



**INTERNATIONAL JOURNAL OF  
PHARMACEUTICAL SCIENCES**  
[ISSN: 0975-4725; CODEN(USA): IJPS00]  
Journal Homepage: <https://www.ijpsjournal.com>



## Review Article

# Activated charcoal: Exploring potential against Psoriasis

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### ARTICLE INFO

Received: 23 June 2024

Accepted: 05 July 2024

Published: 14 July 2024

#### Keywords:

Activated charcoal, skin care, skin condition.

#### DOI:

10.5281/zenodo.12739421

### ABSTRACT

Within last few years, activated charcoal is begin used in cosmetic products. It contain various properties like absorbing. Due to these properly charcoal is used as face mask cleanser and even soap also. It is used to treat skin condition like psoriasis.

In this review the current use of activated charcoal in cosmetic product and its effectiveness is determined. Various treating skin condition like acne, dark spot determination and it is render to be the safe product.

## INTRODUCTION

The outermost layer of skin cells, called keratinocytes, proliferate rapidly in psoriasis, an inflammatory autoimmune disease. These cells regenerate around every three to four days in psoriasis sufferers as opposed to the usual 28-day period in healthy persons. Patches of thicker, redder skin coated in silvery scales that are irritating or uncomfortable develop as a result of this increased cell turnover. Psoriasis affects over 138 million individuals worldwide, with a prevalence rate of roughly 2-3%. These lesions can develop on many body areas, and they have a major negative effect on the affected person's quality of life.[1]

People of any age, gender, origin, social class, or cultural background might be affected by this condition; nevertheless, the highest occurrence happens in those between the ages of 20 and 50.[2] Although the precise origin of psoriasis is still unknown, T cells are known to have a major role in the immune system's stimulation of epidermal keratinocytes. Psoriasis is frequently inherited, and specific human leukocyte genes and antigens (such as Cw6, B13, and B17) have been connected to the disease.[3]

### There are various psoriasis types:

- **Erythrodermic:** Identified by a deep redness encompassing a significant portion of the skin.

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**Relevant conflicts of interest/financial disclosures:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.



- **Guttate:** Marked by tiny, pink to red dots on the skin.
- **Inverse:** Produces redness and irritation in the groin, underarms, and in the spaces where skin overlaps.
- **Plaque:** This form, which affects around 80% of psoriasis patients, is the most prevalent and features thick, red areas covered in silver to white scales.
- **Pustular:** Distinguished by white blisters encircling red, inflamed skin. [4]

The type of lesion and any consequences determine the course of treatment. Choices include immunosuppressants, cytokines, monoclonal antibodies, phototherapy, cyclosporine, vitamins, salicylates, retinol, and corticosteroids. Additionally advised are preventive actions including upholding hygienic standards, eating a balanced diet, and adhering to sanitary procedures.[5] Numerous difficulties related to psoriasis, caused by lifestyle, environmental, and hereditary factors, negatively affect the quality of life of those who suffer from it. Due to their physical and psychological pain, patients frequently seek the advice of many professionals when they do not receive appropriate treatment answers. Because of the potential for social rejection and detrimental effects on family, career, and finances, the visual signs of this disorder can cause extreme emotional pain and occasionally even lead to suicide thoughts.[6] A number of complementary therapies, such as herbal remedies, dietary supplements, lotions, and special diets, assert to reduce the symptoms of psoriasis. Some of these therapies are widely regarded as safe and may help lessen signs and symptoms including peeling and itching, even though their efficacy has not been established. These substitutes are not advised for people with erythroderma, psoriatic arthritis, or pustular psoriasis; however, they might be appropriate for those with milder plaque psoriasis.[7]

### Causes Of Psoriasis:

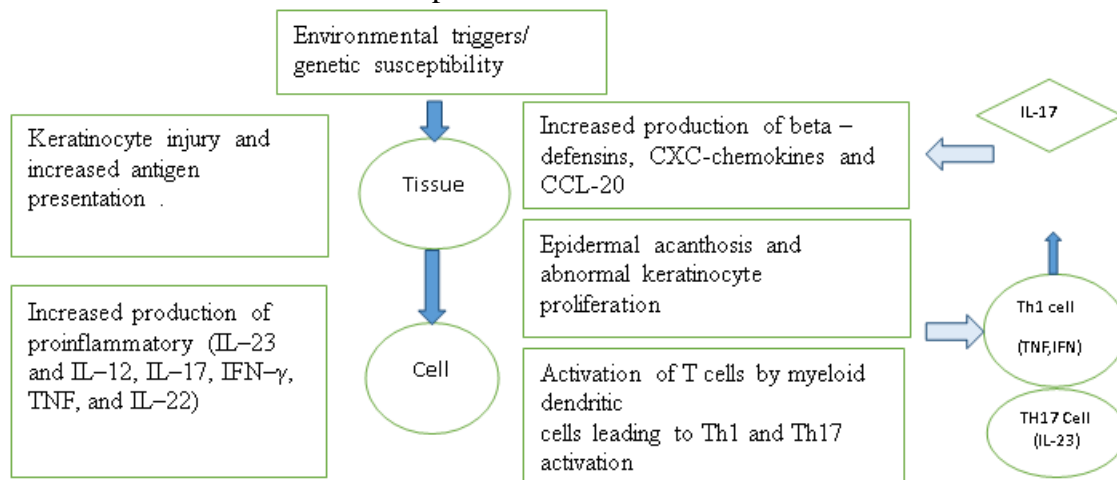
Scientists believe psoriasis is caused by a combination of variables, however a specific cause has not been identified. The rapid appearance of new skin cells is caused by an immune system disruption. In psoriasis, new cells form in 3–4 days instead of the usual 10–30 days when old cells are replaced by new ones. Silvery grey scales are formed as a result of this rapid turnover, in which new cells replace the old ones.[8] Although it can skip generations, psoriasis frequently runs in families. For example, the parent may not be impacted, but the grandmother and grandchild may.[9] Psoriasis outbreaks can be brought on by trauma, surgical incisions, scrapes, strep infections, psychological strain, and certain drugs, such as lithium, mood stabilisers, blood pressure pills, nonsteroidal anti-inflammatory drugs, and antibiotics. Every psoriasis sufferer has a unique combination of triggers, and what sets off a flare-up in one patient might not kick off a flare-up in another. Accurately identifying triggers can aid in the prevention of symptom flare-ups. Since psoriasis affects the immune system, conditions like stress, cold, and dry weather can make symptoms worse. Additionally, there is a greater chance of breakouts in people who experience anxiety. [10] Red, tiny, drop-like patches of psoriasis that mostly affect the torso and limbs can be the result of certain diseases such as tonsillitis and strep throat. For certain people, minor burns, wounds, and bruises might make the disease worse. It is also known that having HIV might make psoriasis worse. Furthermore, new lesions may develop as a result of insect bites or tattooing. [11] Excessive alcohol consumption, especially in young men, might exacerbate symptoms and make psoriasis therapy more difficult. Alcohol and several psoriasis treatments can mix dangerously, which is especially risky for women who are pregnant or nursing. Both tobacco usage and secondhand smoke exposure raise the chance of

getting psoriasis and exacerbate pre-existing symptoms.[12] All skin tones are affected by psoriasis, although the condition looks different in each. Psoriasis can cause less noticeable purplish-colored spots with grey scales on very dark skin in African Americans. The psoriasis in Hispanic skin is usually bright pink in colour with silvery white scales. Hispanic skin is slightly lighter in tone. Depigmentation, which leaves areas of skin that are either lighter or darker than the surrounding skin after healing, can happen. Depending on the severity, these patches normally fade over several months to a year or longer. Treatments recommended by dermatologists can hasten the removal of these spots. [13] Genes are little pieces of DNA that carry instructions for many cellular activities, such as taste preferences, eye and hair colour, and other physiological functions. Certain genes are only active during certain hours of the day. Psoriasis patients have anomalies in the genes that control immune system signalling. Rather than shielding the body from external antigens, these genes induce hyperactivity in skin cells, which results in inflammation. About twenty-five genes have been found to show anomalies in psoriasis. [14]

**Pathophysiology:**

Psoriasis is caused by a variety of reasons, including inflammation, immune system changes, aberrant differentiation of epidermal

keratinocytes, and hyperproliferation of the epidermis.[15] Hyper-proliferation, or high increase in DNA synthesis, is a feature of psoriasis. The epidermal turnover rate is slowed down in this scenario. Furthermore, keratins (1 and 10), which are typically expressed throughout the physiological process of skin differentiation, appear later.[16] The expression of keratins like six and sixteen is elevated in keratinocytes that have undergone abnormal differentiation. The epidermis and the layers above it are invaded by neutrophils. The dermis is invaded by T-cells, mostly CD8+ cells. [17] Regarding the genesis of psoriasis, there are two primary theories. According to the first, psoriasis is essentially a skin condition marked by accelerated proliferation and development of skin cells. This perspective holds that psoriasis is a sign of a problem with the keratinocytes and epidermis. [18] According to the second theory, increased skin cell proliferation as a result of an immunological reaction leads to the development of psoriasis. T cells experience a functional departure from their intended purpose of combating infections. After activation, they go to the dermis and release cytokines, especially tumour necrosis factor-alpha (TNF), which promotes inflammation and the growth of more skin cells. It's unclear exactly what sets off T cell activation in this situation. [19]



**Figure 1: Pathophysiology of psoriasis**

### **Diagnosis:**

Physical examinations are usually simple, especially if the patient has plaques on their nails, ears, belly button, knees, elbows, or scalp. [20]

The doctor may do a biopsy, which entails removing a small piece of skin for examination, to rule out a skin infection. Psoriasis cannot be completely ruled out or confirmed by other tests. [21]

### **Charcoal:**

#### **Introduction:**

A fine black powder called activated charcoal is becoming more and more common in beauty products. It is made by burning things in low oxygen environments, such as wood, peat, coconut shells, and olive pits. Its surface area is greatly increased by this process, reaching almost three thousand square metres per gramme, and pores are formed.[22] By capturing and absorbing substances through its pores, activated charcoal is able to extract pollutants and microorganisms from the skin. It works well to reduce pores, treat bug bites, treat acne, and treat a variety of skin issues because of its characteristic. [23,24]

Because the skin acts as a delicate and protective barrier against UV radiation and environmental pollutants, skin care is essential. The skin on the face needs special care since it is thinner and more sensitive than the skin on the rest of the body. The main application of activated charcoal is in cosmetics for the face. It may be found in products like lotions, creams, face masks, cleansers, and peel-off masks that are designed to improve skin care and renewal.[25] Using the right face wash helps us feel more confident by clearing our skin of dangerous microorganisms and impurities. [26] The 1700s saw the first descriptions of charcoal's adsorbent qualities, and the early 1800s saw the first clinical use of the material. [27] Charcoal-infused lemonade gained popularity in 2014 after Gwyneth Paltrow's publication Goop included it as one of the best juice cleansers of the year and

highlighted its adsorptive qualities, which made it a popular choice for detoxification. [28] Nowadays, charcoal is widely used in cosmetic and beauty products due to its well-known properties that allow it to whiten teeth and remove discolorations from skin. Record-breaking sales of activated charcoal have been achieved as a result of intensive marketing efforts driven by this rising popularity. Its commercial manufacturing has increased dramatically, encompassing not only handwashing and regular soaps but also facial cleansers, pore strips, and carbonated face masks. [29] The cosmetics industry has seen considerable advancements using activated charcoal. A noteworthy accomplishment for a relatively new skincare component, charcoal powder was included in 148 skincare products by the International Nomenclature of Cosmetic Ingredients (INCI) in 2015. This figure had quintupled by 2019, indicating its quick acceptance. From traditional beauty beliefs and medicinal uses, activated charcoal has become a major skincare fad in the 20th century. Though first viewed with suspicion, it has now established itself as a mainstay in high-end cosmetics, demonstrating its persistent existence in the industry and securing its position in consumer preferences. [30]

#### **History:**

Since 3750 B.C., the Egyptians have used charcoal for a variety of reasons. They used it extensively to treat a variety of intestinal problems, such as diarrhoea, bloating, and constipation, in addition to neutralising the smell of mining.[31] Since ancient times, charcoal has been used for a wide variety of purposes. It was used in mummification procedures by the Egyptians. The ancient Greeks and Romans also used it for dental hygiene. Civilizations in and around the Indus region started utilising charcoal powder to purify their water about 400 B.C. [32]



Activated charcoal's adsorbent property was initially identified in science in the 1700s when researcher Lowitz noticed that it could effectively decolorize other materials. This was the official acknowledgement of its adsorptive qualities in scientific research, even though it had been in use for millennia.[33] Charcoal's ability to absorb substances was audaciously proved in 1830 by Tourey, a French chemist. He swallowed a large amount of charcoal and a deadly dose of strychnine, a highly toxic colourless insecticide intended to kill rats and birds. Amazingly, his audacious deed had no effect on him. This incident demonstrated charcoal's possible ability to cleanse the body by absorbing contaminants.[33] Using powdered charcoal, American physician Hort successfully cured a patient with mercury dichloride toxicity in 1834. [33]

#### **Uses:**

Activated charcoal is added to cosmetic preparations for skin-lightening creams because of its well-known capacity to absorb fat, dark patches, and pollutants from the skin.[34] Activated charcoal finds extensive application in a range of skincare products, including soaps, carbonated face masks, pore strips, and facial cleansers. Products with charcoal in them are touted by numerous cosmetic and pharmaceutical industries as being able to effectively treat adult acne, minor infections, wounds, itchy scalps, and seborrhoeic dermatitis. [29] Dermatologists have speculated that activated charcoal, which is well-known for its capacity to create robust connections with toxins during gastric lavage in order to eliminate them from the body, may also be able to use this mechanism in order to bind with bacteria, sebum, and dead skin cells on skin that has been exposed to environmental pollutants. Rinsing off the procedure is supposed to leave skin looking clearer and healthier.[35]

The antibacterial and antifungal qualities of activated charcoal can be used to effectively treat psoriasis and eczema. It also works wonders for clearing the scalp of debris and dandruff, which makes it a great complement to shampoos.[36]

A lot of mouthwashes and toothpastes with charcoal in them make the claim that they can whiten teeth by abrasively removing stains. [37]

#### **Process Of Composition:**

Activated charcoal is made from lignite, rye starch, and low-ash wood pulp, among other carbon-containing sources. After it is acquired, the charcoal is ground into tiny particles. Then the activation process starts, which includes being treated with chemicals, oxygen, steam, carbon dioxide, and some acids. The process of activation removes impurities from the charcoal and turns it into tiny, fine granules. Commercially available activated charcoal has a surface area of about 1000 m<sup>2</sup> per gramme, although experimental versions can reach up to 3500 m<sup>2</sup> per gramme. [38]

#### **Functional Mechanism:**

Micropores in activated charcoal greatly expand its surface area and improve its adsorptive qualities. As a result, when rinsed or peeled away, it can efficiently trap impurities and chemicals from the skin's surface, unclogging pores and detoxifying the skin. [29]

The chemical equilibrium between the free toxin and the activated charcoal-toxin complex determines how well activated charcoal binds to toxins. It is very effective at adsorbing non-polar and hydrophobic organic poisons because it adsorbs them in their non-ionized forms. [39]

#### **Preparation Of Charcoal:**

Activated carbon can be created chemically or by gas activation procedures from a variety of high-carbon materials that are plant, animal, or mineral based. Wood, charcoal, nut shells, fruit pits, brown and bituminous coals, lignite, peat, bone, waste from paper mills (lignin), and man-made polymers like PVC are common raw materials used in the



manufacturing of activated carbon. Hardwood charcoal makes for more stable activated carbon than softwood charcoal, such as pinewood, which crumbles more readily. The best grades of activated carbon for adsorption are known to be produced from coconut shells and apricot pits. There are two main processes used to manufacture activated carbons: chemical activation and physical or gas activation. The beginning material, the desired end product characteristics, the required density (low or high), and whether the final product should be in powdered or granular form all influence the activation method selection. In order to eliminate volatile materials, the raw material—which should ideally have less than 25% moisture—goes through a first carbonisation process at temperatures ranging from 400°C to 500°C. For selective oxidation, the carbon is then exposed to oxidising gases, such as carbon dioxide or steam, at temperatures between 800°C and 1000°C, or to air at lower temperatures. The oxidation process usually comes after the raw material has first become carbonised. Wood pyrolysis, or heat-induced wood degradation, starts at about 225°C. In the presence of ambient oxygen during carbonisation and activation, carbon can convert to CO<sub>2</sub>, hence air must be carefully regulated or removed to avoid unwanted reactions.[40]

#### **Classifications Of Activated Charcoal:**

Based on their physical characteristics, activated charcoal and carbons (AC) are divided into three categories:

**Powdered Activated Carbon (PAC):** Activated carbon powder (PAC) is usually produced as powders or minuscule granules, with an average diameter of 0.15 to 0.25 mm. 95–100% of the crushed or ground carbon particles that make up PAC can pass through a sieve with a mesh size of between 50 and 80. Since rapid adsorption and high effectiveness are needed in a variety of applications, including water and air purification,

PAC's tiny particle size and large surface area make it a good choice.

**Granular activated carbon (GAC):** Particle sizes of granular activated carbon (GAC) are bigger than those of powdered activated carbon (PAC). It's crucial to remember that activated carbon's interior surface area determines how efficient it is, even though it has a lesser outward surface area than PAC. Because of its quicker diffusion rates, GAC is the favoured material for gas and vapour adsorption. GAC is widely employed in many different applications, such as fluid system component separation, deodorization, and water treatment. Because of its bigger particle size, which enables improved flow characteristics and a longer contact time with the adsorbate, it is appropriate for applications requiring effective and continuous adsorption of pollutants.

**Extruded Activated Carbon (EAC):** Activated carbon that has been shaped into a cylindrical shape and is typically between 0.8 and 4.5 mm in diameter is known as extruded or pellet activated carbon (AC). The low pressure drop properties that these pellets exhibit when gas or air travels through them are well-known. Their low dust content and exceptional mechanical strength further make them ideal for applications involving the filtration of gases and air. In sectors where effective air and gas treatment is crucial, activated carbon that has been pelletized or extruded is commonly utilised. Its sturdy construction and cylindrical shape guarantee a long service life as well as dependable performance in eliminating odours and impurities from petrol and air streams. In situations where little airflow resistance and regular flow rates are required, this kind of activated carbon is recommended.

**Impregnated Activated Carbon (IAC):** Porous materials known as impregnated activated carbons have been treated with cations such as Al, Mn, Zn, Fe, Li, and Ca, as well as inorganic elements like



iodine or silver. These processes improve their capacity for adsorption and add particular features for a range of uses. For example, activated carbon loaded with silver is highly prized for its antibacterial and antiseptic qualities. It is widely utilised in ground water filtration systems to efficiently eliminate impurities and inhibit the growth of microorganisms.

Impregnated activated carbons are essential for cleaning flue gases in coal-fired power plants because they absorb contaminants and enhance air quality. In a same vein, they are used to control air pollution and maintain artefacts in cultural heritage locations such as museums and galleries. By modifying their chemical characteristics to target and eliminate particular pollutants or pathogens, activated carbons are made to be adaptable solutions for both industrial and environmental applications through the impregnation process.

**Polymers Coated Activated Carbon (PCAC):** Biocompatible polymers can be used to cover activated carbons, leaving behind a smooth, permeable surface that maintains the pore structure of the carbon. The hemoperfusion applications are a great fit for this polymer-coated activated carbon (PCAC). Toxic chemicals are effectively removed from the bloodstream using hemoperfusion, which involves huge quantities of blood passing through or over a bed of granular activated carbon (GAC) or PCAC. The method uses activated carbon's adsorptive qualities to draw in and hold onto dangerous substances, cleaning the blood as it passes through the system. PCAC guarantees effective toxin adsorption while remaining compatible with physiological conditions thanks to its improved biocompatibility and pore accessibility. This makes it a useful tool in medical treatments where blood cleansing is required quickly and efficiently, like in poisoning or renal failure instances.

All things considered, the application of polymer-coated activated carbons in hemoperfusion serves as an example of their vital significance in medical treatments meant to enhance patient outcomes and blood purification.

**Activated Carbon Cloth (ACC):** Activated carbon can be found in many different forms, such as fibres and fabrics, and is used for a wide range of specialised applications in many industries. For improved chemical protection, the military, for example, uses activated carbon cloth (ACC) in gloves and socks as well as protective clothes intended for nuclear, biological, and chemical (NBC) defence. Wound dressings containing activated carbon are used in medical applications to promote wound healing and guard against infection. It is also used in water purification systems to eliminate impurities and in protective masks to filter airborne toxins. Activated carbon is essential for the preservation of historical artefacts since it stops tarnish and degeneration, which goes beyond healthcare and defence. In addition, it is used in gas sensors and electrodes for a variety of technological applications, as well as in industrial settings for oil mist filtering in compressors. Because of its unique adsorptive qualities, activated carbon is widely used in a variety of fields, greatly improving environmental sustainability, safety, and human health.

**Biochar Activated Charcoal (BAC):** The newest member of the activated carbon family, biochar, is made using a unique pyrolysis process that is renowned for producing very little carbon emissions. Depending on the temperature range utilised, this carbonisation process effectively turns raw materials into biochar in about one hour. It is possible to optimise the pyrolysis process to produce biochar in addition to energy that can be used to run electrical turbines or make biofuels. Both methods produce low-activity biochar with a

high ash concentration that can be used in a variety of industrial and environmental applications. [40]

### **Why Use Activated Charcoal In Skin Care?**

Because of its strong adsorption abilities, activated charcoal has several advantages for the skin, which makes it a useful component in skincare products:

**1. Absorbs Impurities:** Toxins, chemicals, and other impurities are efficiently captured by activated charcoal, which aids in the cleansing and detoxification of the skin.

**2. Clears Clogged Pores:** By removing debris, oil, and other clogged substances from the pores, it lessens the likelihood of acne and blackheads.

**3. Balances Oily Skin:** Activated charcoal helps to balance oily skin and prevent acne outbreaks by eliminating excess oil from the skin.

**4. Calms Skin Irritation:** Its soothing qualities can ease skin irritation and inflammation, offering treatment from psoriasis and eczema.

**5. Enhances Skin Clarity:** By encouraging a more even skin tone and eliminating dead skin cells, regular use can result in clearer, smoother skin. Because of these advantages, activated charcoal is a common ingredient in skincare products that are meant to deeply cleanse and purify the skin.

**1. Removes Impurities:** Activated charcoal is a potent deep cleaning agent that works especially well at eliminating toxins from the skin's underneath layers. If you use different skincare or makeup products on a regular basis, small particles can build up in your pores over time and cause blemishes like blackheads, pimples, or general dirt accumulation. It is quite advantageous to include a face scrub or cleanser with activated charcoal in your skincare routine to counteract these effects. It offers a complete cleaning that penetrates deeply into the pores, guaranteeing a more efficient elimination of pollutants. To prevent over-exfoliation, it is recommended that those with dry or sensitive skin apply a charcoal scrub once a week as a treatment. On the other hand, people

with oily skin may find it helpful to use a charcoal face wash more frequently—daily even—to control oil production and preserve a more refined complexion. Activated charcoal successfully targets particular skincare needs while promoting general skin health thanks to this customised approach.

**2. Cleanse Excess Oil:** People with oily skin especially like activated charcoal because of its amazing ability to absorb oil. Activated charcoal enters pores deeply to absorb excess oil, whereas traditional face washes just efficiently clean the surface. The large interior surface area of activated charcoal provides it with this absorbing capacity. Particles of activated charcoal seem like microscopic sponges when viewed under a microscope. These particles function well within the pores of a face wash or scrub, efficiently eliminating pollutants and oil. By deeply cleaning ingrained oils and avoiding pore constriction, activated charcoal helps people with oily skin retain a brighter complexion and control oil production. For oily skin types, its specific action guarantees that activated charcoal not only purifies but also encourages a more balanced and healthy appearance.

**3. Decrease Blackheads:** The combination of debris, product residues, and sebum—our bodies' natural oil—clog pores or tiny hair follicles, which is why activated charcoal skincare products work so well to treat blackheads. Those who have dealt with blackheads know how frustrating it can be to keep trying to remove or clean them out. Once removed, they frequently reappear, giving the appearance of a congested or harsh face. Activated charcoal works by thoroughly cleaning the accumulation that causes blackheads. In addition to its purifying properties, activated charcoal can be used as a prophylactic to stop the development of blackheads before they get worse. Over time, activated charcoal promotes a smoother and clearer facial complexion by keeping pores clean





and cleansing them. This helps to avoid future buildup of impurities.

**4. Soothe Acne-Prone Skin:** Products for the face that contain activated charcoal are well known for their capacity to relieve acne-prone skin. Although everyone will experience acne at some point, some skin types are more prone to breakouts more frequently than others, making it difficult to find long-term remedies. Pore inflammation, which is the root cause of acne, is frequently brought on by a buildup of bacteria, dead skin cells, or irritants. Although total control over acne isn't always achievable, keeping your face clear of bacteria is essential for controlling flare-ups. Because of its well-known antibacterial qualities, activated charcoal is a useful tool for acne sufferers to keep their skin in ideal condition. Using a facial cleanser with activated charcoal aids in preventing negative reactions brought on by bacteria and pore-clogging oils. Activated charcoal products help to promote clearer, healthier skin over time by both treating current acne and preventing new breakouts.

#### **5. Skin Exfoliation:**

One of the best parts of any skincare regimen is feeling your face feel clean after exfoliating. It is a genuinely satisfying feeling, especially after applying a scrub enhanced with activated charcoal's many advantages. Activated charcoal penetrates deeply into pores during exfoliation to improve cleansing. A mild activated charcoal scrub efficiently removes deeply ingrained filth while absorbing tiny molecules that traditional scrubs might miss, in contrast to strong chemicals or abrasive textures that only slightly touch the skin's surface. Its unique dark colour makes it easier to see which areas need more cleaning, which makes the procedure more satisfying. When the scrub is rinsed off, the face looks visibly brighter, ready and renewed for further skincare indulgence.

There are several obvious advantages that activated charcoal provides for the skin:

1. Preserves natural oils while gently exfoliating.
2. Removes pollutants from pores by deeply cleaning them.
3. Calms skin prone to acne.
4. Removes blackheads effectively.
5. Removes different contaminants from the skin.
6. Has purifying and detoxifying properties. Reduces the size of pores.
8. Firms and tightens the skin.
9. Demonstrates antifungal and antibacterial qualities.
10. May help with bug bite treatment.

All of these advantages help to produce skin that is clearer, healthier, and more youthful.

#### **How Often Should You Use Charcoal Skincare Products?**

Regular usage of activated charcoal is generally safe, depending on your skincare product; nevertheless, moderation is crucial when using harsher substances. For example, only use face scrubs a few times a week; instead, wash and remove makeup with a mild cleanser every day. It is recommended to use charcoal face masks less frequently, ideally once or twice a week, especially those that contain clay. Use a clay charcoal mask no more than once per one to two weeks if you have dry skin to prevent over-drying out your skin.

#### **Is Activated Charcoal Helpful for Psoriasis Symptoms:**

Is topical activated charcoal effective in treating psoriasis symptoms on the skin and scalp? Some members of My Psoriasis Team claim that the outcomes have been encouraging. "Dove charcoal body wash helps my scales," a participant said. Another person talked about their experience: "I started using a charcoal face mask kit I got for Christmas two months ago when my psoriasis expanded to a little portion of my face. It seems to help with the symptoms to some extent, as long as



I take it once a week or more. An additional participant said, "A charcoal soap body bar-I'm telling you, it works," in response to a question concerning goods that might offer long-term comfort. I use it for at least every other day. It doesn't catch fire. It relieves psoriasis symptoms. It's crucial to remember, nevertheless, that no scientific study has supported the benefits of utilising activated charcoal to treat psoriasis symptoms. Although a lot of cosmetic businesses say that using activated charcoal helps remove dead skin cells, exfoliate the skin, and prevent ageing, none of these claims have been verified by science. Individual experiences are the only basis for the benefits of activated charcoal for psoriasis plaques or scalp psoriasis.[41]

#### **How to use activated charcoal in skin care?**

People can sample a range of goods that include activated charcoal, such as:

Facial wipes

Exfoliants

Cleansing lotions and gels

Face masks

Face scrubs

Moisturisers

Toners

Whether a product is to be used everyday or once a week depends on the particulars of that product and how much activated charcoal it contains. Users are free to keep going till they see improvements in their skin.

In addition, powdered activated charcoal is available for purchase for use in DIY face scrubs and masks. Online recipes for these frequently call for additional components like:

Aloe vera

Rosewater

Coconut oil [42]

#### **CONCLUSION:**

In Conclusion the finding of this review demonstrates that the potential of charcoal in treatment of various skin condition like psoriasis.

These reviews prove that the activated charcoal that has been beneficial to human race due to its abstorptive properties from these review persons is to be despite in mind that it is chemical compound having tendency to treat various conditions.

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**HOW TO CITE:** Bhavana Daund\*, Swati Desale, Jyotiram Nannavare, Deepak Somavanshi, Riya Navale, Activated charcoal: Exploring potential against Psoriasis, *Int. J. of Pharm. Sci.*, 2024, Vol 2, Issue 7, 976-987. <https://doi.org/10.5281/zenodo.12739421>

