

Wound Healing Properties of Birch Bark Extract



Clinical studies have established that birch bark triterpenes have notable wound healing properties

- Wound healing requires the integration of many complex cellular and molecular events
- Triterpene extract (TE) which contains betulin, betulinic acid, and lupeol influences the inflammatory phase of wound healing by upregulating pro-inflammatory cytokines, chemokines, and cyclooxygenase-2 in human primary keratinocytes
- Betulin and lupeol increase the formation of actin filopodia, lamellipodia and stress fibers
- TE enhances the beginning of the inflammatory phase of wound healing by upregulation of pro-inflammatory mediators, which does not result in prolonged inflammation
- TE also influences new tissue formation
- TE improves epidermal regeneration and accelerates the repair of the epidermal barrier function
- On a cellular level, TE enhanced re-epithelialization and the reformation of an epithelial barrier
- Lupeol improves epidermal tissue reconstruction, enhancing cell proliferation in the basal layer and promoting the development of a well formed stratum corneum without parakeratosis



According to a study on the effects of oleogel formulations on skin injuries, betulin based oleogel significantly accelerated the healing of wounds by encouraging the migration of immortalized human keratinocytes





Powerful Actives

- Our birch bark extract comes only from the outer bark of the North American birch tree
- It is standardized for >98% triterpene content consisting of:
 - Betulin
 - Betulinic Acid
 - Lupeol
 - Betulin Caffeate

Sustainable

- Sustainably harvested
 - Obtained as a waste product of the paper and timber industries
 - All trees are from sustainably managed and harvested forests
 - Certified through the Sustainable Forestry Initiative (SFI)
- Safe processing
- North American sourced
- Identity preserved
 - Can trace the supply chain back to where the tree was harvested

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