

Summer-Fall 2007 | Issue 2

Powerful arnica protection | Keeping it clean

Regrowing with sesame | Digging with worms

Cheers to biodynamic® wine

FREE
COUPONS INSIDE

we

Weleda lifestyle magazine

EVERY BODY NEEDS

oil



We

contents

WHEN IT COMES to taking care of ourselves and our environment, less can be more. I reuse shopping bags, eat fewer unhealthy foods and care for myself with products free of chemicals, toxins and other ingredients that I am convinced do not belong in the human body. And through it all, one thing is for sure—this “natural” lifestyle has become “naturally” addictive!

While admittedly not perfectly “pure,” I focus on living in balance with my body and environment. I have realized that we can create change through our everyday choices by munching on organic rather than conventional apples, sipping biodynamic® wine and using the cleanest of clean skin care products.

For eighty-six years Weleda has shown us that through organics, biodynamics® and fair trade, we can sustain and care for our planet and its people. Such ideals, once relegated to the crunchy granola counter-culture, are now undoubtedly a part of everybody’s future. With this in mind, we bring you the following pages

full of enriching topics relevant to today and, perhaps even more importantly, tomorrow.

We address the vital role of oils in “Every body needs oil” (page 18); share our proactive approach to protecting natural resources and the livelihood of people throughout local communities (page 4 and page 13); reveal how we can truly keep it clean in the shower (page 8); and get down and dirty with worms—burrowing creatures quite literally able to change the face of our earth (page 29).

Over the next six months I invite you to join me as I strive ever more to “keep it clean” with the greenest of green goods and a conscious approach to balanced, everyday living. Share your progress, thoughts and ideas for creating a healthier and longer-lasting today and tomorrow with me at editor@weleda.com. We’re in this together.

Jennifer Barckley
Jennifer Barckley



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PROTECTING PEOPLE, PLANTS AND ANIMALS IN ROMANIA

Weleda and the WWF team up to save endangered species

NEWS REPORTS regularly highlight pressing environmental troubles that require immediate and drastic remedies. Proactive prevention of such problems may not be as exciting a story, but sustained environmental protection often costs only a fraction of the amount it takes to rebuild vital ecosystems after they have been destroyed.

This proactive approach has been put into practice in the Western Carpathian Mountains of Romania, a country where history collided with environmental concerns. When the people of Romania reclaimed their freedom in the Revolution

of 1989, they also elected a new democratic government. Previously ruled by the communist party for more than six decades, Romanians suddenly faced a distinctly different social, political and economic configuration. As the Romanians seized their new-found freedom in the turbulent times after the fall of communism, natural resources were in danger of being plundered. Romania faced losing its history, land and plentiful wildlife.

Foreseeing the growth of a potentially widespread problem, Christoph Proumberger founded the Carpathian Large Carnivore Project (CLCP) and enlisted various national wildlife organizations to educate people about the important role of animals like the wolf, the bear and the lynx in the ecosystem. “With the sudden social and economic changes, it was clear that in the long run habitat destruction would increase and large carnivores would become threatened,” says Proumberger. As part of CLCP’s initiatives, several wolves, bears and lynx were radio-collared and monitored to help researchers better understand their interaction with the local people and recognize any signs of concern. Additionally, an ecotourism program called “Wolves, Bears and Lynx in Transylvania” educated community members and international visitors about the significance that large



Large carnivores, including the lynx (top) and bear (below) thrive in Romania’s Carpathian Mountains

carnivores have for nature and humans. The program’s success showed residents that interest in wildlife could be used to stimulate the economy.

A similar model was followed for the protection of another key wildlife species and export commodity, the endangered *Arnica montana* plant. With the fall of communism, the market for cultivating and collecting wild plants collapsed, as did the once-enforced guidelines for harvesting such valuable medicinal herbs. Weleda, along with the World Wildlife Fund (WWF) and the University of Freiburg in Germany, recognized the growing misuse of natural resources. To not only stop this decline but also improve the situation for the future, they developed an action-oriented project involving the local community. “By teaching the collectors [how to collect wild plants in a sustainable way] and helping them develop an infrastructure for doing so, we secure long-term supply and fair market prices for these



natural resources,” states Barbara Michler, a biologist and ecologist who has worked with Weleda and the WWF in developing the sustainable arnica project.

Florin Pacurar, a researcher who has spent the past four years exploring the landscapes of the Carpathian Apuseni Mountains in Romania, has also seen tangible results from the arnica project. “In past decades the people were ruled under a dictatorship but greatly desired personal freedom. People only looked out for themselves,” says Pacurar. “Now things have begun to change. In the early summer of 2006, the local farmers and collectors developed a forward-thinking solution [for preserving their personal livelihood and land] by forming a cooperative.”

To ensure that such initiatives are carried through in the future, Pacurar and Dana Bâte, manager of the farmer’s cooperative, regularly teach local school-children about healing plants and the value of the precious resources that lie outside their doors. On tours of the meadows, the children also learn how to collect the bright arnica blossoms in a gentle, sustainable way.

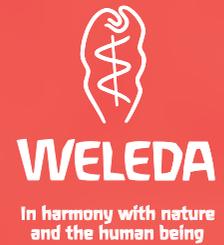
Proactive management creates a sustainable balance between humans



Above: Michael Straub, Weleda Medicinal Plant Garden Manager, inspects the freshly picked wild, organic arnica flowers in Romania

Below: Weleda and the WWF at work building a plant-drying facility in Garda-de-Sus, Romania to ensure the dried arnica is of the highest quality

..... and nature. The local people have come to realize the importance and economic benefits of protecting their environment. In doing so, they achieve the very thing they always sought: the freedom of a promising future in a healthy environment. *jb and ml*



We're in it for the long run. We hope you are too.

For over 80 years Weleda Arnica Massage Oil and Arnica Ointment have been soothing muscles, sprains and bruises. The long-lasting power of arnica restores the body before exercise, after exercise and for the exercise.





KEEPING IT CLEAN

WASH. LATHER. Rinse. Clean. Such is the daily ritual—and obsession—of many.

Showering products, however, are often anything but clean. Many body and shower washes are made from drying, irritating and aggressive cleaning agents such as sodium lauryl sulfate (SLS), ammonium lauryl sulfate (ALS) and unnatural petroleum-based cleansers.

These harmful materials are not part of Weleda's pure, fresh and thoroughly clean body washes. Instead, in Weleda's research and development center in southern Germany, east meets west and luxury meets efficacy. Dr. Junichi Nonaka, the expert Japanese scientist and manager of Cosmetic Development for Weleda, spent endless days and months finding the right blend of ingredients for a feel-good, good-for-your-skin and truly clean showering experience.

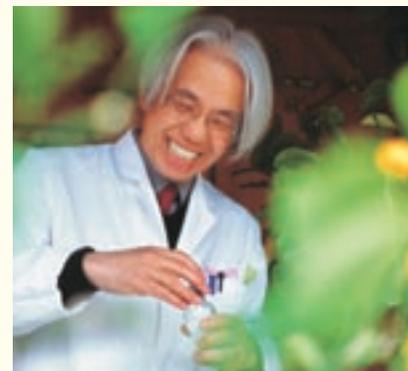
Dr. Nonaka's first step was to find and combine natural cleansing substances in the right proportions. He selected two types of cleansing agents—both from natural sources, environmentally friendly and well tolerated by even the most sensitive skin, including that of babies. A sugar-based tenside from the dried pulp of the coconut fruit, known as cocoglucoside, was combined with one of the mildest amino acid cleansers fermented from sugar and coconut oil. The combination of these gentle tensides resulted in the most delicate foaming cleanser.

These natural ingredients were then blended with the light, gently moisturizing plant oils from organic sesame seeds and sweet almonds. Next, the fragrance, a composition of fine essential oils, was selected with care. Each essential oil blend was created to uplift the human senses

and help preserve the end product without changing the creamy formulas. "In chemistry, one plus one generally doesn't equal two," explains Dr. Nonaka. "As more components are added to a formula, the process of finding the right balance is like creating a piece of art."

Each product imparts its own properties and essences through its unique essential oil blend and its trademark pure plant extract—the final key ingredient. In Calendula

Shampoo & Body Wash, biodynamic® calendula from Weleda's Medicinal Plant Gardens in the hills of southern Germany gently soothes the scalp and skin of babies without irritating the eyes. Biodynamic® sea buckthorn oil from Tuscany revitalizes the skin in Sea Buckthorn Creamy Body Wash; biodynamic® lemon oil from Sicily invigorates the skin in Citrus Creamy Body Wash; and organic rosehip seed oil from the Chilean Andes harmonizes the skin in Wild Rose Creamy Body Wash.



Dr. Junichi Nonaka, manager of Weleda's Cosmetic Development, passionately blends product efficacy with pure quality

Direct to your shower

Experience Weleda's NEW Creamy Body Washes exclusively available at usa.weleda.com



Combining Dr. Nonaka's 20 years of scientific experience with Weleda's 86 years of expertise has created the perfect balance of ingredients. "I always see product functionality as the focus. I research what a product is supposed to be like and then look for the best solution that is compatible with our philosophy and strict criteria," states Dr. Nonaka.

The commitment and passion of this scientist and his team, along with the highest-quality raw materials, deserve the best through and through. At Weleda's spotless production facilities in Germany, the creamy formulas are poured into nontoxic, food-grade, shatterproof and easy-to-handle PE (plastic) tubes. The room fills with aromas reminiscent of all the world's natural paradises.

Only one thing can top what the Weleda research, development and production teams have experienced—a shower with one of Weleda's body washes. After a long day of developing products, this is just what Dr. Nonaka does. "I like the Citrus Creamy Body Wash," he reveals. "It's especially great after sports." *jb and ir*

New Babies Join the Weleda Family



BATHING BASICS

Babies love rhythm. They clap their hands, they giggle, they sleep, they cry—all to their own beat. But babies need help in finding a balanced rhythm for healthy development. After a long day spent processing new impressions, babies find a warm bath soothing and comforting. With their rapidly developing bodies, little ones are very sensitive to their new world, and the warmth of the bath water helps them adjust to the day's cycle. When combined with Weleda Baby Calendula Cream Bath, bathing becomes an especially relaxing, nourishing and cleansing ritual for both parents and children.

Weleda Baby Calendula Cream Bath is comprised of only the most wholesome, biodynamic®, organic and



natural ingredients derived directly from nature and free of chemicals—including synthetic drying detergents. Biodynamic® calendula flower extract soothes and warms the skin, comforting the baby and preventing irritation. Sweet almond oil and organic sesame seed oil nourish the skin, keeping it smooth and supple. This softly soothing formulation gently cleanses and cares for a baby's delicate skin, protecting it from moisture loss.

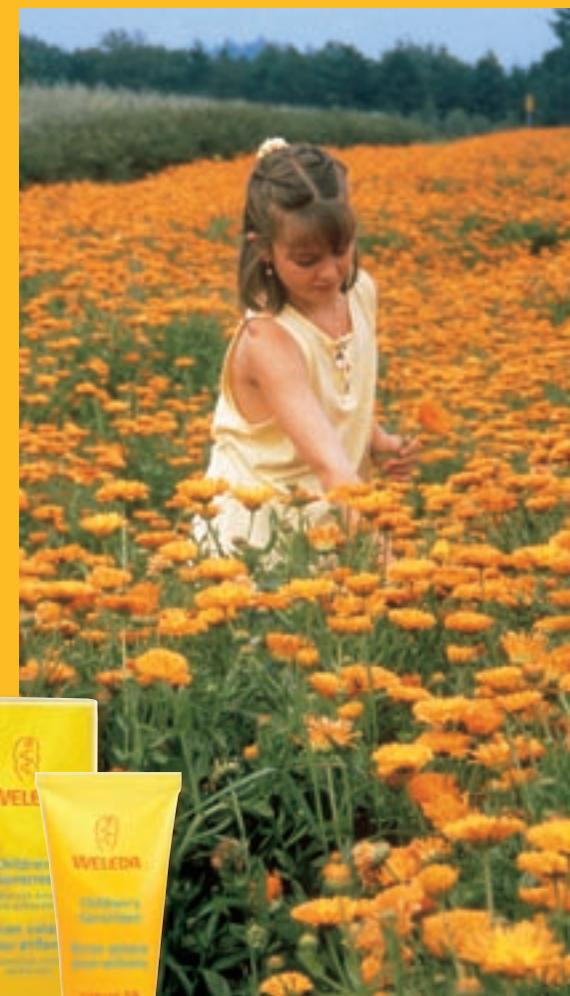
As babies curiously explore their new world, they touch and feel nearly everything and everyone. While it is not necessary to clean their bodies every day, it is important to keep their skin healthy and free of irritants, including harsh chemical detergents and foaming agents. Therefore, a cleanser made of mild, plant-based ingredients should be used. Weleda Baby Calendula Shampoo & Body Wash conveniently cleans a baby head to toe with sugar-based cleaning agents, sweet almond oil, organic sesame seed oil and biodynamic® calendula flower extract. Gentle on the eyes and skin-friendly, this wash helps make clean-up time playful and pampering.

SUNNY DAYS

Sun is warming and stimulating; sun activates the metabolism; sun strengthens our body's immune system and promotes the production of vitamin D for healthy bone development.

The sun's rays, however, can also do damage. They can be especially harmful to the developing skin of children. Sun exposure should be avoided until the age of 12 months. Children can then tolerate short-term sun exposure when covered with a hat and protective clothing. True care and protection of delicate skin must also come from chemical-free and water-resistant physical sun barriers. Weleda Children's Sunscreen SPF 18 reflects UVA and UVB rays with the exclusive use of micronized mineral UV filters: titanium dioxide and zinc oxide. Such mineral-based pigments are especially recommended for protecting children's delicate skin because they are very stable against the sunlight, in addition to being well tolerated, gentle and safe for the skin.

Plant extracts also possess skin-protecting benefits. Edelweiss, coined the "King of the Alps," thrives under the intense light of the mountain sun. This sturdy flower therefore protects even the most sensitive skin from the sun and



other environmental elements. Carrot extract works with edelweiss to scavenge skin-damaging free radicals that naturally develop from UV-radiation. Weleda Children's Sunscreen SPF 18 is formulated with organic edelweiss extract, vitamin A-rich carrot extract and skin-nourishing and protective organic sesame seed oil, organic shea butter and organic jojoba oil for skin-caring benefits beyond sun protection.



Regrowing
Organic sesame
sesame,
seed oil from the
economy
land of the Zapotecs
and culture

It's no exaggeration to say that Mexico's economy relies on agriculture. Almost 25 million people, close to one-fourth of Mexico's population, are dependent on it. In comparison, in Europe a mere 3 to 5 percent of the population works in agriculture, and in the U.S. this figure is less than 2 percent. To help save the people's livelihood, traditions and land, a special project in southern Mexico has been developed to encourage small-scale farmers to continue to cultivate the land rather than migrate to cities.



Mexico is a country of many colors—splashed across oceans, mountains, farm land and populated city centers. The nation has a highly developed electronics industry, and yet fields are often still ploughed by oxen teams. And although current statistics rank Mexico as one of the leading industrial nations, a trip through the countryside reveals a place indicative of both the past and the future.

Accompanied by José Luis Lopez Martínez, an agronomical engineer for the Grupo de Desarrollo Agrícola Mexicano (DESAMEX), I travel to the land of the Zapotecs—the indigenous culture in the southern state of Oaxaca. The area seems a world away from the merchants of urban centers like Mexico City. DESAMEX’s mission is to bring organic farmers and purchasing companies together. The goal of such cooperation is to establish long-term, fair trade relationships that offer security to both producers and purchasers.

We head to the village of San Dionisio del Mar on the Isthmus of Tehuantepec, where one such project has been launched. Wearing a sombrero woven from sisal hemp as protection from the scorching heat, Martínez explains that for centuries half of the people who live here have been fishermen, and the other half farmers. He then tells me about the sesame farming that is indigenous to this region. “Seven years ago we began to encourage the farmers to convert to organic farming,” says Martínez. “Many companies requested organic sesame seeds

From soil to seed to bottle

Whether in body oils, skin creams or baby care, valuable organic sesame seed oil from southern Mexico plays an important role in Weleda products. Vital essential fatty acids and natural antioxidants like those found in sesame seed oil care for and protect the skin. The precious components of sesame seed oil help moisturize and nourish the skin and prevent it from drying.

Of the 250 tons of organic sesame seed oil needed annually, Weleda receives about 180 tons of organic sesame seed oil from the sesame project in Mexico’s Oaxaca province. The remaining 70 tons come from an organic cultivation in Burkina Faso, Africa.



from us as a raw material for use in various foods and cosmetics. But in Mexico, there were few who could provide it. So we decided to go to the villages and look for farmers who were interested and who were also looking for a long-term partnership. It took three years for us to win the trust of the people here,” he declares. “But it was worth it.” Today, 50 small businesses in San Dionisio participate in the project, and a total of 250 take part throughout the Tehuantepec region.

“The farmers deliver quality, and we stick to our contracts,” states Martínez. “The harvest is paid upon delivery, and each farmer also receives a fixed prepayment for sowing, harvesting, transportation and labor. And if they have any questions, we are there and provide on-site advice.”

Martínez further explains how eliminating the “cayotes”—the middlemen—is key to the farmers’ self-reliance, freeing them from their dependency on the well-off. In this relationship, a middleman who has money gives a farmer a whole year’s credit in the village shop. “When it is time to harvest the crops,” says Martínez, “he asks for the credit back in the form of the harvest—of course at a

poor, unfair price! This middleman knows that the farmer is in a weaker position and will not dare scare off his creditor to whom he is again dependent the next year.”

REAPINGS BY THE HANDFUL

In the heat of a quiet afternoon we arrive at one farm community cultivated by several different farmers, each with his own plot of land. Two small-scale farmers, Don Apollinario and his son, are waiting for us. They have begun to clean the sesame seeds they harvested a few days earlier. “Despite the aridness, the harvest was good,” says Don Apollinario. We then go into the fields with another visitor, Rogelio Serna, an economist and





agricultural engineer who is responsible for the “Sesajal” oil mill, which further processes the San Dionisio del Mar farmers’ harvest into valuable sesame oil in Guadalajara in the state of Jalisco.

Despite the overwhelming heat the crops are immediately threshed on the field. Don Severino and Don Armando, two other small-scale farmers from San Dionisio, explain the procedure. After cultivating the sesame plants, they cut them with machetes and bundle them into sheaves. The plants dry in the sun for two weeks until they are withered. Then when the farmers beat the dried plants with wooden sticks, the seeds easily fall onto a cloth that has been spread out. The seeds are then put through a sieve by hand, after which they are cleaned and packed into sacks.

As we walk around, the rhythmic beating and the steady shaking of the sieve are the only sounds that can be heard. The farmers take advantage of short breaks to speak with Martinez and Serna about this year’s sesame seed prices. Each

year they negotiate the prices together. “This year I can give you ten pesos per kilo [about \$0.41/pound] of sesame seeds,” says Martinez. In contrast, the market price for conventionally grown sesame seeds is about five pesos. Through this fair trade partnership, Martinez has offered them twice as much.

WHAT THE FUTURE WILL YIELD

The harvest is transported from the fields on a wooden cart drawn by zebu cattle. Under Don Apollinario’s sure guidance, it rolls down the dusty path to the village below. During this tedious journey, Don Apollinario tells me that he has five sons and seven daughters. Four of them have moved to the capital, Oaxaca. The young ones who still live at home already speak of going to the U.S. “I hope that at least three or four of my children will stay in the village,” he says. “But that will only work if we can also live from our land.” Don Apollinario estimates that, with the rotation of crops, he can harvest about 600 pounds of sesame seeds per acre

Land and Freedom

Almost 100 years ago the Mexican revolutionary Emiliano Zapata (1879-1919) demanded “Tierra y Libertad” (“Land and Freedom”). In 1994, his ideas were revived in southern Mexico under a leader who went by the name “Subcomandante Marcos.” During both times the focus was on comprehensive land reform. Despite these efforts, migration into cities and sinking prices for agricultural goods remain a problem.

The farmers’ situation was intensified in 1994 when the North American Free Trade Agreement (NAFTA) took effect. “The big losers in the Free Trade Agreement are the farmers,” declares Mexican economist Alejandro Nadal. This is ever apparent as Mexico loses market leadership in its core cash crop, corn. At least 15 million small-scale farmers have felt the direct impact of such developments, and they’re often forced to leave their land and move to big cities where they struggle to find work.

In light of such world-trade shifts, it becomes ever more clear why sustainable farming projects such as the partnership developed with Weleda are so important. The people in rural areas then have an alternative to fleeing to cities where few prospects exist. Instead, they can find comfort, stability and a future on their farm.



daily due to an inability to rent it out—resulting from the decrease in crop prices over the past decade,” says Serna. “The sesame project developed by José Luis and his organization

each year. For his 15-acre area he can therefore yield just over 4 tons of sesame seeds, which corresponds to a value of 42,000 pesos (about \$3,750). In Mexico this is still barely enough to support his 10-person family.

Serna, the agricultural engineer, is nevertheless convinced that only these long-term partnerships can save the rural regions from depopulation (see “Land and Freedom”). “The Mexican farmers’ organization CIOAC [Central Independientes de Obreros Agrícolas y Campesinos] estimates that in our country about 740 acres of agricultural land are given up

provides an incentive to stay on the land and harvest agricultural goods. And when partners in Europe, like Weleda, use organic sesame seed oil, more farmers can participate and profit from this partnership.”

Don Severino, Don Apollinario and Don Armando are confident in these prospects. They are among those farmers who have taken part in the project since the beginning. “We want our land, we want just wages for our work, and we want to live a life of dignity. These are our goals,” says Apollinario, as the other two men nod in agreement. “And we also want the same thing for our children.” *ml*

A close-up, warm-toned photograph of a woman's shoulder and neck. The word "oil" is written in a light pink, cursive font across her shoulder. The background is a soft, golden-yellow glow.

EVERY BODY NEEDS

oil

In many ways, oil has shaped the way we live in the 21st century. Oil is everywhere, and it comes in a multitude of forms. We ingest oils for health and palatable pleasure, beautify our skin with oils, heat and cool our homes with oil, fuel our cars with oil and burn glowing candles made from oil.

Fat and oil are also essential components of the human body. Take the skin, our largest organ. It is made of oil, needs oil and even loves oil. The body's connective tissue stores fat in the form of triglycerides¹, which contain saturated and unsaturated fatty acids (see page 22) in varying ratios.

Single unsaturated and polyunsaturated fatty acids—oleic acid², linoleic acid³ and linolenic acid⁴—are particularly important to support the skin's functions. The skin's outermost layer, the epidermis, must replace close to 100 mg of lipids (fats) every day. These lipids are lost as the skin naturally exfoliates, shedding its fine epidermis cells. Due to the skin's impressive reabsorption abilities, it can be supplemented with fatty acids internally via nutrition and externally through the upper skin layer. These fatty acids are then incorporated into the skin's cell membranes.

Fat cells also make up the skin's innermost layer, the hypodermis. Not only are these oils essential to our skin's long-term health and protection, they also help conserve the body's heat and act as a shock absorber, protecting other organs from injury.



Along with its daily loss of oil, the skin as it ages begins to lose its ability to quickly reproduce oils. These vanishing oils must be replenished to keep the skin in healthy balance. Just as the type and quality of ingredients we ingest internally is paramount to our health, those substances “ingested” externally by our skin also affect our well being. It is with this in mind that we explore the different types of oils and their effect on us and our world.

WHEN OIL ≠ OIL

Not all oils are created equal. Oil comes from three main origins, each corresponding to a kingdom of nature: minerals, animals and plants. The source of oil alone can tell us a great deal about the substance’s key properties, its environmental impact and its compatibility with the human organism.

MINERALS: UNEARTHING OIL

Crude oil, commonly known as petroleum, is a fossil fuel made from decaying plants and animals. This oil is chemically comprised of energy-rich hydrocarbons. Gasoline, diesel fuel and paraffin wax are just a few key derivatives of crude oil.

Fats & Oils

The terms fat and oil are often used interchangeably. However, from a chemist’s perspective, they are physically different. Fat is typically solid at room temperature, whereas oil is generally liquid at room temperature.



As a fossil fuel, petroleum is nonliving. Our skin, in contrast, is a living organ. Because of this difference, mineral oils don’t penetrate but rather create a layer atop the skin, potentially blocking the pores and disturbing moisture and oxygen regulation. Without oxygen, the skin cannot regenerate and maintain a natural, healthy balance. These oils therefore prevent growth and development. Just as our bodies cannot readily use heavily processed or chemical-laden foods, our skin reads these nonbiodegradable oils as “foreign substances” and is unable to use them to replenish itself. Delving beyond the skin, analysis of the liver and other organs has found sediments of mineral oils, deposited there because they cannot be broken down. While mineral oils may be recommended for some skin conditions, they are generally not ideal for daily use.

The European Union (EU) bans the use in cosmetic products of more than 300 petroleum-based ingredients. These substances have been classified as carcinogenic, mutagenic or toxic for reproduction (CMR). In the U.S., the Environmental Working Group (EWG), a non-profit research and advocacy organization that works to safeguard public health and the environment, lists more than 90 types of petroleum classified as “petroleum distillates.” According to the EWG’s personal care safety guide “Skin Deep,” these ingredients earn a score of “high” concern. “Many petroleum distillate ingredients have impurity concerns such as polyaromatic hydrocarbon (PAH) contamination,” states EWG researcher Hema Subramanian. “These chemicals are known or suspected carcinogens.” Petrolatum, another petroleum derivative restricted in the EU, is widely used in the U.S. in skin care products such as lip balms, moisturizers, deodorants and face powders.

ANIMALS: BREEDING OIL

A variety of fresh and processed foods are comprised of animal fats, such as butter, cheese, whole milk and meat, derived from cows, sheep, pigs and other animals. These fats are often high in saturated fat (see sidebar).

Because the cell make-up of animals can be similar to that of humans, some animal fats are compatible with human skin and provide it with protection. However, plant-based oils are generally milder, lighter and more skin-compatible. Lanolin, a natural component of the wool of sheep, is an exception. While chemically categorized as a wax, it comes from natural oils found in the wool of sheep. This fatty wax has a similar composition to that of the human skin.

The efficiency in using animal fats, even though they come from natural sources, is questionable, as animals heavily rely on other energy sources such as plants to develop and thrive.

Fatty acids are inherent components of both vegetable and animal fats. Two key categories of fats exist: saturated fatty acids and single/polyunsaturated fatty acids.

Saturated Fatty Acids

- primarily found in animal fat
- not essential fatty acids
- free from double bonds⁵, making them less healthy than unsaturated fatty acids
- appear at room temperature as a white, hard paste

Unsaturated Fatty Acids

- primarily found in vegetable oils and fish oils
- essential (vital) fatty acids, as they cannot be produced by the human body itself
- contain one or more double bonds⁵, making them healthier than saturated fatty acids
- appear at room temperature as a yellowish-brown liquid
- stimulate cell division by supporting cell metabolism and resistance

PLANTS: REGROWING OIL

Plants are rich in much-touted unsaturated fatty acids (see previous page sidebar) that cannot be produced by the body itself. They are considered healthier than the saturated fatty acids primarily found in animal fat. Unsaturated fatty acids provide myriad important functions for the skin: they support natural metabolic processes, help build a protective layer, regulate healthy balance and prevent drying. If the skin is lacking in unsaturated fatty acids, it often becomes dry and scaly. Additionally, because these essential vegetable oils are compatible with the skin's fine lipid layer, they are easily absorbed by the skin and provide lasting nourishment and protection. Pure plant oils recommended for the skin are rich in unsaturated fatty acids and are generally the same as those favored in the kitchen, including oils from almonds, olives, sesame seeds and sunflowers (see next page).

Oils derived from plants preserve the earth's resources when grown using sustainable and organic farming methods. Plant oils, extracted from seeds, nuts and fruit, are both renewable and biodegradable.

At closer glance and touch the prolific use of oils is, in fact, vital. The recipe for reaping real and nutritious vitality lies, like all good cooks know, in the quality of the ingredients. Air, sunshine, rain and all the living ingredients of nature form the stock of pure oils that nourish the body inside and out. *jb*



¹*Triglycerides: The chemical form of what is commonly referred to as fats and oils, they are taken in through food and made by the body from energy sources such as carbohydrates.*

²*Oleic Acid: This Omega-9, single-bond unsaturated fatty acid naturally occurs in greater quantities than other fatty acids. It is present in animal and vegetable sources, such as olive oil.*

³*Linoleic Acid: This shortest chain Omega-6 essential, polyunsaturated fatty acid is made up of multiple double bonds.*

⁴*Linolenic Acid: This essential Omega-3 fatty acid is made up of double bonds and is found in fish oil and vegetable sources such as sea buckthorn, walnuts, flax and hemp.*

⁵*Double Bond: These bonds occur in fatty acids between carbon atoms and result in unsaturated fatty acids. Kinks are formed in the chains of atoms that prevent the molecules from fitting together. As a result, unsaturated fatty acids are liquid at room temperature.*

Know your oils

Oils are unique. Each type of pure plant oil, extracted from sun-ripened seeds and fruits, comes with special, body-benefiting characteristics reflective of its home in nature. The essential components of each nutritious oil show why we're inseparable from oils.

SWEET ALMOND OIL

Pressed from the nut kernels of the sweet almond tree, this fine, nearly colorless and odorless oil is especially mild and gentle. It is extremely well tolerated by the skin and is easily absorbed. Due to its high content of essential fatty acids, it protects the skin from drying and improves the skin's barrier function, keeping it smooth and supple.



Citrus Refreshing Body Oil
Lightly moisturizes and refreshes the skin with gentle sweet almond oil and biodynamic® lemon peel oil.

SESAME SEED OIL

Lavender Relaxing Body Oil
Calms and soothes the body and mind with organic lavender oil and organic sesame seed oil.



The sesame plant, native to Africa and other subtropical areas, yields yellow or black seeds. The light oil that is extracted from the seeds contains a high concentration of unsaturated fatty acids and antioxidants. Due to the plant's natural orientation to the sun, this warming and protective oil stimulates the circulation. It also assists in the buildup of the skin's natural lipid layer.

JOJOBA SEED OIL

This evergreen shrub bears olive-shaped fruits and grows wild in arid environments, such as Arizona, Mexico and South America. Jojoba oil is derived from the seeds (beans) within the fruits. This oil, classified as a wax, is easily absorbed by the skin and is especially beneficial in treating inflamed and irritated skin conditions.



Birch Cellulite Oil
Visibly improves the skin's texture and smoothness after one month of regular use. Pure, organic plant extracts—including birch and jojoba oil—tone the skin and support its overall health.

OLIVE FRUIT OIL

This prized oil comes from the bluish-black fruits that mature out of the small, yellowish-white blooms from the evergreen olive tree, native to the Mediterranean region. The olive pulp contains both saturated and unsaturated fatty acids. It is made up of a particularly high quantity of Vitamin E-rich unsaturated oleic acid. This warming oil is well tolerated by the skin and restores moisture and nourishment to dry, rough skin.



Arnica Massage Oil
Warms the skin and helps restore tired, aching muscles with organic arnica flower extract, organic olive oil and organic sunflower oil.

SUNFLOWER SEED OIL

This light-colored oil, native to Eastern Europe, the Mediterranean region and North and Central America, comes from the seeds of the sunflower plant. The oil provides a rich source of unsaturated linoleic and oleic fatty acids and Vitamin E. Sunflower seed oil is soothing, calming and caring to the skin.

MUSK ROSE SEED OIL

Wild Rose Body Oil
Pampers and harmonizes the skin and the senses with the finest organic rosehip seed oil and organic rose flower oil.



Commonly referred to as rosehip, this plant is made up of thorny branches, white or pink blossoms and orange fruits (haws) that contain the precious rosehip seed oil. Rich in antioxidants, it is comprised of Vitamins A and E, helping to fight free radical damage and promote new cell growth. Rosehip seed oil is also comprised of an exceptionally high amount of linoleic and linolenic essential fatty acids, supporting the skin's elasticity and keeping it well nourished. This easily absorbed oil is often used to heal scars and damaged skin.

SEA BUCKTHORN OIL

This summer green shrub, native to Europe and Asia, features silver-gray branches and coral-red, edible berries. The golden-red pulp oil is rich in unsaturated essential fatty acids, including linoleic and linolenic acids. Comprised of beta carotene, Provitamin A and Vitamin E, it helps protect the skin from UV radiation and free-radical damage. These easily absorbed oils support the natural buildup of the skin's lipid layers and possess anti-inflammatory properties.



Sea Buckthorn Body Oil
Replenishes moisture to the skin with nutrient-rich, biodynamic® sea buckthorn seed and pulp oil.



TOASTING BIODYNAMICS®

A sip (or two) of pure wine with Frey Vineyards

BIODYNAMIC® and organic wines are winning rave reviews throughout the world. Take one sip and you won't need a connoisseur to tell you why.

Frey Vineyards, nestled in the heart of wine country in California's Mendocino County, serves as an excellent example of this high quality. Through their words, distilled below, Derek Dahlen, vineyard manager, and Eliza Frey, granddaughter to the vineyard's founders, take me on a palatable journey through the oldest and largest all-organic vineyard and the first certified biodynamic® winery in the U.S.

What is Frey's wine-making philosophy?

We work with nature's processes to create delicious wines. We have always been

organic because our founders believed "you would never put poison on your land." Our philosophy is to make a very clean product with the cleanest form of agriculture we can find.

What does organic and biodynamic® viticulture incorporate (or not incorporate) compared to conventional viticulture?

At first glance you can almost tell if a vineyard is being treated conventionally or organically. On our vineyards you will see green grass and birds playing and singing songs. Many animals live here, whereas in conventional fields all the sprays that are used kill everything. The fruit that

we are getting here and that we are buying from other organic growers is of the utmost quality. It is a totally clean product without any pesticides. We do not use any additives or preservatives. No sulfites are added. Our wines are a truer reflection of the vintage year and everything that happened that season. The rain, the frost and the drought are in that bottle. A lot of conventional wineries pretty much have a recipe, so it does not really matter what a wine [the grapes] tastes like or how it grows. The yeast used to make our wines comes from the skin of the grapes versus commercial yeast used in conventional agriculture, which often contains GMOs [genetically modified organisms].

Why did Frey choose to go beyond organic and farm some grapes biodynamically?

Biodynamics® is the oldest certified form of ecological agriculture in the world. Everyone at Frey liked the idea of doing biodynamics® because it brings richness to the soil and plants and helps integrate different crops and animals. Biodynamics® develops a consciousness for the whole farm. Rather than compensating for soil deficiencies, we are feeding the soil and increasing the farm's natural intelligence.



Top: Animals are key components of a biodynamic® farm. At Frey, sheep roam alongside the grape vines

Bottom: Eliza Frey (left), granddaughter to the vineyard's founders and the do-it-all wine expert; Derek Dahlen (right), vineyard manager, biodynamic® coordinator and one of the few people in the U.S. to have a master's degree in Biodynamic® Agriculture

The word "sulfite" has recently run abuzz in the world of wines. What are sulfites and why the attention?

Sulfites are naturally occurring in grapes. However, in conventional wines they are artificially produced and added to wines as preservatives. They are very reactive molecules. Sulfites will bind to and immobilize bacteria and yeast in the wine, thus preserving it. Not all sulfites are used up in this reaction process, so when wine is consumed it can react with tissues of the body, can affect breathing and can cause headaches, among other reactions. The naturally occurring antioxidants in our grapes function as preservatives. Being biodynamic® and organic, our grapes have much richer plant chemistry that helps preserve our wines.

THE QUALITY of Frey's wine is detectable far beyond the organic and biodynamic® insignias that mark the simple glass bottles. Award winning many times over (all of their biodynamic® wines have received top prizes), the pure wines impart delicate flavors reminiscent of wild berry pickings and sun-drenched orchards. Frey's various "free of" mantras, including GMOs and added acids and sulfites, result in wines full of smooth, balanced tastes that leave dry, off-dry and sweet wine lovers raising their glasses.

A sampling (and editor's picks) of two of Frey's most prized biodynamic® wines—a red and a white:

CABERNET SAUVIGNON 2004

Redwood Valley, Red Wine

This Cab displays loads of complex fruit such as cherry, currant and blackberry, enhanced by a moderate level of acidity. The result is an elegant wine with a long, lingering finish. Complements grilled meats or vegetables and chocolate cake.

Alcohol: 13.6% by volume; Total sulfite, naturally occurring: BATF analysis, 0 ppm
Total production: 1,700 cases

Silver: Florida State Fair International Wine Competition **Silver:** Rated "Highly Recommended" and "Best Buy" by the Beverage Testing Institute, Illinois

Editor's Notes: The warm fruit flavors are perfectly blended—not too dry and not too sweet. Each sip is as smooth as the last without a hint of bitterness. Friends agree.

CHARDONNAY 2005

Redwood Valley, White Wine

Fermented on our vineyard's natural wild yeast, this aromatic wine shares scents of apricot and honeyed pears. A smooth vanilla-oak finish pairs well with creamy sauces for pasta primavera or free-range chicken.

Alcohol: 13.9% by volume; Total sulfite, naturally occurring: BATF analysis, 1 ppm
Total production: 400 cases

Bronze: Mendocino County Wine Competition

Editor's Notes: In one sip a sun-dappled summer afternoon meets a crisp autumn morning. The light fruit essences blend like the seasons of nature. A vacation for a day. *jb*

WHY WE LOVE WORMS

MOST OF US grew up thinking of worms as squiggly, wiggly, slimy and grimy, associating them with social punishments as in the playground sing-along, "Nobody likes me, everybody hates me, guess I'll go eat worms."

But as we kicked the soccer ball over lush fields or nibbled sweet corn at the dinner table, did we ever stop to think that perhaps we should, in fact, love worms?

Indeed, worms—specifically earthworms—are essential to a healthy environment, which makes for healthy living. More than 15,000 species of earthworms exist, and for centuries the role of earthworms in agriculture has been studied (a field known as vermiculture—"vermi" meaning "worm" in French). In 1881 naturalist Charles Darwin wrote,

Exclusive offer! Your 3-Bottle Biodynamics® Kit

| | |
|---|-------------------------|
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| Frey 2005 Chardonnay — biodynamic® | US \$12.25 value |
| Frey 2004 Zinfandel — biodynamic® | US \$13.50 value |
| Weleda Sea Buckthorn Body Oil, travel size (with biodynamic® sea buckthorn and organic plant oils) | US \$2.50 value |
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“...earthworms are essential, highly valued members of a biodynamic® farm”

“It may be doubted whether there are many other animals which have played so important a part in the history of the world, as have these lowly organized creatures.”

“Earthworms, which have no teeth, suck in soil and plant waste,” says Hendrik Eksteen, earthworm specialist and managing director for Affmech cc, an engineering company in South Africa specializing in organic agriculture. “Through the process of digestion, all pathogens taken in are destroyed, and the beneficial bacteria are increased up to a thousand times. The earthworm’s manure is casted [deposited] in a form that is not water soluble, so it holds on to the nutrients until a plant can utilize it. All fertile soil on earth has passed through an earthworm.”

Organic matter is therefore present in the soil and made available to plants as a result of the work done by earthworms. “Earthworms make soil. Soil without organic matter is not really soil because soil is a marriage of the living and the

dead,” explains Walter Goldstein, research director for the Michael Fields Institute, a nonprofit organization dedicated to the development of agriculture that sustains the land and its resources. Goldstein also explains that earthworms give the soil structure and allow air to pass through it: “When earthworms eat, they ingest a lot of soil. When they breathe out they make carbonic acid through their



Above and opposite page: Gardeners at Weleda’s biodynamic® Medicinal Plant Gardens till the soil and pick plants by hand, gently caring for plants, animals and soil

respiration. The carbonic acid combines with lime and makes a type of calcium carbonate cement. The cement helps the soil particles and organic particles stick together and stabilize. Worms help give

the soil its structure, and if few worms are present in the soil, practice has shown that root diseases often develop.”

Practitioners of conventional agriculture do not look to earthworms to improve soil quality. Instead, synthetic chemicals are used to supplement the soil and vegetation. However, those who engage in organic and biodynamic® agriculture increasingly recognize the essential role played by earthworms. The U.S. division of the international biodynamic® certifying agency Demeter requires that all certified farms take at least three soil samples to measure the presence of invertebrates such as earthworms. If the sample site lacks earthworms, evidence of their existence vis-à-vis castings and worm tunnels must exist. Because they improve soil biology and recycle organic materials, earthworms are highly valued members of a biodynamic® farm. “Earthworms are the only way you can achieve 100 percent disease control,” says Eksteen.

Eksteen and Goldstein can both point to accounts of how earthworms have reformed the land. Eksteen notes that earthworms helped revitalize land in Russia after the nuclear Chernobyl disaster occurred 20 years ago: “Earthworms were used to absorb the heavy and toxic metals in the earth. The earthworms digested the toxins and expelled them through their dorsal pores, making the wastes unavailable to plants so that crops could again be grown free of radioactive materials.”

Goldstein tells another triumphant story. “I have a friend in the Carpathian Mountains of Ukraine who tried to revitalize the land with worms,” Goldstein says. “He collected different species of worms, along with their natural soil from the land, inserted them into manure compost piles and allowed them to multiply before spreading the compost



and the worms onto the pasture. Through this approach, he rejuvenated pastures, achieving amazing effects.”

Given such notable successes and the growing efforts to reverse the curve of conventional, chemically reliant agriculture, earthworms—not to mention farmers—still have a lot of down-and-dirty work ahead. “In the future, I hope to see more methods for cultivating worms and improving the land by such means,” says Goldstein. Lesson learned. Even on the playground, worms are too valuable to be eaten. *jb*

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The international farming practice known as biodynamics®—a holistic method of farming that goes beyond organic—is as forward-thinking as it is age-old. This original form of organic agriculture, developed by Weleda founder Dr. Rudolf Steiner, remains relevant today. This feature is part of an ongoing series. To learn more about biodynamics® visit our archives at weleda.com/we. Still looking for more? Visit weleda.com/biodynamics or contact the Demeter Association at demeter-usa.org



FLOWER POWER

The healing touch of arnica

COINED THE “patron saint of muscles and bruises,” arnica relieves and restores everything from bruises and muscle tightness to inflammation and sprains. This powerful botanical is used in essential body care and medicinal products such as body oils, ointments, gels, essences and tinctures. Whether ingested or massaged into the body at gyms, racing tracks or massage therapy practices, arnica provides relief to professional and recreational athletes during warm-up, competition and post-endurance, when the body is regenerating.



Left: Massage the skin with Weleda Arnica Massage Oil before exercise to warm the body and after exercise to accelerate muscle recovery.

Below: Arnica montana is wild-collected in protected nature reservations, as in Weleda’s fair trade project, pictured here.



The power of this radiant yellow plant lies in the 150 substances that make up its flowers. One key component, silicic acid, is responsible for arnica’s great strength and its ability to restore the human body. Silicic acid regulates the body’s internal and external formative processes. When the muscles and tissues are broken down by a blunt injury such as a sprain or prolonged impact such as intense running, the silicic acid in arnica activates the body’s natural self-healing powers to repair the damage. Two other active components of arnica, helanalin and dihydrohelenalin esters, have powerful pain relief and anti-inflammatory effects. Flavonoids (antioxidants), carotinoids, tannins, essential oils, resin and sugar substances are among arnica’s other essential ingredients.

Native to mountainous terrain, arnica has proven to be a mighty plant. As strong as it is sensitive, it produces a brilliant,

golden sea of flowers when in bloom. The plant thrives despite thunderstorms, hail, showers, frigid cold and other extreme conditions. However, if not grown in healthy soil, it can easily be destroyed. While arnica loves silica-rich soil, it refuses to grow in the presence of lime or artificial fertilizers, or in heavily acidic or alkaline conditions. In such inhospitable environments, arnica not only ceases to flourish but also vanishes for several generations. Only healthy arnica plants, grown and harvested in a balanced ecosystem, can fully release their salutary properties in body care and medicinal products.

Revered throughout generations, arnica symbolizes tradition and progress. In our rapid-paced lifestyle of pushing, climbing and jumping faster, higher and farther, arnica remains essential. *ir*



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and the human being

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Weleda has pioneered the use of biodynamic® and organic ingredients in body care and medicines to promote natural harmony and health.

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