



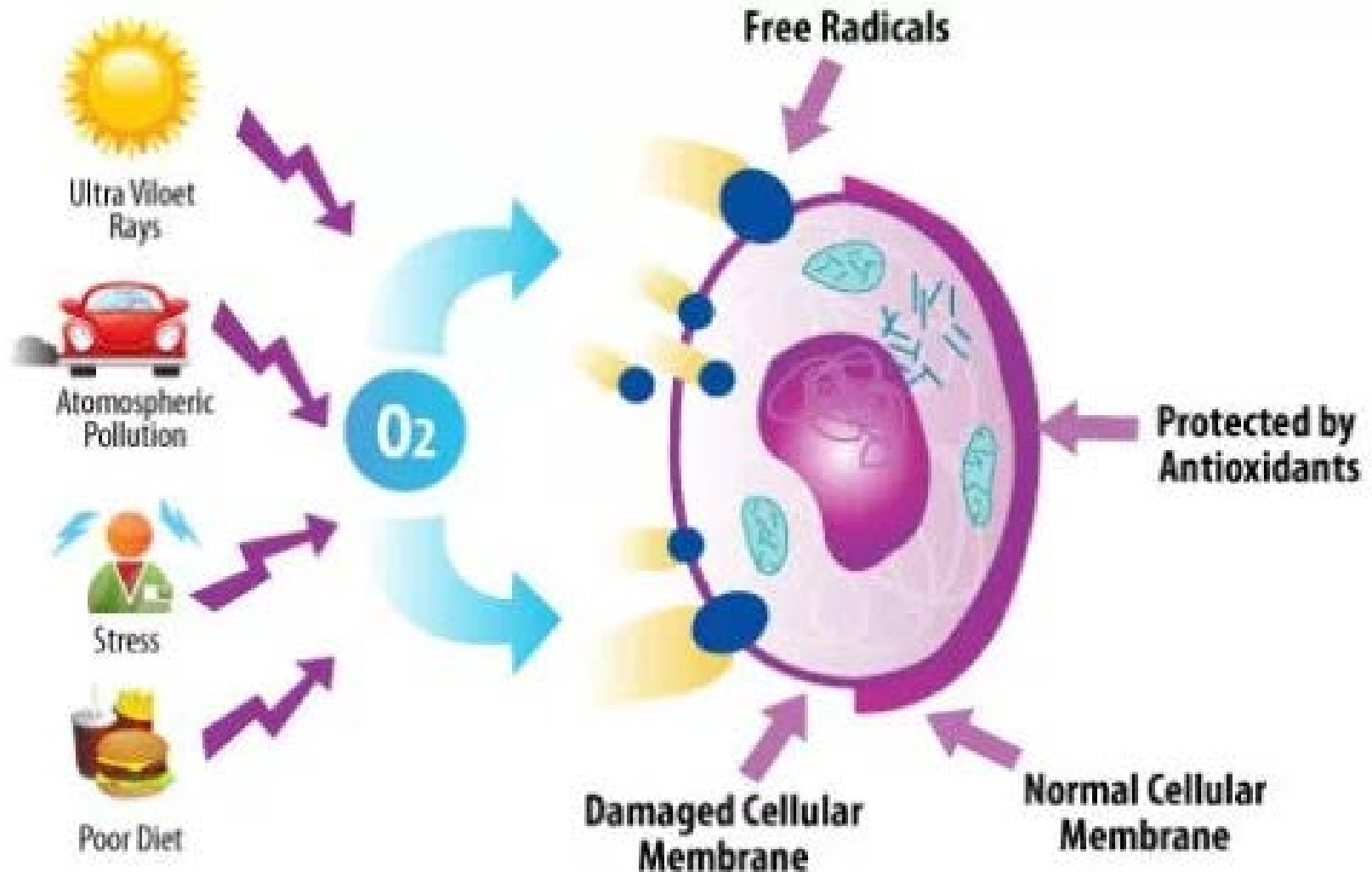
*antioxidants*



*Our Philosophy is to support the success of the aesthetician and skin care technician by providing quality clinical skin care technologies and educational opportunities that produce a generous revenue stream and secure client retention, while providing the consumer with state-of-the-art, high performance products.*

*the science...*

# formation of free radicals



# free radicals are:

*roaming, electrically unbalanced molecules looking to bind with healthy cells, causing cellular and DNA damage...*

## HOW ANTIOXIDANTS STOP FREE RADICALS

### ANTIOXIDANT



Are stable with paired or unpaired electrons.

**Antioxidants neutralize free radicals by donating an electron.**

### FREE RADICAL

Are unstable molecules that cause cell damage & destruction.



Free radicals have an unpaired electron which is dangerous, because electrons are normally paired.

**ELECTRON DONATION**



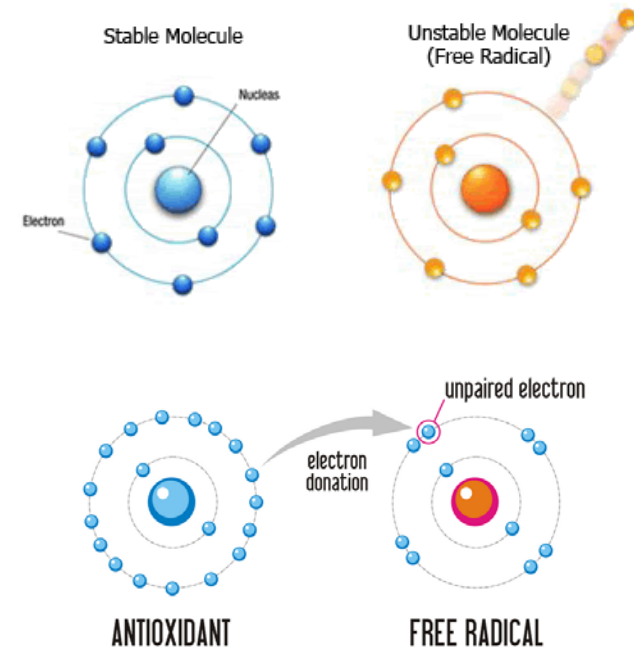
# *the antioxidant barrier*

## *antioxidants:*

- Anti-inflammatory
- Reverse FR damage (e.g., photodamage)
- Stimulate collagen
- Enhance immune functions
- Strengthen cell membrane to lessen cell water loss
- Greatest concentration stored in epidermis

*less than 1% of ingested antioxidants get to the skin*

*as we age, antioxidant concentration declines*



# redox

- **Redox** - short for **red**uction–**ox**idation reaction
- Reaction where the oxidation states of atoms are changed
- Involves both a reduction process and an oxidation process
- The key concept involved with electron transfer
- Redox reactions involve the transfer of electrons
- When the electron is stripped is said to be oxidized (free radicals)
- When the electron is added is said to be reduced (antioxidants)

**Oxidation:** *loss* of electrons or an *increase* in oxidation by a molecule

**Reduction:** *gain* of electrons or a *decrease* in oxidation by a molecule

# *free radical theory of aging...*

- Organisms age as cells accumulate free radical damage over time
- Free radical is an atom or molecule that has a single unpaired electron
- Most biologically-relevant free radicals are highly reactive
- For most biological structures, free radical damage is closely associated with oxidative damage
- Antioxidants are reducing agents, and limit oxidative damage to biological structures by passivating them from free radicals



# *oxidative stress...*

- An imbalance between the production of free radicals and the body's ability to neutralize them with antioxidants
- Is thought to contribute to the development of auto-immune diseases as in Alzheimer's, Parkinson's, the pathologies caused by diabetes, rheumatoid arthritis
- Oxidative damage in DNA can cause cancer
- Plays a role in cardiovascular disease where LDL oxidation causes atherosclerosis and cardiovascular disease
- Antioxidant enzymes such as glutathione peroxidase, glutathione reductase, glutathione S-transferase protect DNA from oxidative stress
- Antioxidants are important to maintain immune function and help prevent disease and skin aging (oxidation)
- Topical antioxidants help to prevent aging and oxidative stress in the skin





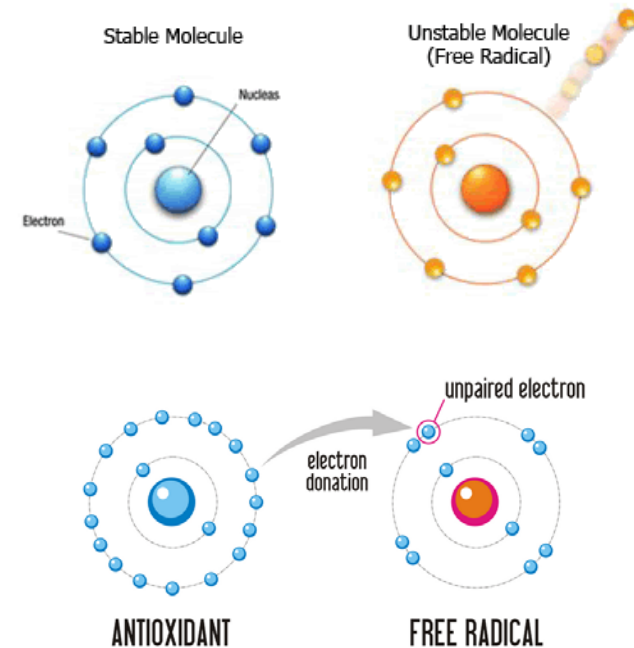
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# glutathione

- One of the most important cellular antioxidants
- Glutathione prevents damage caused by free radicals
- Produced in the body and made from the amino acids cysteine, glutamine and glycine
- Used in metabolic/biochemical reactions such as DNA synthesis and repair
- Binds to Tyrosinase and helps prevent the enzymatic pathways from producing melanin
- Its antioxidant properties eliminate free radicals and inactivate tyrosinase
- Helps prevent the activation of tyrosinase by reducing free radicals that activate and cause an increase in melanin production
- Melanin is the pigment that gives our skin its color, produced by the activation of the enzyme Tyrosinase
- Can be applied topically or as an oral supplement

vitamins...



*A vitamin is any of a group of organic compounds that are essential for normal growth and nutrition and are required in small quantities in the diet because they cannot be synthesized by the body...*

# Know Your A's C's and E's

## Vitamin A (Retinol)

- Clinically proven to stimulate collagen, elastin and fibroblasts
- Supports cell turnover
- Improves skin density

## Vitamin C (L-Ascorbic/Magnesium Ascorbyl Phosphate)

- Powerful antioxidant
- Brightens and lightens the skin surface
- Stimulates collagen
- Protects cellular DNA from UV damage

## Vitamin E (Alpha-Tocopherol/Tocopherol)

- Powerful antioxidant
- Anti-inflammatory
- Binds moisture



# vitamins

## skin health vitamins A, C, E

**Vitamin A:** (retinol), is fat soluble and synthesized from beta-carotene

- Protects dark green, yellow and orange vegetables and fruits from solar radiation
- Thought to play a similar role in the human body
- Carrots, squash, broccoli, sweet potatoes, tomatoes (their color comes from lycopene), kale, mangos, oranges, sea buckthorn berries, wolfberries (goji), collards, cantaloupe, peaches and apricots are particularly rich sources of beta-carotene, the major provitamin A carotenoid

**Vitamin C:** (ascorbic acid) is a water-soluble compound

- Fulfills several roles in living systems/necessary for human life
- Helps protect DNA in cells from UV damage
- Citrus fruits, green peppers, broccoli, green leafy vegetables, black currants, strawberries, blueberries, sea buckthorn berries, raw cabbage and tomatoes


**Vitamin E:** (tocotrienol and tocopherol) is fat soluble

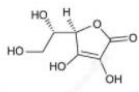
- Recent studies show tocotrienol has significant anti-oxidant properties
- Alpha-tocopherol is the main form in which vitamin E is consumed.
- Wheat germ, nuts, seeds, whole grains, green leafy vegetables, kiwifruit, vegetable, and fish-liver oil.



## vitamin table

Antioxidant vitamins	Foods containing high levels of antioxidant vitamins
Vitamin C (ascorbic acid)	Fresh or frozen fruits and vegetables
Vitamin E (tocopherols, tocotrienols)	Vegetable oils, nuts, and seeds
Carotenoids (carotenes as provitamin A)	Fruit, vegetables and eggs

Vitamin 



# vitamin C

## *L-ascorbic acid*



- Integral to the immune system and essential for human life
- Protects the skin from UVA/UVB sun damage
- Can double the production of new collagen
- Ascorbic acid is required for conversion of procollagen to collagen
- Procollagen is formed by fibroblasts in the process of collagen synthesis
- Stimulates fibroblasts - must be present for collagen
- Only proven form as a co-factor in collagen production
- Strengthens elastin in the skin and blood vessels
- Inhibits the development of skin cancers by reducing FRs







# vitamin C

*L-ascorbic acid*

“Topical Vitamin C helps offset the effects of sun damage, including wrinkling and changes in cells that may lead to skin cancer.”

*Mark G. Rubin M.D.*

# vitamin E

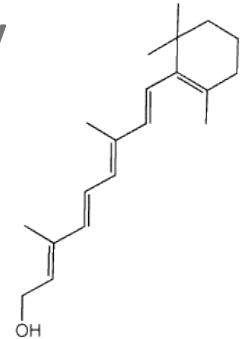
## *tocopherol*

- Fat-soluble vitamin with antioxidant properties and high bioavailability
- Most important lipid-soluble antioxidant
- Most important function is as a signaling molecule(peptide)
- Vitamin E is **provided to the skin through the sebum**
- **Topical application can supply the skin with vitamin E**
- May provide vitamin E forms that are not available from the diet
- Vitamin E can **absorb the energy from ultraviolet (UV) light**
- Plays important roles in **photoprotection**
- Prevents UV-induced free radical damage to skin
- Vitamin E may have **anti-inflammatory** roles in the skin
- Topical application of vitamin E can **improve skin water-binding capacity**
- Alpha-tocopherol is the main form in which vitamin E is consumed

# vitamin A



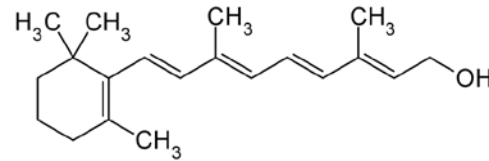
- Vitamin A is a key vitamin skin needs topically
- Oxidizes easily-unstable
- Oral consumption does not address the topical deficiency
- Retinol at high concentration can cause irritation
- Most products do not deliver enough retinol to the skin
- Needs a stabilized delivery system

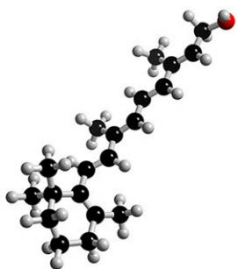




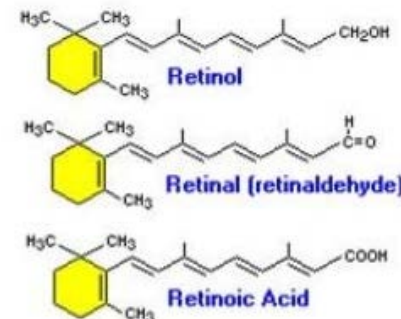
# retinol

- Retinol is considered one of the most effective **anti-aging ingredients**
- Natural form of **Vitamin A**
- **Most effective over-the-counter vitamin** for aging skin
- Improves overall **skin health**
- Able to go inside the cell to **stimulate cellular function at the dermal level**
- **Simultaneously repairs** damage at the epidermal level





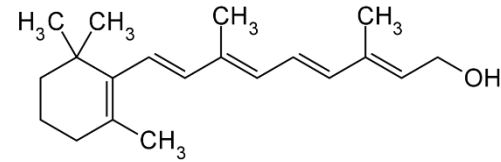
# retinol cascade



- The retinol cascade is the process where *special enzymes convert retinol to retinoic acid*
- The majority of over-the-counter skin care products have very low levels of retinol
- Products that have a low concentration of retinol produce less retinol cascade
- *When the conversion rate is low, little retinoic acid becomes bio-available to the cells*
- A high concentration of retinol (.6% -1.0%) increases the conversion rate of retinol-to-retinoic acid



# retinol



## benefits of regular use:

- Improves fine lines, wrinkles, sun damage, age spots
- Improves brightness and tone
- Increases collagen production, firmness and elasticity
- Retinol is preventative and corrective
- Early use can prevent fine lines, wrinkles, age spots, uneven tone
- Later use of retinol will help correct visible signs of aging

*our system...*

*corrective skin care:*

SERUMS  
CHEMICAL PEELS  
PROTOCOLS



# serum based products

*Customized home-care programs and sun protection will support and maintain the results of the treatment...*

*all serums are engineered to provide:*

- *Hydration*
- *Anti-inflammatory Benefits*
- *High Concentrations of Antioxidants*
- *Seal in Trans-epidermal Water*

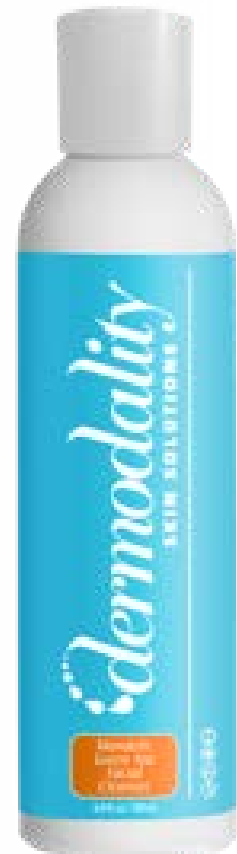
*product knowledge*

# mandelic green tea cleanser

## anti-inflammatory & smoothing

pH-6.2 (am/pm)

- Mandelic Acid – anti-inflammatory, decongesting
- Green Tea - antioxidant
- Gently washes away dead skin cells
- Helps to decongest pores
- Perfect for sensitive and rosacea skin conditions
- Ideal for daily cleansing



# foaming cleanser

## gentle and antioxidant

pH-6.2 (am/pm)

- For dry, sensitive skin
- Sulfate-free formula
- Light, airy foam to rich, creamy lather
- Hydrates and moisturizes skin
- Vitamins A, C and E
- Promotes skin cell rejuvenation
- Removes make-up and surface impurities
- Skin is clean, smooth and hydrated



# creamy cleanser

## anti-inflammatory & smoothing

pH-6.3 (am/pm)

- For sensitive, aging skin and rosacea
- Sulfate-free formula
- Highly concentrated, luxurious formula
- Transforms to a rich, creamy lather
- Gently cleanses, hydrates and moisturizes
- Contains vitamins A, C and E
- Promotes skin cell rejuvenation
- Removes make-up and surface impurities
- Bilberry extract brightens skin



# eye lash extension foaming wash delicate cleanser

pH-6.2 (am/pm)

- Specially formulated to clean lash extensions
- Will not disturb or loosen lashes
- Extends life of lash extensions
- Minimizes touch-ups



# beta hydroxy foaming cream cleanser

## acne treatment

pH-5.0 (am/pm)

- Highly concentrated multi-vitamin, antioxidant formula
- Gently and effectively exfoliates dead skin
- Anti-inflammatory
- Opens clogged pores, minimizes large pores
- Helps reduce the occurrence of black and white heads
- Effective cleanser for emerging acne

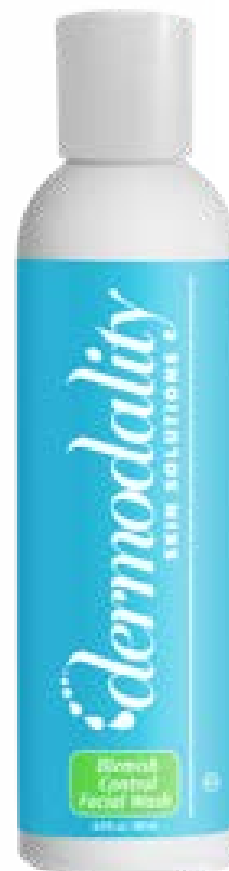


# blemish control facial wash

2.5% refined benzoyl peroxide

pH-5.0 (am/pm)

- Kills *P-acnes*, acne-causing bacteria
- Treats acne-prone skin/Targets problem areas
- Contains 2.5% Micronized Benzoyl Peroxide
- Prescription strength
- Removes excess oil
- Reduces stress on skin
- Alleviates sensitivity and prevents irritation
- Clears and clarifies skin
- Paraben and Sulfate free





# mandelic toner

## soothing & balancing

pH-1.5 (am/pm after cleansing)

- Balances pH
- Alcohol-free, fragrance-free
- Minimizes dryness and dehydration
- Mandelic acid – anti-inflammatory, decongesting
- Allantoin – anti-inflammatory, calming
- Chamomile - anti-inflammatory, calming
- Aloe – anti-inflammatory, hydrating
- Ideal after cleansing, shaving, waxing and exfoliating



exfoliating pads

10% glycolic acid/2% salicylic acid

acne and anti-aging treatment

pH-4.3 (am/pm after cleansing)

- Used professionally for peel prep
- OK 1-2 times a week at home (retail)
- Acne – daily usage
- Lightly exfoliates dead skin cells
- Destroys surface bacteria
- Replaces mechanical scrubs
- Helps lighten pigment
- Great for back-facial treatment



# peptide plus

## light weight intensive hydration/anti-oxidant

pH-5.0 (am/pm)

- Peptides restore collagen production, stimulating fibroblast cells
- Reduces the appearance of wrinkles
- Marine algae-increases surface hydration
- Vitamin C – stimulates collagen, antioxidant
- Vitamin A – accelerates cell turnover
- Vitamin E – provides hydration, antioxidant
- Green Tea – antioxidant, anti-inflammatory
- Anti-inflammatory (cucumber/melon)
- Brightening – licorice extract
- Ideal for all skin types
- Unique, lightweight, serum based formula
- Layer with SPF, Weightless or Ageless



# weightless hydrating serum

## moisture expanding & soothing

pH-6.0 (am/pm)

- For all skin types (especially oily/acne skin)
- Contains hyaluronic acid, B5, Vitamin E, aloe vera
- Maintains hydration throughout the day
- Naturally plumps skin
- Refines skin surface
- Can be used day and night
- Layer under moisturizers and SPF with no heavy feeling



# ageless moisturizer (anti-aging)

## mega peptide

pH-5.0 (am/pm)

- Ideal for adult and mature skin types
- Diminishes signs of aging
- Stimulates collagen production
- Reduces the appearance of wrinkles and fine lines
- Marine algae - increases surface hydration
- Vitamin C – stimulates collagen, antioxidant
- Vitamin A – accelerates cell turnover
- Vitamin E – provides hydration, antioxidant
- Green Tea – antioxidant, anti-inflammatory
- Brightening – kojic acid, licorice extract



# AloeSone soothe anti-inflammatory/hydrating cream (as needed for irritation) pH-6.0

- Post treatment cream
- Provides relief from irritation and inflammation
- Treats minor skin irritations, inflammation, itching, rashes
  - eczema
  - allergies
  - cosmetics
  - poison ivy
  - poison oak
  - soaps
  - insect bites
  - seborrheic dermatitis
  - post-inflammatory response



# SunMoist SPF 30 sunblock

## lightweight protection

pH-6.5 (am)

- Lightweight sun block
- 6% zinc oxide
- 1.5% titanium dioxide
- Aloe – hydrating, anti-inflammatory
- Vitamin E – hydrating, antioxidant, anti-inflammatory
- Green Tea - antioxidant
- May replace daily moisturizer for normal/oily skin types
- Skin is moisturized and protected



# Eye Cream: Intense

AM/ PM treatment

pH-5.0 (am/pm)

- Reduce puffiness, dark circles
- Minimizes fine lines and wrinkles
- Helps strengthens and protect new collagen formation
- Excellent upper eyelid correcting treatment
- Enriched with anti-inflammatory rosemary



# *vitamin C: intense™ w/l-ascorbic acid*

antioxidant & brightener

pH-3.6 (am)

- Highly concentrated vitamin C
- +21% L-Ascorbic Acid
- Treats aging and environmentally damaged skin
- Enhances collagen production
- Reduces hyperpigmentation
- Alpha-Arbutin - promotes bright, even skin tone
- Provides immediate visual changes
- Reveals younger, brighter, tighter complexion



# vitamin A:intense

## anti-wrinkle & cell stimulation

pH-3.6 (pm)

- Anti-aging, acne, pre-conditioning benefits
- **Vitamin A - retinol activates cell turnover**
- Minimizes fine lines and wrinkles
- Vitamin C - Stimulates collagen production, antioxidant
- Lactic acid – gently promotes cell turnover
- Salicylic acid – controls sebum production
- Breaks up accumulations of dead skin cells
- Visibly reduced signs of aging
- Causes no dehydration or sensitivity
- Helps repair aging and sun damaged skin



# HQ lightening gel

## pigment correcting

pH-3.6 (pm)

- Brighteners - Hydroquinone, Kojic acid, Ascorbic acid, Alpha-Arbutin, Niacinimide
- Glycolic, Lactic Acid – Promote cell turnover
- Vitamin E – antioxidant, hydrating
- Vitamin C – antioxidant, stimulates collagen
- Powerful brightening treatment
- Lightens age spots, acne scars, sun spots
- Effective for other forms of hyperpigmentation.
- **Guaranteed to visibly reduce superficial pigmentation**



hyaluronic: C ester

*anti-aging, water sealing,*

*moisture expanding*

*pH-5.8 (am/pm)*

- Stabilized vitamin C, penetrates easily
- Maintains potency
- Proprietary Licinol Liposomes allow for deep penetration
- Provides moisture to tight, dry skin
- Hyaluronic Acid holds 1000 X its weight in water
- Continually moisturizes, skin is hydrated all day
- Naturally plumps skin, refining the surface
- Minimizes fine lines around eyes and lips



m:corrective

mandelic acid

decongesting/anti-inflammatory

pH-2.0 (am/pm)

- Mandelic acid - highly anti-inflammatory
- AHA derived from bitter almonds
- Glycolic acid – accelerates cell turnover, antibacterial
- Minimizes breakouts
- Decongests skin/reduces pore size
- Vitamin E – anti-inflammatory, antioxidant
- Clarifies and balances, enhances and brightens
- Pre and post laser treatment/reduces downtime
- Treats aging skin, hyperpigmentation, acne



# retinol mixer

## max anti-aging cell stimulation

pH-3.6 (pm)

- Retinol – accelerates cell turnover
- 2% kojic acid – brightener
- 1.4% Alpha arbutin - brightener
- 2% niacinamide - brightener
- Lactic acid – refines skin texture
- Provides noticeable improvement in skin texture
- Highly concentrated retinol; well tolerated, less redness
- Minimizes deep and fine lines
- Balances skin tone



# vitality booster super serum

## intensive antioxidant hydrating serum

pH-4.0 (am/pm)

- Ideal for adult and mature skin types
- Diminishes signs of aging
- Stimulates collagen production
- Reduces appearance of wrinkles/fine lines
- Marine algae - increases surface hydration
- Vitamin C – stimulates collagen, antioxidant
- Vitamin A – accelerates cell turnover
- Vitamin E – provides hydration, antioxidant
- Green Tea – antioxidant, anti-inflammatory
- Brightening – kojic acid, licorice extract



# blemish Rx serum

2% resorcinol and 8% sulfur

Rx strength

pH-2.8 (pm)

- Strongest available for use without a prescription
- Clears breakouts and elevated levels of acne
- Apply directly to troubled areas
- Spot treatment
- Immediate impact, acts shortly after application
- Corrects acne prone skin





*pre-conditioning  
professional peels*

# pre-peel prep pads

- Dual Solvent System
- 91% Isopropyl Alcohol
- Acetone
- Effectively cleanses & removes sebum, oils, residues
- Preps skin to provides a more uniform peel



# Pumpkin peel 30%

3.2pH

- 10% Glycolic Acid
- 20% Lactic Acid

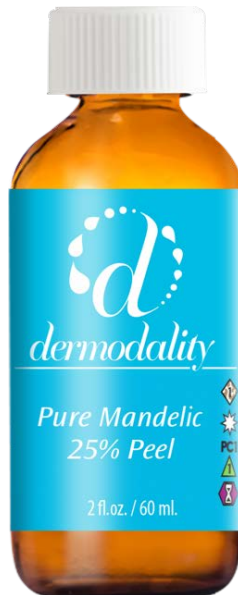


- Provides exfoliation
- Allows acids to penetrate clogged pores
- Assists in cell proliferation
- Bilberry extract – vasodilation allows for better penetration
- Can be used alone or with other chemical peels
- Ideal for use with other facial treatments as in micro-dermabrasion

# mandelic 25% peel

## 3.0pH

- 25 % Mandelic Acid
- 10% Lactic Acid
- 2 % Salicylic Acid
- 2% L-Ascorbic Acid

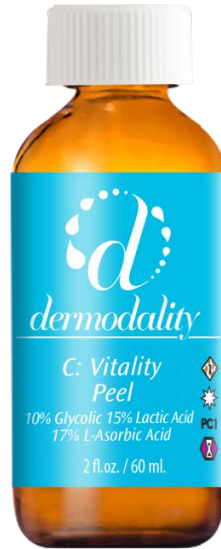


- Highly anti-inflammatory
- Mandelic acid helps remove dull layers of dead skin cells
- AHA's improve the texture of skin
- Decongests skin and unclogs pores
- Reduces the appearance of fine lines and wrinkles
- Helps stimulate collagen and elastin production

# C: vitality peel

3.0pH

- AHA 25 %
- 10% Glycolic
- 15% Lactic Acid
- 17% L-Ascorbic Acid

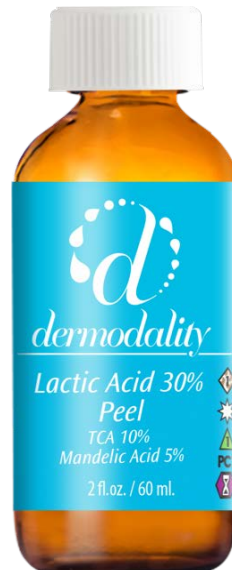


- Highly concentrated vitamins and fruit-driven anti-oxidants
- Contains skin balancing nutrients
- Replaces traditional enzyme scrubs
- Uses highly concentrated distilled extracts
- Bilberry extract – vaso dilation allows for better penetration
- Concentrated anti-inflammatory Ingredients for minimal irritation

# *lactic acid 30%*

*3.0pH*

- 30% Lactic Acid
- Larger molecule
- Slower penetration
- Reduces edema and erythema

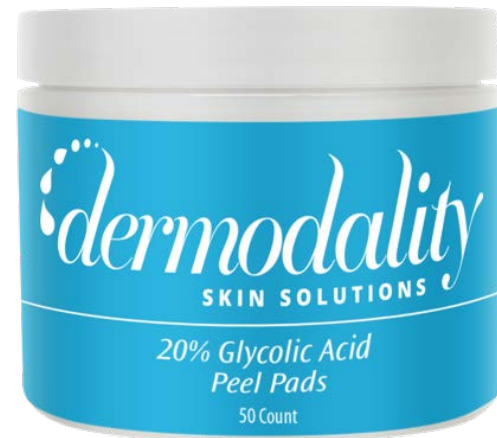


- Lactic Acid complements other chemical Peels to achieve a multiple treatment protocol
- Used alone it is a gentle but effective exfoliant
- Can be used with Pumpkin Peel 30%

# 20% glycolic acid pads

## acne and anti-aging treatment

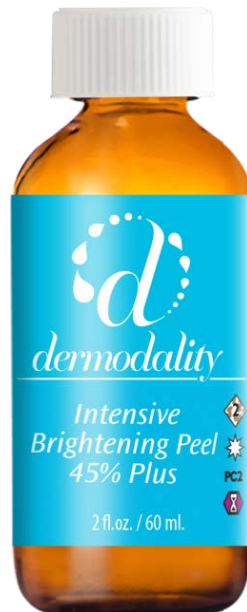
- Exfoliates dead skin cells
- Helps stimulate collagen production
- Smallest AHA molecule
- Easily penetrates the skin
- May cause irritation
- Anti-bacterial
- Treats acne conditions



# intensive brightening peel 45% plus

3.0pH

- Kojic Acid
- Mandelic, Lactic, Glycolic Acids
- Salicylic Acid
- L-Ascorbic Acid
- Bilberry
- Beta-Carotene

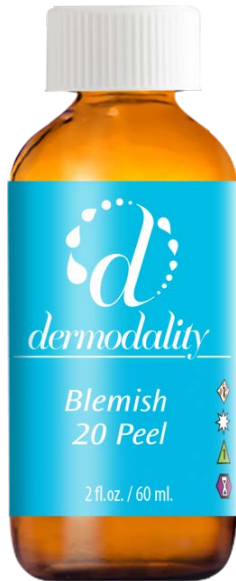


- Visibly lightens and brightens skin
- Skin becomes softer and smoother
- Bilberry extract – vaso dilation allows for better penetration
- Correcting mechanism is immediately visible
- No irritation even when used with Pumpkin peel



# blemish 20 peel

- 3.0 pH
- 20% Salicylic Acid

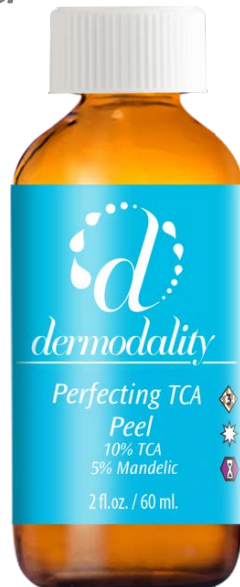


- BHA – oil soluble acid
- Derived from willow bark
- Breaks down sebum
- Minimizes comedones
- Keratolytic and antimicrobial
- Controls P-acnes bacteria (acne causing)
- Aids the extraction process
- Treat every 4 to 6 wks for 4 to 6 treatments

# TCA perfecting peel

1.2 pH

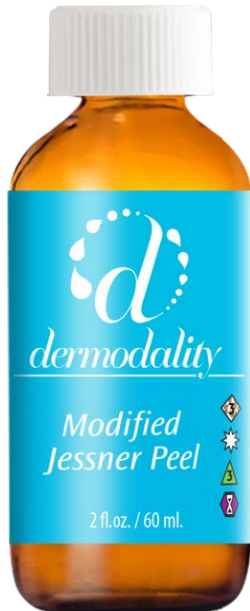
- *Trichloroacetic Acid*
- *10% TCA*
- *5% Mandelic Acid*



- Controllable effects when properly administered
- Helps lighten hyper-pigmentation
- Smooths and refines texture
- Helps **corrects acne scaring**
- **Do not** apply on active acne

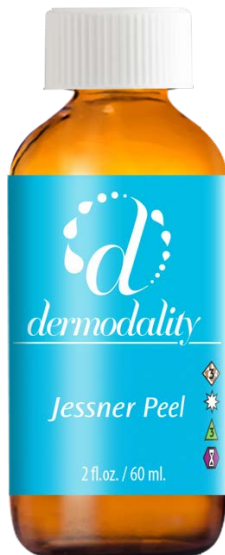
# modified jessner peel

- 1.8 pH
- Lactic 14 %
- Salicylic 14 %
- Citric 8%
- Highly effective peel formula
- Allows for several degrees of controlled depth
- Exfoliates
- Destroys bacteria
- Stimulates cell production



# jessner peel

- 1.8 pH
- 17% Lactic
- 17% Salicylic
- 17% Resorcinol
- Medium to high-depth peel
- TRIO acid combination
- Provides benefits from potent ingredients
- Removes multiple skin layers instantaneously
- Provides smooth texture and healthy looking skin



# retinol 10/10

pH 2.2

- 10% Retinol
- 10% Lactic Acid



- Used over TCA, Salicylic, Modified Jessner, Jessner Peels
- Instantly reduces irritation and discomfort
- Last step in peel process
- Do not remove, client wears home
- Follow with SunMoist

# long island ice tea 15/15

- 15% Retinol
- 15% Lactic Acid
- Aloe Vera



- Used over TCA, Salicylic, Modified Jessner, Jessner Peels
- Instantly reduces irritation and discomfort
- Highly concentrated retinol & lactic acid formula
- Enhances natural rejuvenation process
- Last step in peel process
- Do not remove, client wears home
- Follow with SunMoist

# pure retinol 20/20

- 20% Retinol
- 10% Lactic Acid
- 10% Mandelic Acid



- Used over TCA, Salicylic, Modified Jessner, Jessner Peels
- Reduces irritation and discomfort
- Highly concentrated retinol, lactic & mandelic acid formula
- Minimizes pore size
- Last step in peel process
- Do not remove, client wears home
- Follow with SunMoist

Thank You!

 *dermodality*  
**SKIN SOLUTIONS** 