



PRODUCT FACT SHEET

# SALIZAIN™

SALIZAIN™

ITEM #: 3625-0030-01

Salizain™ is indicated for relief of minor aches and pains.

### KEY FEATURES

- Contains 240 mg of salicin extract
- Studies have demonstrated that 240 mg of salicin is the most effective dose for pain reduction
- 240 mg of salicin provide equivalent reduction in low back pain as Vioxx
- Salicin has an excellent safety profile and low incidence of side effects

### DESCRIPTION

Extract of white willow bark for the relief of minor pain.

### HOW SUPPLIED

30 tablets per bottle.

### DIRECTIONS

Take 1 tablet daily for relief of minor pain.

### DIRECTIONS

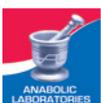
White willow should be avoided by individuals who are allergic to aspirin or its derivatives. It should also be avoided by those with kidney or liver conditions, asthma, stomach ulcers, inflammatory bowel disease and breast-feeding mothers.

### Supplement Facts

Serving Size 1 Tablet      Servings Per Container 30

Amount Per Serving	% Daily Value
Salicin (from 979.2 mg white willow bark extract)	240 mg *

\* Daily Value not established.



# ANABOLIC LABORATORIES

Pharmaceutical Made Nutritional Products Since 1924



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**SALIZAIN™**

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BACKGROUND

One tablet of SALIZAIN provides 240 mg of salicin, which is the active ingredient in white willow bark. A randomized controlled study compared 240 mg of salicin to 12.5 mg of Vioxx, a COX2 inhibitor. At four weeks of treatment in 228 patients with idiopathic low back pain, reduction of pain was equal in both groups<sup>1</sup>. In a randomized double-blind study<sup>2</sup>, patients with low back pain exacerbations received either 240 mg of salicin, 120 mg of salicin, or placebo. In the last week of treatment, 39% of patients receiving 240 mg were pain-free compared to 21% who received 120 mg and 6% taking the placebo.

Recently, the American College of Physicians and the American Pain Society developed clinical guidelines for the treatment of low back pain. White willow bark was deemed to be moderately beneficial for treatment of acute low back pain, which was the same rating as acetaminophen, NSAIDs, muscle relaxants, and opiates.<sup>3</sup>

In a randomized placebo-controlled double-blind trial in patients suffering from osteoarthritis of the hip or knee, subjects received either 240 mg of salicin or placebo daily for two weeks. At the end of two weeks, subjects receiving salicin reported a 14% reduction in pain compared to a 2% increase in those receiving placebo.<sup>4</sup>

The effectiveness of salicin in relieving minor pains should be considered in the context of cost and side effects. The patient cost for Salizain is only \$24.00 per month, which is substantially less than the cost for COX2 inhibitors such as Celebrex.

The active ingredient in white willow bark is salicin and it is converted to salicylic acid after absorption, which is thought to be a reason why there are minimal side-effects compared to aspirin and traditional NSAIDs.<sup>5</sup> In placebo-controlled studies, there were 20 adverse events in the 179 white willow bark patients compared to 35 events in 109 placebo patients. The low incidence of adverse events observed in multiple studies suggests that willow bark extract may be an effective alternative, especially in patients who cannot tolerate NSAIDs.<sup>2</sup>

As white willow bark has additional components, it is thought that the observed analgesic effect of willow bark may therefore not be attributed to salicylic acid alone. It can be speculated that other constituents of willow bark (e.g. tannins, flavonoids, salicin, salicin esters or others) may contribute to the overall effect.<sup>4</sup>

Not well known is that fruits and vegetables contain salicylates<sup>6</sup>, which highlights the importance of making appropriate dietary modifications for any patient in need of pain relief. Vegetable and fruit intake at a level consumed by vegetarians provides a level of dietary salicylates that appears to be equivalent to 75 mg of aspirin.<sup>6,7</sup>

In summary, according to the available research, white willow bark should be viewed as a natural analgesic agent for the treatment of minor pains.<sup>1,4</sup> In conjunction with a diet rich in fruits and vegetables, the use of white willow bark may provide the best available natural approach for modulating acute pain.

#### REFERENCES

1. Chrubasik S, Kunzel O, Model A, Conrath C, Black A. Treatment of low back pain with a herbal or synthetic anti-rheumatic: a randomized controlled study. Willow bark extract for low back pain. *Rheumatology*. 2001;40(12):1388-93.
2. Chrubasik S, Eisenberg E, Balan E, Weinberger T, Luzati R, Conrath C. Treatment of low back pain exacerbations with willow bark extract: a randomized double-blind study. *Am J Med*. 2000;109:9-14.
3. Chou R, Qaseem A, Snow V et al. Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society. *Ann Intern Med*. 2007;147:478-91.
4. Schmid B, Lüdtke R, Selbmann HK, Köttler I, Tschirdehahn B, Schaffner W, Heide L. Efficacy and tolerability of a standardized willow bark extract in patients with osteoarthritis: randomized placebo-controlled, double blind clinical trial. *Phytother Res*. 2001 Jun;15(4):344-50.
5. Akao T, et al. Evaluation of salicin as an antipyretic prodrug that does not cause gastric injury. *Planta Med*. 2002;68(8):714-18.
6. Hare LG, Woodside JV, Young IS. Dietary salicylates. Another benefit of fruit and vegetable consumption? *J Clin Pathol*. 2003;56:649-50.
7. Lawrence JR, Peter R, Baxter GJ, Robson J, Graham AB, Paterson JR. Urinary excretion of salicylic and salicylic acids by non-vegetarians, vegetarians, and patients taking low dose aspirin. *J Clin Pathol*. 2003;56:651-53.

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As a pharmaceutical manufacturer, the standards used for raw materials, production and finished product testing exceed FDA requirements for the nutritional products industry. Our pharmaceutical requirements for manufacturing are the foundation for the guaranteed quality of our nutritional products. Anabolic Laboratories sets the nutritional supplement industry standard for label accuracy, potency and purity as dictated by the FDA for pharmaceutical and nutritional products.



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