



The Afterlife of Natural, Ancient Egyptian Cosmetics

The handwriting is on the wall. Cosmetic chemists searching for novel active materials for today's cosmetics should toward Egypt for solutions.

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WHEN CLEOPATRA, Queen of Egypt, used a poisonous snakebite to take her own life, it was not the first time she had employed potent natural ingredients for dramatic effects. This charismatic female ruler regularly consulted court physicians, perfumers and beauticians to enhance her charms with notoriously enticing results. Cleopatra is rumored to have compiled an extensive for-

mulary of royal recipes with her favorite toiletries and beauty regimens detailed. Alas, Cleopatra's collection of cosmetic formulas has never been located! Still, the information she collected was the culmination of millennia spent perfecting beauty and medical techniques based on Egypt's vast resources of plants and minerals.

Ancient Egypt's culture of art and glamour is legendary. The advances made in the arts and sciences by the Egyptians many thousand years ago startle those who see ancient societies as primitive. Perhaps even more valuable than the exquisite gold and finery remaining from that era are the gems of scientific knowledge they left behind. The health and beauty practices developed by the ancient Egyptians expose a sophisticated knowledge of the natural world; how to use



Ancient Egyptians used a variety of natural ingredients, including basil, rose and jasmine, to beautify their skin.

organically grown floral ingredients are commonly extracted using harsh solvents. These solvents negate the otherwise organic status of the item. Using the ancient technique of *Enfleurance*, the essence of these flowers is absorbed by a layer of vegetable fat, requiring reapplication of fresh flowers over many days. This results in a pomade of the floral essential oils which, when dissolved in alcohol, yields an extract that is chilled, filtered and concentrated to an absolute of that floral. This technique has been successfully yielded pomades, extracts and absolutes of jasmine, rose, neroli, bitter orange, violet leaves and carnation. Since the ingredients in this procedure are all organic, the final result is organic and qualifies to be organically certified to U.S. (NOP) or European (Ecocert) standards. Here we find a modern purpose for an old technique. The careful, natural extraction techniques of the past have been abandoned but call for resurrection.

Ancient Actives for Modern Cosmetics

The natural ingredients themselves are among the most accessible treasures of this ancient culture. We have collected samples and indications for items in constant use since time immemorial for the benefit of modern science and contemporary beauty. Some of these oils are common and familiar to us today. Aside from praising the fragrant quality of many of these ingredients, the pharaohs documented extensively the natural ingredients that they used in cosmetics, toiletries, aromatherapy, herbal teas and natural medicines. These items were applied, inhaled, ingested and administered using poultices. Below are a few examples (*listed with their common, Latin and Hieroglyphic/Arabic name*).

Basil (*Ocimum Basilicum*) Reehan: This herb with its white and purple flowers comes in several varieties. Basil leaves have added a distinctive flavoring to food throughout the ages. Its oil is highly aromatic and is used extensively in cosmetics. Reputed for its anti-microbial properties, the extract from these leaves has also been used as a preservative. Basil has been shown to contain active constituents that are insecticidal. Currently, two types of basil oils are produced and are known for their chemical constituents, linalool and methyl chavicol. Other major constituents are 1,8-cineole and methyl eugenol.

Black Cumin Seed (*Nigella sativa*) Habet Baraka: In modern times, the black seeds of this plant are used in baking. When pressed, the oil produced is used to condition hair and stimulate hair growth. Primarily, it is known for its immune system boosting properties. It is commonly used as a curative for insomnia, earaches, sore throats and high blood pressure. Legend has it that it is a stimulant and treats sexual disorders. Prophet Mohammad declared that there is a cure for every disease in this black seed.

Chamomile (*Chamomile matricaria*) Sheeh: The flower of the Chamomile *matricaria* plant is used worldwide as an herbal tea for its calming and soothing effect. Its oil is currently used for the treatment of wounds and for its anti-inflammatory properties. The cooling, harmonizing effects of chamomile make it a first choice oil for nervous tensions,

nature's bounty and achieve calculated results. A rich repertoire of extraction techniques, formulas and novel ingredients remain entombed treasures awaiting their rebirth.

Now that the beauty industry is leaning toward the use of natural ingredients and environmentally sensitive farming, there is renewed interest in the ancient natural sciences. Ecological responsibility, a recent trend in agriculture and business, was a staple of the ancient Egyptian approach to farming and production. An examination of an era before synthetics could provide a roadmap away from our utter dependence on artificial ingredients. We have much to learn from ancient techniques in agriculture, harvesting, extraction and waste management.

There are multiple sources for information about Egyptian cosmetic techniques and beauty items. Valuable information was recorded on papyrus and on temple walls; many ancient products treating most of the common diseases were depicted. Some of these ingredients and formulations have been in use since ancient times. Folklore medicine that continues the ancient traditions uses ingredients that are commonly accepted for their effectiveness—they are tried-and-true. Recently, remains of perfume bottles and containers, now housed at the Louvre, have been unearthed and analyzed, exposing the chemistry of ancient Egyptian beauty formulations.

Mining the treasures of Ancient Egyptian cosmetics and toiletries to enhance our beauty, soothe our bodies and heal is innovation; old ideas are new again. Below are a number of extraction techniques and active ingredients that originate from the records of ancient civilizations.

Enfleurance—An Extraction Technique

One current challenge that can be addressed by a review of ancient practices is the issue of organic certification. Delicate

migraines and all kinds of stress related disturbances. The body and abdominal cavity of King Ramses II, when analyzed, revealed the presence of chamomile oil. The major constituents in this oil are bisabolol, farnesene and germane D.

Fenugreek (*Trigonella foenum-graecum*) Helba: This is a small annual herb that carries three oval-shaped leaves, small single white flowers and a thin, elongated fruit with numerous seeds. The seeds are soaked in water, sprouted and used to treat fevers and stomach ailments. It's a well-known lactagogue and is found in many maternity and nursery preparations. It is reputed to neutralize the excess acid in breast-feeding children. According to ancient Egyptian history, Fenugreek transforms old men to young men and leaves skin beautiful without any blemishes.

Geranium (*Pelargonium graveolens*) Etre: Geranium oil is a legendary fragrance that influences mood with anti-depressant qualities. It is a relaxing, happy scent. Its flowers yield highly aromatic oil that is distinctively floral and occasionally used as an inexpensive substitute for rose oil. In formulations it is also known for its anti-fungal properties and ability to treat wounds. Vast tracts of land in ancient Egypt were planted with the geranium herb. The major chemical constituents are citronellol, geraniol and linalool.

Dubbed the "King of Flowers," the essential oil was prepared by the pharaohs in a process now termed *Enfleurance* that extracts the jasmine oil without the use of synthetic solvents. Its highly floral aromatic quality is sufficient to impart a most characteristic and powerful odor in fragrances. It has sedative and anti-depressant qualities. It was used in cosmetics for skin irritations, sun care preparations and treatment of oily skin. It is also popular in hair preparations specifically for dandruff and oily hair. Chemically the absolute contains benzyl acetate, benzyl benzoate, phytol and cis-jasmone.

Hibiscus (*Hibiscus subdarifia*) Karkadeh: This herb has been used both externally and internally throughout history. Externally it is used in combination with henna and chamomile to dye the hair a beautiful copper-red color. Its oil is used as a preservative for cosmetics. In massage oils and teas it is used to reduce blood pressure and calm the nerves. Internally, the infusion is used to treat bronchitis, reduce fever and relieve stress often in the form of a tasty, red iced tea.

Lupin (*Lupinus termis*) Termis: Ancient Egyptians used it to impart a distinctively bitter taste to beer. In folklore medicine it is used to treat diabetes. They used the seeds to cleanse the skin, in particular oily skin. It was also used to

lighten the skin. Today it is mixed with vinegar and is used to treat black heads and pimples. Lupine soap is used for washing the hair.

Moringa (*Moringa peregrina*) Hab Alba: This oil is also known as Ben's Oil and is considered excellent for the repair of skin wrinkles in combination with frankincense, ground cypress and fermented plant juice. It is used as a base for perfumes with fixative properties. It is light, highly absorbent, non-greasy, sweet tasting and less prone to oxidation than other fixed oils.

Neroli (*Citrus aurantium*) Laregue: The Neroli tree produces a bitter orange that is extracted for its juice and oil, the leaves produce the prized Neroli oil. Neroli makes you feel good. For this reason it has often been used for grief and shock. It is generally uplifting with aphrodisiac properties. Cleopatra reputedly soaked the sails of her ships with the scent of this oil when she embarked upon her successful seduction of the Roman conquerors. In cosmetics, Neroli is used as a deodorant and in preparations treating scaly, itchy skin. The oil is high in linalool, linalyl acetate and geranyl acetate.

Pomegranate (*Punica granatum*) Romman: Popular in wine making and refreshing drinks. The peel of the fruit when boiled is used as an antiseptic and for the treatment of wounds, cough and cold symptoms. In skin care products it is used as an emollient. The bark of the tree is used as a natural dye.

Rose (*Rosa sancta*) Ward: A five-petal flower with a remarkable floral odor termed in Egypt "the Queen of Flowers." Found in numerous tombs in ancient Egypt, the oil was extracted via the now termed *Enfleurance* process and was used extensively in aromatic preparations, unguents and in most funeral rites. It is aromatherapeutically uplifting. It is especially excellent for skin preparations. Cleopatra was known to soak herself in a luxurious rose petal bath with milk. This bath has an excellent effect on softness and cleanliness of the skin. This preparation is still used today in luxurious spas. In addition to the presence of the characteristic waxy stereoptins, it contains predominantly citronellol, geraniol and nerol.

Ancient Products

Some ancient ingredients and recipes have been in use continuously for thousands of years. Many of the formulations and ingredients are used informally and also sold in stores to this day. These unique and recommended items could find a home in modern formulations. Shebba (Alum), a natural potassium aluminum sulfate, is mined in Upper Egypt and is a proven astringent commonly used to soothe the skin after shaving in barber shops and as an underarm deodorant. *Lupinus albus* (Lupene Beans) are a kitchen counter solution for skin issues. They are dried then applied as a poultice to restore the skin and remove blackheads. In folk medicine, lupene beans have long been used as an emollient skin lotion. Kohl, the original ancient eyeliner, is almost as popular today as it once was centuries ago. Sourcing intriguing, little-known yet effective ingredients can be done in Egypt.

While the knowledge of the ancients is impressive, we must

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be mindful to use our current scientific knowledge when incorporating suggestions from Ancient Egypt. The ancients did not have the full benefit of our modern technological developments. Some ancient cosmetic preparations in their time included lead, which we know to be poisonous. Surely, we can combine the wisdom from the past with our current modern ingredients and advanced analytical techniques.

Conclusions

The natural art and science of the ancient Egyptians should not be lost. Our ancestors mastered these two fields of knowledge with finesse that we can only hope to approximate. These ancients were proficient in incorporating beauty into every aspect of life (and death). The medicines and cosmetic mixtures of the ancient Egyptians are not only scientifically sound they are also useful in contemporary formulations. Egypt, the mother of civilization, can provide for her children bountifully. Her repertoire of scientific healing and beauty enhancement is our collective inheritance and should be valued as such. ●

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