

J Cosmet Dermatol. 2004 Apr;3(2):88-93.

Nicotinic acid/Niacinamide and the skin.

Source : Hautklinik am Klinikum der Stadt Karlsruhe, Karlsruhe, Germany.

Abstract

Nicotinic acid (also generally known as niacin) and niacinamide (also known as nicotinamide) are similarly effective as a vitamin because they can be converted into each other within the organism. The blanket term vitamin B(3) is used for both. Niacinamide is a component of important coenzymes involved in hydrogen transfer. Here, the two coenzymes, nicotinamide adenine dinucleotide (NAD) and nicotinamide adenine dinucleotide phosphate (NADP) are of central importance. Topical application of niacinamide has a stabilizing effect on epidermal barrier function, seen as a reduction in transepidermal water loss and an improvement in the moisture content of the horny layer. Niacinamide leads to an increase in protein synthesis (e.g. keratin), has a stimulating effect on ceramide synthesis, speeds up the differentiation of keratinocytes, and raises intracellular NADP levels. In ageing skin, topical application of niacinamide improves the surface structure, smoothes out wrinkles and inhibits photocarcinogenesis. It is possible to demonstrate anti-inflammatory effects in acne, rosacea and nitrogen mustard-induced irritation. Because of its verifiable beneficial effects, niacinamide would be a suitable component in cosmetic products for use in disorders of epidermal barrier function, for ageing skin, for improving pigmentary disorders and for use on skin prone to acne.

PMID: 17147561 [PubMed]

2009 Aug 28.

Reduction in the appearance of facial hyper-pigmentation after use of moisturizers with a combination of topical niacinamide and N-acetyl glucosamine: results of a randomized, double-blind, vehicle-controlled trial.

Source: Harvard Medical School, Boston, MA 02114, USA.

Abstract

BACKGROUND: Topical niacinamide and N-acetyl glucosamine (NAG) each individually inhibit epidermal pigmentation in cell culture. In small clinical studies, niacinamide-containing and NAG-containing formulations reduced the appearance of hyperpigmentation.

OBJECTIVES: To assess the effect of a combination of niacinamide and NAG in a topical moisturizing formulation on irregular facial pigmentation, including specific detection of changes in colour features associated with melanin.

RESULTS: By all four measures, the niacinamide + NAG formulation regimen was significantly ($P < 0.05$) more effective than the vehicle control formulation regimen in reducing the detectable area of facial spots and the appearance of pigmentation.

PMID:19845667 [PubMed - indexed for MEDLINE]

Rooibos - Promotes hair growth

Studies were initiated by Cosmecochem International at an independent laboratory (Dermascan, France) to study the effect of the use of Rooibos in a hair lotion on a group of healthy persons who were suffering from the problem of hair loss. A 90 day trial was conducted comparing a hair lotion containing Rooibos with a placebo lotion of a alcoholic solutions both were applied daily. The efficacy of the products was evaluated using a videotri-chogramme, which determines:

1. Number and proportion of telogen hairs (hairs where growth has ceased)
2. Hair density (total number of hairs)
3. Number and proportion of anagen hairs (hairs which are still growing)
4. Hair growth speed of anagen hairs

After 90 days results showed that:

Hair growth speed - There was a significant increase of the hair growth speed in the lotion containing Rooibos compared with the placebo. An increase in the hair growth speed was observed with 89% of the volunteers.

Product efficiency – results from a subjective evaluation questionnaire by the volunteers showed:

*67% rated hair loss as zero or low

*67% liked the general aspect of their hair

*78% saw an improvement (low to medium)

*45% saw low to medium regrowth of hair

*63% of volunteers found a positive effect on the fragrance and smoothness of hair

No undesirable reactions - (irritation or allergy) were recorded