# AVALON
## a Bath for Dry, Itching Skin

Bianchi B., Menchini G.*, Comacchi C., Ghersetich I., Lotti T.
Department of Dermatology, University of Florence, Florence, Italy
*Department of Dermatology, University of Siena, Siena, Italy.

**Introduction**

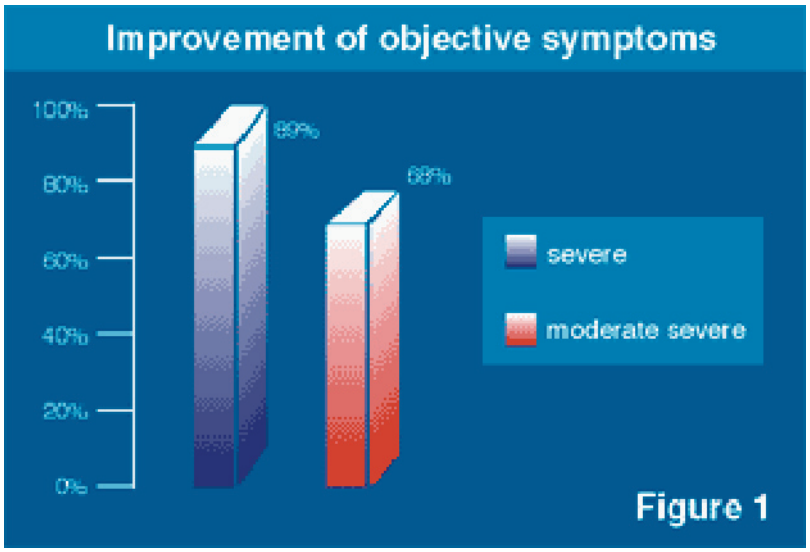
Ordinary dry skin-xerosis is a widespread affliction of old age and a common complaint in the dermatological practice. Xerosis is characterized by roughness and inelasticity of the skin with numerous small scales adherent to the surface and lowered moisture content in the outermost layers of the stratum corneum. The only clinical manifestation in mild dryness of skin may be superficial scaling, but severe dryness involves considerable scaling, fissuring, inflammation and eczematous changes and pruritus. Moreover, pruritus and xerosis are important and bothersome features of many skin diseases such as xerosis/ichthyosis, eczema, and atopic dermatitis. The scratching response evoked, can provoke further cutaneous damage, often with perpetuation and intensification of the pre-existing symptoms. Management of dry skin and related pruritus can be difficult. Various medications are currently marketed, however, a number of concerns are associated with such treatments. Oatmeal treatment can be effective, but tends to be extremely messy and cosmetically unappealing, reducing patient compliance and thus the benefits associated with these ingredients. Recent breakthroughs on the fractionation of traditional oat sources had led to the development of a clear hydrolyzed oat protein which appears to have all the benefits of its colloidal counterpart but presents fewer problems. This hydrolyzed oat protein contains a significantly higher amount of available protein compared to other sources of oat ingredients; in fact arginine, lysine and histidine are the aminoacids most represented in the make-up of this hydrolyzed oat protein. Moreover, the hydrolyzed oat protein bath soak has significantly higher amounts of protein solubilized in water that the traditional colloidal oatmeal product.
The following study is based on the use of hydrolyzed oat protein, Avalon Bath Solution and Avalon Detergent, in the treatment of skin disorders characterized by dryness and xerosis.

**Materials and Methods**

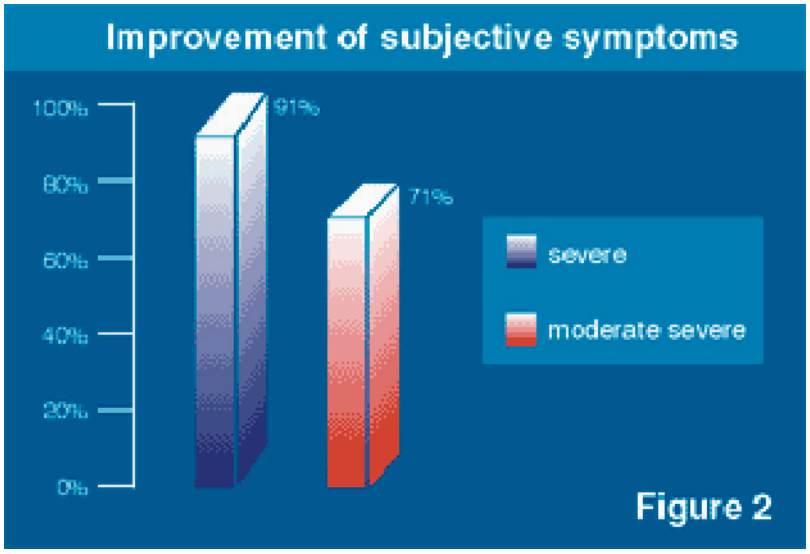
**A group of 54 volunteers** (40 females and 14 males) 1-70 years old was studied. These subjects showed moderated to severe dry skin or itching before entering the study and had not taken any drugs for at least 4 weeks. Since no single objective measurement can fully describe the complex set of attributes of dry skin, the use objective and subjective grading scales (absent, moderate, severe) to delineate the severity of dry skin signs and symptoms is a reliable technique. The objective symptoms evaluated by us were: scaling skin rough to the touch, erythema, presence of fissures or excoriations and, finally, lichenification. Subjects were asked about the relief of subjective symptoms of itching and burning and analogous grading scales for subjective symptoms were used. Subjects were instructed to soak in a bath prepared with Avalon Bath Solution for 10 minutes every day for 30 days and to use Avalon Detergent for daily hygiene, not to use soap. Each subject was examined after two weeks and at the end of the treatment (30 days) for grading of symptoms. Patient compliance was evaluated at the end of the treatment, and recorded as poor, fair, good or excellent.

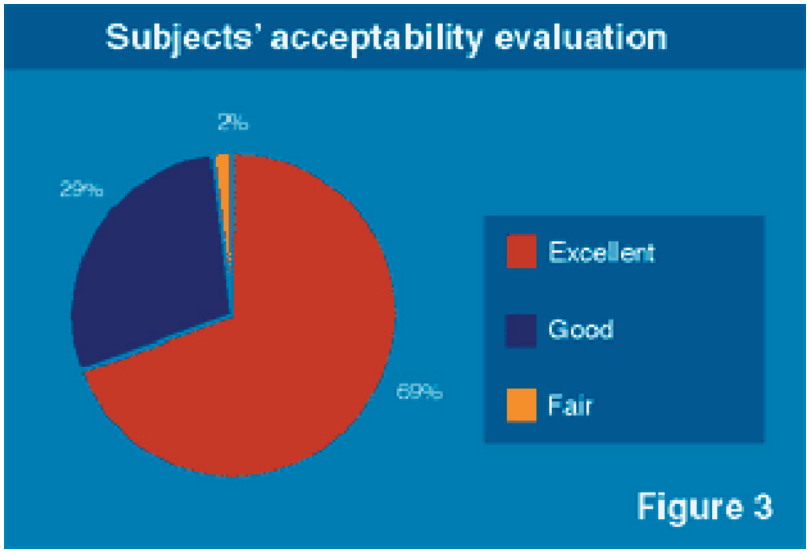
**Results**

The signs and symptoms of dry skin and xerosis showed statistically significant improvement in theses subjects treated with Avalon Bath Solution and Avalon Detergent. At the end of the treatment, with regard to the objective symptoms, subjects with moderate-severe and severe clinical conditions showed significant improvement equivalent to 68% and 89%, respectively (fig. 1). Table 1 shows the improvement expressed as a percentage of maximum possible improvements from baseline value. Also individual response to subjective symptoms showed a significant improvement.



In fig. 2, 71% of subjects with moderate-severe symptoms and 91% with severe signs rated Avalon good for relief of burning and itching. Finally, subject compliance showed that in 69% if cases Avalon Bath Solution and Avalon Detergent were rated excellent, 20% good, and 2% fair (fig. 3). No case of intolerability was reported.



## Discussion

It is well known that oatmeal treatments can be effective in certain skin disorders characterized by dryness and xerosis, as well as itching. Unfortunately their cosmetic inadequacy limits compliance. New products using a clear hydrolyzed oat protein demonstrate excellent risk benefit ratios. Specifically, Avalon Bath Solution and Avalon Detergent have been shown to be clearly efficacious in the treatment of xerosis and/or generalized itching, especially on atopic skin. Our data show that subjects treated with Avalon present significant improvement of objective symptoms. Those who benefit most are the individuals with severe symptoms. Also the subjective symptoms (itching and burning) were reduced in 71% of moderate-severe cases and in 91% of subjects with severe symptoms. These products apparently do not irritate the skin, and their acceptability is evaluated as excellent or good by all subjects treated to date.


## Abstract

Ordinary dry skin-xerosis is a widespread affliction of old age and a common complaint in the dermatological practice. Oatmeal treatment can be used, especially in the form of clear hydrolyzed oat protein, which appears to be more efficacious than traditional oatmeal. We show here clinical and experimental data indicating treatment with products using a hydrolyzed oat protein, Avalon Bath Solution and Avalon Detergent, reduces the severity of dry skin and itching.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