



Your Monthly Update

Dear Colleague

Welcome to the September 2012 newsletter from Pure Bio Ltd.

Did you know:

Whilst statins are designed to lower LDL and raise HDL, the latest research from Harvard Medical School has found that high HDL levels do not translate into lowering the risk of heart problems. Furthermore, research has established that LDL cholesterol becomes increasingly important as we age, protecting the brain against memory loss and dementia (*Lancet 2012; doi: 10.1016/s0140-6736(12)60312-2*).

Don't forget our website on www.purebio.co.uk. We always welcome feedback and suggestions.

Acne

Protocol Summary

Ranking	Nutritional Supplements	Botanical Medicine
Primary	Niacinamide (topical) Zinc	Tea Tree Oil (topical)
Secondary		Guggul
Other	Pantothenic Acid Vitamin A Vitamin B6 Chromium	Burdock Vitex (associated with menstrual cycle)

Primary – Reliable and relatively consistent scientific data showing a substantial health benefit.

Secondary – Contradictory, insufficient, or preliminary studies suggesting a health benefit or minimal health benefit.

Other – An herb is primarily supported by traditional use, or the herb or supplement has little scientific support and/or minimal health benefit.

Introduction

Acne is a common skin condition. Acne lesions can appear as whiteheads, blackheads, small pink bumps called papules, or pimples (pus-filled red lesions). More severe forms can result in firm, painful nodules and cysts and may lead to scarring. Acne often occurs on the face but can also appear on the shoulders, back, chest, legs, and buttocks.

Lifestyle Modification

- **Apply a honey mask to the face once or twice a week** - Honey has antibacterial properties so it has capacity to disinfect and heal minor blemishes. It is also gentle on sensitive skin.
- **Wash twice a day with acne soap** - wash the face twice a day with a sulphur based soap designed for acne. However, be gentle when washing - do not scrub or use any sort of rough cloth. Over-washing the skin will actually stimulate the sebaceous glands to produce more sebum, thus potentially increasing acne.
- **Avoid wearing makeup** - Leaving makeup products on the skin only contributes to clogging your pores, causing more pimples and blackheads. If you feel you must wear makeup, be sure it is water- and mineral-based, and free of chemicals. Try NVEY Organics as a quality, chemical-free alternative.
- **Do not pick or squeeze blackheads and pimples** - As tempting as it may be, do not squeeze, scratch, rub or touch pimples and blackheads, all of which actually increase sebum production. Plus, when you squeeze, you are actually rupturing the membranes below the skin, causing infection and sebum to spread underneath your skin. The result is more pimples.
- **Wash your pillow case every other day** - Your face lays on your pillow case every day. The pillow case absorbs the oils from your skin and reapplies the dirt and oil, thus causing breakouts.
- **Eat foods rich in zinc** - Zinc is an antibacterial agent and a necessary element in the oil-producing glands of the skin. A diet low in zinc can actually cause acne breakouts.

Integrative Options

Acupuncture may be helpful in the treatment of acne. Several preliminary studies have reported that a series of acupuncture treatments (8 to 15) is markedly effective or curative in 90 to 98% of patients. As well as traditional Chinese acupuncture in which needles alone are used, “cupping” is frequently used in the treatment of acne. Two preliminary trials of cupping treatment for acne reported marked improvement in 91 to 96% of the study participants.

Dietary Modification

Some practitioners of natural medicine have observed that food allergy plays a role in some cases of acne, particularly adult acne.

A dietary factor that has been linked with acne is foods with a high glycaemic load, such as sweetened fruit juice, sugary beverages, sweets, white rice or pasta, french fries, baked potatoes, low-fibre cereals, macaroni and cheese, pizza, and raisins and dates. High glycaemic load foods affect levels of the hormones insulin and insulin-like growth factor-1, which increases the production of androgen hormones and may stimulate the development of acne. Instead of high-glycaemic load foods, choose lower-glycaemic foods such as beans, fruits and vegetables, high-fibre cereals, nuts, and whole grain breads.

There is evidence that dairy products may be linked with acne. Milk naturally contains androgens and growth hormones which may stimulate the development of acne. The Nurse's Health Study examined 47,000 nurses and found that those who consumed more milk when they were teenagers had higher rates of severe acne than those who drank little or no milk as teenagers.

Although there are many dairy-free milk substitutes, such as rice milk, be sure to choose unsweetened products (or avoid them altogether), because the added sugar in some of these products may have an adverse effect on acne.

Contrary to popular belief, preliminary research shows that chocolate is not implicated in acne.

Nutritional Supplement Treatment Options

Vitamin B3 (niacinamide) – *topical application*. In a double-blind trial, topical application of a 4% niacinamide gel BID for two months resulted in significant improvement in people with acne. However, there is currently no research to show that oral intake of vitamin B3 produces similar results.

Zinc – *60mg daily*. Several double-blind trials indicate that zinc supplements reduce the severity of acne. In one double-blind trial zinc was found to be as effective as oral antibiotic therapy. General recommended dosage for people with acne is 30 mg of zinc BID or TID for a few months, then 30 mg per day thereafter. It often takes 12 weeks before any improvement is seen. Long-term zinc supplementation may require 1–2 mg of copper per day to prevent copper deficiency.

Zinc should not be taken together with quinolone antibiotics or tetracycline antibiotics, because taking them together can inhibit the absorption of both zinc and the antibiotic. To minimize the effect, zinc should be taken at least 4-6 hours before or 2 hours after taking an antibiotic, or zinc supplements should be avoided altogether.

Vitamin A - Large quantities of vitamin A – up to 300,000 IU per day for females and 400,000–500,000 IU per day for males - have been used successfully to treat severe acne. However, unlike the long-lasting benefits of the synthetic prescription version of vitamin A (e.g. Accutane®), the acne typically returns several months after natural vitamin A is discontinued. In addition, the large amounts of vitamin A needed to control acne can be toxic and should be used only under careful medical supervision.

Pantothenic acid – *2.5g four times daily*. In a preliminary trial, people with acne were given 2.5 grams of pantothenic acid orally QID, for a total of 10 grams per day -

a remarkably high amount. A cream containing 20% pantothenic acid was also applied topically four to six times per day. With moderate acne, near-complete relief was seen within two months, while severe conditions took at least six months to respond. Eventually, the intake of pantothenic acid was reduced to 1 to 5 grams per day - still a very high amount.

Vitamin B6 (P5P) – 50mg daily. A preliminary report suggested that vitamin B6 at 50 mg per day may alleviate premenstrual flare-ups of acne experienced by some women. While no controlled research has evaluated this possibility, an older controlled trial of resistant adolescent acne found that 50mg per day decreased skin oiliness and improved acne in 75% of the participants.

Chromium - 400mcg daily. Chromium has known properties to heal infections of the skin.

Botanical Treatment Options

Tea tree oil - A clinical trial compared the topical use of 5% tea tree oil to 5% benzoyl peroxide for common acne. Although the tea tree oil was slower and less potent in its action, it had far fewer side effects and was thus considered more effective overall.

Tea tree oil contains a constituent called terpinen-4-ol that is believed to be responsible for most of tea tree oil's anti-bacterial activity. Because tea tree oil can kill bacteria, applying topical tea tree oil to acne lesions is believed to kill *Propionibacterium acnes*, the skin-dwelling bacteria involved in acne.

Guggul – 500mg twice daily. One controlled trial found that guggul (*Commiphora mukul*) compared favorably to tetracycline in the treatment of cystic acne. The amount of guggul extract taken in the trial was 500 mg BID.

Historically, tonic herbs, such as **burdock**, have been used in the treatment of skin conditions. These herbs are believed to have a cleansing action when taken internally. Burdock root tincture may be taken at a dose of 2 to 4 ml per day. Dried root preparations in a capsule or tablet can be used at 1 to 2 grams TID. Many herbal preparations combine burdock root with other alterative herbs, such as **yellow dock** or **red clover**.

Some older, preliminary German research suggests that **vitex (agnus castus)** might contribute to clearing of premenstrual acne, possibly by regulating hormonal influences on acne. Women in these studies used 40 drops of a concentrated liquid product once daily.

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