

Pomegranate Extract Research Paper

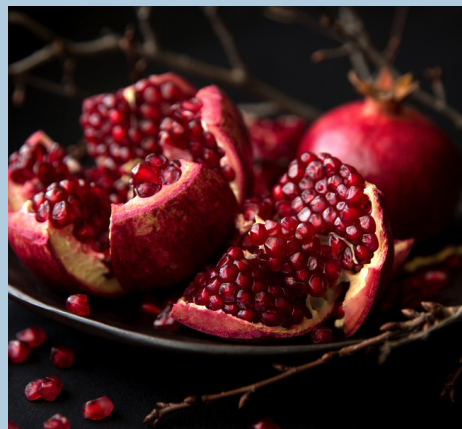
APPEARS IN



Punica Granatum, commonly known as Pomegranate, is known for its soothing, antioxidant, and antimicrobial effects. Pomegranate pericarp is the unused portion of the pomegranate that is wasted from the juicing industry. It is sourced from a family-run business that is within the same country as the manufacturer which allows for less emissions in shipping the raw fruit material. Three Ships sustainably sources Pomegranate Extract in Firm Believer Goji Stem Cells + Pomegranate Smoothing Neck + Face Cream.

KNOWN FOR ITS SOOTHING, ANTIOXIDANT, AND ANTIMICROBIAL EFFECTS.

Pomegranate is rich in a molecule called punicalagin which gives it strong antioxidant properties. The pericarp also contains other phytochemicals, such as polyphenolic flavonols and ellagitannins, which includes ellagic acid. Its polyphenols help it to reduce the production of reactive oxygen species in the skin, and it helps to reduce inflammation.



Plants are selected by a local farmer in France and shipped only a short distance to the manufacturing plant. Here, the plants are macerated and the unused residues are composted. The decanted macerate is then filtered and concentrated before undergoing a drying process called zeodration which requires less energy than conventional methods. The exact method of extraction of Pomegranate Extract that Three Ships sources is proprietary information.

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One of the key ways our bodies age is through oxidative stress, which is also known as free radical damage. Free radicals are substances or molecules that have an unpaired electron. These unpaired electrons like to be paired up and make free radicals so reactive because they want to pair with another electron to be “stable”. In its unpaired electron form, it is so unstable that it will take an electron from anything around it to become more stable. When a free radical takes an electron, the substance that loses the electron to the free radical becomes oxidized, thus called oxidative stress. The substance that lost its electron will then become a free radical and a chain reaction starts where the oxidation of molecules continuously occurs.

An antioxidant is a substance that can neutralize free radicals. They are stable substances, even with an unpaired electron. Therefore, once an antioxidant comes in contact with a free radical, the antioxidant will donate an electron to the free radical and make it stable, whilst preventing a chain reaction of new free radicals from forming. Molecules such as polyphenolic flavonols and ellagitannins in Pomegranate Extract act as antioxidants.

SCIENTIFIC STUDY

In-vitro antimicrobial and antioxidant activities of aqueous pericarp extract of Punica granatum

The present study examined the antioxidant effects of pomegranate pericarp extract through several methods. They measured the superoxide, hydroxyl radical, DPPH, hydrogen peroxide radical, lipid peroxidation, and nitric oxide scavenging activity. It was found that in nearly all categories, the pomegranate extract had a similar or slightly higher IC50 (lower scavenging activity) than ascorbic acid, showing that pomegranate extract has strong antioxidant properties. This study also reviewed the antimicrobial activity of pomegranate extract using a variety of methods against *Salmonella typhi*, *Vibrio cholerae*, *Shigella dysenteriae*, *Enterococcus faecalis*, *Escherichia coli*, *Klebsiella pneumoniae*, *Staphylococcus aureus*, and *Candida albicans*. It was found that the extract had significant antibacterial activity and moderate antifungal activity.

Pomegranate Extract has been used for centuries for its many therapeutic benefits. It contains a large amount of bioactive molecules that allow it to act as an effective antioxidant ingredient. The extract of this plant is sourced sustainably in France. It can be found in Three Ships' Firm Believer Smoothing Neck + Face Cream.