



iS Clinical Ingredient Highlights

(PRESENTATION SPEAKER NOTES)

Contact: education@isclinical.com

Education Resources: www.isclinicaledu.com

SLIDE 1

TITLE: iS Clinical Ingredient Highlights

SUBTITLE: N/A

SPEAKER NOTES: N/A



SLIDE 2

TITLE: Ingredient Highlights

SUBTITLE: N/A

SPEAKER NOTES:

Ingredient Highlights Overview

iS Clinical is dedicated to developing clinically validated skincare products that improve the physical and emotional well-being of people globally. We employ the highest ethical standards as we advance the science of skin health, one face at a time. To assist our Skincare Professionals with this mission, we seek to continually support our Global Partners by developing effective products using the best ingredients and formulation technology available.

It is important to consider that every product is made from multiple ingredients that are combined according to their percentages, and compatibility amongst various other factors.

Although ingredient selection, and formulation are both integral aspects in the making of iS Clinical products, independent clinical testing are realized to confirm and measure the effectiveness of the final formula and end product; which is what consumers globally are using.

All of our products are designed to be safe for all skin types because they are formulated with the goal of total skin health. Instead of creating products that only address a specific skin issue, our products are designed to create healthy, balanced skin with proper cellular function.

We have pioneered the use of special ingredients that we will review such as:

- Centella Asiatica,
- Superoxide Dismutase,
- L-Ascorbic Acid (Vitamin C) ADVANCE+,
- Copper Tripeptide-1,
- Vitamin A,
- and Extremozymes.

Now let's explore the iS Difference and understand the quality of ingredients used by iS Clinical.

SLIDE 3

TITLE: Our Ingredients

SUBTITLE: N/A

SPEAKER NOTES:

The iS Clinical Difference: Ingredient Quality

iS Clinical formulates its products with pharmaceutical-grade ingredients whenever available.

What does that mean? Simply put, pharmaceutical-grade ingredients come with a certificate of analysis which ensures that the ingredient exceeds 99.5% purity and does not contain any fillers, binders, dyes, or other inactive ingredients that serve as a vehicle for active substances.

Many of our ingredients are botanically sourced. Some ingredients are bioidentical, with the exact molecular structures that are already present throughout the skin and body.

Our ingredients are globally and ethically sourced, and non-systemic, meaning they do not enter the bloodstream, making them safe for all, even throughout pregnancy. (Except Prodigy Peel Systems)

Pharmaceutical-grade products range at a much higher price point, but the difference is obvious, even to the naked eye! As you can see, there is a notable difference in the color of the cosmetic-grade versus pharmaceutical-grade ingredients. The pharmaceutical-grade version of the ingredient is white compared to the cosmetic grade.

Ingredient quality is one of the most important factors in product performance. Two products may contain the same ingredient, but when quality is sacrificed, the product will not perform as well. Ingredients also must be combined and formulated properly to achieve optimal results.

Transition to next slide: Let's begin with our first ingredient: Centella Asiatica

SLIDE 4

TITLE: CENTELLA ASIATICA

SUBTITLE: N/A

SPEAKER NOTES:

Centella Asiatica

What is it?

Centella Asiatica is a tropical, medicinal plant that grows in Southeast Asia. It is an ingestible plant that has been used in Ayurvedic Medicine for over 2000 years and has become very popular in skincare products.

What does it do? Why does our skin need it?

Centella Asiatica contains potent antioxidants that stimulate collagen synthesis and improve microcirculation, capillary flow, and vascular tone to promote wound healing and reduction of scar tissue.

In simplified terms, this means that products containing Centella Asiatica aid in wound healing, collagen production, and antioxidant protection. This can be the wounds of aging, like wrinkles, ("solar scars") as well as wounds associated with procedures and treatments.

Ingredient Particularity:

Centella Asiatica is an expensive ingredient to purchase and can be challenging to formulate. iS Clinical has found a way to combine it, along with other powerful and qualitative ingredients to extract its benefits and obtain results.

SLIDE 5

TITLE: Products containing Centella Asiatica

SUBTITLE: N/A

SPEAKER NOTES:

Here are the iS Clinical products containing Centella Asiatica. These products are designed to increase collagen synthesis, improve wound healing, tissue repair and regeneration, provide antioxidant protection and anti-inflammatory benefits.

SLIDE 6

TITLE: Superoxide Dismutase

SUBTITLE: N/A

SPEAKER NOTES:

Superoxide Dismutase (SOD)

What is it?

This naturally occurring enzyme safely absorbs harmful free radicals to combat photoaging and cell damage while protecting the skin against future damage. Superoxide Dismutase is a bioidentical enzyme found in the body, and a renewable antioxidant.

What does it do? Why does our skin need it?

This uniquely designed, natural enzyme, safely absorbs harmful free radicals to combat photoaging and cell damage while protecting the skin against future damage.

While many non-enzymatic antioxidants are destroyed during antioxidant activity and defense, this version of Superoxide Dismutase defends itself and the skin from harmful aggressors that cause skin aging. Hence, Superoxide Dismutase provides anti-aging benefits, along with antioxidant protection due to its ability to reduce free radical damage to the skin, therefore helping to prevent fine lines and wrinkles, and age spots.

Ingredient Particularity:

Superoxide Dismutase is also a very expensive ingredient. The cost typically prohibits use but is Clinical chooses to include it because the benefits outweigh the price.

SLIDE 7

TITLE: Products containing Superoxide Dismutase

SUBTITLE: N/A

SPEAKER NOTES:

Here are the iS Clinical products that contain Superoxide Dismutase. This powerful, renewable antioxidant is included in 4 of our most potent formulas designed for aging repair and prevention. The ability of the skin to defend itself against free radicals and inflammation is crucial to maintaining a youthful complexion.

SLIDE 8

TITLE: Vitamin C

SUBTITLE: N/A

SPEAKER NOTES:

Vitamin C

What is it?

Vitamin C is an essential nutrient involved in tissue repair, immune function, collagen synthesis, and brightening.

Humans need Vitamin C to stay healthy, and that includes our skin, the body's largest organ!

Vitamin C provides multiple necessary benefits for the skin and skin health:

It serves as an antioxidant and anti-inflammatory. Antioxidants neutralize damaging free radicals that lead to inflammation and other deleterious effects in the skin like cell damage and even cell death, so Vitamin C is important to keep the skin protected against damage.

It also offers protection against photoaging and DNA damage. Layering a Vitamin C Serum under your sunscreen every morning is an excellent way to protect the skin against UV rays which account for up to 80% of skin aging, and other environmental stressors like pollution. We call this method of layering a Vitamin C serum and sunscreen "Double Defense."

Vitamin C brightens the skin and improves hyperpigmentation. It is a tyrosinase inhibitor which means it inhibits tyrosinase enzyme activity to reduce melanin production in the skin, leading to brighter more even complexion. It also helps improve general dullness and give the skin a youthful glow.

Visit our Education website, isclinicaledu.com for more information on hyperpigmentation, pigment formation, and the best iS Clinical products to address these concerns.

Vitamin C is also a co-factor of collagen synthesis, which means it is required for the skin and body to produce healthy collagen. In addition to maintaining skin firmness and a youthful appearance, collagen plays a role in wound healing, provides strength to our bones, joints, ligaments, tendons, muscles, arteries, blood vessels and other organs keeping them healthy and flexible.

Starting in our mid-20's, collagen production decreases by about 1% every year. As collagen production declines, we start to see wrinkles, sagging, and loss of firmness, but also joint stiffness, slower wound healing, brittle bones, hair and nails. This is why it is so important to

ensure we get enough Vitamin C in our diets, and to incorporate high quality topicals that contain Vitamin C like iS Clinical every single day.

Finally, Vitamin C helps improve the appearance of scar tissue through its collagen boosting effects and its role in tissue repair. Collagen synthesis is critical during the wound healing process and helps reduce the appearance of scarring from post-inflammatory hyperpigmentation and acne scars to surgical scars and even stretch marks.



SLIDE 9

TITLE: FIRST GENERATION VS. SECOND GENERATION VITAMIN C

SUBTITLE: N/A

SPEAKER NOTES:

Over the past 20 years, formulation technology has come a long way. iS Clinical is known for developing products that incorporate the latest advancements in ingredient and formulation technology.

First-generation Vitamin C is primarily L-Ascorbic Acid, which is the pure and most potent form of Vitamin C, but it is also highly unstable, difficult to formulate with, and has the potential for skin irritation.

Second-generation Vitamin Cs are much more stable due to advancements in ingredient technologies. They also have a number of other advantages including their ability to be combined with other beneficial ingredients.

ABILITY TO COMBINE WITH COPPER AND VITAMIN A:

First generation Vitamin C cannot be combined with Copper and other beneficial ingredients like Retinol or Vitamin A. When first generation Vitamin C is combined with Copper or Vitamin A, they reduce the efficacy of each other, which is a disadvantage when developing skincare products.

One of the advantages of second generation Vitamin C is that it can be combined with other ingredients like Tripeptide-1 (Copper Tripeptide-1) in Super Serum Advance+ and C Eye Serum Advance+ for enhanced collagen synthesis, brightening, and antioxidant protection without irritation or side effects.

pH OF FORMULA:

The pH of a product containing first-generation Vitamin C must be 3.5 or lower to be absorbed into the skin past the skin barrier and produce any results.

The pH of a product containing second-generation Vitamin C can range anywhere from 2 to 11 making it much easier to formulate with and more tolerable for all skin types.

CONCENTRATION OF VITAMIN C:

To be absorbed into the skin and produce any visible results, the optimal concentration of first-generation Vitamin C is 20%. The combination of a 20% concentration and an acidic pH of 3.5 or

less is one of the reasons products containing first generation Vitamin C can be irritating to some individuals.

The concentration of second-generation Vitamin C does not need to be as high as 20% to produce incredible results. This is another formulating advantage that allows consumers to benefit from this essential vitamin without the risk of sensitization or irritation

OXIDATION AND SHELF LIFE:

First generation Vitamin C is not very stable, meaning it oxidizes quickly in the bottle, on the shelf, and in the skin. Oxidation is a chemical reaction that occurs when oxygen is exposed to Vitamin C. Once oxidized, Vitamin C breaks down and becomes less effective and can potentially cause irritation and other negative effects. While a slight yellow or straw color can be normal, a deep brown or orange color indicates that the product is no longer effective and should be discarded.

The stability of second-generation Vitamin C far surpasses that of first-generation Vitamin C. It remains stable for much longer in the bottle, on the shelf, after opening, and on the skin.

SKIN IRRITATION:

Sensitivity to first generation Vitamin C is common because of its low acidic pH and high concentration requirements, which can cause irritation, redness, and stinging, especially for those with sensitive skin or a compromised skin barrier. Second generation Vitamin C does not have such strict formulation requirements and has a different delivery mechanism in the skin that provides slower, sustained delivery making it incredibly tolerable for all skin types.

EXPENSE AND AVAILABILITY:

In terms of expense and availability, first-generation Vitamin C is inexpensive for skincare companies to purchase and is readily available. Second-generation Vitamin C is more expensive but is Clinical never sacrifices when it comes to ingredient quality and performance.

SLIDE 10

TITLE: Products containing Advance+ Vitamin C

SUBTITLE: iS Clinical products contain different forms of Vitamin C for different purposes.

SPEAKER NOTES:

iS Clinical helped pioneer the creation of second-generation Vitamin C in the early 2000's.

ADVANCE+ Vitamin C is our proprietary, scientifically advanced, second-generation form of L-Ascorbic Acid that is highly stable and tolerable for all skin types. L-Ascorbic Acid is a water-soluble form of Vitamin C that contains potent antioxidant and anti-inflammatory properties, promotes collagen synthesis and wound healing, and supports skin immunity. Due to advancements in formulation technology, Advance+ Vitamin C can now be combined with many other beneficial ingredients like Copper and Vitamin A.

Pro-Heal Serum Advance+ is an excellent Vitamin C Serum for all skin types and conditions, especially individuals that have experienced sensitivities to Vitamin C in the past. It is designed to be used each morning to provide superior antioxidant protection against UV rays and other environmental stressors that lead to inflammation and premature aging.

In addition to 15% Advance+ Vitamin C, Pro-Heal Serum Advance+ contains Vitamins A and E which provide additional antioxidant protection and anti-inflammatory benefits. Botanical sources of Arbutin and Kojic Acid prevent post-inflammatory hyperpigmentation. Kojic Acid is also antibacterial. Olive Leaf Extract has also been added to this formula to provide soothing, healing, and antibiotic benefits for individuals with red, inflamed, sensitive, or compromised skin. This can include conditions like impaired barrier function, acne, rosacea, eczema, psoriasis, and more.

Super Serum Advance+ also contains 15% Advance+ Vitamin C and is another excellent option for daily antioxidant protection. Super Serum Advance+ contains a few different ingredients that focus more on collagen synthesis and wound healing, making it ideal for individuals seeking improvements in fine lines and wrinkles, dark spots and scars.

Super Serum Advance+ also contains botanically derived Arbutin and Kojic Acid to assist with brightening. Centella Asiatica is included in this formula for its additional antioxidant protection, anti-inflammatory and wound healing benefits. Tripeptide-1, previously known as Copper Tripeptide-1, is a bioidentical peptide that has been added to this formula for its ability to increase collagen synthesis and assist with tissue repair and regeneration. It is one of the main reasons Super Serum Advance+ is excellent at improving the appearance of dark spots, uneven skin tone, scars and even stretch marks.

C Eye Serum Advance+ is designed specifically for the delicate eye area. It contains 7.5% Advance+ Vitamin C in addition to Hyaluronic Acid, Tripeptide-1, and Zinc Sulfate to improve the appearance of dark circles, puffiness, fine lines and wrinkles around the periorbital area.



SLIDE 11

TITLE: Products containing Tetrahexyldecyl Ascorbate

SUBTITLE: N/A

SPEAKER NOTES:

Tetrahexyldecyl Ascorbate is another second-generation form of Vitamin C that is lipid soluble. Because it is lipid soluble, it can penetrate a bit deeper into the skin versus water-soluble forms of Vitamin C. It is highly stable and beneficial for more sensitive skin types. This form of Vitamin C excels at brightening by inhibiting melanin synthesis and increasing collagen production. It also pairs well with other forms of Vitamin C, Vitamin E, and Vitamin A for enhanced effectiveness and anti-aging benefits.

SLIDE 12

TITLE: Products containing L-Ascorbic Acid and L-Ascorbic Acid Complexed with Gold

SUBTITLE: N/A

SPEAKER NOTES:

Pure **L-Ascorbic Acid** is a water-soluble form of Vitamin C that is essential for skin health. The body cannot produce Vitamin C, so it must be obtained through diet, supplements, and high quality topicals like is clinical. L-Ascorbic Acid assists with collagen synthesis, wound healing, brightening, and antioxidant protection, and gently encourages cell renewal and turnover.

L-Ascorbic Acid complexed with Gold or Colloidal Gold is utilized in some iS Clinical formulations for its improved stability and efficacy, and its ability to combine easily with other beneficial ingredients like Copper and Vitamin A. This combination is used in skincare products to brighten, reduce hyperpigmentation, and increase collagen synthesis.

GeneXC Serum is the only iS Clinical product that contains first generation L-Ascorbic Acid. Although it is a first-generation Vitamin C, it is of the highest quality, purity, and potency available. This formula is also designed to provide very gentle exfoliation to encourage cell regeneration. L-Ascorbic Acid enhances cell renewal and turnover, enhancing the resurfacing benefits provided by the Mixed Fruit Acids and Sugarcane Extract.

GeneXC Serum contains 20% pure L-Ascorbic Acid and Kakadu Plum Extract. The Kakadu Plum is a superfruit from Australia that has 100x more Vitamin C than an orange, and it has the highest natural Vitamin C content in the world!

GeneXC Serum is an incredibly protective and regenerative Vitamin C formula that can be used morning and evening to help improve the appearance of dull, aging skin, photodamage, uneven tone and texture.

The Retinol+ Emulsions, Active Peel System, Extra Strength Active Peel Brightening System, and Daily Dynamic Hydrator all contain L-Ascorbic Acid that has been complexed with Colloidal Gold to improve stability and efficacy and allow it to be combined with additional ingredients like Retinol and Tripeptide-1 in the Retinol+ Emulsions for enhanced age-defying and brightening benefits.

SLIDE 13

TITLE: Products containing Ascorbyl Palmitate

SUBTITLE: N/A

SPEAKER NOTES:

Ascorbyl Palmitate is a gentle lipid soluble form of Vitamin C that provides antioxidant and anti-inflammatory benefits, boosts collagen production, and brightens hyperpigmentation. It also helps maintain the skin's natural moisture barrier to prevent dryness. Ascorbyl Palmitate is a very gentle and tolerable form of Vitamin C all skin types.

Ascorbyl Palmitate is included in a variety of iS Clinical formulations like Cleansing Complex, Youth Eye Complex, Moisturizing Complex, Reparative Moisture Emulsion, Youth Intensive Crème, and Body Complex.

It is another lipid soluble form of Vitamin C that is stable and non-irritating making it suitable for use in a variety of skincare products. While it is a bit less potent than L-Ascorbic Acid, it is more easily absorbed and more stable. It provides all the benefits of L-Ascorbic Acid including antioxidant protection, increased collagen synthesis, brightening, and acts as an anti-inflammatory.

These products are all designed to be incorporated into daily regimens to ensure this essential nutrient is being delivered to the skin.

SLIDE 14

TITLE: Tripeptide-1

SUBTITLE: N/A

SPEAKER NOTES:

Tripeptide-1

What is it?

Tripeptide-1 is composed of three amino acids (TRI-Peptide) combined with Copper. Tripeptide-1 is a safe and effective growth factor analog, that aids in wound healing regulation, and collagen synthesis. Tripeptide-1 is a growth factor analog and is bioidentical; which means it is chemically identical to those produced in our body.

What does it do? Why does our skin need it?

Tripeptide-1 has been clinically proven to stimulate the synthesis of collagen, and increase the accumulation of total proteins, glycosaminoglycans, and DNA in dermal wounds. Copper is the most important micronutrient for the repair of human tissue and aids in antiwrinkle, moisturizing, and hair loss protection.

Ingredient Particularity:

Pharmaceutical-grade and bioidentical. Unlike other growth factors, Tripeptide-1 only targets specific proteins including collagen, making it a safe and effective anti-aging ingredient.

SLIDE 15 & 16

TITLE: Products containing Tripeptide-1

SUBTITLE: N/A

SPEAKER NOTES:

The following 2 slides show the iS Clinical products containing Tripeptide-1:

Tripeptide-1 increases healthy collagen synthesis, helping to reduce the appearance of fine lines, wrinkles, and scar tissue including hypertrophic scars and stretch marks. These products are designed to improve the appearance of aging skin, and encourage tissue repair and regeneration.

SLIDE 17

TITLE: Vitamin A

SUBTITLE: N/A

SPEAKER NOTES:

Vitamin A is a micronutrient required for healthy human life, but it cannot be synthesized by the human body. Therefore, it must be supplied in adequate amounts via high-quality topicals, a healthy diet, and supplements. Vitamin A doubles as a fat-soluble vitamin and an antioxidant. It is an essential vitamin that our skin and body rely on to complete their most necessary tasks.

It is important to note that consumers and professionals alike often confuse and misuse terms to describe Vitamin A derivatives.

The term "Retinoid" refers to all Vitamin A derivatives including: Retinyl Palmitate, Retinol, Retinaldehyde/Retinal, and Retinoic Acid (Prescription-only Tretinoin/Retin-A).

We will discuss this further on the next slide, but for the purposes of this presentation and proper ingredient nomenclature, please note that the term Retinoid refers to all Vitamin A derivatives.

Vitamin A – The iS Difference

iS Clinical uses pharmaceutical-grade Vitamin A derivatives. Pharmaceutical-grade ingredients must exceed 99.5% purity and come with a Certificate of Analysis proving the ingredient's purity levels. Pharmaceutical-grade ingredients are recognized worldwide as having the same quality and purity as medicines. As a result, they are the safest, highest-quality, purest and most potent ingredients available.

iS Clinical's Vitamin A derivatives are also botanically-sourced. Botanical or plant-based ingredients are more easily recognized by the skin, making them more skin-friendly and efficacious.

Retinoids can significantly improve the appearance of wrinkles and acne, help fade hyperpigmentation, improve skin elasticity and smooth rough texture. Most Retinoids available today are accompanied by unwanted side effects such as dryness, redness, peeling, flaking, itching, photosensitivity, and general discomfort, preventing many consumers from incorporating Vitamin A into their regimens.

The Retinoids used in iS Clinical formulations include Retinyl Palmitate and Retinol, which function as powerful antioxidants and anti-inflammatories while increasing collagen synthesis and the skin's wound-healing abilities. With iS Clinical, consumers can receive all the benefits of

Vitamin A without the traditional side effects or downtime and increase the overall health of the skin in the process.



SLIDE 18

TITLE: Vitamin A Actions

SUBTITLE: N/A

SPEAKER NOTES:

Vitamin A is an essential ingredient to increase the overall health of the skin. Due to the long list of benefits Vitamin A provides, it is included in a wide variety of iS Clinical products.

Vitamin A **deficiency** is linked to many inflammatory conditions and diseases of the skin including:

- Acne
- Actinic Keratoses
- Rosacea
- Eczema
- Psoriasis
- Wrinkles
- Hyperpigmentation
- Dryness
- Sensitivity and more.

Understanding truths and misconceptions surrounding Vitamin A and Retinoids brings expertise and confidence to conversations surrounding Retinoid use. Changing the narrative by reframing Retinoids as an essential nutrient the skin needs will help consumers and practitioners understand the best ways and the best forms of the ingredient to effectively incorporate into their regimen.

Following the graphic pictured here, let's discuss the benefits of Vitamin A:

1. Vitamin A stimulates Fibroblast cell activity. Fibroblast cells go on to synthesize Collagen and Elastin which are essential for healthy, youthful skin.
2. Vitamin A inhibits excessive Matrix Metalloproteinase Enzymes (MMP) activity, especially Collagenase. MMPs consist of Collagenase, Elastase and Hyaluronidase, which break

down the correlated protein. Small amounts of MMP activity is vital to remove damaged and devitalized proteins, however, excessive or over-active MMP activity can destroy healthy proteins. Inhibiting excessive MMP activity reduces line and wrinkle formation, volume loss and sagging related to loss of elasticity.

3. Vitamin A supports anchoring fibrils of the Dermal-Epidermal Junction (DEJ). It stimulates and strengthens Rete Pegs or Rete Ridges, which are microstructures of the DEJ that assist in anchoring the epidermis and dermis together. A healthy DEJ facilitates proper communication between the layers of the skin and plays a critical role in maintaining skin homeostasis. With age, the DEJ and Rete Ridges flatten, leading to fine lines, deeper wrinkles, and sagging. By strengthening the DEJ and its Rete Ridges, the skin maintains a firm, youthful appearance.

4. Vitamin A increases and balances Natural Moisturization Factors (NMF), boosting and regulating hydration. This action will also assist in driving cell turnover functions. When the skin becomes dehydrated, it cannot properly desquamate, leading to hyperkeratosis and texture concerns. With age, the skin naturally becomes drier and more dehydrated. Supporting optimal levels of hydration in the skin is essential for regulating cell turnover and maintaining a healthy, youthful complexion.

5. Vitamin A is a powerful antioxidant and anti-inflammatory that protects the skin and its DNA against photodamage. It excels at neutralizing free radicals and acts as a **skin normalizing vitamin**, able to balance and correct various cellular malfunctions. This correlates directly with number 6:

6. Vitamin A normalizes epithelial tissue development, cell renewal and cell turnover.

Cell Renewal AKA Mitosis – Cell development and division.

Cell Turnover AKA Desquamation – Shedding of the outermost layers of skin cells.

For example, in acneic skin, skin cells divide and multiply too quickly accumulating in the follicle which contributes to the development of acne. In this case, Vitamin A slows down cell renewal to maintain homeostasis.

However, in aging skin, cell renewal speeds are declining, which leads to fine lines, wrinkles, texture concerns, and other visible signs of aging. In this case, Vitamin A will speed up the cell renewal process for a more youthful complexion.

Additional benefits of Vitamin A include: supporting skin immunity, accelerating the wound healing process, reducing and healing scarring.

SLIDE 19

TITLE: Vitamin A (Retinoid) Conversion

SUBTITLE: N/A

SPEAKER NOTES:

It is important to note that one Retinoid form is not better than another, since all Retinoids convert to Retinoic Acid in the skin. Upon topical application of a Retinoid, an enzymatic conversion takes place morphing the Retinoid from its original chemical form into Retinoic Acid, the biologically active form the skin recognizes and can use. Retinoic Acid now links to the Retinoic Acid Receptors (RAR) in our skin. Bonded to a receptor, the Retinoic Acid travels into the cell nucleus initiating a DNA response that begins to create change in the skin.

The differences lie in how many chemical conversions must take place for the Retinoid to become Retinoic Acid.

The more chemical conversions a Retinoid takes to become Retinoic Acid in the skin, the gentler and more tolerable it will be. Conversely, the closer the Retinoid form is to Retinoic Acid, the faster the conversion is, making the Retinoid stronger and faster-acting. However, there is an increased potential for irritation.

Retinyl Palmitate (Chemical form: Ester) – The most gentle form with the least potential for irritation. 3 chemical conversion steps to become Retinoic Acid.

(Retinyl Palmitate converts to Retinol, then to Retinal, then to Retinoic Acid.)

Retinol (Chemical form: Alcohol) More potent than Retinyl Palmitate. 2 conversion steps to become Retinoic Acid.

Retinaldehyde/Retinal – (Chemical form: Alcohol/Aldehyde) More potent than Retinol. 1 conversion step to become Retinoic Acid.

Retinoic Acid – (Chemical form: Acid) The strongest but most irritating form. 0 conversion steps to become Retinoic Acid, as this is the pure acidic form.

This explains why a 1% Retinol is gentler than 0.5% Retinoic Acid.

Remember that one Retinoid form is not better than another, and more is not always better, especially in skincare! A gentler Retinoid simply processes slower, and a stronger Retinoid processes faster, but not without the potential for side effects. They each serve a desired purpose to varying demographics and produce similar results. The variables with Retinoid use are time to achieve desired results and tolerance.

Confusion and misinformation arises surrounding the topic of tolerance. The outcome of the Retinoid pathway is dependent on the form of Retinoid that is chosen, individual genetics and metabolic speed. Individuals born with a genetically sensitive skin type already struggle to retain water and enzymatic function within the skin barrier. This will impair their skin's ability to convert a Retinoid efficiently until barrier health is balanced and an adjustment period is complete. First-time Retinoid users should consider a "less-is-more" approach until the skin has acclimated. For example, start by using a product containing the gentle ester form, Retinyl Palmitate, before graduating to Retinol. This slow and steady approach will minimize the risk of unwanted side effects while increasing the amounts of Retinoic Acid Receptors in the skin, making stronger forms more tolerable in the future.

What about individuals who do not have sensitive skin and still experience discomfort?

Patients, clients, and consumers may assume they have had an allergic reaction, that a product does not work, or that it caused them to break out.

What they have experienced is a **retinoid reaction**. This is actually a result of Vitamin A deficiency in the skin, with an inadequate amount of retinoid receptors and prematurely using too active of a retinoid. When it comes to first time retinoid use, and generally first-time use of pharmaceutical-grade skincare, less is more! When the skin does not have a substantial amount of retinoid receptors for retinoids to bind to, the skin can become irritated, manifesting as itchiness, redness, or bumps.

The best approach is for individuals to be committed to basic cleansing, exfoliating and hydrating habits. Their skin will likely already be tolerant of retinoid esters and can incorporate a treatment serum or complex containing these esters. Once acclimated, the skin is prepped for Retinol use. Long-term it is advisable to use treatment products containing esters and a non-keratolytic retinoids like iS Clinical's for comfortable daily use.

SLIDE 20 & 21

TITLE: Products containing Retinyl Palmitate

SUBTITLE: N/A

SPEAKER NOTES:

The products on the next 2 slides contain Vitamin A in the form of Retinyl Palmitate. Retinyl Palmitate is the gentle ester form of Vitamin A that is generally tolerable for all skin types and conditions. These products can be easily incorporated into daily regimens to provide antioxidant protection, anti-inflammatory benefits, regulate and balance cell renewal and turnover and increase collagen synthesis.

SLIDE 22

TITLE: Products containing Retinyl Palmitate

SUBTITLE: N/A

SPEAKER NOTES:

PRODUCTS CONTAINING NON KERATOLYTIC RETINOL

The products on this slide contain **non-keratolytic** Retinol.

Non-keratolytic Retinol **balances** cell renewal and turnover, where keratolytic Retinol **increases** cell renewal and turnover, which is why it can induce peeling and shedding of the outermost layers of the skin.

The **non-keratolytic Retinol** in these products functions as an essential nutrient and vitamin, providing all the benefits of Vitamin A without the typical side effects commonly experienced with Retinol use including peeling, flaking, dryness, photosensitivity, and irritation.

TREAT

Pro-Heal Serum Advance+

Vitamin A in the form of **Retinol** is found in Pro-Heal Serum Advance+. It is non-keratolytic, and functions as a powerful antioxidant, improves collagen synthesis, and promotes wound healing which are all essential to reducing inflammation.

Remember, individuals with inflammatory skin conditions usually have a **Vitamin A deficiency** in their skin. With products like Pro-Heal Serum Advance+, we can deliver this essential anti-inflammatory, balancing vitamin to help soothe and heal conditions like acne, rosacea, eczema, psoriasis and more.

Poly-Vitamin Serum

Retinol is also included in Poly-Vitamin Serum. The Retinol in this product has many benefits: it inhibits DNA damage, thymine dimer formation, inflammation, and oxidative damage. It also complements Vitamin E with its potent free radical scavenging ability. Poly-Vitamin Serum also improves collagen synthesis which makes it a great anti-aging serum, and for those with over-processed or compromised skin.

PROFESSIONAL PRODUCTS

Intensive Resurfacing Masque

Intensive Resurfacing Masque provides powerful, controlled exfoliation to immediately resurface the skin without producing irritation or downtime. This masque smooths and softens the skin to reduce the appearance of fine lines and wrinkles, acne blemishes, uneven tone and texture. It also increases microcirculation and deep cleans the pores leaving the skin with a youthful glow.

Intensive Resurfacing Masque is an integral component of the Fire & Ice Facial protocol. The **Retinol** in this formula functions as a powerful antioxidant and anti-inflammatory, improves collagen synthesis and wound healing. Vitamin A is an essential nutrient that balances epithelial tissue development, including cell mitosis and desquamation, and helps maintain barrier function while reducing the appearance of scarring.



SLIDE 23

TITLE: Products containing keratolytic Retinol

SUBTITLE: N/A

SPEAKER NOTES:

PRODUCTS CONTAINING KERATOLYTIC RETINOL

The products on this slide contain **keratolytic** Retinol. Keratolytic ingredients increase cell renewal and cell turnover rates resulting in peeling, shedding, and flaking of the outermost layers of the skin.

The Retinol in these formulas was purposefully designed to increase cell renewal and cell turnover rates, resulting in mild keratolytic effects to improve signs of aging, acne, hyperpigmentation, and texture concerns.

TREAT

Retinol+ Emulsion 0.3

Our highly active, fast-acting Retinol+ Emulsion 0.3 is a mildly keratolytic formula featuring a Retinol of botanical origin that is encapsulated with bio-identical lipids, Phosphatidylcholine, and Triglycerides. This well-delivered Retinol boosts overall skin condition through its vitamin and antioxidant properties, as required for normal skin epithelialization. At the same time, a proprietary blend of potent botanical boosters, antioxidants, and Extremozymes. helps nourish skin and improve its resilience.

Formulated for first-time Retinol users, this powerful and versatile formula is recommended for all skin types and conditions with the exception of unmanaged or undiagnosed inflammatory skin disorders.

Retinol+ Emulsion 1.0

Our maximum-strength, fast-acting Retinol+ Emulsion 1.0 is a keratolytic formula featuring a Retinol of botanical origin that is encapsulated with bio-identical lipids, Phosphatidylcholine, and Triglycerides. This well-delivered Retinol boosts overall skin condition through its vitamin and antioxidant properties, as required for normal skin epithelialization. At the same time, a proprietary blend of potent botanical boosters, antioxidants, and Extremozymes. helps nourish skin and improve its resilience. Retinol+ Emulsion 1.0 is a professional-strength formula recommended for use only as advised by a licensed professional.

This professional strength formula is designed for experienced Retinol users with normal, oily, dry, and combination skin.

How do THE Retinol+ Emulsions differ from OTHER iS CLINICAL PRODUCTS CONTAINING Retinol?

iS Clinical's Retinol+ Emulsions incorporate keratolytic Retinol along with an efficacious blend of barrier supportive ingredients and Extremozyme technology. They are specially formulated for individuals seeking advanced results for their current iS Clinical regimen.

The Vitamin A (Retinol) in Pro-Heal Serum Advance+ and Poly-Vitamin Serum is formulated to be non-keratolytic meaning will not cause peeling, flaking, or irritation. It provides all the benefits of Vitamin A including antioxidant and anti-inflammatory functions and is required for skin health.

Additionally, Pro-Heal Serum Advance+ and Poly-Vitamin Serum can serve as excellent precursors to the Retinol+ Emulsions, gradually strengthening the skin's barrier function, Retinoic Acid Receptor activity and abundance, and improving skin tolerance.

SLIDE 24

TITLE: Extremozymes

SUBTITLE: N/A

SPEAKER NOTES:

Extremozymes

What is it?

Extremozymes are enzymes found in “extremophilic” or extreme-loving plants that not only survive, but thrive in the most extreme environments on the planet. These plants are found in places like the deep ocean trenches, hot, dry, arid deserts, frozen, icy waters, and high altitudes.

What do Extremozymes do? Why does our skin need them?

The same way Extremozymes protect the DNA and vital structures of plants against harsh environmental stressors, they do the same for the skin. Extremozymes act like bubble wrap for DNA, protecting it against the damage induced by environmental stressors like extreme heat or cold, and dehydration. Essentially, they help human skin remain healthy even in extreme conditions.

Ingredient Particularity: iS Clinical has pioneered and patented the integration of Extremozymes in skincare formulations.

SLIDE 25 & 26

TITLE: Products containing Extremozymes

SUBTITLE: N/A

SPEAKER NOTES:

PRODUCTS CONTAINING EXTREMOZYMES

The products on the following 2 slides all contain Extremozyme technology.

Extremozymes play an important role in protecting and repairing damaged DNA that can result from UV exposure, dehydration, extreme heat and cold, and more.

DNA damage accumulates over time and is a key factor in the aging process. If your cells can't repair the damage, it can lead to visible signs of premature aging at the cellular level.

DNA damage can also lead to the development of skin cancer. A healthy and intact genome is a primary defense against this risk.

Remember any time you see the Extremozyme logo, the shield with the DNA triple helix inside, that indicates that the product contains extremozyme technology to protect the skin against harsh environmental stressors.

SLIDE 27

TITLE: Thank you

SUBTITLE: N/A

SPEAKER NOTES:

