

Science Review: Fast-Acting and Safe Pain Relief

Inflammatory pain is a prominent health burden that impacts the lives of countless individuals. While acute pain serves as an important protective mechanism, at times it can be difficult to control, even with the use of acetaminophen and nonsteroidal anti-inflammatories (NSAIDs).¹ Even more concerning, single doses of acetaminophen beyond 1,000 mg or ibuprofen over 400 mg of can lead to adverse effects,^{1*} which may cause patients to feel uncertain about conventional analgesics. Providing a safe and fast-acting approach, Rhuleave-K™ contains safe ingredients, curcumin and *Boswellia serrata* (*Boswellia*). This clinically proven combination has been shown to help alleviate pain within 63 minutes,² with similar time-to-effect as 1,000 mg of acetaminophen.³ Therefore, Rhuleave-K offers a safe approach to inflammatory pain.

Rhuleave-K: full-spectrum analgesia

Curcumin and *Boswellia* within Rhuleave-K have been shown to be as effective as over-the-counter (OTC) pain relief, including NSAIDs⁴ and acetaminophen.³ Underpinning the clinical efficacy of these plant extracts are a broad spectrum of anti-inflammatory mechanisms that target several stages of inflammation.⁵ Most notably, this combination inhibits proinflammatory enzymes, cyclooxygenase-2 (COX-2)⁶ and lipoxygenase-5 (LOX-5),⁷ which synthesize prostaglandins and leukotrienes that promote heat, swelling, redness, and pain.⁸ As such, by reducing the production of these mediators, curcumin and *Boswellia* in Rhuleave-K can help relieve inflammatory pain. Moreover, through its dual actions on COX and LOX pathways, this therapeutic blend offers broader anti-inflammatory actions compared to NSAIDs.^{7†} However, unlike these mainstream anti-inflammatories, safe agents within Rhuleave-K are less likely to cause negative side effects.⁴

Enhanced herbal absorption with SpeedTech™

Unique to the manufacture of Rhuleave-K, proprietary SpeedTech technology enhances curcumin and *Boswellia* absorption, helping to offset the low bioavailability of these extracts.^{9,10} By combining safe ingredients through a high-speed milling process, SpeedTech micronizes botanical particles within a phospholipid-rich[‡] base of sesame seed oil¹¹ to create a highly bioavailable dispersion of active compounds. For this reason, specialized SpeedTech technology can maximize the anti-inflammatory benefits of curcumin and *Boswellia* extracts in Rhuleave-K for greater clinical effects.

Clinically studied benefits

Human clinical trial data indicates that a single dose of Rhuleave-K is as effective as 1,000 mg of acetaminophen for the relief of acute musculoskeletal pain ($p < 0.001$).³ In a randomized open-label study, healthy subjects (mean age 42) with grade 1 musculoskeletal strain⁵ received either 1,000 mg/d Rhuleave K (n=44) or 1,000 mg/d of acetaminophen (n=44) for seven days. Outcomes showed Rhuleave-K administration led to substantial pain relief within 2.5 hours (**Figure 1**), while after six hours, Rhuleave-K reduced total pain by 53.1%, which was comparable to acetaminophen use (55.4%). Moreover, after seven days, safe treatment was observed to improve pain quality and intensity by 71.8%, which mirrored OTC efficacy (73.6% improvement).

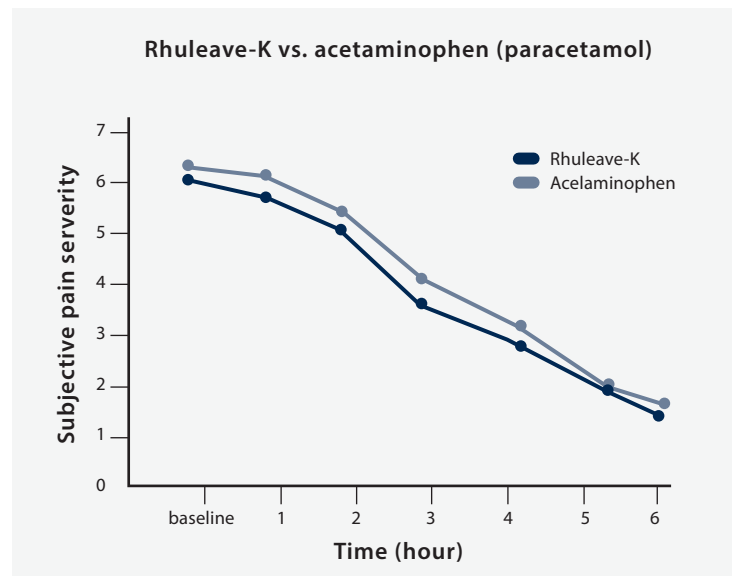


Figure 1: Pain reduction with Rhuleave-K is comparable to 1,000 mg of acetaminophen.³

In addition, the fast-acting benefits of Rhuleave-K have been documented in 232 healthy individuals (mean age 36.4 years) with exercise-induced muscle pain.² In this randomized double-blind placebo-controlled study, treatment reduced pain severity from > 74% to < 3% ($p < 0.001$), while no significant relief occurred in the placebo group. Notably, perceived pain relief occurred around 63 minutes, while complete pain relief was achieved in 3.1 hours. As such, these studies support the anti-inflammatory and analgesic effects of Rhuleave-K.

Plant-derived medicines achieving rapid and reliable pain relief

Delivering a clinically tested solution for pain sufferers, curcumin and Boswellia extracts within Rhuleave-K offer an alternative to conventional analgesia. This combination blends scientific SpeedTech methods with researched botanicals to prevent acute pain from holding patients back. As such, by prescribing anti-inflammatory herbal medicines within holistic treatments, practitioners can achieve even better results, allowing patients the freedom to live life to the fullest.

References:

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*Negative side effects associated with NSAIDs include gastrointestinal, cardiovascular, and renal side effects; negative effects associated with acetaminophen are related to hepatotoxicity.

[†]NSAIDs specifically target COX-2 pathways without exerting effects on LOX mediators.

[‡]Phospholipids possess stabilising, emulsifying and solubilising properties that can enhance the delivery of therapeutic compounds.

[§]Grade 1 muscle strain is characterized by <5% loss of muscle function.

