Salicylic acid is a beta hydroxy acid that occurs naturally in plants such as willow bark. Salicylic acid has <u>anti-inflammatory and antibacterial properties</u>, and also works as an exfoliant to remove dead skin cells.

Many face washes or skin care products for acne contain SA in varying strengths.

### Does it work?

The <u>American Academy of Dermatology (AAD)</u> recommend using a skin care product containing SA to treat certain types of acne, including:

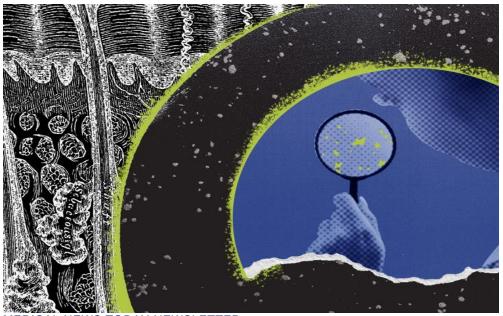
- Pustules: Pus-filled pimples.
- Papules: Small, hard bumps which may give a rough or textured feel to the skin.
- <u>Blackheads</u>: A small bump with a black surface. Blackheads develop as a result of a blockage within a hair follicle.
- Whiteheads: A completely blocked follicle.

### How does it work?

Acne forms when excess oil and dead skin cells block pores within the skin. Bacteria can also become trapped inside the pore, causing inflammation and pus-filled pimples.

Salicylic acid works to treat acne by unclogging <u>blocked pores</u>. It does this by <u>breaking down the bonds</u>Trusted Source between dead skin cells so that they can release from the pore more easily, and breaking down oils, such as <u>sebum</u>.

Salicylic acid also decreases the skin's sebum production, leading to fewer breakouts.



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# Forms, dosage, and how to use

The following table offers general guidelines for using different forms and concentrations of SA. People should always follow the instructions on individual product labels, or the advice of their doctor or dermatologist.

Forms of salicylic acid	Concentration	How to use
Over-the- counter topical treatments	0.5% to 2%	Follow the product instructions, which will state whether to wash off or leave on for a set time. Initially apply once a day, then gradually increase applications to 2-3 times a day. If excessive dryness or peeling occurs, reduce

		applications to every other day.
Chemical peels	<u>Up to</u> <u>50%</u> Trusted Source	Only a trained dermatologist should carry out the procedure.

## Use as an exfoliant

Salicylic acid works as an exfoliant to slough off dead skin cells. Practitioners may use chemical peels containing up to <u>50%</u>Trusted Source concentration of SA. Chemical peels may help to treat the following types of acne and resulting residual pigmentation:

- papules
- whiteheads
- blackheads
- post-acne erythema
- hyperpigmentation

# Side effects

Salicylic acid may cause some side effects. These may vary depending on a person's skin type or the form or concentration of SA they are using. Side effects may include:

- mild burning
- mild stinging
- peeling skin
- mild irritation
- dryness

## **Precautions**

The <u>U.S. Food and Drug Administration (FDA)</u>Trusted Source provide the following precautions for people using SA:

- Patch test any product containing SA on a small area of skin before applying the product more liberally. Do not use the product if a reaction develops at the site of the patch test.
- Follow the instructions on the product label carefully.
- Avoid using more than the recommended amount of product.
- Avoid applying the product in higher doses or at a greater frequency than stated on the label.
- Avoid using SA products on babies and children.
- Always protect the skin from the sun when using SA products.

People should also take the following precautions when using an SA product:

- Avoid contact with the eyes, mouth, or any mucous membranes, such as those inside the nose.
- Stop using the product if there are excessive side effects, and contact a doctor for further advice. Examples of side effects include:
  - o skin peeling
  - o stinging
  - irritation
- If a person accidentally swallows a SA solution, seek medical help straight away.
- Avoid using air-tight or water-tight dressings, or petroleum-based ointments, on top of SA as these may cause excessive exposure to SA.

Avoid any other medications containing SA while using SA products.
Examples of such medications include <u>aspirin</u> and certain sports injury lotions.

# Safety

Salicylic acid may not be safe for everyone. Some examples are outlined below:

#### **Pre-existing conditions**

Salicylic acid products may not be safe for people who have a kidney or liver condition. Anyone who has such a condition should talk to their doctor before considering using products containing SA.

#### **Allergies**

If people have an allergic reaction to SA, they should stop using the product immediately and seek medical attention.

#### **Pregnancy and breastfeeding**

Topical use of SA in pregnancy and lactation is not problematic due to limited systemic absorption.

If a person wants more information about using salicylic acid during pregnancy or lactation they should get in touch with their doctor.

# Salicylic acid vs. benzoyl peroxide

Benzoyl peroxide (BP) is another topical agent that may help treat acne. It is an antiseptic that kills acne-causing bacteria. People may use BP alone or in combination with SA. Both are available without a prescription.

Benzoyl peroxide may not be suitable for people with <u>sensitive</u> <u>skin</u> or <u>eczema</u>. People with pre-existing skin conditions may want to consult with a doctor or dermatologist to see if BP will be safe for them to use.

When using BP, people may want to start with a concentration of <u>2.5%</u>. Higher doses may cause irritation and dryness.

Benzoyl peroxide can stain fabrics. People may want to avoid using BP before exercising or before going to bed to avoid staining clothing or bedding.

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