

an unsolicited plug

Making an Effective Cannabis Topical

Cannabis topicals vary in effectiveness from individual to individual. Some report feeling almost instant, almost miraculous benefit from joint and muscle pain. I had tried several balms over the years, unsuccessfully, to relieve computer-induced pain in my wrists. The woman peddling Topicanna Sungrown topicals at the Emerald Cup, said I had been giving up too soon. She suggested that I try working the lotion into my aching wrist maybe twice a day for a week or two. And sure enough, after a week the healing molecules seemed to penetrate and the pain faded. Here my caregiver describes her production process.

—The Grateful Fred



By Deborah Caldwell

It all starts with the plants. We use organic arnica, calendula, turmeric, and lemon grass as well as Cannabis.

Our cannabis is organically grown on our solar-powered ranch in San Luis Obispo and harvested at peak potency. We use landrace-variety seeds or clones from Equilibrium Genetics to produce the cannabinoid and terpene profiles we’re aiming for.

In 2017 we grew African Haze, Indigo Malawi and AC/DC to make topicals rich in THCa and CBDa (the cannabinoids in the plant are always in the acid form), as well as limonene, caryophyllene and other terpenes associated with inflammation reduction.



The Skin Microbiome

“A well-developed skin microbiome with diverse critters maintains an ecological balance that keeps pathogenic bacteria from getting a foothold. Likewise, an imbalanced skin microbiome, or one reflecting the inflammatory responses of a screwed-up gut microbiome, may play a role in psoriasis, atopic dermatitis, and eczema.

“Our skin provides a lot of niches. For bacterial species, that falls into three environments: the moist (armpit, groin, and toe webs), the oily (head, neck and trunk), and the dry (forearms and legs). So far scientists have found that a few bacteria phyla typically dominate each region. Fungal communities are present as well, most harmless freeloaders, but they can become problematic if the balance of power within the microbial community is compromised. Too few bacteria to counter them and fungi run amuck. That’s what a yeast infection is.

“Microbial niches are so specific that we have different fungi that live between different toes and different bacterial species on the right versus the left hand, even different fingertips carry different communities. And those site-specific communities are similar from one person to the next....

“There are 1,000 to 10,000 species and millions of microbial cells on a bit of skin the size of a letter key on my computer keyboard... When you hug you share them, which is why people who live together have similar skin microbiomes.”

—Eugenia Bone, *Microbia*

After harvest we buck off the stems and wash the buds in a 5% hydrogen peroxide solution, then rinse them in RO water [water purified by a “Reverse Osmosis” process] to eliminate any airborne molds and fungus.

We use a commercial five-gallon spinner to get the excess water off, then we hang it to dry.

Topicanna Sungrown topicals are made with flowers. We don’t trim very tightly, but too much leaf matter makes the cream green. It would stain more and would smell stronger.

Once the flowers are dry I infuse them with locally grown organic olive oil in Mason jars, which are bathed for a week at a low temperature —just under 120 degrees— to preserve the cannabinoids in acid form.

I use 1,500 milliliters of fresh, dried cannabis buds per one-quart jar.

Calendula (we grow our own) and arnica (organically grown in Washington state) are added to the infusions for the Synergy formula.

After about three days the chlorophyll starts to transfer, which gives the oil color and scent. Longer than a week it gets very dark.

To extract the oil from the buds we use a plant oil press that applies two tons of pressure and yields about 90% of the oil. The infused oil is sent to SC Labs for potency testing to achieve a consistent product.

Emulsification with all-organic plant oils, waxes and aloe vera yields an absorbable cream. Turmeric extract (from Monterey county) and essential oils (from Elizabeth Van Buren of Santa Cruz) are added for the Synergy Blend. Bare Naked cream is cannabis in all its dank glory. We formulated it for a family member with eczema and other sensitive patients.



GRATED TURMERIC RHIZOMES AND CALENDULA FLOWERS will be added to the Cannabis oil extract for additional anti-inflammatory effects in Topicanna Sungrown’s “Synergy Blend.” Organic turmeric from Monterey County is extracted with alcohol and added to the non-lipid liquid at the emulsion phase.



EMULSIFICATION is the physical mixing of liquids that are normally immiscible. The stainless steel bowl holds eight gallons, the mixer is a 750-watt commercial Immersion blender. Hand-crafted batches are made two to four gallons at a time.



TOPICANNA USES US SOURCED GLASS and we label our bottles by hand. Since its founding in 2015, Topicanna has provided topicals to thousands of patients from San Jose to Sonoma County mainly through storefront dispensaries. In 2017 more than 1,000 samples per month were distributed by the founder at dispensary demonstration, educational events, and conferences.



“To be governed is to be noted, registered, enumerated, accounted for, stamped, measured, classified, audited, patented, licensed, authorized, endorsed, reprimanded, prevented, reformed, rectified, and corrected, in every operation, every transaction, every movement.” —Pierre-Joseph Proudhon