

Charcoal, the Incredible Healer

Using an 'activated' form of this natural product, doctors are treating everything from gas and intestinal ailments to serious infections.

The year is 1813, and the French chemist Claude Bertrand is in his laboratory, a vial in his hand. It contains a teaspoonful of arsenic, enough to kill 150 men. He lifts it to his lips, swallows it-and goes about his business as if nothing had happened. And nothing had.

Bertrand wasn't committing suicide, he was conducting an experiment. One he lived to tell about. He survived because the arsenic was mixed with charcoal, a substance that acted like a sponge in his stomach and sucked up the arsenic before it reached his blood. A century later, charcoal filters in gas masks protected World War I soldiers from poison gas. And today, charcoal-made more effective by a process called "activation"-is used in submarines and space capsules to purify the air. It's also used in emergency rooms to treat victims of poisoning or drug overdose.

But activated charcoal is more than a lifesaving hero. It also puts in time on humbler jobs. Like relieving hiccups. Soothing a hangover. And solving a problem that can turn your face red and your friends against you—gas.

A study conducted at the Loma Linda University School of Medicine in California shows that activated charcoal cuts down the amount of gas formed after eating beans and other "gas-producing" foods.

For the study, Raymond Hall, Ph.D., associate professor of physiology at Loma Linda, selected 30 men and women, ages 18 to 40, who were in good health and had never had digestive problems.

"We fed them a bland, non-gas-producing meal and measured intestinal gas generated over an eight-hour period," Dr. Hall told us. "The next day we fed them a meal high in gas-producing foods; beans, whole wheat toast, peaches and fruit juice. For this meal, however, we divided them into two groups and gave one group activated charcoal capsules and the other placebos (identical looking pills with nothing of value)."

The group receiving placebos, says Dr. Hall, produced large amounts of gas. But the group receiving activated charcoal produced much less-no more, in fact, than after the bland meal. And when the two groups ate another gassy meal, this time with the placebo group receiving the activated charcoal and vice versa, the results repeated themselves: placebo group, lots of gas; activated charcoal group, gas levels same as the bland meal.

"Activated charcoal reduced the amount of gas either by absorbing the gas itself or absorbing the intestinal bacteria that produce the gas," explains Dr. Hall.

But no matter how it works, Dr. Hall believes activated charcoal is "a good cure for gas. If a person has a gas problem, it's well worth trying."

For best results, Dr. Hall suggests taking activated charcoal shortly after a meal. But, he emphasizes, activated charcoal won't quickly clear up a case of gas that's already developed. "It

takes several hours for activated charcoal to reach the lower intestinal tract where the gas is being produced," he says.

GOOD FOR 'TURISTA' (Or Stomach Flu)

Since activated charcoal stifles bacteria in the intestines, and absorbs irritating toxins, Dr. Hall believes it may also cure mild dysentery; better known as "turista."

Sharing that opinion is Marjorie Baldwin, M.D., a doctor at the Wildwood Sanitarium and Hospital in Wildwood, Georgia. "Charcoal is an excellent remedy for traveler's diarrhea," she told us.

But Dr. Baldwin uses activated charcoal for more than just gas and diarrhea. "Any inflammation; an area that is red, painful, swollen and hot-responds to charcoal. We apply charcoal as a poultice if the inflammation is on the outside of the body or give it by mouth if the inflammation is in the digestive tract."

Dr. Baldwin describes the case of a juvenile diabetic whose foot was saved from amputation by charcoal.

"This young lady had caught pneumonia and her feet were soaked in hot water. Because she was diabetic, her feet were damaged and she developed severe infections. Antibiotics didn't clear them up. The doctors suggested one foot be amputated, but she refused and came to us for treatment. We put that foot in a plastic bag filled with a mixture of charcoal and water that was about the consistency of cream. The foot was kept in the bag round the clock, and the mixture was changed four times a day. She walked out of our clinic—on both feet."

Doctors in England have also used charcoal to treat infections. A letter to *Lancet* (September 13, 1980), one of the world's most prestigious medical journals, describes the use of charcoal-saturated cloth for wounds that were infected, discharging and had a bad odor.

The doctors applied a single layer of the charcoal cloth to the wounds of 26 patients with chronic leg ulcers and 13 patients with unhealed surgical incisions. "A noticeable reduction in wound odor occurred in 24 ulcer patients and 13 surgical wound patients," the doctors write. And they found the charcoal cloth reduced odor longer than "standard dressing materials."

The doctors note that charcoal may have reduced the odor by absorbing bacteria. It's a possible explanation since, says Dr. Baldwin, "charcoal is the most powerful absorbent known to man.

"Charcoal absorbs up to thousands of times its own weight," she explains. "It has enormous surface area—like a football field-sized piece of tissue paper rolled up into a tiny ball—and the more surface area charcoal has, the more absorbent it is." (One pound of activated charcoal has a surface area equal to 125 acres!)

EFFECTIVE FIRST AID

And charcoal absorbs poisons. So effectively, that it's an ingredient in the "universal antidote," a concoction designed to take on almost any poison known to man. But even by itself, charcoal tackles a wide array of poisons—from hemlock to DDT. That versatility prompted a pair of Army

doctors, writing in the medical journal *Pediatrics* (September, 1974), to recommend that every family keep activated charcoal on hand to deal with poisoning emergencies.

"It is immediately effective upon ingestion and can be given safely by nonprofessionals," they write. "Hence, its inclusion in household first aid supplies is warranted." (To neutralize poison, mix about one-quarter to one-half cup powdered charcoal with a cup of water, stir or shake the mixture, and have the victim drink it within the first 30 minutes after the poisoning. And, of course, go to a doctor, poison center or emergency room.)

And if you pick your "poison" one too many times, charcoal may be the best antidote for a hangover.

Hangovers are caused by substances called congeners and activated charcoal absorbs them. In an experiment conducted at Columbia University College of Pharmaceutical Sciences in New York City, researchers found that in test-tube conditions similar to a person's stomach, activated charcoal absorbed 93 percent of one congener and 82 percent of another.

Charcoal may also solve another problem-hiccups.

"I have treated my cases of hiccups with charcoal tablets," wrote a doctor to the *British Medical Journal* (September 10, 1977), "and have instructed patients to continue chewing them at least once an hour and in extreme cases continuously. In most cases I have met with success on this simple regimen."

On a more sober note, doctors use activated charcoal to treat patients with kidney failure. Those patients often have high levels of blood fats (arteriosclerosis is the leading cause of death in patients on long-term hemodialysis, the treatment for kidney patients that mechanically cleans their blood).

And they often suffer from severe itching.

If you have high cholesterol, or an itch that doesn't quit, should you take activated charcoal regularly?

No.

"I wouldn't recommend activated charcoal as a daily supplement," says Dr. Baldwin.

Charcoal, she explains, "doesn't know what's naughty and what's not," and absorbs vitamins along with any bad substances. And although no one who has taken activated charcoal has been known to develop a vitamin deficiency -or any other health problem from the charcoal - Dr. Baldwin believes it's best used selectively.

"Charcoal takes toxins out of the system so the body can get well," she says. "For gas, diarrhea, infections and poisonings-charcoal works."

NOTE:

Remember also, if you are on medications, Charcoal can neutralize many drugs and this could be a problem for those who are dependent on medications.