the Benefits of charcoal

ALSO IN THIS ISSUE: Canada Red Cross Used HIV Blood

Charcoal is an amazing substance. It adsorbs more poisons than any other substance known to mankind. It can adsorb lead acetate, strychnine, DDT, many drugs (including cocaine, iodine, penicillin, aspirin, phenobarbital), and inorganic substances (chlorine, lead, and mercury).

It can adsorb thousands of times its own weight in gases, heavy metals, poisons, and other chemicals; thus it renders them ineffective and harmless.

It can adsorb intestinal gas and deodorizes foulsmelling gases of various kinds.

Charcoal can do these various things because of its ability to attract other substances to its surface and hold them there. This is called "adsorption" (not absorption). Charcoal can adsorb thousands of times its own weight in harmful substances. One teaspoonful of it has a surface area of more than 10,000 square feet.

The British medical journal, *Lancet*, discusses the amazing ability of the human skin to allow transfer of liquids, gases, and even micro-particles through its permeable membrane and pores, by the application of moist, activated charcoal compresses and poultices which actually draw bacteria and poisons through the skin and into the poultice or compress! The article describes the use of charcoal compresses to speed the healing of wounds and eliminate their odors. But the poultices must be kept moist and warm for this healing process to occur (59).

Ancient Egyptian doctors, as well as Hippocrates (the Greek physician), recommended the use of charcoal for medicinal purposes. North American Indians used it for gas pains and skin infections. It eases inflammation and bruises.

A 1981 research study found that activated charcoal reduces the amount of gas produced by eating beans and other gas-forming foods. It adsorbs the excess gas, along with the bacteria which form the gas (57).

Activated charcoal helps eliminate bad breath, because it cleanses both the mouth and the digestive tract (38). It also helps to purify the blood (10, 38).

It relieves symptoms of nervous diarrhea, traveler's diarrhea (turista), spastic colon, indigestion, and peptic ulcers. For such problems, take between $1-1\frac{1}{2}$ tablespoons of powdered charcoal up to 3 times a day. Because food will reduce its effectiveness, take it between meals. Swirl the charcoal in a glass of water and then drink it down; or mix it with olive oil and spoon it into your mouth. (38, 47, 57, 58).

Charcoal was placed in gas masks during World

War I; and it effectively counteracted poison gas.

Bad odors, caused by skin ulcers, have been eliminated by placing charcoal-filled cloth over plastic casts. It has been used externally to effectively adsorb wound secretions, bacteria, and toxins. And, in poultices and packs, it treats infections of the face, eyelids, skin, or extremities. It is one of the best substances in poultices for mushroom poisoning, insect stings, brown recluse spider bites, black widow bites, and various types of snake bites.

It is used in water purification, air purification, and for removing undesirable odors and impurities in food.

Charcoal is the most-used remedy when many different types of poisons may have been swallowed. It is also used for diarrhea and indigestion.

It is used for jaundice of the newborn, poison oak and ivy reactions, and many other illnesses.

All research studies show charcoal to be harmless when it is accidently inhaled, swallowed, or in contact with the skin. (But if enough is swallowed, it can cause a mild constipation.) No allergies to it have been reported (10, 38). But it is best not to take charcoal longer than 12 weeks without stopping. Do not take it regularly for long periods of time.

Charcoal from burned toast should never be used; since substances are present which are carcinogenic. Do not eat burned food. Charcoal briquettes are especially dangerous, because petro-chemicals have been added to them.

The most effective type of charcoal is the *activated* form. This process renders it 2 to 3 times as effective as regular charcoal. First, the charcoal is ground very fine; and then it is placed in a steam chamber. This opens up the charcoal and exposes more of its surfaces, so it can adsorb much more.

Modern medical science uses *Activated Charcoal USP*, a pure, naturally produced wood charcoal carbon that has no carcinogenic properties.

It must be stored in a tightly sealed container, because it readily adsorbs impurities from the atmosphere. (Leaving the top off a container of charcoal will partially purify the room it is in, to the degree that the air in the room comes in contact with the charcoal.)

Simply place some in water, stir, and swallow. Or apply it to the skin's surface. It is odorless and tasteless. Powdered, activated charcoal achieves maximum adsorption within a minute or so after absorption.

Charcoal can also be placed in empty gelatin capsules and swallowed. (Gelatin is usually processed

2 Waymarks

from animals.) But they will act more slowly than swallowing the powder mixed with water. Charcoal can also be mixed with a little fruit juice before being swallowed; but, of course, it will adsorb that also. This should not be a problem if the juice is diluted or there is a sufficient amount of charcoal in it.

Charcoal poultices that are kept moist and warm actually draw toxins and poisons out through the skin tissue. This is because skin is a permeable membrane, which permits a variety of liquids and gases to enter and exit the body.

Make the poultice just large enough to cover the injured part. The paste may be made by mixing equal parts of flaxseed meal or corn starch with the activated charcoal, in a bowel, and then adding just enough hot water to make a moderately thick paste. Then spread the paste over a porous cloth, covering over the top with another layer of that same cloth.

Place the poultice over the area to be treated and cover it with a piece of plastic. Cover or wrap with a cloth, to hold it all in place. Secure by a tie, stretch bandage, or pin.

Apply the poultice for 1 or 2 hours. If applied at bedtime, leave it on overnight. Adsorption takes place almost immediately. When it is removed, wash or gently cleanse the area with cool water. Repeat when needed. Poultices should, at the most, be changed every 6-10 hours. Do not put charcoal directly on the broken skin; because it may cause a tatooing effect, blackening the skin for a period of time (21, 23, 24, 38, 50).

Activated charcoal is required by law to be part of the standard equipment on many ambulances, in case poisoning is encountered. It is the first choice of the medical profession (10, 38, 41).

Scientific experiments, conducted over a period of many years, attest to the effectiveness of charcoal as an antidote. In one experiment, 100 times the lethal dose of cobra venom was mixed with charcoal and injected into a laboratory animal. The animal was not harmed (15).

In other experiments, arsenic and strychnine were thoroughly mixed with charcoal and then swallowed by humans under laboratory conditions. The subjects survived, even though the poison dosages were 5 to 10 times the lethal dose (1, 3, 14, 16, 17, 38).

Because medicinal drugs are chemical compounds, they are all poisons to a greater or lesser degree. Because of this, if charcoal is taken with them, or soon afterward, it will tend to adsorb and inactivate the drugs. Therefore, physicians recommend that you only take charcoal two hours before or two hours after taking a medicinal drug.

Physicians primarily use charcoal for eight different purposes. Here they are:

1 - To treat poisonous bites from snakes, spiders, and insects (38).

2 - To treat poisonings in general, as well as over-doses of aspirin, Tylenol, and other drugs (10, 30, 48, 49, 51, 52, 53, 54, 55, 56, 62, 63).

- 3 To treat some forms of dysentery, diarrhea, dyspepsia, and foot-and-mouth disease (20, 22, 24, 25, 26, 27, 28, 37, 38, 48).
- 4 To disinfect and deodorize wounds (48, 50, 58, 59).
- 5 To eliminate toxic by-products that cause anemia in cancer patients (33, 50, 54).
- 6 To filter toxins from the blood in liver and kidney diseases (31, 48, 65).
 - 7 To purify blood in transfusions (48, 60, 65).

Although activated charcoal can be used as an antidote in poisoning from most drugs and chemicals, it will not be effective against the following: cyanide, alcohol, caustic alkalies (such as lye), mineral acids, or boric acids. Strong alkaline and acid poisons need to be treated with solutions with the opposite pH. For example, until the ambulance arrives, calcium powder in water will help offset acids and vinegar will help offset alkalies. Consult a Poison Control Center (phone numbers are in the front of your phone book) or a doctor immediately, for instructions and information in any poisoning emergency (10, 51, 52).

When mixed with water and swallowed to counteract poisoning, charcoal adsorbs the poison or drug, inactivating it. It then carries it inert through the entire length of the digestive tract and out of the body. Charcoal is not absorbed, adsorbed, neutralized, nor metabolized by the body (6, 13, 47, 53).

In a poisoning emergency, if the victim is conscious, first induce vomiting (unless he has swallowed an acid) if it can be done quickly. *Ipecac* is a commonly used emetic. The dosage is $\frac{1}{2}$ oz. for children and 1 oz. for adults. Induced vomiting will bring up about 30% of the poison from the stomach.

Then give the charcoal to help inactivate the remaining 70%. The usual dose is 5-50 grams of charcoal, depending on age and body size. Adults should be given at least 30 grams (about half a cup of lightly packed powder), depending on the amount of poison ingested. Larger doses will be needed if the person has eaten a meal recently. A dose of 200 grams (3½ cups) is not excessive in cases of severe poisoning. The charcoal will reach its maximum rate of adsorption within one minute. The sooner it is given, the more complete will be the adsorption of the poison. Always keep a large jar of activated charcoal in your kitchen! The dose can be repeated every four hours or until charcoal appears in the stool (3, 10, 41, 47, 48, 52, 53, 60, 61).

Never give charcoal, or anything else, to an unconscious person to swallow. Contact a physician or ambulance immediately.

Do not give charcoal before giving an emetic (to get him to vomit), because the charcoal will neutralize

the emetic. Remember that charcoal will not work in cases of poisoning by strong acids or alkalies.

Here is a sampling of over 100 substances which are adsorbed by charcoal:

Acetaminophen / Aconitine / Amitriptyline / hydrochloride / Amphetamine / Antimony / Antipyrine / Arsenic / Aspirin / Atropine / Barbital, Barbiturates / Ben-Gay/Benzodiazepines/Cantharides/Camphor/Chlordane / Chloroquine / Chlorpheniramine / Chlorpromazine / Cocaine / Colchicine / Congesprin / Contact / Dalmane / Darvon / Delphinium / Diazepam / 2-, 4-Dichlorophenoxyacetic acid / Digitalis (Foxglove) / Dilantin / Diphenylhydantoin / Diphenoxylates / Doriden / Doxepin / Elaterin / Elavil / Equanil / Ergotamine / Ethchlorvynol / Gasoline / Glutethimide / Golden chain / Hemlock / Hexachlorophene / Imipramine / Iodine / Ipecac / Isoniazid / Kerosene / Lead acetate / Malathion / Mefenamic acid / Meprobamate / Mercuric chloride / Mercury / Methylene blue / Methyl salicylate / Miltown / Morphine / Multivitamins and minerals / Muscarine / Narcotics / Neguvon / Nicotine / Nortriptyline / Nytol / Opium / Oxazepam / Parathion / Penicillin / Pentazocine / Pentobarbital / Pesticides / Phenobarbital / Phenolphthalein / Phenol / Phenothiazines / Phenylpropanolamine / Placidyl / Potassium permanganate / Primaquine / Propantheline / Propoxyphene / Quinacrine / Quinidine / Quinine / Radioactive substances / Salicylamide / Salicylates / secobarbital / Selenium / Serax / Silver / Sinequan / Sodium Salicylate / Sominex / Stramonium / Strychnine / Sulfonamides / Talwin / Tofranil / Tree tobacco / Yew / Valium / Veratrine / Some silver and antimony salts / Many herbicides (32, 39).

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GANADA RED GROSS USED HIV BLOOD

More than 3,000 people have died since getting tainted blood from the Red Cross in Canada back in the 1980s.

The Red Cross in Canada has pleaded guilty to distributing contaminated blood supplies which infected thousands of Canadians with HIV and hepatitis C.

The organization may have to pay a small fine (C\$5,000, equivalent to U.S.\$4,000); but charges of criminal negligence could be dropped as part of a deal with prosecutors.

The blood scandal is widely regarded as one of the worst public health disasters in Canadian history.

More than 1,000 people became infected with HIV and as many as 20,000 others contracted hepatitis C through blood transfusions and blood products in the 1980s. Many of the victims were hemophiliacs.

In 1997, a governmental inquiry was made which strongly criticized the Canadian Red Cross, which had run the country's blood supply system for decades.

As a result, the Red Cross was stripped of this role and was replaced by a government agency which is now in charge of blood collection and distribution throughout the nation.

The blood scandal also led to several lawsuits against the Red Cross.

After years of legal wrangling, the charity has decided to plead guilty to distributing the contaminated blood.

It said it would donate C\$1.5 million (equivalent to U.S.\$1.2 million) toward medical research and educational scholarships.

Federal prosecutor John Ayre said the fine was adequate, in view of the Red Cross' status as a humanitarian organization, noting it no longer engages in blood collection or distribution.

The Canadian Red Cross has already paid victims \$55 million in a separate fund.

Mike McCarthy, spokesman for the Canadian Hemophilia Society (CHS), said: "How can anyone be satisfied? Thousands of people lost their lives. "Hundreds and hundreds of people are living with these fatal viruses today.

"There's no great outcome here for anybody that's gone through the tainted-blood scandal."

John Plater, Ontario president of the CHS, said: "Finally, the Red Cross has accepted responsibility for their part in the tainted blood tragedy.

"It's the least they can do for the sake of victims who have waited two decades for someone to be held accountable."

Dr. Pierre Duplessis, the secretary general of the Red Cross, made this statement:

"The Canadian Red Cross Society is deeply sorry for the injury and death . . for the suffering caused to families and loved ones of those who were harmed." In a public apology demanded by survivors of the victims and played on videotape in the court, Duplessis said the charity accepted responsibility for "having distributed harmful products for those that rely on us for their health."

In exchange for the guilty plea and public apology, prosecutors dropped criminal charges against the charity, including criminal negligence.

The Canada Red Cross did not start testing donated blood for HIV until 1985. By that time, it had already received word of hundreds of people who had contracted HIV from tainted blood.

In 2001, the following official statement was issued:

"The Canadian Red Cross Society and a number of other individuals and entities on October 5, 2001, implemented a Plan creating an HIV Fund. The HIV Fund is intended to make payments to persons directly infected with HIV-AIDS from blood or blood products received in Canada, or infected indirectly from such persons, and/or the family members of persons directly infected.

"No new lawsuits about tainted blood will be allowed against the Canadian Red Cross Society. Instead, persons with claims for damages due to HIV-AIDS from tainted blood may apply to the Referee of the HIV Fund."—From the official HIV Fund Statement.