innovation in skincare technology has catapulted in the past few years. As a scientist and cosmetic chemist, I am truly fortunate to be working in the appearance medicine industry during these dynamic times. Each week I meet with raw ingredient suppliers and manufacturers to discuss the latest developments in cosmetic science and discuss how these ingredients can be harnessed to create novel and effective products. There are still many myths regarding ingredients and products that need to be addressed. Here are eight of the most common I hear.

1. You must exfoliate daily – FALSE

Not all skin types require daily exfoliation. Individuals with thickened, sun-damaged skin or acne sufferers may require daily exfoliation until their skin improves. However, excess exfoliation with home care AHAs and clinical peels can lead to dryness, skin irritation and even premature ageing. Most women over the age of 35 should only need to use a lactic acid-based exfoliant twice weekly. Glycolic acid is a smaller molecule and may be more irritating than lactic acid.

2. Look for cleansers with active ingredients for different skin types – FALSE

Cleansers are simply designed to remove surface grime and pollutants and maintain a pH on the skin of around 5.5, without stripping the natural acid mantle on the skin. Since a cleanser is a wash-off product and only in contact with the skin surface for less than thirty seconds, adding active ingredients is not logical. Save your precious actives for products that remain on the skin and not in the drain!

3. Collagen in skincare products is great for the skin – FALSE

Collagen is a large complex protein and is far too large to penetrate the surface stratum corneum. It’s like trying to fit a tennis ball through a keyhole! Collagen is effective when it is in the deep dermis of the skin and effective actives (retinol, niacinamide, L-ascorbic acid, certain peptides) are designed to stimulate the skin’s own collagen production or prevent its breakdown. Products containing collagen molecules are a total waste of money.

4. All Vitamin C serums are effective on the skin – FALSE

Not all Vitamin C serums are created equal. According to leading US dermatologist Dr Sheldon Pinnel, the most effective form of Vitamin C is L-ascorbic acid. Vitamin C derivatives such as magnesium ascorbyl phosphate or ascorbyl palmitate do not have clinical White Paper data or skin penetration results to support efficacy comparable to L-ascorbic acid. Furthermore, L-ascorbic acid is highly unstable in a water-based solution and begins to lose potency within hours of formulating. Ideally, L-ascorbic acid powder should be mixed with a water-based serum at the time of application. Alternatively, new stabilised (anhydrous) L-ascorbic acid is now available in a light oil base. This water-free form is highly stable for two years and is better suited to dry and more sensitive skin.

5. Niacinamide can be mixed with Vitamin C crystals or AHAs – FALSE

Niacinamide (Vitamin B3) hydrolyses in acidic solutions containing ingredients such as L-ascorbic acid or chemical exfoliants (AHAs and BHAs). It is not advisable to apply Niacinamide serums at the same time as L-ascorbic acid, lactic, glycolic or salicylic-based products.

6. AHAs such as lactic and glycolic acid can be formulated with retinol – FALSE

World-renowned dermatologist Professor Leslie Baumann states that the topical vitamin A derivative, Retinol, should not be mixed with acids. Mixing acids, particularly chemical exfoliants, results in the chemical breakdown and resulting ineffectiveness of retinol. It is therefore recommended to use Retinol at the same time of day as Niacinamide and neither should be applied with acidic solutions.

7. Nanoparticles are dangerous! – TRUE & FALSE

A nanoparticle is merely term describing a particle that is less than 100 nanometers in diameter. A nanoparticle can be made of toxic arsenic or a life-saving drug. It’s not the nanoparticle that’s dangerous, but what the nanoparticle is actually made of. Incidentally, there is no conclusive evidence that zinc oxide nanoparticles in sunscreens are dangerous. So, if you are asked, “does this product contain nanoparticles”, you should reply with, “What nanoparticle are you referring to?”

8. A moisturiser is the most important skincare product – FALSE

The most important skincare product is sunscreen! Ultra violet protection prevents both the potential to develop skin cancer as well as the acceleration of premature ageing. Sunscreen is your primary insurance policy against environmental ageing. It is our responsibility of skin professionals to dispel the common skin care myths. My advice is to refer reputable information sources such as dermatological journals and texts written by industry professionals. The truth is out there. You just need to find it.