The human skin plays an important role as the outermost layer of the human body. As the protective barrier, the skin guards the internal organs from outside insults and maintains the barrier from internal influences, while shedding the outermost layer continuously. The shedding is called desquamation, which is a complex process that the skin goes through for renewal. There are different speculations on the reasons why desquamation occurs. One of the hypotheses is that desquamation is a protective mechanism by which the skin removes the contaminant-exposed outer layer from impacting the skin below [1]. As we age, desquamation slows down [1]. In many cases, skin diseases and conditions manifest as inadequate desquamation [1]. Proper desquamation is a sign of healthy skin, and skin exfoliation by stimulated desquamation, can alleviate the signs of skin aging [2].

Healthy skin is maintained with proper hygiene, which requires the removal of deposits and harmful microorganisms from the skin surface. People go through different cleansing routines based on their personal preferences. In addition, the area of the skin that's exposed to more filth, like the hands, is cleansed multiple times throughout a day, to prevent diseases and other problems. Facial skin cleansing can be categorized into different forms or different skin types. For example, a cleaner could be foaming or non-foaming for formulation types, as well as different levels or kinds of surfactants can be used to remove deposits and improve the after-feel of the products based on the skin types [3]. Additionally, facial cleansing could use different media, such as handwashing, use of washcloths, or use of automated devices. Mechanical movements on the skin surface can also remove deposits. We developed a novel facial treatment cleansing mechanical device with accompanying treatment cleansers based on common skin types, that will exfoliate the skin by gently stimulating desquamation and remove deposits on the face, maintaining and improving skin health.

Photography was used as a visual record and tool for measuring the efficiency of the test regimen. All photographs for before and after the treatments were analyzed independently followed by comparison to subject-specific images. Before and after photographs were taken using the Matched Scientific Photography™ protocol developed by AMA labs. The pixel image analysis comparing subject photographs before to after product regimen use demonstrated efficacy in improving the appearance of skin texture, luminescence and pores. Selected results are shown in Figure 3.

**RESULTS**

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**CONCLUSIONS**

- The novel treatment cleansing regimen was able to improve skin softness and smoothness immediately after one use.
- The novel treatment cleansing regimen was able to improve appearance of pores, skin texture and firmness after 12 weeks.
- The novel treatment cleansing regimen was shown to provide increasing benefits with continued use.
- We demonstrated that mechanical stimulation of the skin brings about in vivo skin treatment benefits while simultaneously cleansing.

**REFERENCES**