

Serum Strategies for Layering and Customizing

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cleanser cleanses. A toner tones. A moisturizer moisturizes. Each is self-explanatory for what it does in a skin care regimen, but a serum is not so clearly defined.

Water-based and oil-based serums are multi-tasking superstars in effective facial routines since they provide a wide range of benefits, such as brightening, reducing wrinkles, fading brown spots, plumping, firming and accelerating skin renewal. Serums treat many skin types and conditions. They boost results in skin care regimens, especially when layered together or underneath a moisturizer or sheet mask. Plus, serums are very potent because they can contain a higher concentration of active ingredients than other skin care products. In short, serums can transform and alter skin—without inflammation.

To a skin care formulator, serums are ideal. Active ingredients usually come in a liquid form, so a formulator can add high levels of actives to serum formulas. By contrast, when these actives are poured into a cream formulation, the viscosity of the cream is impacted, and it becomes difficult to stabilize. In serum formulations, these high levels of actives remain concentrated and stable.

To Layer Or Not

Layering serums is one method of customizing facial treatments. Think of it as "custom dosing" to personalize for a client's unique skin concerns. But there are some caveats. First, the order of layering serums must be taken into consideration—how many nutrients can skin drink in at once?

When layering serums, the order starts with serums with a thin consistency and then those that are thicker. If thicker serums are the first layer, they prevent lighter serums from penetrating. The result is wasted product. Instead, lightweight, water-based serums containing small molecules are absorbed by the skin first, providing skin cells with an essential "moisture cushion."

A thicker water-based serum or an oil-based serum would be layered on top. For example, a serum with hyaluronic acid at low or medium molecular weights (20-800 kilodaltons) would penetrate the skin surface first to hydrate, help prevent the degradation of collagen and promote repair. However, hyaluronic acid at a high molecular weight (1,000 kilodaltons and above) stays on the surface for a film-forming, plumping, and moisturizing effect that enhances skin barrier protection.

Anti-aging or regenerative serums can also contain large molecules such as collagen, ceramides, vitamins, long-chain peptides, stem cells, and growth factors, which normally would sit on the surface of the skin. However, with advances in skin care technology and delivery systems, formulators can now coat large molecules in natural liposomes to ensure effective delivery—a type of "drone technology" that ensures that peptides, stem cells and growth factors are more likely to arrive at targeted cells.

Hydration-based humectants need liposomes to penetrate superficial layers of skin and retain the water in deeper skin layers. Hollow liposome vesicles have one or more phospholipid layers, with a structure similar to cell membranes. The fluid-filled spheres transport active ingredients deeper into skin, where they are released. Microencapsulation delivers ingredients to sites where actives can perform optimally. Even vitamin C can be loaded into an encapsulated vesicle that maintains 100% stability and potency.

The bottom line for the order in layering serums is to start with the thinner texture first. Keep in mind that serums with similar consistencies AND an advanced delivery system can still get the actives where they need to go, whether working in a certain order as a tag team, or mixed together as a united front.

Serum Ingredients On Active Duty

We layer serums to achieve heightened results. But "more" is not always "better," especially with a combination of ingredients that might trigger skin sensitivity. When considering layering or mixing two or three serums, it is important to consider skin types and skin conditions. For example, an excess of specific actives might be too strong for oily or acne-prone skin, and might lead to breakouts or skin irritation. In these cases, more than one serum layered together could potentially counteract the benefits provided by individual serums alone.

SERUM STRATEGIES FOR LAYERING AND CUSTOMIZING

Here are a few guidelines to be aware of when layering serums.

Retinol. Refrain from layering more than one serum that contains vitamin A, retinol or other retinol derivatives, because increasing the percentage of retinol in multiple products can increase the likelihood of skin irritation, sensitivity or even extreme dryness and flaking. Retinol serums layered with serums that contain unstable forms of vitamin C (for example, unstable L-Ascorbic acid) might also cause skin sensitivity or conflict with each other due to the difference in pH. However, for treating lines, wrinkles, and discoloration, retinol serums layered with serums with stable forms of vitamin C (for example, magnesium ascorbyl phosphate, aminopropyl ascorbyl phosphate, tetrahexyldecyl ascorbate) can work well together. For erasing lines and wrinkles, a retinol serum can also be layered

with a serum containing line-filling peptides that provide a "Botox effect," such as acetyl hexapeptide-8 (Argireline), acetyl octapeptide-3 (SNAP-8), palmitoyl pentapeptide-4 (Matrixyl), palmitoyl tripeptide-1 and palmitoyl tetrapeptide-7 (Matrixyl 3000), or the laboratory-synthesized peptide that mimics the effects of the venom of the temple viper snake, dipeptide diaminobutyroyl benzylamide diacetate.

Hyaluronic acid. If extra hydration, plumping, and volumizing is the goal, layer or mix serums that contain ceramides, panthenol or hyaluronic acid at different molecular weights, since the various sizes of hyaluronic acid molecules impact skin differently. For example, hydrolyzed sodium hyaluronate is a low molecular weight, chemically chopped-up form of hyaluronic acid, which acts like a sponge that helps skin retain water, making it plump and minimizing wrinkle depth. Ascorbyl propyl hyaluronate is a medium-weight

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combination of hyaluronic acid and vitamin C that adds antioxidant and brightening benefits to the moisturizing effects of hyaluronic acid. Hydrolyzed hyaluronic acid is another medium-weight hyaluronic acid that is ideal for oily and combination skin since it will not clog pores. Sodium acetylated hyaluronate is a high molecular weight form of hyaluronic acid called "super HA" that adheres to the skin surface even after washing, for long-lasting moisture, suppleness and skin barrier protection.

Vitamin C. To give a brightening treatment a boost, layer a vitamin C serum with a serum containing other tyrosinase-inhibiting ingredients that fade away brown spots and suppress melanin activity. Look for oligopeptide-68, a brightening peptide with an even higher activity than alpha arbutin. Tranexamic acid minimizes post-inflammatory hyperpigmentation and signs of melasma, blocks UV-induced melanin synthesis, and plays well with other brighteners that include azelaic acid, retinol, niacinamide, licorice root extract and mulberry extract. Be sure that the client applies sunscreen during the day, especially if layering a vitamin C serum with another serum that contains brightening actives.

To treat and counteract signs of damage from UV rays, HEV light, pollution and other environmental stressors, layer a vitamin C serum with a serum that contains other powerful antioxidants like ectoin, vitamin E, green tea extract (EGCG), glutathione, superoxide dismutase, resveratrol, acerola fruit extract, tasmanian pepperberry extract and ginseng extract, just to name a few.

Anti-inflammatory. To reduce redness and skin sensitivity, start with a water-based serum with anti-inflammatory ingredients like aloe vera extract, chamomile, arnica, marine algae extract or cannabis to ease redness and minimize inflammation. On top of that hydrating serum, layer a lipid-based serum to seal in moisture and calm skin, especially serums that feature soothing, anti-inflammatory botanical oils containing high levels of linoleic and linolenic acids, such as sacha inchi, baobab, marula, argan, acai fruit and annatto seed.

To treat stressed, damaged, aging or post-procedure skin, layer a hydrating serum underneath a serum containing growth factors, antioxidants and stem cells to help accelerate skin renewal. This layering



can also speed up skin recovery after a micro-peel, micro-needling, dermaplaning, LED, IPL and other laser procedures.

Bottom Line On Layering

Savvy estheticians with a knowledge of ingredients and delivery systems can safely and effectively layer serums during customized facials. However, they may help a client choose just one or two serums for home care to focus on a particular skin concern, or they may direct the client to a well-rounded serum to target multiple issues. Overall, it is important to remind clients to be consistent in their skin care routine and always prep their skin by cleansing, toning and exfoliating. Prep is the first step, so there will be no dead skin cells blocking the path of the active ingredients in their serum.

For home care, serum rotation is the name of the game, because skin can have a diminished response to the same ingredients when used over a long period of time. Encourage clients to switch their serums throughout the year, according to changes in season, environment and even lifestyle. Serums can also be chosen based on the skin's specific need during the day, night, and time of year. In fact, rotating serums is like performing a good fitness routine for skin. For example, skin might need a more hydrating or moisturizing serum during the dry, cold winter months, and a brightening serum or an anti-aging serum during other months. In these days of skin care advancements and ever-evolving technology, there is a serum for every reason, for every season!



Janel Luu is the founder and CEO of Le Mieux Cosmetics and PurErb, with over 38 years of experience in the beauty industry as an educator, researcher, and formulator.