Aveeno®

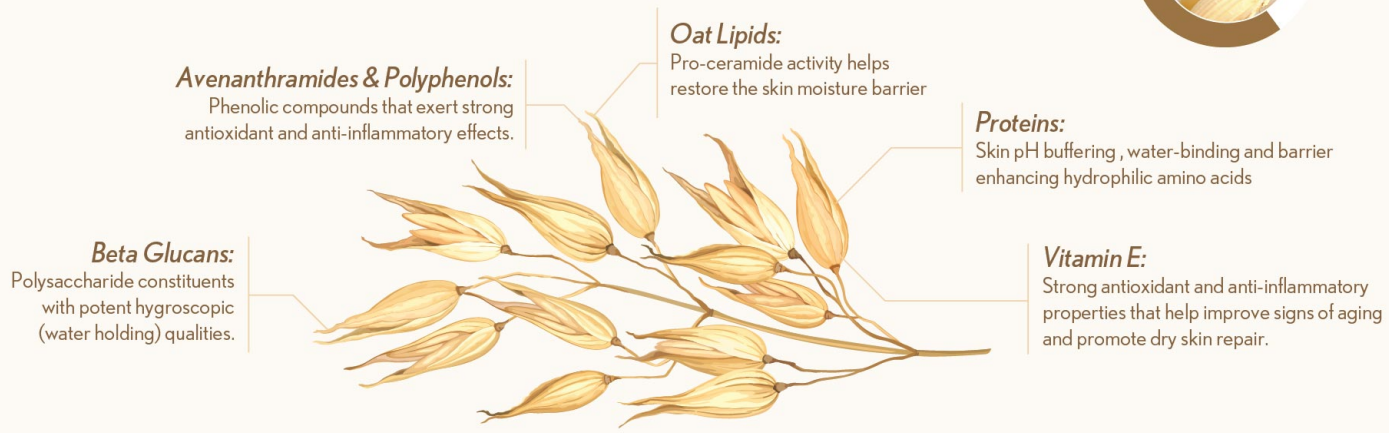
Colloidal Oatmeal

COMPOSITION, BENEFITS & MECHANISM OF ACTION

Colloidal oatmeal has a long history of use in the treatment of dermatologic disease. Oat is composed of various phytochemicals which contribute to its wide-ranging function and clinical use in atopic dermatitis and other skin conditions resulting from an impaired skin barrier and inflammation.[1]

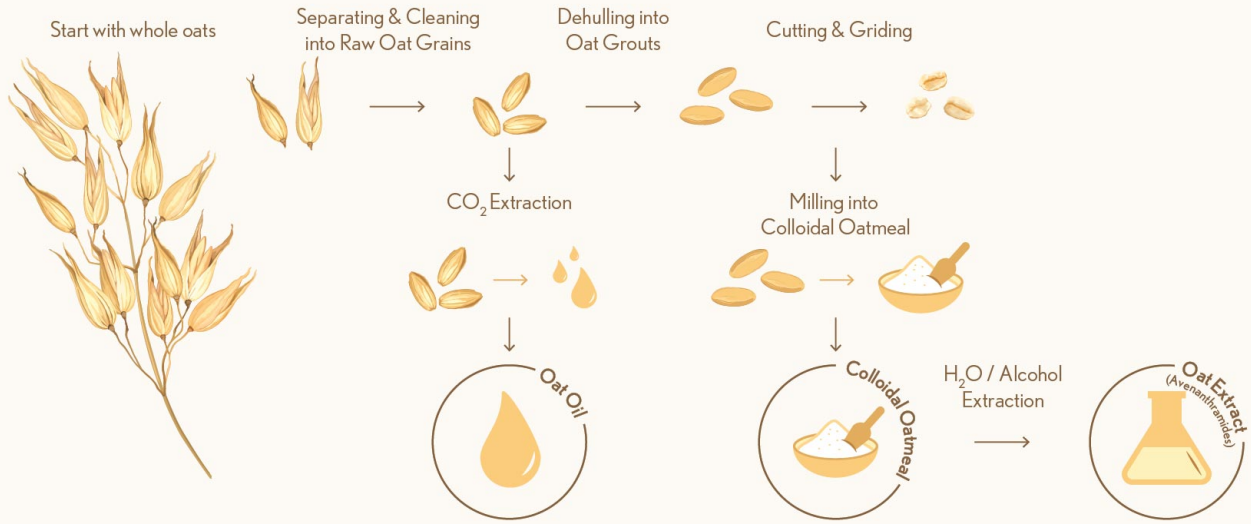
OAT COMPOSITION & BENEFITS:

The main components of colloidal oatmeal are polysaccharides (including beta glucans), proteins, lipids, saponins, vitamins (including vitamin E), minerals, antioxidants (including avenanthramides), and other protective compounds.[2]



OAT PROCESSING

The oat in AVEENO® formulations is obtained by grinding the milling the whole oat grain, carefully processed to help retain the strength and integrity of its most potent extracts – Oat Oil, Colloidal Oatmeal and Avenanthramides.



OAT MECHANISMS OF ACTION:

Colloidal oatmeal has various mechanisms of action including direct anti-inflammatory, anti-pruritic, antioxidant, pre-biotic and barrier repair properties, and beneficial effects on skin pH.

Moisture Barrier

In vitro data showed oat extracts increase transcription of skin barrier and differentiation genes which may aid in the treatment of inflammatory skin conditions.[3]

The occlusive and water-binding colloidal film holds moisture in the stratum corneum, helping to replenish the barrier.[4]

In vitro data showed oat lipids induce ceramide formation in skin cells.[5]

pH Modulation

The buffering capacity of colloidal oatmeal restores the pH of compromised skin to within the normal range.[6]

Anti-inflammatory

Colloidal oatmeal extracts reduce the expression of cytokines from human keratinocytes.[7]

Avenanthramides inhibit IL-1ß induced NF-kB activation in endothelial cells; suppress IL-1ß secretion of pro-inflammatory cytokines such as IL-6, IL-8 and MCP-1.[7]

Anti-pruritic

Avenanthramides have been shown in vitro to inhibit neurogenic inflammation; help break the itch-scratch cycle, soothe and calm skin.[8]

Antioxidant

Colloidal oatmeal, avenanthramides and oat oil deliver up to 9x the antioxidant power (compared to colloidal oatmeal alone).[9]

Pre-biotic

Oat flour supports the growth of commensal microorganisms, such as *S. epidermidis* (p=0.012), but not *S. aureus* to help balance the skin's microbiome and improve atopic dermatitis symptoms.[10]

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