



Bioengineered for Masculine Sexiness

Confidence • Sex appeal • Wisdom

Nothing oozes these things more than a good, full-looking beard. Don't let anything stop you from getting the masculine facial hair you deserve – especially with HFR Beard! Formulated with a proprietary blend of restorative components that stimulate the growth of beard hair follicles via cell therapy, it's the perfect first step to a newer, more suave you.



HFR BEARD



Natural peptides & hypoallergenic formula – suitable for a wide range of skin types.

Low molecular weight 10kDa Nano peptides; offers high permeability to hair follicles.

Potent key bioactives: insulin-like and vascular endothelial growth factors.

No preservatives, parabens, alcohol, and no animal testing.



Beard hair versus head/eyebrow hair

Unlike the hair found on our scalp or eyebrows, beard hair follicles and their growth are largely propelled by the testosterone hormone. The linear hair growth rate for beards is determined by the amount of dihydrotestosterone, a byproduct of testosterone activated via enzymes in the hair follicles' oil glands.

Dihydrotestosterone (DHT) is an androgen and is the main regulator of changes in hair growth. Both scalp hair follicles and beard follicles are sensitive to DHT, but it impacts them differently. High levels of circulating androgens such as DHT can shrink hair follicles as well as shorten the hair growth cycle, resulting in hair loss.

DHT, however, exerts an opposite effect on beard hair follicles. Beards possess androgen receptors, thus making beard growth rate dependent on androgen. Androgen acts on the epithelial hair follicles via mesenchyme-derived dermal papilla situated at the base of the follicles – the dermal papilla is the main site of androgen action in hair follicles as it contains low capacity, high affinity androgen receptors.

Androgens stimulate the proliferation of keratinocytes, prompting the dermal papilla to produce androgen-dependent paracrine growth factors. Insulin-like growth factor-I (IGF-I) was identified as one of the androgen-dependent paracrine growth factors, acting as the paracrine mediator from dermal papilla cells (DPC) to epithelial cells.

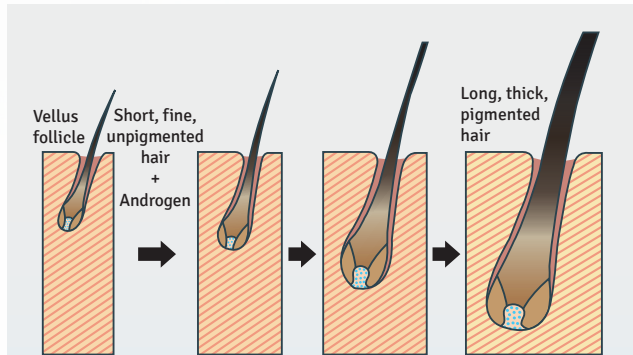


Figure 2: Androgen promotes the beard hair growth

Androgens prolong the growth phase of beard hair and promote their conversion from vellus to terminal type. Since beard hair growth is triggered and regulated by DHT, men with naturally low androgenic hormones will not be able to grow thick and voluminous beards.

By taking this information into account, **MF PLUS HFR Beard** was carefully formulated with Proprietary Blend Beard Follicle Regenerator – an advanced solution that primes the follicles for growth, fuels liner growth, stimulates hair follicle development, and prolongs the anagen phase via augmentation of DHT in beard hair dermal papilla. Each individual epithelial hair follicle of the beard is affected by this solution's unique mechanism of action.

Reference:

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- Singh, A., & Yadav, S. (2016). Microneedling: Advances and widening horizons. *Indian dermatology online journal*, 7(4), 244–254. <https://doi.org/10.4103/2229-5178.185468>
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- VA Randall, 2004, Androgen-dependent human hair growth: a biological paradox, Volume 7, *Clinical Endocrinology* (1994) 40, 439-457.



Figure 1: Schematic diagram of Androgen action in beard follicles.

HFR Beard

Formulated with Proprietary Blend Beard Follicle Regenerator that will specifically target the beard dermal papilla to augment the androgen levels binding to the androgen receptor. It stimulates the production of androgen-dependent paracrine growth factors and promotes the proliferation of hair epithelial cells.

MicroNed Stamper

The MicroNed Stamper is manufactured with an array of 24k Gold plated microneedles that are 0.50mm thin. Each needle has a spiral groove that helps to deliver the ingredients into the skin (direct drug delivery), leaving behind only a tiny, invisible hole in the skin.

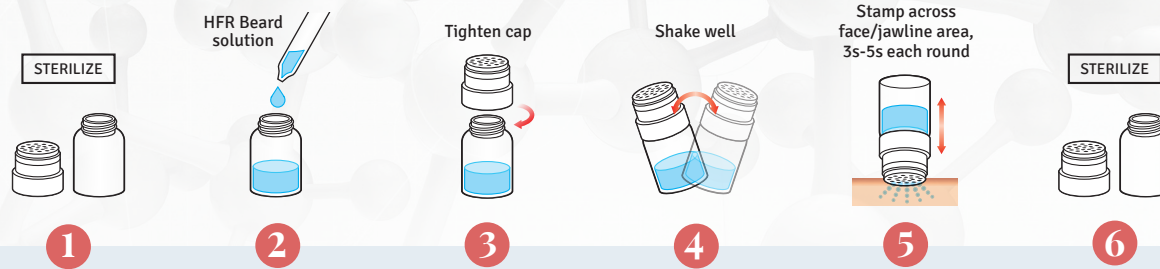
MicroNed Stamper is an applicator that allows you to target more specific areas of the skin – it's also significantly safer than other conventional methods, as there is less risk of damaging surrounding hair follicles by pulling the hairs out at the root.

HFR Beard Kit:

- 2.5ml x 5 vials
- 5ml MicroNed Stamper
- Dropper



Administering the MF PLUS HFR Beard solution using the EW Biomedical MicroNed Stamper is the recommended option for home treatment. Microstamping is not a surgical procedure; it's a safe and promising tool in hair stimulation and can be self-applied without any particular training.



Directions:

1. Sterilize the MicroNed Stamper and dropper with 75% alcohol solution before use to avoid cross contamination.
2. Use the sterilized dropper to take the solution out from the vial, then transfer the solution into the MicroNed Stamper bottle.
3. Close the bottle with the stamper lid. Shake well before use.
4. Place the MicroNed Stamper at the edge of where you like to target the beard hair to grow (jawline and sideburn area). Ensure that these areas of the skin are clean beforehand.
5. Apply MicroNed Stamper across face/ jawline area – about 3 to 5 seconds for each round. Apply enough pressure to penetrate the skin and cause the feeling of a slight prickling or tingling, but not enough to cause pain.
6. After every set of application, make sure to rinse the MicroNed Stamper with water followed by 75% alcohol solution to sanitize the device and let it dry before you transfer any new solution into the MicroNed stamper.
7. Increase or decrease the frequency of the procedure based on individual specific skin reaction. Avoid areas of the skin with acne / skin irritation.

Potential Side Effects and Complications

Certain individuals should not perform the needling process with MicroNed Stamper without the supervision of a doctor.

These include:

- Those with haemophilia, or other conditions that inhibit healing
- Those on blood thinners or similar medications
- Those with a history of open wounds, or who currently have acne or open wounds on their skin or jawline.
- Those with who are currently recovering post microdermabrasion, botulinum toxin, dermal fillers, IPL, chemical peels, or cosmetic surgery, until inflammation from those treatments has resolved.

Product images are for illustrative purposes only. Differences in screen or printing qualities may cause actual product to appear differently from the website and marketing materials. Please also note that the product may come in different packaging in accordance with their technical requirements. Please consult our specialist for the specific packaging available to you.



How to transfer MF PLUS HFR Beard solution from vial to the MicroNed stamper bottle:

Sterilize the dropper with alcohol solution before using the dropper to avoid cross contamination.

Use the sterilized dropper to take the solution out from the vial, then transfer the solution into the MicroNed Stamper bottle. Close the bottle with the stamper lid, shake before use and apply the solution onto the desired area as per instructions. Rinse the dropper with clean water, let it dry, and store properly to avoid contamination.

- General protocol:**
Apply at night onto a clean face with MicroNed Stamper (0.5mm).
- Frequency:**
1 vial per session, twice a week.
- Contraindication:**
Not suitable for acneic skin or skin with severe scars and inflammation.
- Appearance:**
Clear liquid.
- Dosage:**
1 vial x 2.5ml
- Packaging:**
5 vials x 2.5ml. Dropper included.
- Storage:**
The product is formulated without preservatives. Store in a cool temperature between +4°C to +16°C, away from sunlight, heat, and moisture.

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