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FINDING A SOLUTION TO THE ENERGY PROBLEM

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You may think that this paper is a little late, since the height of public concern about the energy problem seems to have been reached sometime in 1980. Since then a new administration has seen fit to deemphasize energy as a national concern, and the most sensitive of all measures of fuel anxiety--the price of gasoline at the pump--has gone down.

A Kentucky New Era editorial commented recently that "the energy crisis has faded," and quoted the federal Department of Energy secretary as saying that "energy issues are . . . more political problems than ingredients of a crisis."

In a speech last December, Ashland Oil Company Board Chairman John R. Hall stated, "Today there is too much oil, too much coal, too much natural gas. There appears to be no need for a synthetic fuels industry. OPEC is in disarray and its members are faced with serious difficulty in defending their crude oil prices."

So much for a problem once described by a former president as "the moral equivalent of war," whatever that means. How easily the government reacts to crises by claiming to have been warning us of them all along. How quickly both government and the energy companies--oil, gas, and electricity--can mobilize their public relations departments to propound the idea that it was not they who had encouraged the use of their products by the American people but the people themselves who had insisted on more and more energy to run more and more gadgets.

Consumption and imports of foreign oil have decreased a few percentage points in recent years, and there have been some highly publicized experiments

on energy producing projects, most of them costly and government subsidized, but energy development is now a low priority item. Not until another serious crisis occurs (and it will, of course) will the government tell us that it has been working on the problem all along, and the energy companies will again try to tell us that they have not been advertising to increase consumption, and, therefore, sales. Once again the consumer will be made to feel guilty, because he has been greedy, selfish, and lazy. But the fact is that we do have an energy problem, albeit not a crisis at the moment, and it behooves us, the common people, to seek a solution.

The immodest aim, therefore, of this paper is to propose a simple, yet workable solution to the problem of limited energy resources. You may, with good reason, doubt my qualifications in this field, but to date no one else has proposed anything that appears likely to become a workable solution. The basic idea came to me, not by means of the scientific method, but through revelation (or inspiration), the way most great ideas--from the sermon on the mount to Einstein's theory of relativity--have come to their proponents.

Indeed, it came early one Sunday morning while I was running along Cox Mill Road. (Now I know that runners are reputed to experience "psychological highs" on occasion--something akin to the raptures suffered by deep sea divers, so you may be tempted to dismiss these thoughts as semi-delusions or hypomanic flights of ideas.) But don't discount my proposal simply because it appeared as a sudden insight.

Great ideas often come during periods of partial suspension of intellectual control. Witness the precepts of Islam, many of which were formulated by Mohammed during fits of epilepsy. Or Samuel Taylor Coleridge's claim that he composed two or three hundred lines of the poem "Kubla Khan" in a dream. And, of course, our own "Sleeping Prophet," Edgar Cayce, claimed to absorb

information from books while dozing. So I ask simply that you judge the solution on its own merit.

Other solutions to the energy problem posed thus far fall into two major categories: (1) those based on conservation of presently available resources and (2) those based on the development of alternative sources. Both approaches pose problems. Conservation methods require that we reduce our goals and aspirations, suggesting that we adopt a hold-the-line-and-learn-to-live-with-less-until-what-we-have-finally-runs-out attitude. Such an approach seems inconsistent with our American heritage of success through innovation and creativity.

Alternative energy solutions are more attractive, but there is the fear that they present challenges beyond our technical capacity. Some would suggest an all-out, Herculean effort akin to the Manhattan Project of the 1940's or the man-on-the-moon achievement of the 1960's, but though the liquefaction of coal, development of solar power, use of alcohol for engine fuel, extraction of heat from the earth's core, and the building of more nuclear reactors may have some support, none have really caught the imagination of the people or of the government, and it is possible that such effort might waste precious energy and lead to an earlier demise of western civilization.

But I have kept you in suspense long enough. It is time to tell you that we have, in this country, within our own borders, a plentiful energy source, relatively untapped, and readily accessible. It could be used to replace enough of the other energy fuels that we can foresee a world in which the demand for oil could be supplied by current resources and probably by our own domestic reserves.

Gentlemen, the alternative energy source that is so abundant in America is human fat. The burning of human fat takes place as the body expends energy.

Thus, any activity performed by the body, whether a voluntary activity such as walking, or an autonomic activity such as maintaining body temperature, involves a biochemical process whereby the body burns the energy that it obtains from fat, protein, and that most readily accessible supplier of energy, carbohydrates. If the carbohydrate intake is less than the body requires for activity, then fat is converted into carbohydrate and burned up, causing weight reduction (and bad breath, I might add). If, however, the carbohydrate intake is more than the body requires, then the excess is stored as fat. (Until now this has been considered a problem, but with the acceptance of my theory, the storage of human fat will be looked upon as a national strength, much as the Arabs view their rich oil deposits.)

We measure the energy ingested in food and expended by activity in terms of calories. The calorie is simply a measure of body heat or energy. Specifically, one calorie is the quantity of heat required to raise the temperature of one gram of water from 15 to 16 degrees, centigrade. The number of calories necessary for a given activity can be calculated with fair accuracy. When one runs, for example, he burns about 100 to 120 calories per mile. By the same token, the number of calories put into the body by certain foods can be measured. An average size apple has about 70 calories, while a slice of apple pie a la mode has about 600. If a person takes in 4,000 calories per day, while expending energy that requires only 3,500, he should gain about one pound per week. If, however, he takes in only 3,000 calories and expends 3,500 in activity, he should lose about one pound per week. These figures vary, of course, with the weight of a person, as well as other factors.

It is well known that being overweight is a common condition of Americans. Lest you underestimate the possibilities of this vast energy supply, let me inform you that there are, in the United States today, at least 250 million and

probably as much as one billion pounds of excess fat distributed variously on a large number of human bodies that make up the population. No less a prestigious publication than the National Enquirer quoted a university nutrition professor recently to the effect that the excess fat in this country is over 1.4 billion pounds. A conservative estimate of the number of overweight people in America is about 80 million, and the number may well be as high as 110 million, or some 50 percent of the population.

There are different theories as to why so much fat has accumulated in the American populace. Many like to point to glandular difficulties, such as an underactive thyroid which can lead to obesity or a pancreas which produces too much insulin (causing hypoglycemia) or too little insulin (causing diabetes). Difficulties with the pituitary or the adrenals may be factors in weight gain, but most physicians agree that the overall incidence of metabolic disorders as a cause of obesity is relatively low. Most of us are overweight, because we consume more food energy than we expend.

Certainly psychological factors play a role. People eat when they are lonely, and when anxious they may regress to infantile behaviors, putting something in their mouths the way they did as infants. And socioeconomic factors are important. Our sedentary work and recreation patterns contribute, and it is notable that some of the most fattening foods are cheaper and, therefore, the staple items for many people. Virtually all cultures seem to have staple food items that are high in carbohydrate but less expensive--consider the rice of the orient, the pastas of Italy, breads of France, potatoes of Ireland, and the "Big Mac" of modern America. All of these foods are within the reach of the common people, but all can be quite fattening. Try living on a diet rich in lean meat, fish, and fresh fruits and vegetables, and you'll find it much more expensive.

The sociology of American eating habits can be quite interesting. Consider the cliché, "real men don't eat quiche," or the oft quoted "I'm a meat and potatoes man." Such phrases suggest the extent to which our taste buds may be subjected to cultural conditioning, much as the salivary glands of Pavlov's dogs were conditioned to respond to bells and whistles.

Harvard medical school professor George Blackburn was quoted as saying that, "Food is the cheapest recreation of all in this country." And where does one find the youth of Hopkinsville swarming like droves of ants around a lump of sugar on Friday and Saturday nights? In and around the various fast food establishments that have spent half their overhead costs on food preparation and the other half on making their eating sites resemble stock car race tracks to accommodate the sedentary locomotion typical of most teenagers today. The drive-in restaurant may well symbolize America's propensity for combining fattening food with a minimum of physical activity.

But regardless of the cause of obesity, the possible results are ominous. It is said to lead to hypertension, arteriosclerosis, angina pectoris, myocardial infarction, stroke, fatty heart, fatty liver, fatty kidneys, gall stones, diabetes, varicose veins, hemorrhoids, degenerative arthritis of the hip and knee, and many other disorders. It is also psychologically damaging. While not a factor in the incidence of mental illness, being overweight is associated with unhappiness and a poor self-image.

In spite of these consequences and the warnings of physicians, many people will remain overweight. My plan would enable us to turn this national obesity problem into an asset. No longer would fat people be unpopular, they would be looked upon as natural resources like rich mineral deposits. The guilt about overeating would be eliminated, as the overweight would be seen as sacrificing health and longevity for the national good.

Human fat will take its place alongside nuclear, solar, and other alternative fuels, when it comes to be used to replace large amounts of the scarce fuels, and there are many ways by which this can be accomplished.

Let us say, for example, that 15,000 persons in Christian County drive to work each day, and that they travel an average of three miles each. That's six miles per day apiece, or 90,000 miles. If they average 15 miles to the gallon of gasoline, that's 6,000 gallons per day. If all those people rode bicycles for those six miles, 6,000 gallons of gasoline per day would be saved. Though energy is required to travel by bicycle, it runs on fat or calorie power, rather than gasoline, and it burns approximately 45 calories per mile when ridden at a speed of nine miles per hour.

Thus, with 90,000 miles of bicycling per day, some 4,000,000 calories per day would be traded for 6,000 gallons of gasoline, the processing of which would have required some 300 barrels of crude oil. If the entire nation accomplished the same degree of saving, we could reduce the intake of foreign crude oil by perhaps some 900,000 barrels per day.

Of course, the riders of the bicycles would have to take in that many calories collectively during each day or they would, as a group, begin to lose fat. (As side effects, they would feel better, look better, and occasionally, during long rides, they might get creative ideas like the one that I am explaining to you right now.) We could, however, prevent the dissipation of our natural resource by encouraging everyone to eat all the high calorie food they wanted.

Think of the value to child development and education. Instead of bussing every child who lives more than one mile from his assigned school, we could bus only those who lived as far away as ten miles. Those who lived within two or three miles could walk, and the rest could ride bicycles, scooters, or other

fat-powered transportation. The children would no longer arrive at school half asleep, having arisen 15 minutes before bus time and eaten only a sweet roll before running out to the bus stop. Having to walk or pedal to school, they would soon learn to rise early and demand a breakfast of bacon and eggs. They would experience the exhilaration of making their way to school by means of aerobic exercises, expanding their lung capacity and improving blood circulation and heart function at the same time. Their improved general health would, in time, reduce health care costs. When the children arrived at school, they would be wide awake and ready to learn. Physical education could be discontinued, since the children would be getting plenty of exercise. The schools could build fewer gymnasiums and use the money saved to add books to the library or to cut taxes. The benefits are so enormous and the ramifications so broad that we could go on and on.

By turning the thermostats down to 55 degrees in the wintertime, we would force our bodies to burn up the potential heat that lies within the adipose tissue now resting in great abundance on our overburdened skeletons. Another example of fat substituting for gas or electricity.

A few new orientations would have to be learned. We would have to go back to extolling those feats accomplished by the human body in preference to those that involve the person only as a pilot or driver of a machine. Motorcycling, race and stock car driving, boating, water skiing, and other such pursuits would have to be classified as useless skills, perhaps even made illegal. Running, swimming, and other fat-powered skills would be praised and held up for public approval. Runners, swimmers, cyclists, skaters and horseback riders would be acclaimed as public heroes and would be given the right-of-way on all public roads. To strike a person with a motor driven vehicle would be considered a capital offense.

Golfers would play without carts to ride between strokes, and they would see how beautiful the golf courses are. (Some of the older ones remember them from years past when they used to walk.) Most of them would be healthier, live longer, and get better scores. Others would decide it's not worth the effort and quit the game, thus leaving room on the less crowded links for the more dedicated players.

This proposal is not without problems, of course, and I can anticipate several already.

Safety and health would be a factor in the development of fat power, as with other energy development. OSHA could be asked to develop regulations for inspection of elevators, high rise apartments and theater balconies. This would not reduce the number of accidents, but it would document their causes--the true aim of all government health and safety regulations.

As soon as adipose tissue is recognized as a valuable resource, there will arise the question of how it should be managed. I predict two main points of view. First there will be those who assert that fat belongs to the individual who accumulates it and should be expended as he sees fit and for his own benefit. Indeed, fat without free enterprise is just plain disgusting if not socialistic. (All of these people will be Republicans, of course.) They will argue that unless there is a profit motive, why should a person use up his fat at all? Why even step on a scales and find out he has it, if he can't make a profit on it? The fat person chewed, swallowed, and digested the food that turned to fat without government help, so why should the government tell him how to use it? These are powerful arguments, with much to recommend them!

But a second point of view will run something like this: fat belongs to the body politic, not to a single corpus on which it hangs. The energy it produces is needed by all Americans, and, therefore, it must be shared equally,

regardless of how and where it accumulates. The only way equal benefit can be assured is to have the federal government manage it--through state bureaus, of course, since fat management is not described in the U.S. Constitution as a federal responsibility and must, therefore, be left to direct management on the state level.

This will be called the "liberal" view and its adherents will be Democrats, many of whom voted for George McGovern in 1972. They will call for an affirmative action plan to guarantee equal benefits to thin people who must be added to the other protected minorities. The price of calorie-produced energy would have to be regulated, and it would be necessary for the 1990 census to add "skinnies" or "thins" to the minority groups counted in 1980. Each community would have to have a local fat planning committee, with a fat planner to assist elected officials in keeping up with how much fat there is in each county and how it is being used.

Indeed, I can see the possibility of a future presidential platform based on the redistribution of bodily fat. Arguing that wealthy people have always eaten more rich food and, therefore, had more opportunity to gain weight, the candidate could advocate a program to provide an abundance of high calorie food to the poor--his program might be called something like the New Meal. A party might even see the sense in running a former circus fat man for office, since former actors and football players are usually less than obese.

So there would be problems, but these are fought over the management of other resources, and we can cross that bridge when we come to it (that is, if we have enough energy left to get across a bridge). For now, our task is to recognize the huge benefits that lie within our grasp and learn to make good use of this most plentiful source of energy.

When our descendants look back upon the 1980's and ask how we solved the greatest crisis of our time, let it not be said that we were weighed in the balances and found wanting.

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