Optimized low pH niacinamide formulations show a significant induction of autophagy gene expression over neutral niacinamide control formula

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Niacinamide (N, aka niacinomin, Vitamin B3) has been used in skin care formulations for decades and clinically proven to improve barrier integrity, appearance of skin color, and topographical attributes. Mechanistically it is believed that N can impact autophagy in skin by increasing cellular NAD+ and NADPH pools, which are known to decrease in skin with topographical attributes. Mechanistically it is believed that N can impact autophagy in skin by increasing cellular NAD+ and NADPH pools, which are known to decrease in skin with topographical attributes. Mechanistically it is believed that N can impact autophagy in skin by increasing cellular NAD+ and NADPH pools, which are known to decrease in skin with topographical attributes. Mechanistically it is believed that N can impact autophagy in skin by increasing cellular NAD+ and NADPH pools, which are known to decrease in skin with topographical attributes. 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The current identification of L3 as ligands for LXRs opens up new possibilities for regulation of epidermal barrier functions.