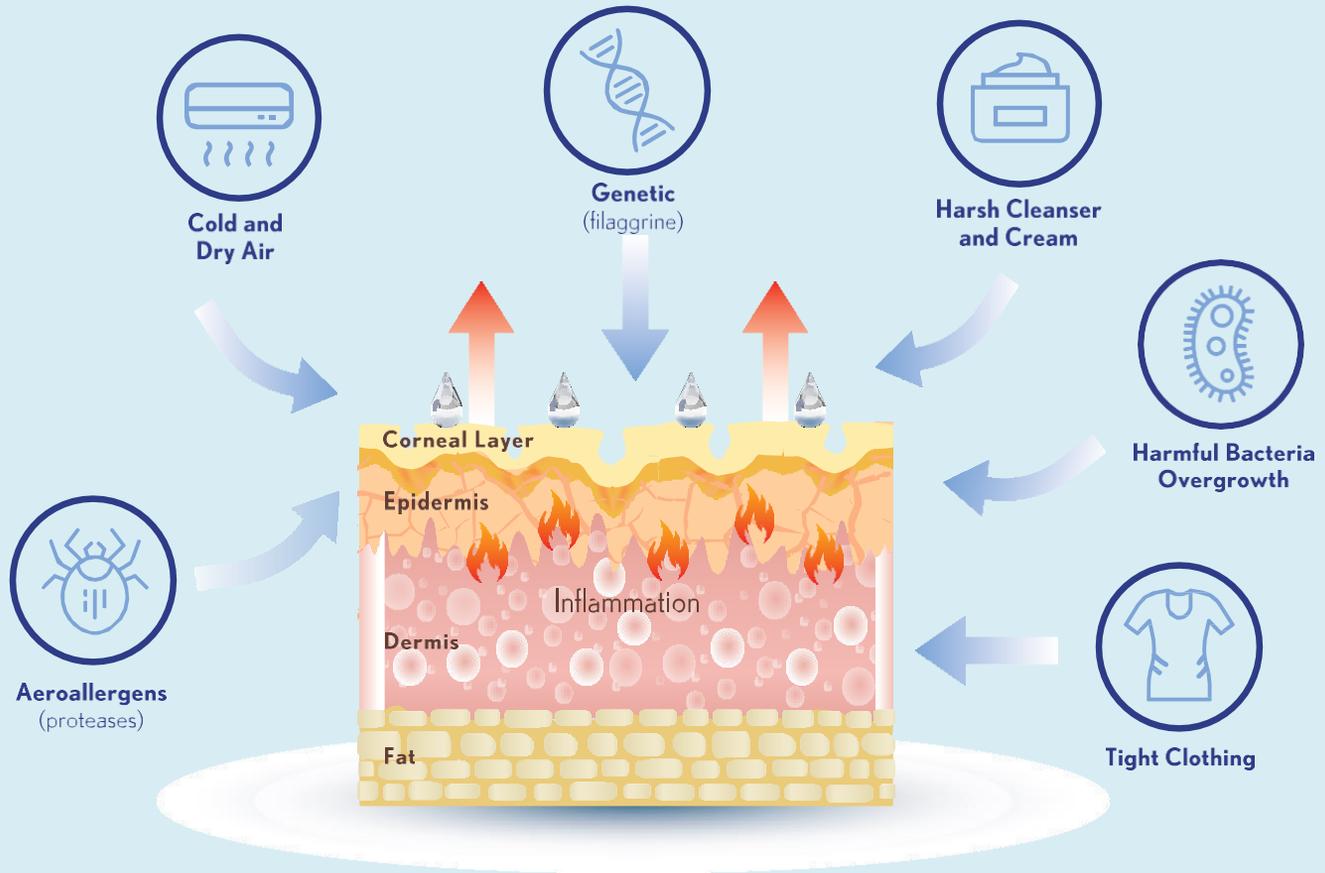
DRY SCALY SKIN



DRY INFLAMED SKIN



Factors causing Dry Scaly Skin in Atopic Eczema



MESSAGE 12

ECZEMA'S EFFECT MORE THAN SKIN DEEP

Although Atopic Eczema primarily affects the skin, it is not just skin-deep. It has been found to be associated with numerous atopic comorbidities, including allergic rhinitis, asthma, food allergies.

Beside physical, this skin disorder can have a serious impact on patient's quality of life .i.e. psychosocial, mental and financial aspects. People with eczema are more susceptible to

MENTAL HEALTH ISSUES

Anxiety

Depression

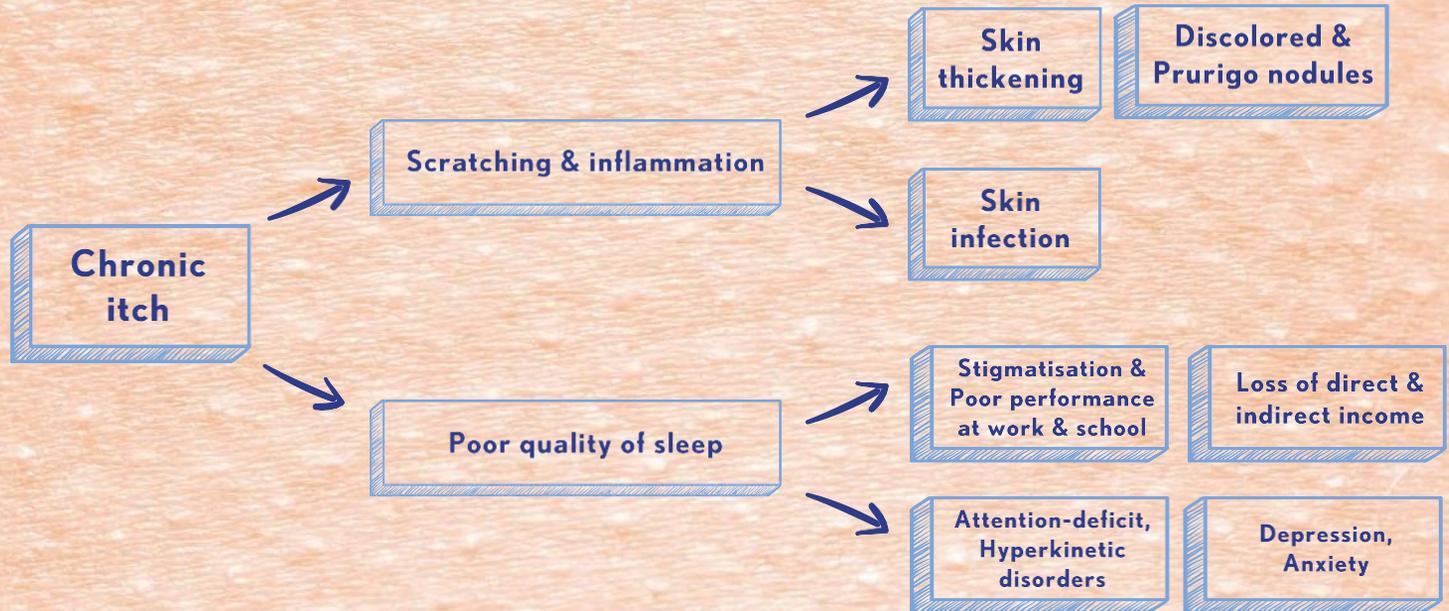
Attention-
Deficit
Hyperactivity
Disorder
(ADHD)

Low
Self
Esteem



Atopic Eczema is one of the itchiest skin disorder on earth

AE related Itch is not a trivial symptom, it often leads to serious pathological sequence



MESSAGE 13

ECZEMATOUS SKIN WITH POROUS SURFACE IS OVERFRIENDLY TO ALL ILLEGAL IMMIGRANTS & UNINVITED INTRUDERS

The skin microflora are microbes that reside on our skin. On average, the skin surface has about 1 billion bacteria per square cm.

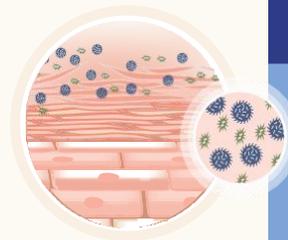
- 🍃 Skin flora can be **commensals** (are not harmful to their host), **mutualistic** (offer a benefit) or **pathogens** (harmful).
- 🍃 Often they can be all three based on the host's immune status. Some microbes are permanent resident.
- 🍃 Others are considered transient visitor as they can be found on our skin from time to time.



HEALTHY SKIN

NURTURES BALANCED SKIN MICROFLORA

- 🍃 Well hydrated with an organized lipid layers and adequate amount of natural moisturizing factors
- 🍃 Optimal surface pH of 4.5 - 5.5
- 🍃 Effective first line immune system
- 🍃 Balanced and diverse population of microbes



ATOPIC ECZEMA

THE SKIN IS DEHYDRATED

- 🍃 Higher skin surface pH with dysregulated natural defense mechanism
- 🍃 As a result, atopic eczema is susceptible to different forms of skin infection



BACTERIA



FUNGAL



VIRAL

Tinea

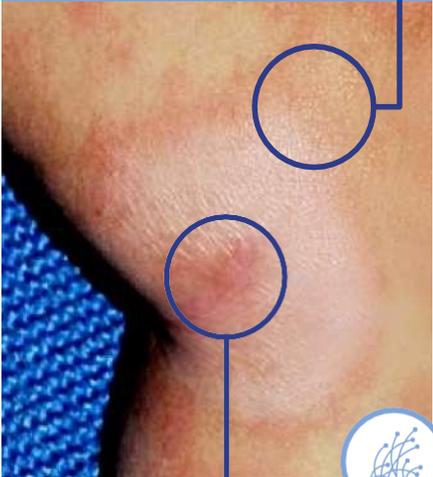
- 👉 well-defined
- 👉 expanding

Bacteria + Eczema



BACTERIA

Fungal + Eczema



FUNGAL

Viral + Eczema



VIRAL

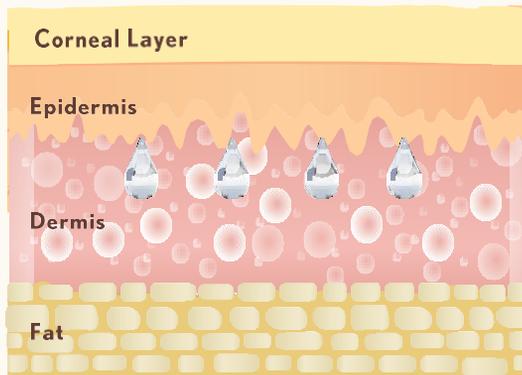
Eczema

- 👉 ill-defined
- 👉 red, scaly

WELL HYDRATED SKIN

pH4.5 - pH5.5

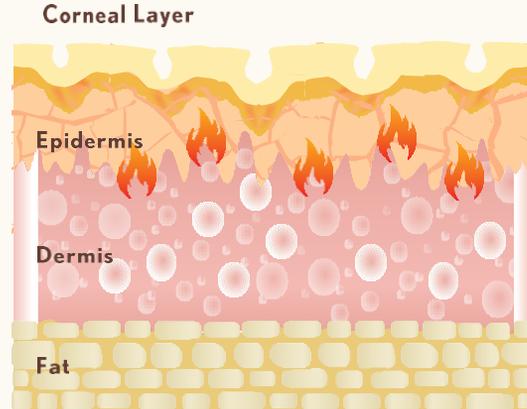
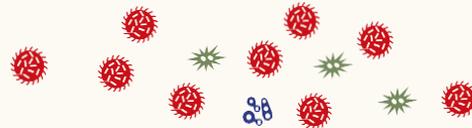
Balanced Skin Microflora



DRY ECZEMATOUS SKIN

pH5.5 - pH6

Imbalance of skin microflora
Harmful bacteria > Good bacteria



03

**KNOW YOUR TREATMENT
OPTIONS AND STRATEGIES**
IN MANAGING ATOPIC ECZEMA

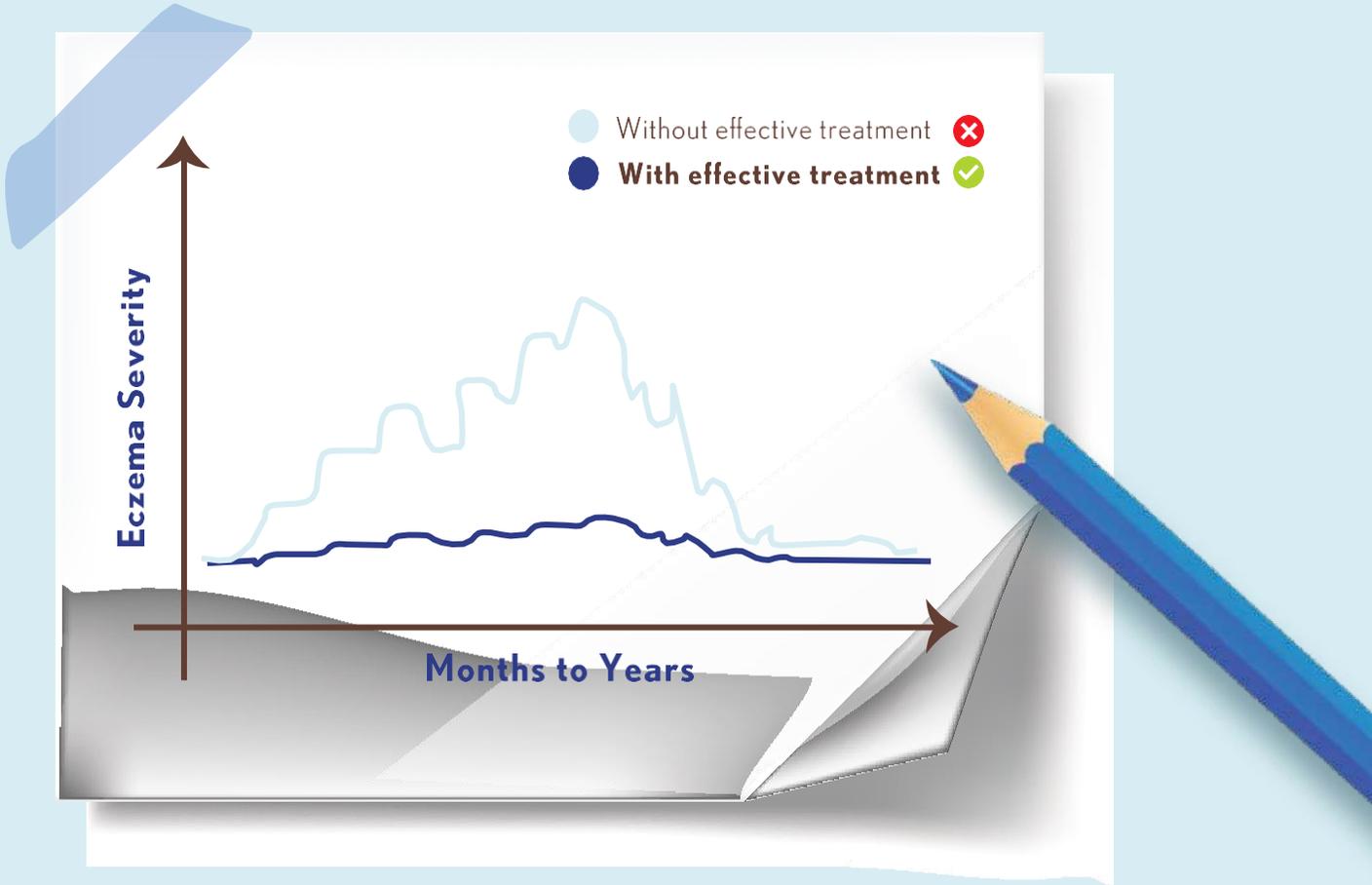
MESSAGE 14

THERE IS NO PANACEA OR MAGIC BULLET

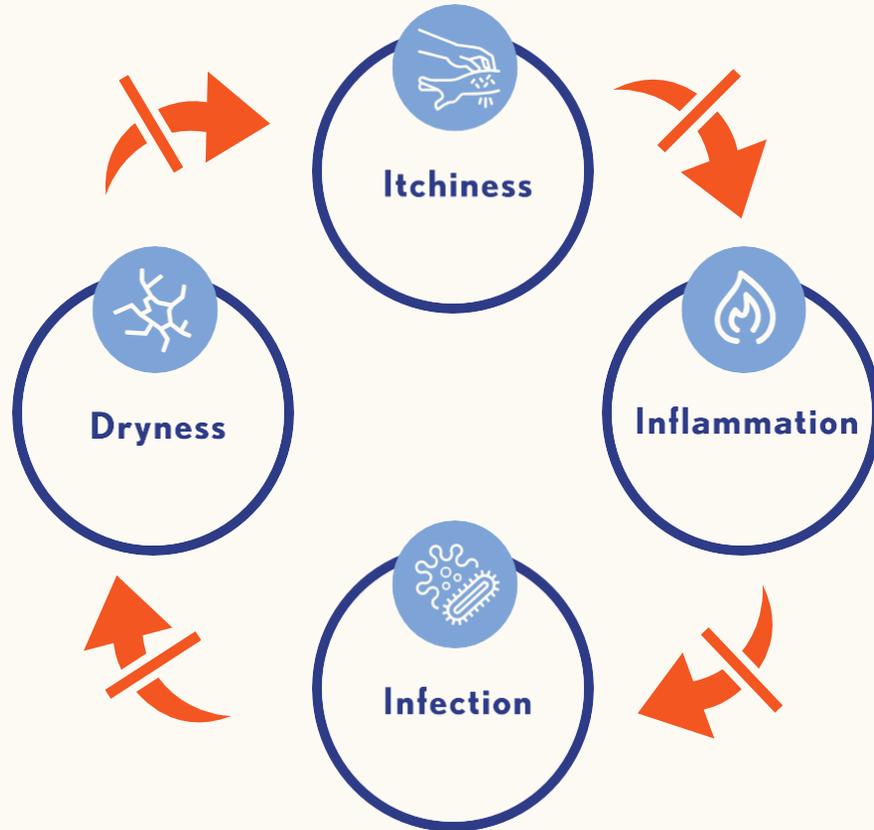
The **6 key strategies** in management of Atopic Eczema are



In Atopic Eczema , our aim is to **FLATTEN** the curve and not cure it



Break the **Dry-Itch-Inflammation** cycle



MESSAGE 15

THE ANTIDOTE OF DRY SKIN IS MOISTURIZER, MOISTURIZER AND MOISTURIZER

Dry skin is very common among Atopic Eczema patients. It is one of the key components that present in all stages of eczema. Moisturizers are the mainstay of treatment for Atopic Eczema and regular application is soothing and has a steroid-sparing effect.

10 RULES about moisturizer application in atopic eczema

Moisturizer should be:

- 1 applied regularly and liberally especially in air conditioned room due to low humidity.
- 2 applied to entire body immediately after bath or whenever the skin feels dry and itchy.
- 3 provided adequately with 250–500g of basic moisturizer per week and 50g/week of enhanced moisturizer over the hotspots.
- 4 coupled with a gentle cleanser.
- 5 continued even when the eczema has cleared.
- 6 applied & smoothed on in the direction of hair growth.
- 7 provided in a pump container or tube as moisturizer in open containers can become contaminated.

8 Moisturizer should be provided in different formulations and patients should be encouraged to select the regimen that will best meet their lifestyle and weather.

• Ointments may be preferred for night time use because of their longer lasting hydrating properties.

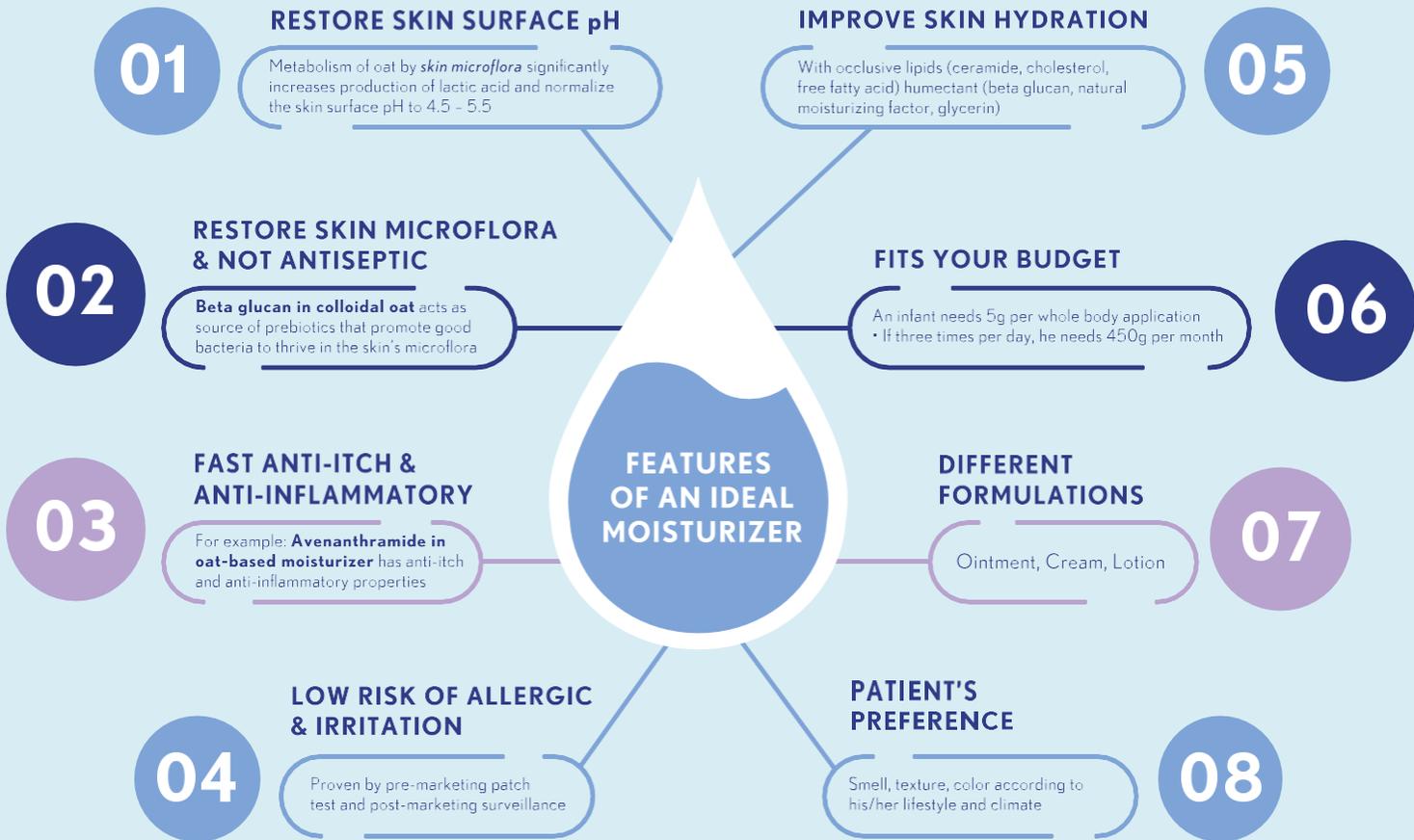
• But ointment-based moisturizers can be uncomfortable and sticky under hot weather whereas lotions or cream-based moisturizers are lighter and cosmetically acceptable.

9 How to choose between Moisturizer or Steroid first application? Simplicity and adherence should be the first criteria.¹ (Voegeli *et al.*, 2017)

10 Moisturizer, especially when introduced 1st time, should be tested in front of elbows or behind the ears for 3–5 days and parents/caretakers should watch out for any redness and itchiness on the child.



Dryness



FACTORS THAT INFLUENCE THE CHOICE OF MOISTURIZER TYPE (WEATHER, AGE/BODY SURFACE, AMOUNT OF HAIR)

1 Weather




Cold Weather



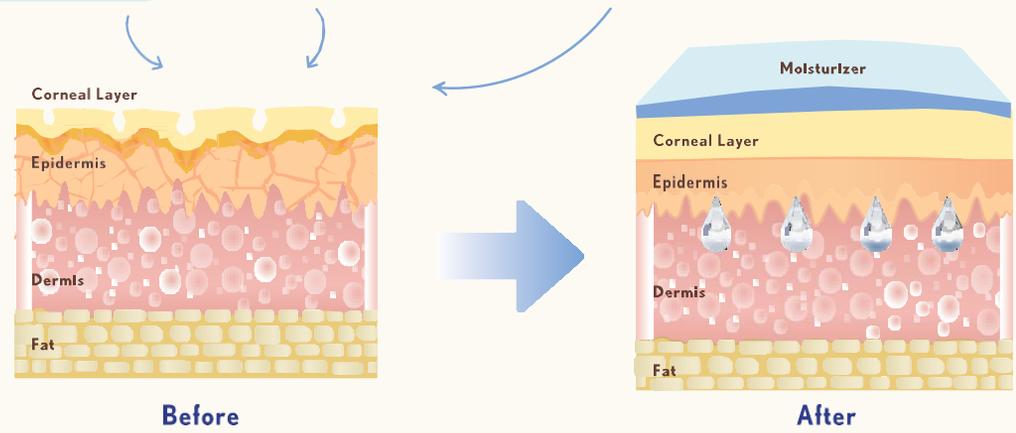

Hot Weather

2 Age / Body Surface



Infant → **4 years old** → **Adult**
5g → 10g → 20g

3 Amount of Hair



MESSAGE 16

CHRONIC PERSISTENT ITCH IS MORE "PAINFUL" THAN PAIN & BEYOND PHYSICAL

Everybody experiences itch in his or her life and itch is a sensation that provokes the desire to scratch. Transient itch and subsequent scratching that resulting in itch relief has been associated with positive feelings like pleasure. Chronic persistent itch is never pleasurable but unbearable.



Nearly **100%** of patients with skin diseases like atopic dermatitis (AD), urticaria and scabies suffer from moderate to intense itch. When you scratch or even rub, you can make the itch and your eczema worse.

Some people scratch so much they bleed, and that's a setup for infection.

STRATEGIES IN MANAGEMENT OF AD-RELATED ITCH

- 1** Avoid unempathetic and ineffective instruction about itch .e.g. don't scratch, it bleeds.
- 2 Pharmacological management**
Topical: Moisturizer with anti-itch ingredient (avenanthramide, menthol), corticosteroid, calcineurine inhibitors
Systemic: Sedating anti histamine, oral anti-inflammatory agents and biologics (dupilumab).
- 3 Non-pharmacological steps**
 - 👉 Modify the environmental triggers: sweating, harsh cleanser, stress, dry air, dusty environment, tight clothing and true food allergy.
 - 👉 6 home based steps to modify the itch scratch cycle.



Itchiness

6 HOME-BASED STEPS TO MODIFY THE ITCH SCRATCH CYCLE



COLD COMPRESS

Make a quick compress to cool your skin by wetting a washcloth or gauze with cold water



MOISTURIZER WITH ANTI ITCH PROPERTY

Enhanced Moisturizer
i.e. **oat-based with Avenanthramide**



WET WRAP

Single layer of damp gauze.
Top that with a dry layer



DISTRACTION METHOD

Keep your hands busy with tapping, acupressure, short video games



NATURAL NEUTRALIZATION

Cool (1 - 3% Menthol)
Heat (0.025% Capsaicin)



RELAXATION METHOD

Meditation

MESSAGE 17

TACKLING SKIN INFLAMMATION: FROM SMOULDERING FIRE TO ERUPTED VOLCANO

Eczema is like a fire in your skin you cannot see during the early stage. It is a smoldering process that injures the physical, psychosocial and mental, and you often do not notice it until significant damage is done. To put out Atopic Eczema, learn how to become a firefighter.

Combination of steroid & non-steroidal cream & enhanced moisturizer

Creams

- 👉 4 classes of steroid
- 👉 Non-steroidal (tacrolimus, pimecrolimus, crisaborole)
- 👉 Enhanced moisturizer (**oat-based moisturizer with Avenanthramide**)

Systemic

- 👉 Oral: steroid, cyclosporin, methotrexate, Azathioprine
- 👉 Injectable: Dupilumab



COMBINATION OF "CREAMS + TABLETS + INJECTIONS" TO FIGHT THE FIRE



Severe Eczema 1-2%



Mild & Moderate Eczema 98-99%

**IDENTIFY EARLY SIGN OF ECZEMA
& TREAT PROMPTLY**



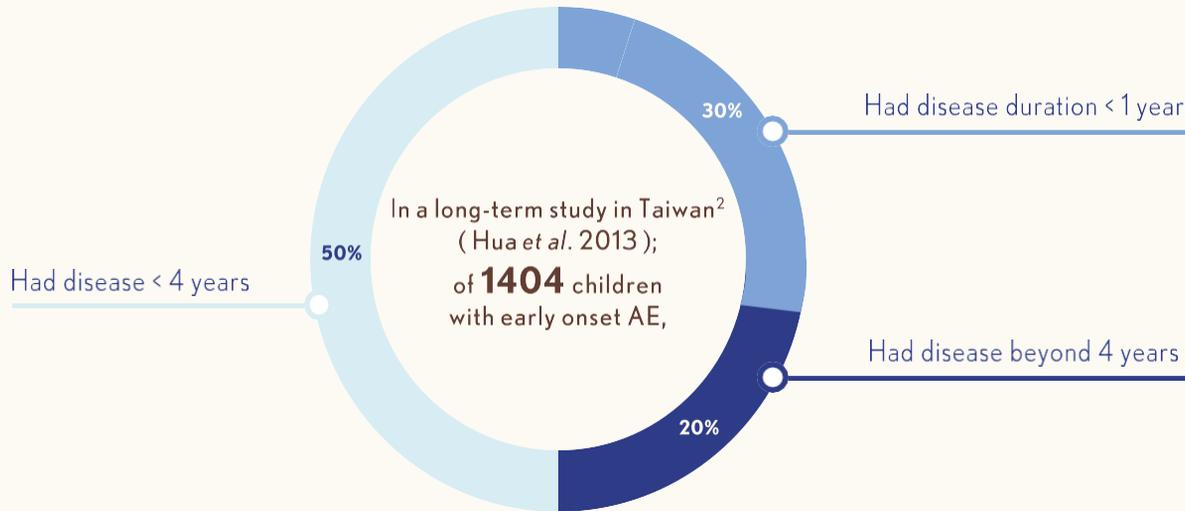
**HIT HARD AND PROACTIVELY
UNTIL FULL REMISSION IS ACHIEVED**



MESSAGE 18

FINETUNE YOUR ECZEMA RACE AT MARATHON OR TURTLE PACE

Atopic Eczema is a chronic relapsing inflammatory disorder that takes years to go into long term remission. The intensity of symptoms usually fluctuates over time.



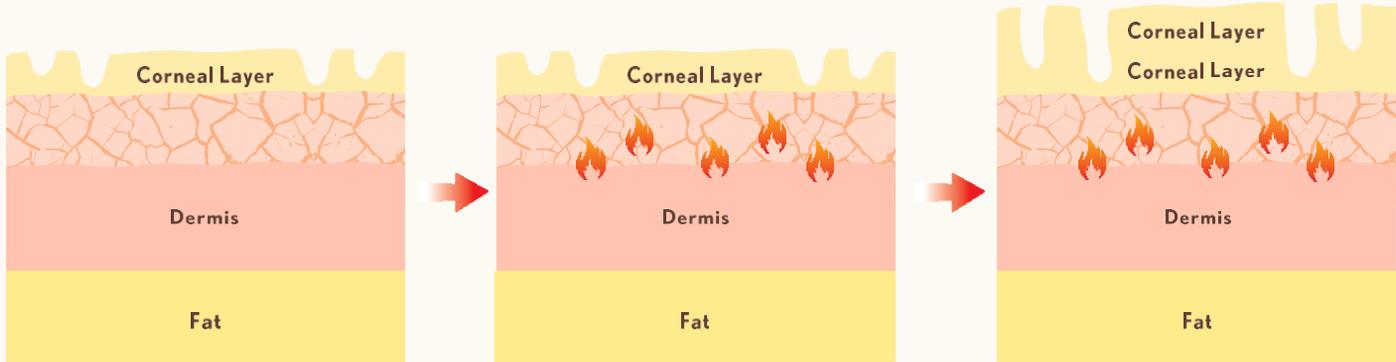
But it does not mean that we wait “passively” for Atopic Eczema to run its course.

Poorly controlled Atopic Eczema causes:

Skin lichenification and frequent flare-ups

Poor quality of life

Poorly controlled Atopic Eczema ends up with **lichenified eczema, nodular eczema and psychosocial scarring**

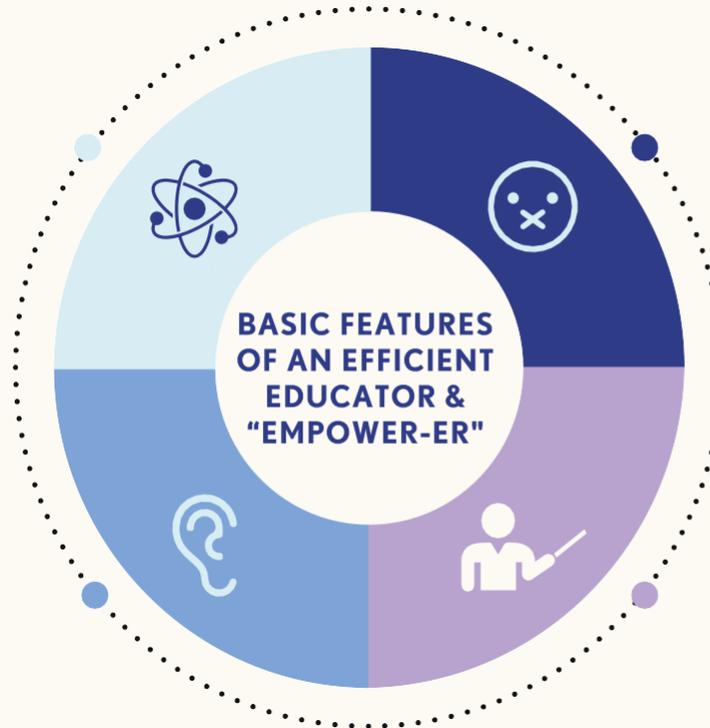


MESSAGE 19

BE AN ACTIVE LISTENER, A MYTH BUSTER, AN EDUCATOR AND "EMPOWER-ER"

**Be dynamic
and tailored
to individual
background**

**Be an active
myth buster**

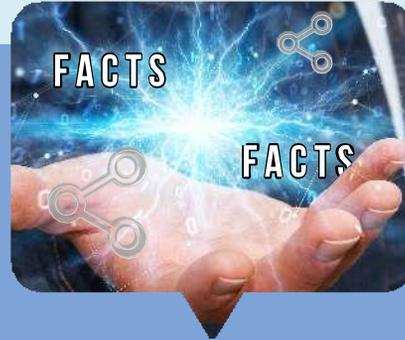


**Be an
active
listener**

**Be a 4-dimensional
educator:**
physical, mental, social
and cyberspace



Be an Active Listener



Be an Empower-er

Share the facts to all caregivers



Be an Active Myth Buster

Active debunking (Pour out the polluted water before educating the fact)



**Have Emphaty &
Be Holistic**

MESSAGE 20

STEROID IS NATURAL AND SAFE IN GOOD HANDS

STEROID IS NATURAL TOO

Our body produces steroid hormone everyday by adrenal gland (7.5 mg/m²/day)



Steroid has 4 classes based on its potency vs site of application³



Steroid has 70 years of track record.

Steroid has been used to help all kinds of skin diseases worldwide since 1950s.

We are not promoting steroid without restriction. Please don't reject it without knowing it but use it in combination and under supervision.

The class of steroid used changes depending on the site of application³



Moderate



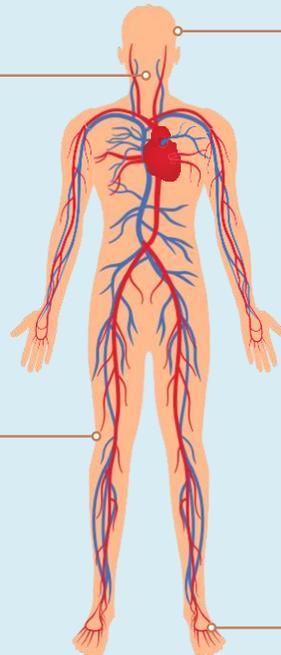
Mild



Superpotent



Potent



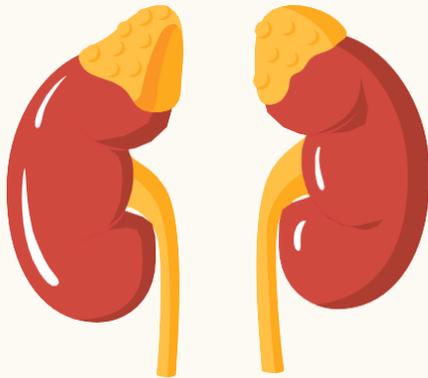
Steroid is natural

Our body produce it everyday

Steroid: A double-edge sword

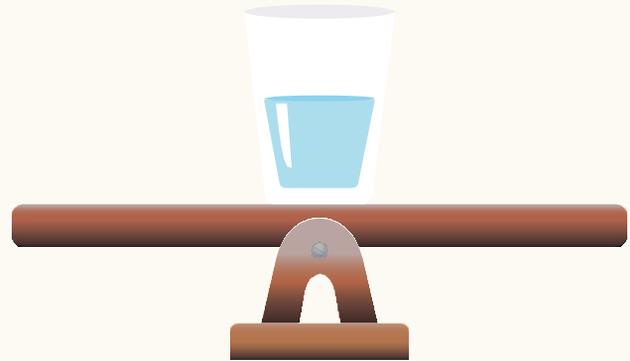
Balance is the key

Glucocorticosteroid
by adrenal gland



Kidney

What happens when
you drink too much water?



**Even too much water
in our body is harmful**

04

**LEARN TO BECOME A
MYTH BUSTER:**

WHAT IS NOT ATOPIC ECZEMA

MESSAGE 21

RELATIONSHIP BETWEEN ATOPIC ECZEMA & FOOD ALLERGIES: FATHER & SON / BROTHER & SISTER?

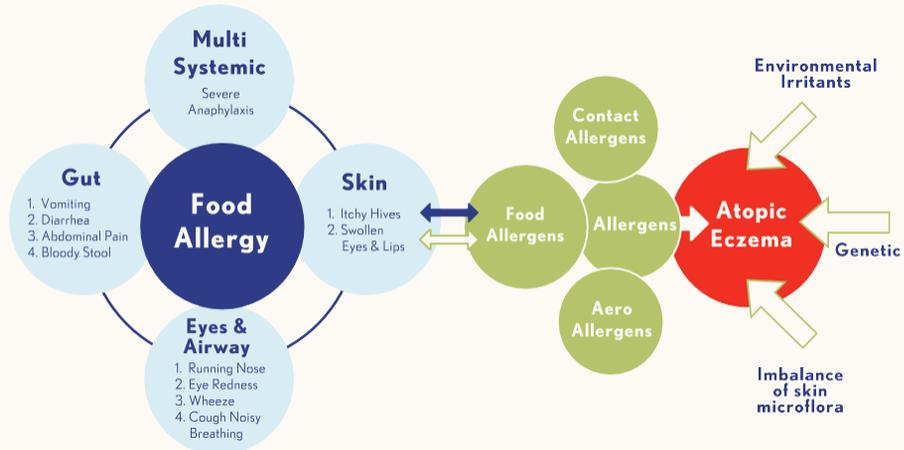
To understand the relationship between food allergy and Atopic Eczema, let's try going through these **10 statements**.

1. Food allergies and Atopic Eczema is **closely linked**. 
2. Food allergies can **trigger** a worsening of existing Eczema symptoms. 
3. Food allergy and Atopic Eczema has greater tendency to co-exist among young babies than adolescent & adults. (Overtime, majority of babies with milk, egg, soy and wheat allergies will outgrow their food allergies) 
4. Food allergy is more common in infants with severe atopic eczema than mild Atopic Eczema. (up to 30 - 50% of children with moderate to severe atopic eczema will have an IgE mediated food allergy) 
5. Food allergies can make your Eczema symptoms worse indirectly via the non-eczematous rashes .e.g. itchy hives that caused by true food allergy. 
6. Food challenge test is diagnostic for food allergies among eczema but could be performed only when Atopic Eczema is well controlled. 
7. Food allergies **cause** Atopic Eczema. 
8. When a child has Atopic Eczema and confirmed food allergy, total avoidance of the identified food allergen often cure his Atopic Eczema. 
9. Self guided home diet manipulation is the first line therapy for children with Atopic Eczema. Only if the response is poor, we move on to topical creams like steroid, moisturizer and modification of other environmental triggers. 
10. Commercial Food allergy tests .e.g. skin prick test and allergen specific serum IgE is confirmatory with high degree of accuracy (> 95%). 

WHICH DIAGRAM BEST DESCRIBE THE RELATIONSHIP BETWEEN ATOPIC ECZEMA & FOOD ALLERGIES?

OPTION A

RELATIONSHIP BETWEEN ATOPIC ECZEMA & FOOD ALLERGIES



OPTION B

RELATIONSHIP BETWEEN ATOPIC ECZEMA & FOOD ALLERGIES



The answer is A

MESSAGE 22

"CLEAN OR NOT TOO CLEAN" IN PREVENTION OF ATOPIC ECZEMA

Hygiene Hypothesis

Based on observational studies, there is an inverse relationship between the level of hygiene and the incidence of allergies. **The cleaner the environment a child lives in, the higher the risk he or she will develop allergies in their lifetime.** Although hygiene does reduce our exposure to harmful bacteria, it also limits our exposure to beneficial microorganisms. As a result, in modernized communities, the bacterial flora of our digestive system isn't as rich and diversified as it used to be.



According to the '**hygiene hypothesis**' that proposed by Dr. David Strachan⁴,

Changes of lifestyle, higher level of sanitation and the decreasing incidence of infections in industrialized countries is the origin of the increasing incidence of allergic diseases.

Healthy skin surface is not sterile, it is colonized by about 1 billion of bacteria per cm square.

Our skin microflora is an ecosystem of bacteria on the skin's surface. A balanced community of microbes that are working together can keep our skin protected and healthy.



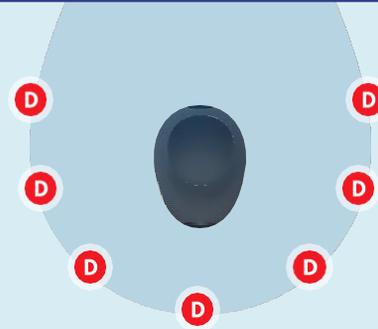
Avoid overuse of 99.9% anti septic cleanser as it might disturb our healthy skin microflora

Developed nations with higher level of sanitation has higher prevalence of Atopic Eczema

Country	Prevalence of Atopic Dermatitis
Birmingham, England	19.5% among 3 to 11 years-olds ⁵ (Kay <i>et al.</i> ,1994)
Denmark	22.9% among 7 years-olds ⁶ (Larsen <i>et al.</i> ,1996)
Australia	18.7% among 7 to 9 years-olds ⁷ (Marks <i>et al.</i> ,1999)
Japan	19% among 7 to 9 years-olds ⁸ (Sugiura <i>et al.</i> ,1998)
Hong Kong	20.1% among 14 years-olds ⁹ (Leung & Ho,1994)
Singapore	20.8% among 7 to 16 years-olds ¹⁰ (Tay <i>et al.</i> ,2002)
San Bu, China	7.2% among 14-16 years-olds ⁹ (Leung & Ho,1994)
Kota Kinabalu, Malaysia	7.6% among 14-16 years-olds ⁹ (Leung & Ho,1994)

Toilet seat eczema due to detergent residue

(Caregiver emphasis on extreme hygiene practices during covid 19 pandemic)



D Detergent Residue

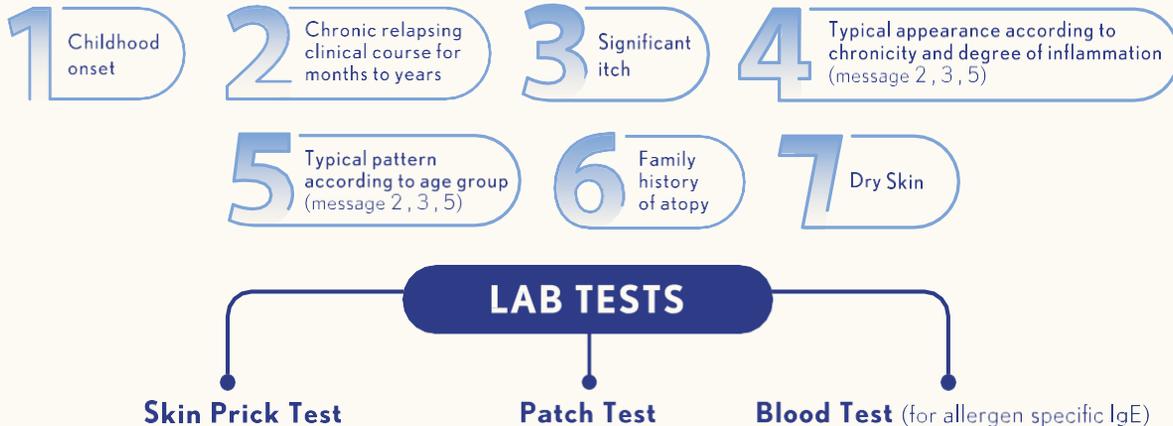


MESSAGE 23

LAB TESTS ARE NOT MANDATORY FOR ALL PATIENTS WITH ATOPIC ECZEMA

No definitive lab test is needed to diagnose Atopic Eczema. Besides family history of atopic diseases, elevated serum total IgE and blood eosinophilia are useful in supporting the overactive immune status of the patients.

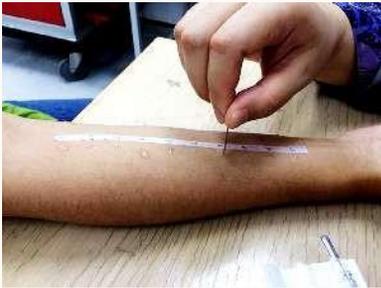
Diagnosis of Atopic Eczema is based on monitoring of clinical signs and symptoms for 3 - 6 months (retrospective or prospectively)



These tests **DO NOT** diagnose Atopic Eczema, but it may be used to **identify environmental triggers that flare up or aggravate existing eczema** so that patients may be advised to avoid these. Unfortunately, these tests have accuracy of about 50-60% only. Applied kinesiology, blood IgG level and hair analysis are unproven diagnostic tests.

Skin prick test/ Blood specific IgE

(For immediate onset allergic reaction,i.e. hives
not for eczematous reaction)

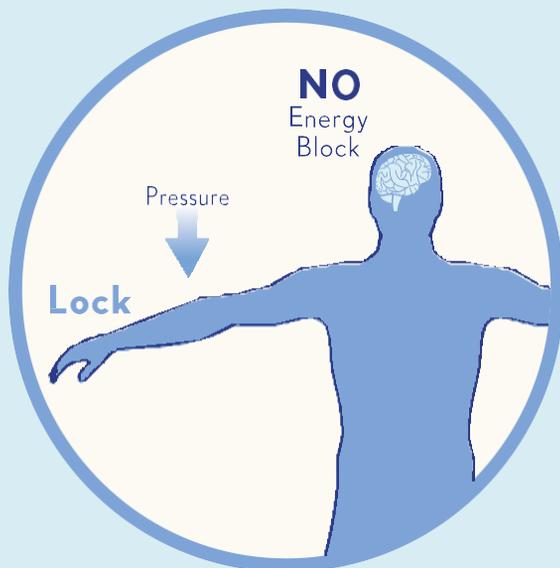


Patch Test

(For delayed onset eczematous reaction)

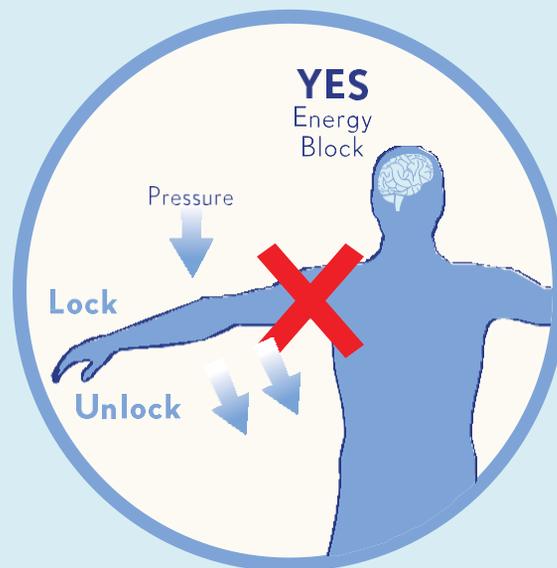


Applied kinesiology is designed based on muscle testing by chiropractor, not by allergists. It is an UNPROVEN test for food intolerance or allergy.



No Energy Block

- 👉 Subject extended arm remain strong and horizontal, despite external pressure.
- 👉 Subject has no allergy



Yes, Energy Block Presence

- 👉 Subject's extended arm is weakened and moves downwards, even with the same amount of pressure.
- 👉 Subject has an allergy

MESSAGE 24

CURE OR NO CURE, STUCK OR GROW OUT, WATCHFUL WAIT OR ACTIVE TREATMENT

Majority of children with Atopic Eczema will outgrow the condition by their teenage years. However, there is no cure for Atopic Eczema.

What is your response?

We are all wired differently. Some of us are wired for optimism while others are opposite.



MYTH 1 : OVER PESSIMISTIC

Among patients that are wired for pessimism, these two words - **NO CURE** - cause hopelessness and depression, it can seem like having Eczema means you are stuck with the condition for life, with no way out.

Since modern medicine has no cure for Eczema, many patients or caregivers prefer cyber-hunting for secret recipes, panacea and magic bullets.



MYTH 2 : OVER OPTIMISTIC

If remission is expected as the child gets older, some have misinterpreted it as **"let the eczema run its course"**. But the natural course of Atopic Eczema is not predestined.

The longer we wait, the worse the situation will be.

Instead of hitting hard and flattening the curve, some caregivers opt for active treatment only for the child during major flare-up with unbearable itch or secondary bacteria infection.

Delay in treatment is harmful and it can cause

- Secondary bacteria, fungal and viral infection
- Lichenified eczema, post inflammatory leukoderma and prurigo nodules which are hard to treat
- Long term psychosocial and mental scarring: low self esteem, self isolation, anxiety, depression



FACTS ABOUT THE NATURAL COURSE OF ATOPIC ECZEMA

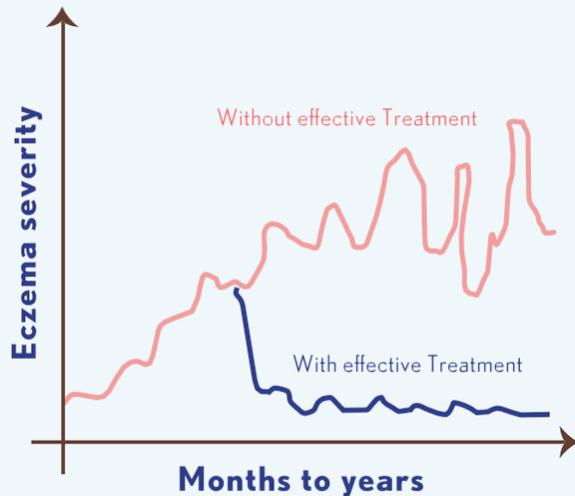


- 1 Most children affected by early onset Atopic Eczema will see significant improvement as they get older.
- 2 However, majority continue to have dry skin and at higher risk of allergic or irritant contact eczema. Therefore, lifelong avoidance of harsh irritants such as soaps, detergents and bubble baths is beneficial.
- 3 Although Atopic Eczema cannot be cured, there are many ways of controlling it and many promising medications are in the pipeline.

MYTH

LET THE DISEASE RUN ITS COURSE

Eczema is like a fire in your skin that injures the physical, psychosocial and mental aspect of the patients and caregivers. It constantly fueled by Dry-Itch-Inflammation cycle and multiple environmental factors.



Atopic Eczema with secondary bacteria infection related to delayed treatment

MESSAGE 25

**EXTRA VIRGIN IS ALWAYS NON-ALLERGIC.
ORGANIC IS ALWAYS GOOD...**

**When you hear the word “organic”,
what comes to your mind immediately?**

- | | |
|----------------------------|-------------------------------|
| A Allergen-Free | F Extra Virgin |
| B Preservative-Free | G Health Risk-Free |
| C Pesticide-Free | H Price Tag-Free |
| D Chemical-Free | I Zen and Eco-Friendly |
| E Close To Nature | J Marketing Hype |

**Limiting your cream to natural, organic and higher virginity is no guarantee that you'll avoid allergic reaction.
This is because contact allergies are not caused by chemicals, but by proteins in the raw ingredients .**

**ORGANIC & NON ORGANIC
BANANAS ARE NOT
CHEMICAL FREE**



They contain >30 chemical ingredients in them

NO CHEMICAL



**Water is
Chemical
(H₂O)**

NATURAL



Natural + Organic Cigarette,
Is it safer?

NO PRESERVATIVE



**Molds &
Bacteria
Grow on
Moisturizer**

FOOD FOR THOUGHT FROM ALLERGY POINT OF VIEW

If your baby develops hives immediately after eating a half-boiled chicken egg, how do you manage it?

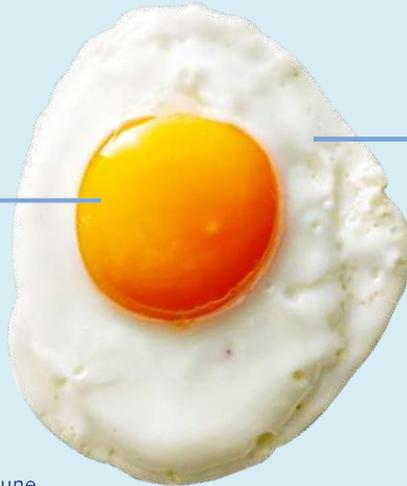
- A** Try free range or cage free, extra virgin, organic chicken eggs
- B** Avoid chicken eggs till 5-year-old
- C** Replace chicken egg with duck egg
- D** Consuming a small amount of egg protein daily and gradually increased overtime

θ - livetin (Gal d 5)

- 🍳 Chicken Serum Albumin (CSA)
- 🍳 69 kDa

YGP42 (Gal d 6)

- 🍳 14.3 kDa



Ovomucoid (Gal d 1)

- 🍳 11% of egg white
- 🍳 28 kDa
- 🍳 Most allergenic

Ovalbumin (Gal d 2)

- 🍳 54% of egg white
- 🍳 45 kDa
- 🍳 Most abundant

Ovotransferrin (Gal d 3)

- 🍳 12% of egg white
- 🍳 76.6 kDa

Lysozyme (Gal d 4)

- 🍳 3.4% of egg white
- 🍳 14.3 kDa

Chicken egg allergy occurs when the immune system overreacts to one of the six foreign proteins that present in the eggs. Organic eggs have these 6 types of protein too.

EXTRA VIRGIN OLIVE OIL AND ATOPIC ECZEMA

OLIVE OIL



Topical application of Olive oil for 4 weeks caused a significant thinning of outer part of the skin and induced mild redness¹¹

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Statement of Intent

- These messages are meant to be guides for clinical practice, based on the best available evidence at the time of development. Adherence to these guidelines may not necessarily guarantee the best outcome in every case
- Every healthcare provider is responsible for the management of his/her unique patient based on clinical picture presented by the patient and the management options available locally.

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