



Camel Milk Cosmeceuticals for Comparative Alternative Medicine

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ABSTRACT

The Comparative Alternative Medicine (CAM) activities of camel milk have been previously documented. Although there are no data concerning Comparative Alternative Medicine (CAM) activity of camel milk cosmeceuticals, these data explain the findings that camel milk cures Atopic dermatitis when swabbed on a child. This led to making a cream containing over 95% camel milk. The local application proved as effective in curing localized skin problems as the raw milk that was imbibed. Nowadays the knowledge of the cosmetic contents with camel milk uses the skin-friendly aspects for beauty treatments as well as CAM activities, including the very active immunoglobulins, which are incorporated in cosmeceuticals. Observations are presented on the efficacy of the camel milk in many parts of the body, explaining in each case what substance in the cosmetics is responsible for the rehabilitation of the skin. The cosmeceuticals are made in factories in a factory, Beauty Treat which combines the specialized knowledge of cosmetics with the specialized knowledge of camel milk properties. Among the maladies healed by camel-milk-cosmeceuticals are: acne, acne scarring, dandruff, localized psoriasis and fungal infections (tinea pedis)..

Key words: immunoglobulin, acne, dandruff, Atopic dermatitis, localized psoriasis, fungus

INTRODUCTION

For thousands of years camel milk has been known as a cure for illnesses (Khan,1974) and it was mentioned as being given by G-D as a cure for all diseases (Weill, 1863). However, in many countries camels are held in disrepute, considered as dirty and vicious when this is the opposite of the truth. But these misconceptions have led to many bad decisions made by official entities banning the use of its milk (Yagil, 2013a).

Nowadays this has changed after the FAO published an estimate of billions of dollars income per year from sales of camel milk and its products (FAO, 2006). Also the observations and publications that camel milk can cure a number of diseases that have reached epidemic levels (Hosam et al., 2012; Martin et al., 1997, Shabo and Yagil, 2005; Shabo, Barzel and Yagil, 2008, Yagil, 2013b) has raised the interest in camel milk.

Due to the basic demand of the Food Hygiene Section of the Ministry of Health that camel milk must be pasteurized, thus destroying most of its beneficial properties. It is proposed that a routine examination by a registered laboratory establish that the marketed camel milk is pathogen free. This brings the product to the state of probiotic and its acceptance as complementary alternative medicine (Miller et al., 2003; Yagil, 2013a, Yagil, 2013b, Yagil CAM , Hasan et al, Martin et al,1997). The pathogen-free status depends mainly on the hygiene of the milker(s), the hygienic handling and marketing of the milk.

Other laws governing the use of camel milk are found in the Jewish dietary laws (Dietary Laws, (2013). The permission to use camel milk for CAM has been presented (Levi, Steiner and Yagil, 2013).

After successfully treating a child with seemingly incurable Atopic dermatitis by swabbing camel milk onto the skin camel-milk-creams containing 97% camel milk was introduced and was found to be as effective as the milk. No treated child ever had a recurrence of the Atopic dermatitis. At that stage, however these products had to be stored frozen and kept refrigerated when in use. Later the cosmetic company, Beauty Treat, situated in Haifa, overcame the need for cooling and introduced many different kinds of cosmeceuticals. Beauty Treat company markets unique materials and instruments in the fields of medicine, esthetics, cosmetics, toilet and spa products which incorporate scientific techniques with alternative medicine, chemistry with homeopathy, in a unique and successful combination. The materials are based upon healing herbs, aromatic oils, homeopathic components, vitamins A, E, and C, seaweeds, special materials from the Dead Sea, and other materials, all of them on a natural basis. Beauty Treat cosmetics are registered in Israel and France. The knowledge of cosmetic manufacturing being combined with the expert knowledge of camel milk has proven to be excellent. Beauty Treat products are skin friendly and enhance skin vitality, starting from lack of moisture, wrinkles and fatty skin. By adjusting the right products to each type of skin, it is possible to treat every patient individually in order to correct skin defects. The products have not been used in animal experiments. In addition the cosmetician using the products has successfully passed the examinations of the International Board for cosmeticians (CIDESCO).

Camel milk not only has probiotic ingredients, but other important factors as well. The most pertinent properties of the camel milk (Yagil, 2013a) which persist in the cosmeceuticals are:

Fat

Low fat (2%), completely homogenized into minute globules, mainly poly unsaturated fatty acids (PUFAs - Omegas). This natural source of Alpha-hydroxyl acids is known to plump the skin and smooth fine lines. PUFAs also help to reduce inflammation by giving rise to the potent signaling molecules, called eicosanoids.

Lactose

Which is completely digested by human lactase unlike that of ruminant milk. The sugar is a skin-conditioning agent – it acts as a humectant - a substance that is used to retain moisture. It is the opposite of a desiccant, whose purpose is to keep things dry. Humectants are hygroscopic substances.

Proteins

Camel milk has no allergens but of extreme importance, it contains a large number of “protective proteins” (Kappeler, 1998), including very small and potent nano body-sized immunoglobulins (Muyldermans, 2001), tenth the size of human ones, allowing the penetration of thick tissue e.g. intestines and skin. The protective proteins have powerful antibacterial, antiviral and antifungal properties. Some “protective proteins” are responsible for tissue repair.

Vitamin C

Vitamin C in camel milk has antioxidant and tissue repair protection activities. Vitamin C is an essential water soluble vitamin that helps protect the immune system. According to Natural Standard Research, Vitamin C is necessary in the body for the production of collagen, a protein that aids in the growth of cells and blood vessels and gives skin its firmness and strength. Collagen is found in the skin, joints and cartilage; by increasing the production of collagen. Vitamin C strengthens the structural support and resiliency of skin so helps repair it. Vitamin C is an antioxidant that slows the rate of free-radical damage which causes skin dryness, and wrinkles (Escott-Stump, 2008) Vitamin C can literally reverse skin aging. .

Electrolytes

Magnesium slows down the aging process in the skin because magnesium stabilizes DNA and RNA which are both negatively charged and are attracted to the positively charged magnesium. Magnesium is also needed for hair to grow properly because chronic stress can cause hair to fall out as a result of unstable blood sugar, chronic inflammation, not

eating properly or getting enough sleep.

All of the above-mentioned camel milk contents explain the ability of penetrating the skin layers without leaving a fat or other residue on the skin. Camel milk creams are skin friendly and rapidly penetrate into the deeper layers of the skin.

COSMECEUTICALS

Cosmeceuticals refers to the combination of cosmetics and pharmaceuticals. Examples of products typically labeled as cosmeceuticals include anti-aging creams and moisturizers (Chen et al., 2005). Cosmeceuticals are cosmetic products with biologically active ingredients purporting to have medical or drug-like benefits. Dermatological research suggests that the bioactive ingredients used in cosmeceuticals do indeed have benefits beyond the traditional moisturizer (Zettersten et al., 1997). However, despite the reports of benefits from some cosmeceutical products, the term cosmeceutical remains a marketing term, as there are no requirements to prove that the products actually live up to their claims. Therefore it is up to the consumer to decide whether these claims are valid and worth the cost. Generally speaking, it is to the financial benefit of the cosmeceutical manufacturer that their products are not regulated by the FDA as drugs. The "cosmeceutical" label applies only to products applied topically, such as creams, lotions and ointments. Products which are similar in perceived benefits, but ingested orally are known as nutricosmetics.

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EXAMPLES OF CAMEL-MILK-COSMECEUTICALS FOR SKIN AFFLICTIONS

Scalp Dandruff

Simple dry skin is the most common cause of itchy, flaking dandruff. oils and skin cells from the scalp can build up, causing dandruff. (Mayoclinic, 2013) - A yeast-like fungus (malassezia) lives on the scalps of most healthy adults without causing problems. But sometimes it grows out of control, feeding on the oils secreted by the hair follicles. Before using the creams care must be taken to ensure that hands and the skin site have been washed with camel milk soaps.

Camel milk shampoos quickly restore the health of the skin and hairs. The skin oils are cleansed by the camel milk and the antiviral and antifungal properties will prevent the activity of malassezia or any negative immune response. The cell repairing substances will reintroduce normal hair development.

Face Acne

Scars from acne can seem like double punishment — first having to deal with the pimples, now you have marks as a reminder. (Goodman, 2006). Acne lesions or pimples happen when the hair follicles (or "pores") on the skin become plugged with oil and dead skin cells. A plugged follicle is the perfect place for bacteria to grow and create the red bumps and pus-filled red bumps known as pimples.

Acne comes in different forms:

Mild acne, which refers to the whiteheads or blackheads that most of us get at various times

Moderate acne, which includes red inflamed pimples called papules and red pimples with white centers called pustules

Severe acne, which causes nodules — painful, pus-filled cysts or lumps — to appear under the skin

The papules and pustules are removed by the skin repairing mechanisms and the bacteria are killed by the camel milk. The scars are repaired by the cell repairing properties in camel milk.

Body sores

Open wounds and sores of all sizes and origins are cleansed by the protective proteins and the sores repaired by the tissue repairing mechanisms.

This applies to Atopic dermatitis and localized psoriasis where the small, active immunoglobulins are activated and skin healed.

Localized psoriasis

The creams are very effective against localized psoriasis (general psoriasis requires drinking the camel milk). The effectiveness is due to the antibodies in the creams being active "on site" and in the tissue repair substances.

TINEA PEDIS

Tinea pedis is a fungal infection of the feet, most frequently affecting the spaces between toes (interdigital spaces). It is transmitted by human to human contact in warm humid environments, for example through shared towels and on wet floors in swimming pools, changing rooms and gymnasia. The antifungal properties in camel cosmeceuticals rapidly heal the fungus.

The specific small but efficient immunoglobulins of camel milk are also found in the cosmeceuticals. This can be important for skin cancer as it is one of the most common cancers in the world. Non-melanoma skin cancer refers to a group of cancers that slowly develop in the upper layers of the skin. The term 'non-melanoma' distinguishes these more common kinds of skin cancer from the less common skin cancer known as melanoma, which spreads faster in the body. The first sign of non-melanoma skin cancer is usually the appearance of a lump or patch on the skin that doesn't heal after a few weeks. Camel-milk cosmeceuticals can play an important role at this stage. As diabetes treatment doubles skin cancer drug's effectiveness camel-milk cosmeceuticals can be effective at the skin level.

CONCLUSION

Other factors in camel milk which make them skin friendly contain natural anti-aging factors and make the skin feel "good". These are the Camel Luxury aspects of the camel milk, bringing beauty and good feeling after treatments to the body. Various bio-additions to the basic camel milk provide for the special products available.

Camel milk or its creams as CAM (comparative, alternative, medicine) has no specific active component that can be extracted but is a sum of many components, each guaranteeing the efficacy of the product, be it from the milk or the cosmeceuticals (for beauty or health).

Based on the knowledge of camel milk comparative effects (CAM) it have been observed that cosmeceuticals based on camel milk are effective in rehabilitating skin afflictions. It is interesting that if we have comparative alternative medicine = CAM and we add "enhancing life" EL, we get CAMEL.

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