



DERMAL BOTANICS
SKIN SPA

ACNE GUIDE



BY DIANE BREWER

WHAT IS ACNE

Acne is a genetic condition affecting the pores, characterized by the rapid shedding of dead skin cells. Typically, normal pores lose about one layer of dead skin cells each day, while acne-prone pores can shed up to five layers daily, leading to a buildup. This accumulation results in a microcomedone, which serves as the starting point for all acne lesions. Over time, this microcomedone can develop into blackheads or whiteheads beneath the skin. If bacteria are present, they consume the dead skin cells and oil, resulting in inflamed pimples, pustules, or even cysts. This entire process may take as long as 90 days.

The exact causes of acne still remain unclear, but there is proof that a few factors affect the presence or severity of acne.

- Elevated hormone levels stimulate sebaceous glands to produce more oil, also called sebum, which is normally travels up the hair shaft to lubricate and protect the skin.
- Oil combines with dead cells, forming a plug in the follicle called a comedone. These comedones or plugged follicles may eventually rupture and oil may seep into the surrounding skin causing inflammation.

WHAT CAUSES ACNE

Acne develops due to four key factors:

1. **Excess Oil Production (Sebum):** Your skin naturally produces oil to stay hydrated, but acne-prone skin produces too much. This overproduction is influenced by hormones, which we'll explore further in this guide.
2. **Retention Hyperkeratosis (Dead Skin Cell Buildup):** Acne-prone skin can shed up to five times more dead skin cells than normal. Instead of naturally sloughing off, these cells get trapped inside pores. When they mix with excess oil, they form a blockage—known as a microcomedone—which is the beginning of a blackhead.
3. **Bacterial Involvement (P. acnes):** Once the pore is clogged, it creates the perfect environment for *Cutibacterium acnes* (formerly known as *P. acnes*)—a type of bacteria that lives on the skin—to thrive. This bacteria triggers infection and irritation in the follicle.
4. **Inflammation and Immune Response:** As your immune system tries to fight off the bacteria, it sends white blood cells and fluids to the area. This causes the follicle wall to rupture, spilling its contents into the surrounding tissue and resulting in the redness, swelling, and inflammation you see with a pimple.

Common Acne Products:

Most acne products you can buy without a prescription use glycolic acid, salicylic acid, and benzoyl peroxide to help control acne. Salicylic acid and benzoyl peroxide kill acne-causing bacteria but don't last long. These ingredients can help clear blocked pores but don't reduce oil production or affect other bacterial factors much. So, they only work a little and need to be used all the time.

In 1995, the FDA warned about benzoyl peroxide, changing its status from safe to uncertain. It has been linked to skin cancer in lab animals and is being studied for similar effects in humans. It might also cause skin to age faster. Since acne can be controlled better with safer natural ingredients, Dermal Botanics chooses not to use benzoyl peroxide or any ingredient that might cause cancer or speed up skin aging. **Our products do NOT contain benzoyl peroxide.**

WHAT CAUSES

ACNE

Dermal Botanics Control of Acne:

1. Balancing Oil Production with 5 α -Reductase Inhibitors

One of the main drivers of excess oil production is an enzyme called 5 α -reductase, which converts testosterone into a more active form that overstimulates oil glands. Dermal Botanics formulas are uniquely crafted to block this enzyme using naturally derived ingredients—most notably cinnamon bark extract.

We also incorporate other powerful botanical ingredients such as:

- Turmeric – helps reduce inflammation
- Zinc-rich natural clay – absorbs excess oil and calms the skin
- These ingredients help regulate oil levels without over-drying, making our products ideal for all skin types—including sensitive, dry, normal, and combination skin.

2. Eliminating Acne-Causing Bacteria (*P. acnes*)

Cinnamon bark also offers powerful antibacterial properties. Alongside four other targeted plant extracts, it helps kill *Cutibacterium acnes* (formerly *P. acnes*)—the bacteria responsible for triggering acne inflammation.

But we go further. These multi-tasking extracts also:

- Fight other common skin-invading bacteria like Staph, Salmonella, and E. coli
- Calm inflammation and reduce redness
- Maintain skin integrity without irritation

Our botanical approach offers lasting antibacterial protection while supporting the skin's natural barrier—so you get clear skin without the dryness or harsh side effects.

3. Follicular Inflammation:

Dermal Botanics acne products use a number of agents that block interleukin-6, tumor necrosis factor-alpha, and histamine generated by free fatty acids within the follicles. These include marjoram (wild oregano), green tea, and several others. When beginning on our acne products people notice the red inflamed look of the skin begins to resolve in just a few days, breaking the inflammation cycle and promoting healing.

WHAT CAUSES ACNE

90% Control Rate:

Dermal Botanics products successfully control acne in over 90% of cases. The remaining 10% involves chronic acne that hasn't responded to any treatment, except possibly Accutane. For these cases, control can still be achieved by using our acne products along with some simple diet changes.

Linoleic Acid Deficiency:

About 2-3% of people with chronic acne don't digest or absorb linoleic acid well. You can spot them by the number of whiteheads and blackheads they have. We recommend using Dermal Botanics products and taking 1,000mg flaxseed oil supplements. Don't take these supplements if you're pregnant or nursing. It takes 2-3 weeks for the supplements to start working, helping your skin produce the right kind of oil. This reduces new plugs but might not get rid of them completely. The supplements usually help with dry skin and improve overall skin appearance. They won't dissolve existing plugs, but they work well with our products. You can use Blackhead Controller to dissolve existing whiteheads.

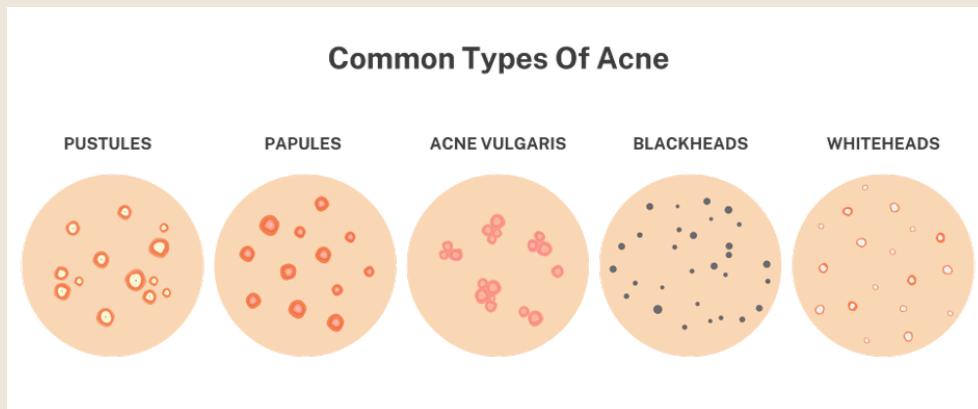
Wheat-Induced Follicular Inflammation:

Around 6% of people with chronic acne are sensitive to wheat. Eating wheat can cause inflammation in the hair follicles, leading to new acne breakouts about 3 days later. If whiteheads and blackheads aren't a big problem, wheat is often the main cause of chronic acne.

Dairy (Mostly Milk) Induced Acne:

About 10% of people with chronic acne are sensitive to dairy, especially milk. The steroid hormones in milk can increase oil production and cause the skin to thicken, leading to acne. Once these issues are addressed, our products can effectively control acne in almost all cases. The only exceptions are when people don't stick to their daily routines or use benzoyl peroxide products, which can cause inflammation.

COMMON TYPES OF ACNE



The team behind Dermal Botanics products understands the skin chemistry involved in acne. We use botanical plant extracts for a treatment that research shows can correct skin chemistry and effectively control acne.

To treat acne, use your prescribed products twice a day. You'll see improvement in 3 to 4 weeks. About 20% of people might have a breakout in the third week, but it will be milder and heal faster. Remember to just keep using the products, and they'll see results soon.

For oily skin, use Antibac Cleanser and Alpha Beta Gel twice daily to prevent acne and reduce oiliness. If someone has had chronic acne for years without success, there might be other factors at play, like a deficiency in linoleic acid (essential fatty acids), or sensitivity to wheat or milk (hormones).

Flare-Up Response: Many clients go through a "flare-up" stage during acne treatment. Acne causes many small infections that can grow larger over time. Due to chemical imbalances in the skin (like zinc, linoleic acid, calcium, antioxidants), these small infections don't heal, and acne persists. In the second week of using Dermal Botanics acne treatments, the products start to balance the skin's chemistry, helping the immune system to work properly and tackle these small infections all at once, bringing them to the surface. **This causes a "flare-up," usually starting in the third week and lasting five to seven days.**

COMMON TYPES OF ACNE

During a flare-up, infections heal faster and are less severe. After the flare-up, there are usually fewer new infections, and existing ones heal well. Healing continues for several weeks, and red spots fade away. People who experience this "Flare-Up Response" often achieve full control of their acne right after the flare-up.

Severe Acne:

Clients with severe acne, like Acne Vulgaris or Cystic Acne, often **see good results using Lactic Clearing Gel**. Apply it sparingly once a day in the evening after cleansing with either Antibac Cinnamon Cleanser or Antibac Turmeric Cleanser, but before using the follicle exfoliation product (Alpha Beta Gel or Pore Refining Gel) and Calming Green Tea Mask.

When treating severe and chronic acne, it's important to consider other factors to achieve complete control. Continue reading to find out more.



WHY HOMECARE IS SO IMPORTANT

Treating acne can often be challenging and frustrating. This chronic condition requires a personalized approach to treatment that may span months or even years depending on your homecare and necessary lifestyle changes. With correct guidance, most people saw remarkable results after 90 days of use and lifestyle changes.

Success is possible if the individual is well-informed, dedicated, and compliant. Due to the complex nature of acne, a combination of therapeutic agents might be necessary for effective management. If people with acne do not adhere to a consistent daily routine to combat acne and fail to make lasting lifestyle changes that can worsen their condition—such as managing stress or avoiding certain drugs and foods—breakouts are likely to return.

When the skin is clear, a fragile equilibrium has been achieved. However, when stress impacts the body, healing can be disrupted, leading to flare-ups. Given its chronic nature, ongoing treatment is essential until the individual reaches a point of stability. While acne is not curable, it can be effectively managed by those committed to following a treatment plan and maintaining diligent home care.



IMPORTANT FACTORS CONTRIBUTING TO ACNE

Stress: Stress is closely linked to acne and can have a big impact. When you're stressed, your body produces hormones like cortisol, which can disrupt the skin and cause acne flare-ups. While avoiding stress is easier said than done, try to recognize when you're feeling stressed or facing stressful situations. During these times, cleanse your skin thoroughly, or even three times a day instead of two. Use some products more often, like twice a day instead of once. Apply the Calming Green Tea Mask more frequently. Basically, increase your skincare routine to counteract the effects of stress on your skin. Once the stressful period is over, you can go back to your normal skincare routine.

FABRIC SOFTENER Fabric softeners (liquid or dryer sheets) leave a waxy residue on pillowcases, towels, wash cloths, sheets, and any other fabric comes into direct contact with the skin. This residue can clog pores of acne-prone individuals. You can use anti-static dryer balls to reduce static cling.

DETERGENT Detergents with fragrance can cause skin irritation. Fragrance-free detergents are a better choice. Remember to check the ingredient list of the detergent you choose and against Pore-Clogging Ingredients page in this guide.

PILLOWCASES It is good practice to change your pillowcases often. Oil and other products (such as hair care) can leave build up and contribute to clogged pores.

WATER SOFTENERS There is some evidence that water softeners can lead to acne, especially those containing high amounts of potassium chloride.

SWIMMERS Swimming pool disinfectants contain iodides and chlorine which can remain in the water, causing skin problems for frequent swimmers. Consider applying a thin layer of petroleum jelly over your sunscreen before you get into the pool.

SUN EXPOSURE AND ACNE Although sun exposure causes desirable scaling and drying, it also damages the follicle, exacerbates dark spots, and causes skin cancer and premature aging. Always wear sunscreen, even if it's overcast and/or raining

BEWARE OF HAND LOTIONS If you are using a pore-clogging (comedogenic) hand lotion then leaning your face on your hands or sleeping on your hands, this could exacerbate your acne.

BREAKOUTS AROUND THE MOUTH AREA Many lip balms, toothpastes, and even facial tissues have comedogenic ingredients (pore clogging ingredients) in them. If you see breakouts around your mouth area, one of these products may be the culprit. We recommend petroleum jelly as a lip balm and toothpaste without SLS (sodium lauryl sulfate). Many well-known tissue brands are infused with things like coconut oil, isopropyl myristate, and SLS, all of which will clog the pores.

IMPORTANT FACTORS CONTRIBUTING TO ACNE

RESIST PICKING OR SQUEEZING Rub ice on pustules and pimples for a couple of minutes, twice a day.

IMPORTANT: if you pick, squeeze, and break the skin, that scab will leave a red or dark mark that will be there for months longer than if you left it alone.

BIRTH CONTROL AND HORMONE REPLACEMENT Forms of birth control that contain low doses of estrogen can be higher in androgen hormones, and that combination may aggravate acne-prone skin. Certain forms of birth control are FDA approved to treat acne. Please speak with your doctor about the birth control method that will be best for you. You should also familiarize yourself with the benefits and risks of any birth control. Please see the Birth Control And Acne Simplified in this guide for more detailed information. Progesterone hormone replacements may exacerbate acne. If you have Polycystic Ovarian Syndrome, it can cause hormonal changes and breakouts.

PRESCRIPTION DRUGS Prescription drugs that may exacerbate acne include some topical and oral steroids, anticonvulsants, thyroid medications, fertility drugs, Isoniazid, Imuran, Danazol, Gonadotrophin, Cyclosporin, Disulfiram, and drugs that treat ADD/ADHD. Other topical prescription drugs that must be discontinued at least 14 days prior to receiving a treatment or starting an acne homecare regimen. These actives include Azelex, Finacea, Retin-A, Tazorac, Differin, Clindamycin (Cleocin-T), Erythromycin (Erygel), Dapsone (Aczone). This includes any topical treatment from Proactiv or Curology, that is not benzoyl peroxide only. If you are taking oral Isotretinoin you must wait 12 months before receiving a treatment.

RECREATIONAL DRUGS Recreational drugs that may exacerbate acne include marijuana, cocaine, and amphetamines (speed).

CHEMICALS Coal tars (roofers), grease (mechanics, cooks, waiters), chlorinated industrial chemicals, and dioxin can exacerbate acne.

Diet: Eating well is a great way to help control acne. Focus on fruits and vegetables rich in antioxidants, along with enough protein. A healthy, balanced diet benefits your whole body, including your skin. Every organ needs the same vitamins, minerals, and nutrients to work properly. Since the skin gets nutrients last, it can suffer from a poor diet. Foods high in antioxidants, like colorful fruits and vegetables, are especially helpful in healing acne.

IMPORTANT FACTORS CONTRIBUTING TO ACNE

Wheat: If you've tried many acne treatments without success, Dermal Botanics products might work for you. If not, your acne might be caused by wheat, making treatment difficult. Dermal Botanics products, along with diet changes, can help control wheat-induced acne in most cases. People with this type of acne (gluten intolerance) often have moderate to severe acne for years and have tried many treatments without success. They usually don't have whiteheads and may or may not have blackheads. The acne can be cystic or vulgaris, and they tend to have normal to oily skin.

We suggest continuing to use Dermal Botanics products while eliminating wheat and gluten from your diet for 2-3 weeks to see if it affects your acne. Avoid wheat, barley, rye, oats, and products made from these grains, like most bread, pastries, pasta, cereals, beer, hot dogs, snack foods, and energy bars. Look for wheat-free options like rice cereals, bread made from rice or quinoa flour, and corn tortillas (check labels for fillers). Health food stores offer pasta made from rice, corn, or quinoa. You can substitute rice or quinoa for pasta. Vegetables, fruits, meats, dairy, and nuts are wheat-free and high in antioxidants and protein, which help heal acne. Always check food labels, as many products contain wheat, like some soy sauces and even ice cream.

Dairy: Some people with acne may react to milk and dairy products. Milk contains hormones that can trigger acne, especially around the chin and jawline. If dairy is causing acne, you might have tried many treatments without success. Dermal Botanics products can help because they reduce hormone levels and oil production in the skin. If acne is still hard to control, cutting back on dairy might help.

Dermal Botanics suggests that females eliminate all dairy products from their diet starting 3-5 days before their period and continue without dairy for 2-3 days into their period to see if it reduces breakouts. If it helps, they should do this every month. Males should try cutting out dairy for a couple of weeks to see if there's any improvement. Dairy-induced acne is less common in males but can still occur.

Essential Fatty Acids: If someone has many whiteheads and/or blackheads, they might be lacking linoleic acid (omega 6). This can make acne treatment difficult due to excessive clogging of pores. Dermal Botanics products, along with diet changes, can help control acne caused by linoleic acid deficiency. Whiteheads are often present with this deficiency and can appear quickly. Blackheads might be there too, and the condition can lead to acne, often cystic. The skin is usually dry and may be prone to inflammation, but not always.

IMPORTANT FACTORS CONTRIBUTING TO ACNE

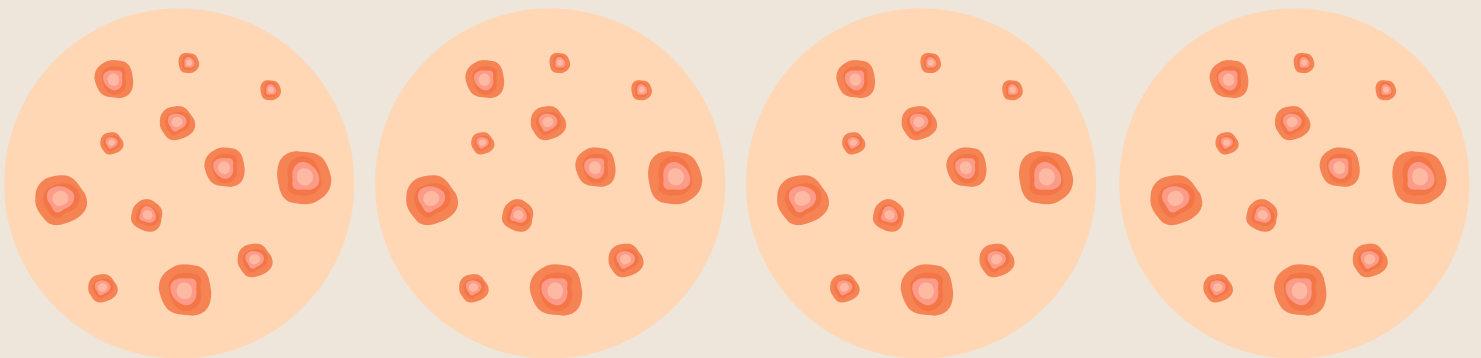
Dermal Botanics suggests continuing to use our products and adding flaxseed oil supplements in the 1,000mg size, available at drug and discount stores for \$7-\$10 per bottle. Take one capsule daily, but do not take them if pregnant or nursing. It takes 2-3 weeks for the supplements to work, helping the skin produce the right kind of oil. This reduces new clogs but might not eliminate them completely. The supplements usually help with dry skin and improve overall skin appearance. They won't dissolve existing clogs but work well with Dermal Botanics products.

Smoking: A German study published in 2001 showed acne is 62% more prevalent in active smokers than in non-smokers. Additionally, a significant dose-dependent relationship was observed between acne severity and daily cigarette consumption.

Heredity: Acne does have genetic linkage and people may get a better understanding of the possible extent of their condition by discussing this subject with their parents. Ask questions about the severity of their acne and the duration

Menstrual Cycle: Like stress, there is a relationship to acne. The body increases its production of hormones, which indirectly stimulates the production of oil and the subsequent chemical reactions that promote acne. Three to seven days before the cycle, step up the daily skin care regimen and return to the normal regimen at the end of the period. Use the Calming Green Tea Mask twice daily as per the instructions.

Oral Contraceptives: In some instances, oral contraceptives may reduce the severity of acne and in other cases, they can trigger skin problems, including acne. If an oral contraceptive is contributing to acne, speak with the physician about "low-progestin" contraceptives or other options. Changing to low-progestin contraceptives has been shown to reduce acne in some cases. An oral contraceptive containing ethinyl estradiol and levonorgestrel may provide benefits for moderate acne. See Birth Control page.



FOOD & ACNE

Acne Aggravator	Substitution
Iodized Salt Vitamins with iodides, iodine, kelp, potassium iodide (also avoid biotin and B12)	Sea salt, uniodized salt, celtic salt, himalayan salt
Milk (including organic and especially nonfat)	Almond milk, coconut milk, rice milk, oat milk
Cheese	Nut Cheese
Whey or soy protein shakes and protein bars, creatine	Pea protein, egg white powder, hemp – still check for iodides and biotin before buying (Vega Sport Performance Protein and Perfect Fit are a few safe ones.)
Soy products: tofu, soy milk, tempeh, edamame, soy sauce	
Seafood, shellfish: cod, scallops	Fresh water fish: lake trout, bass, catfish
Spirulina, chlorella, blue-green algae	
Kelp, miso soup, seaweed, seaweed supplements	
Organ meats including pate	
Peanuts, peanut butter	Almond butter or other nut butters
Peanut oil, corn oil, canola oil	Olive oil, coconut oil

Food containing fatty acids

Fatty acids are needed to form oil. Studies show that some monounsaturated fatty acids, such as sapienic acid and some vegetable oils, can increase oil production. However, the essential fatty acids linoleic, linolenic and gamma-linolenic acid can unblock the follicles and reduce sebum production.

What to eat if you have acne?

Some people with acne have reported improvement in their skin when they follow a low-glycemic index diet and increase their consumption of whole grains, fresh fruits and vegetables, fish, olive oil, garlic while keeping their wine consumption moderate.

Foods that increase insulin production have a high glycemic index. The glycemic index is a measurement of how carbohydrates have an effect on our blood sugar levels. It's a good idea to drink less milk and eat less of high glycemic index foods such as sugar, biscuits, cakes, ice creams and bottled drinks.

The reasons for these benefits are thought to relate to the effects of these foods on insulin and insulin-like growth factor-1 (IGF-1). Insulin induces male hormones (androgens), glucocorticoids and growth factors. These provoke keratinization (scaling) of the hair follicle and sebum or oil production. An increase in sebum production and keratinization is a factor in acne.

Although cow's milk has a low glycemic index, it contains androgens, oestrogen, progesterone and glucocorticoids, which also provoke keratinization and sebum production. Milk also contains amino acids (eg arginine, leucine, and phenylalanine) that produce insulin when combined with carbohydrates. Other components of milk that might induce comedones include whey proteins and iodine. Caffeine, theobromine, and serotonin found in chocolate may also increase insulin production.

FOOD & ACNE

Foods More Often Associated With Exacerbating Acne & Inflammation

- **Trans fats** - cakes, pies, cookies, margarine, microwave popcorn etc.
- **Overheated fats:** baked foods/ fried at high temperatures
- **Excess sugar**
- **Omega-6 oils** (most vegetable oils) and not enough Omega-3s
- **Known food sensitivities** (examples: fruit, gluten)

Supportive Foods/Beverages

- Ceylon cinnamon
- Apple cider vinegar
- Green tea, especially matcha

Antioxidant “Helper”- Selenium Rich Foods

- Brazil nuts
- Pinto beans
- Halibut
- Wild-caught salmon
- Oats
- Navy beans
- Chicken
- Spinach

*A WELL-BALANCED LOW-GLYCEMIC DIET CAN
SUPPORT ALL ASPECTS OF HEALTH,
INCLUDING YOUR SKIN.*

Foods/Beverages That May Provide Anti-Inflammatory Support

- Turmeric
- Ginger
- Green tea (especially matcha)
- Ceylon cinnamon
- Apple cider vinegar

FOODS HIGH IN VITAMIN B3

- Cremini mushrooms
- Tuna
- Chicken breast
- Fish (halibut, salmon, sardines)
- Leafy greens
- Asparagus

FOODS HIGH IN OMEGA-3

- Fatty fish
- Salmon
- Sardines
- Atlantic mackerel
- Anchovies
- Herring
- White fish
- Omega-3 enriched eggs
- Walnuts
- Blueberries
- Hemp seeds
- Mustard seed
- Brussel sprouts
- Winter squash
- Navy beans
- Deep leafy greens: spinach, kale, watercress

PORE CLOGGING INGREDIENTS

- Acetylated Lanolin
- Acetylated Lanolin Alcohol
- Algae Extract
- Algin
- Butyl Stearate
- Carrageenan
- Cetyl Acetate
- Cetearyl Alcohol + Cetareth 20
- Chondrus Crispus
(aka Irish Moss or Carrageenan Moss)
- Chlorella
- Coal Tar
- Cocoa Butter
- Coconut Alkanes
- Coconut Butter
- Coconut Oil
- Colloidal Sulfur
- Cotton Seed Oil
- D & C Red # 17
- D & C Red # 21
- D & C Red # 3
- D & C Red # 30
- D & C Red # 36
- Decyl Oleate
- Dioctyl Succinate
- Disodium Monooleamido
PEG 2- Sulfosuccinate
- Ethoxylated Lanolin
- Ethylhexyl Palmitate
- Glycerol Stearate SE
- Glycerol-3 Diisostearate
- Hexadecyl Alcohol
- Hydrogenated Vegetable Oil
- Isocetyl Alcohol
- Isocetyl Stearate
- Isodecyl Oleate
- Isopropyl Isostearate
- Isopropyl Linolate
- Isopropyl Myristate
- Isopropyl Palmitate
- Isostearyl Isostearate
- Isostearyl Neopentanoate
- Kelp
- Laminaria Digitata Extract
- Laminaria Saccharina Extract
(Laminaria Saccharine)
- Laureth-23
- Laureth-4
- Lauric Acid
- Mink Oil
- Myristic Acid
- Myristyl Lactate
- Myristyl Myristate
- Octyl Palmitate
- Octyl Stearate
- Oleth-3
- Oleyl Alcohol
- PEG 16 Lanolin
- PEG 200 Dilaurate
- PEG 8 Stearate
- PG Monostearate
- PPG 2 Myristyl Propionate
- Plankton
- Polyglyceryl-3 Diisostearate
- Potassium Chloride
- Propylene Glycol Monostearate
- Red Algae
- Seaweed
- Shark Liver Oil (Squalene)
- Shea Butter
- Sodium Laureth Sulfate
- Sodium Lauryl Sulfate
- Solulan 16
- Sorbitan Oleate
- Soybean Oil (Glycine Soja)
- Spirulina
- Steareth 10
- Stearic Acid Tea
- Stearyl Heptanoate
- Sulfated Castor Oil
- Sulfated Jojoba Oil
- Wheat Germ Glyceride
- Wheat Germ Oil
- Xylene

SUPPLEMENTS AND ACNE

Zinc is a mineral involved in skin health and collagen synthesis. It helps with acne in several ways, including lowering oil production (possibly by reducing androgens) and helping to maintain proper levels of inflammation. Yes, while too much inflammation is problematic, the body does need to maintain healthy levels as part of our immune defense.

Vitamin A is a go-to nutrient for skin health, and while it's usually used in topical treatments as retinol or retinoids, oral vitamin A could help too. Some research suggests that Vitamin A has anti-inflammatory effects because it promotes the body's antioxidant response, which may make it easier for your cells to clear out free radicals that could damage skin issues

DIM (Diindolylmethane)- DIM works by reducing androgen production that contributes to acne (making it an especially helpful supplement for PCOS). It also promotes healthy estrogen detoxification, which is essential for people with estrogen dominance.

Vitamin D -is so vital for immune health, and the health of your skin is impacted by your immune system, it could help regulate immune pathways involved in acne.

Probiotics are beneficial bacteria that help balance the microbiome to help keep your gut working as it should. Taking probiotics adds targeted strains of healthy bacteria to help rebalance the gut and quiet inflammation that contributes to skin and hormone imbalances.

Magnesium is not a typical supplement for acne, but I use it regularly as part of a hormone-balancing plan because it promotes stress relief and is involved in the metabolism of our hormones. Magnesium can also help with estrogen balance by promoting the excretion of extra estrogen that could contribute to hormone imbalances.

SUPPLEMENTS AND ACNE

Vitamin E- has antioxidant and anti-inflammatory properties that could help the skin. People reach for topical vitamin E products for skin regeneration and healing, but maintaining optimal levels in your body is also important. One study found that low levels of vitamin E, along with vitamin A, were associated with acne.

Myo-inositol -is a supplement that I often use, especially with people with acne and PCOS. Acne is so common with PCOS because of the excess androgen production that leads to inflammation and hormonal imbalances. Myo-inositol can help by reducing androgen production (reducing sebum production) and increasing insulin sensitivity. Myo-inositol is a nutrient that's closely related to the B-vitamins. It's found in many foods like fruits, grains, beans, and nuts, but usually in small amounts, so supplementation may be necessary to reach therapeutic levels.

B vitamin -has a job, but as a group, they contribute to hormone balance and cellular health, impacting hormonal acne. B-vitamins support the liver, which helps with detoxification and estrogen dominance. Vitamin B6 can also help rebalance hormones by elevating progesterone and dropping estrogen. B vitamins are also necessary for energy metabolism and function within your cells, and deficiency of B vitamins can lead to dry skin and acne

Vitamin C -is a powerful antioxidant that can help reduce the inflammation that contributes to acne breakouts. It may also help with scarring by supporting collagen production and wound healing.

Omega-3s -get a lot of airplay in health news because their anti-inflammatory activity extends to many health benefits, including your skin. Omega-3s are a type of essential fatty acid found in fish, flaxseed, and chia seeds. They can interrupt inflammation signals from inflammatory cytokines that can contribute to acne and other health problems. Studies on fish oil containing omega-3s link supplementation with clearer skin, especially for people with moderate to severe inflammatory acne. Eating fish several times a week can boost your omega-3 intake, but many people don't eat fish regularly (or just don't like seafood), so omega-3 supplements can be an excellent way to get these skin-loving nutrients.

MEDICATIONS AND DRUGS THAT CAN AFFECT ACNE

Medication	Route	Description
Antibiotics	Oral	Prescribed to treat acne. Clients can continue using this drug while using treatments and products. Probiotics can be beneficial to restore gut flora after taking antibiotics. Examples: tetracycline, minocycline, doxycycline, erythromycin, clindamycin,
Antibiotics	Topical	Must wait 2 weeks after discontinuing use before clients can begin actives or have a treatment. Examples: clindamycin (Cleocin-T), erythromycin (Erygel), dapsone (Aczone)
Retinoids	Topical	Vitamin A derivatives. Must wait 2 weeks after discontinuing use before clients can begin actives or have a treatment. Examples: Retin-A (tretinoin), Avita (tretinoin), Tazorac (tazarotene), Differin (adapalene)
Thyroid medications	Oral	Contains high levels of iodides which can exacerbate acne. May take longer to see improvement in skin. Examples: Levothyroxine (Levothroid, Synthroid, Tirosint, Unithroid)
Azelaic Acid	Topical	For treatment of rosacea. If using a prescription version, the client must wait 2 weeks after discontinuing use before clients can begin actives or have a treatment. Examples: Finacea, Azelex
Capaxonel	Oral	Glatiramer Acetate. For treatment of Multiple Sclerosis (MS). Acne is a known side effect
Spironolactone	Oral	A diuretic used to treat high blood pressure and acne. Clients can continue using this drug while using treatments and products. Examples: Aldactone, CaroSp

MEDICATIONS AND DRUGS THAT CAN AFFECT ACNE

Medication	Route	Description
Azathioprine	Oral	Immunosuppressant for organ transplant and Multiple Sclerosis (MS). Suppresses the body's ability to fight bacteria. Examples: Imuran, Azasan
Disulfiram	Oral	For enforced sobriety of alcoholism. Can exacerbate acne. Example: Antabuse
Isotretinoin	Oral	Vitamin A derivative. Must wait a minimum of 1 month after discontinuing use before clients can begin actives or have a treatment. Some clients' skin will still be too dry to be treated for a longer period of time. Examples: Accutane (not available in the US), Zenatane, Absorica, Myorisan, Claravis
Corticosteroids	Oral and Topical	Treats asthma, inflammatory bowel disease, and skin rashes. Can exacerbate acne. Examples: Prednisone, cortisone, hydrocortisone
Steroid Hormones	Varies	Primary sex hormones that may exacerbate acne. Examples: testosterone, progesterone
Fertility Drugs	Injection	Can exacerbate acne. Examples: Pregnyl, Chorionic Gonadotropin, Ovidrel, Novarel
Danazol	Oral	Treats endometriosis and fibrocystic breast disease and has androgenic properties which can exacerbate acne. Example: Danocrine

MEDICATIONS AND DRUGS THAT CAN AFFECT ACNE

Medication	Route	Description
Cyclosporin	Oral	Drug to reduce transplant rejection. May take longer to see improvement in skin. Examples: Sandimmune, Neoral, Gengraf
Lithium	Oral	Treats bipolar disorder. Likely to exacerbate acne and it is difficult to see improvement when taking this drug. Examples: Eskalith, Lithobid
Isoniazid (INH)	Oral	Treats Tuberculosis and is likely to exacerbate acne. Examples: Hydra, Hyzyd, Isovite
Phenytoin	Oral	Anticonvulsant, seizure medication. Example: Dilantin
Carbamazepine	Oral	Treats seizures, nerve pain, and bipolar disorder. Can exacerbate acne. Example: Tegreto



BIRTH CONTROL AND ACNE

Birth control pills, IUDs, implants and shots are popular forms of birth control. Typically, these forms of birth control are divided up as estrogen or progestin dominant and have varying degrees of androgenic (testosterone like) effects. Those with the potential for higher androgenic effects may exacerbate acne breakouts. The FDA has approved the following types of birth control for acne:

- Ortho Tri-Cyclen (norgestimate/ethinyl estradiol)
- Estrostep (norethindrone acetate/ethinyl estradiol) (discontinued)
- YAZ (drospirenone/ethinyl estradiol). The FDA has concluded that birth control pills containing drospirenone may have increased risk for blood clots compared to pills containing other progestins. Other brands containing drospirenone include Beyaz, Gianvi, Loryna, Ocella, Safyral, Syeda, Yasmin, and Zarah.

Other common examples of birth control pills that are estrogen dominant and are less often associated with exacerbating acne that you should discuss with your doctor (list is not exhaustive):

- | | | | |
|-----------------|--------------------|----------------|--------------|
| • Brevicon | • Ortho-Novum 1/35 | • Tri-Sprintec | • MonoNessa |
| • Necon | • Tri-Previfem | • Modicon | • Tilia Fe |
| • Tri-Legest Fe | • Kelnor | • Sprintec | • Zovia 1/35 |
| • Cyclofem 1/35 | • Pirmella 1/35 | • Wymzya Fe | |

Common examples of birth control that is progestin dominant and are more often associated with exacerbating acne breakouts, that you should discuss with your doctor (list is not exhaustive):

- | | | | |
|-------------|------------------------|------------------------|-----------------------|
| • Alesse | • Azurette | • Depo-Provera | • Implanon |
| • Lessina | • Loestrin | • Lo-Ovral | • Microgestin |
| • Nexplanon | • NuvaRing | • Portia | • Sronyx |
| • Amethyst | • Cryselle | • Desogen | • Jolessa |
| • Levora | • Lo-Feminol | • Lutera | • Mircette |
| • Nordette | • Ortho Tricyclen Lo | • Reclipsen | • Triphasil/Trivora |
| • Apri | • Cyclessa | • Emoquette | • Kariva |
| • Linessa | • Lo-Ogestrel | • Marvelon | • Mirena or Skyla IUD |
| • Norplant | • Paragard/Copper IUD* | • Seasonale/Seasonique | • Velivet |

*hormone free, however, there have been reports of higher copper levels triggering acne

ACNE PIGMENT SPOTS

Pigment (melanin) and pigment spots are naturally produced in the skin's melanocyte cells when the skin is injured. This injury could be from a cut, burn, or infection like acne. Pigment is brown to dark brown and shouldn't be confused with temporary red marks from infections and healing.

Hormones can also cause or worsen pigment spots. Darker skin tones are more prone to pigment spots from inflammation, and pregnancy hormones can make these spots darker and longer-lasting. Sun exposure can darken these spots, so using a broad-spectrum sunscreen and proper sun protection is essential.

Acne, including cystic acne and acne vulgaris, is an infection that can cause pigment spots. Depending on how severe the acne is, the spots may last four to ten weeks. If the acne heals slowly due to chemical imbalances in the skin, the pigment marks can be darker and last eight to twelve weeks. People with moderate to severe acne often lack the chemicals needed to prevent acne and pigment spots. Zinc, which is discussed in other sections, can block many acne-promoting conditions and inhibit pigment production. Since people with moderate to severe acne often lack zinc, hyperpigmentation can become a secondary issue.

Pigment spots are directly caused by acne infections, so reducing or eliminating acne will help with pigment spots. Instead of trying to treat or lighten the pigment, it's better to focus on controlling or eliminating the acne, like adult acne, acne vulgaris, or cystic acne, and let the pigment spots fade naturally. Skin lightening products with hydroquinone can be harmful and shouldn't be used for more than 6 months. Dermal Botanics does not recommend or use hydroquinone.

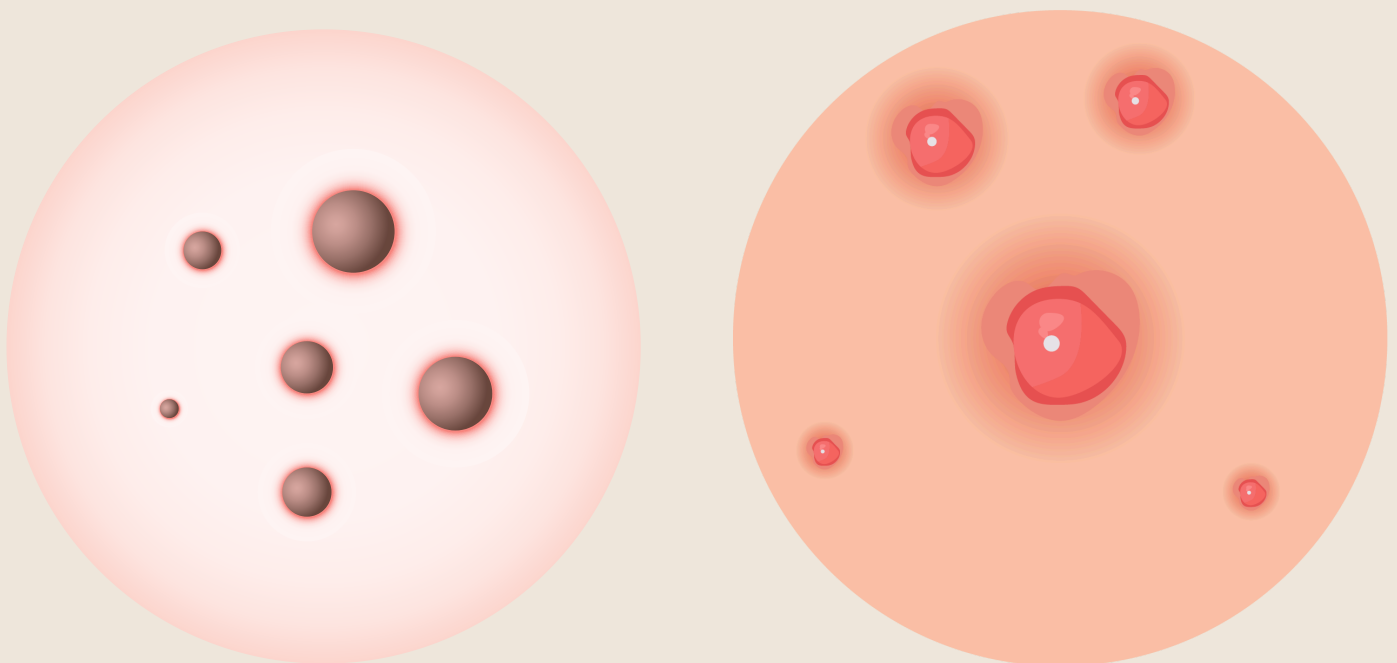
Dermal Botanics acne products can effectively control or eliminate acne. Using the Green Tea/Clay Poultice along with other acne products can prevent acne and reduce or prevent hyperpigmentation. This product is rich in zinc (found in the mineral-rich clay) to help inhibit acne and pigment production.

ACNE PIGMENT SPOTS

Using benzoyl peroxide products creates free radicals in the skin, slowing the healing process. The red and brown marks from acne may last longer if benzoyl peroxide is used regularly. Benzoyl peroxide can promote hyperpigmentation, especially in people with medium to dark skin. Dermal Botanics products do not contain benzoyl peroxide.

People with light skin often develop red to purple marks where infections occur, and these can last eight to ten weeks. These spots are part of the normal healing process and are caused by the free radicals produced during skin repair. Using Dermal Botanics' Green Tea/Clay Poultice along with other acne products can help prevent acne, speed up healing, and gradually lighten these red spots. This product is rich in zinc and other essential ingredients that promote rapid healing. Eating protein and plenty of antioxidant-rich fruits and vegetables can also help speed up the healing process.

However, some types of hyperpigmented spots may never fade completely and might need additional treatment such as microneedling to reduce their appearance.



TIPS FOR BETTER CONTROL OF ACNE

Epsom Salt Compress: If you have a number of active infections, the following method will help drain these infections more quickly. Purchase a box of Epsom salts at the drugstore. Following cleansing in the evening, mix about 1/4 cup of the salt with 2 cups of very, very warm water in a clean bowl or sink. While leaning over the mixture, soak a washcloth with the Epsom water and lift it up to the face, pressing lightly against the affected areas for about 5-6 seconds. Repeat this process again and again for 3-5 minutes. When finished, do not rinse and allow the skin to air dry. Then proceed with the rest of the evening regimen. Do this on a daily basis for about 4-7 days.

Ice your acne lesions- can significantly reduce inflammation by constricting blood vessels (a process known as vasoconstriction), which limits the flow of inflammatory mediators like histamines and cytokines. This helps minimize swelling, redness, and discomfort. By calming the inflammatory response early, icing can also reduce the risk of post-inflammatory hyperpigmentation (PIH) and tissue damage that may lead to scarring.

Sebum Production Cycle: The skin produces its greatest volume of sebum and oil at approximately 1 to 2 o'clock in the afternoon and its least volume in the middle of the night. Therefore, a thorough skin care regimen performed in the late afternoon or early evening is pivotal to effective acne control. Cleanse thoroughly.

Antibiotic Dangers: Using antibiotics like Tetracycline, Doxycycline, Minocycline, or even Amoxicillin can sometimes help control acne, but there are significant risks. **Long-term or frequent use of antibiotics can harm the body's natural immune system and lead to antibiotic-resistant "superbugs" that are hard or impossible to treat with regular antibiotics.**

Research from February 2004 by the University of Washington and the National Cancer Institute found that women who used antibiotics for about 500 days or more over 18 years were twice as likely to develop breast cancer compared to others. The risk increased with higher doses over time. While this study focused on women, the link between antibiotics and cancer could also apply to men. Using antibiotics long-term to control acne may carry risks that should be considered when choosing acne treatments. Dermal Botanics focuses on providing effective treatments without dangers or side effects.

TIPS FOR BETTER CONTROL OF ACNE

Linens and Headgear: Washcloths, towels, pillowcases, hats, helmets, sweatbands, etc. collect bacteria and return it to the skin each time the item is used. Change washcloths, towels, and pillowcases every two to three days while achieving control of acne. Make sure headgear is clean and/or avoid the use of unnecessary items.

Hairline or Forehead Acne: A pattern of acne that basically follows the hairline may be caused by sebum and free fatty acids that are generated in the scalp and migrate onto the forehead. The condition can be reduced or eliminated by shampooing more frequently and/or selecting a shampoo specifically developed for oily hair. While hair may not be oily, this type of shampoo can reduce the sebum and fatty acids in the scalp.

Benzoyl Peroxide Cautions: Benzoyl peroxide creates free radicals in the skin, similar to what happens with unprotected sun exposure. The redness (erythema) caused by both sun exposure and benzoyl peroxide is due to oxidative stress on the skin. Repeated use of benzoyl peroxide or sun exposure generates free radicals that can damage the skin's structure and DNA, leading to premature aging. The damage and aging effects depend on the concentration, frequency, and duration of benzoyl peroxide use.

Using benzoyl peroxide for acne control may have side effects and risks that should be considered when choosing acne treatments. Dermal Botanics focuses on providing effective treatments without side effects and does not use benzoyl peroxide.

Make-Up: Dermal Botanics recommends using makeup made with natural minerals like mica, zinc, titanium dioxide, and iron oxides instead of dyes like red #3 or yellow #4. This is better for the long-term health of your skin. The idea of "oil-free" can be misleading. Some oils, like safflower oil and avocado oil, are actually essential fatty acids that help the skin function properly. These essential fatty acids also have anti-inflammatory benefits that can help fight acne. Many natural plant oils are beneficial, but it's important to distinguish between good and undesirable oils.

Acne Checklist

Because it takes up to 90 days for acne to form, you may still have 90 days of acne that will surface. Your esthetician will customize a home care routine that takes at least 5 things into consideration: acne type, skin type, skin color, skin sensitivity and environment. The biggest part of the clearing process is your commitment to applying your home care routine as instructed and following recommendations where possible.

01

Look at your lifestyle choices and see what you can new habits you can add and what old habits you can improve upon

☐

02

Start a food journal to identify if you are eating foods that may be affecting acne

☐

03

Identify which foods from your journal maybe causing harm to your goal of clear skin

☐

04

Start to add in new healthier acne safe options to your diet

☐

05

Check all your skincare products ingredients and compare that to the pore clogging ingredient list in this guide and Remove all pore clogging skincare from your routine

☐

06

Look at your medications (including birth control) and supplements to see if there is any that could be increasing your acne activity

☐

07

Add supplements that are acne fighters and don't forget to drink plenty of water

☐

08

Try your best to get at least 7 hours of sleep and try stress reducing activities like exercise or meditation

☐

09

Book your next facial and call your esthetician with any questions. We are on this journey together!

☐
