

1. Fat? Maybe Body's Too Efficient

By The Boston Globe

Why can some people diet and still put on unwanted flesh while others can eat all they want and still stay thin?

New research offers an explanation for this ancient injustice: Some fat people have a biochemical defect that alters the way they burn up food energy.

The discovery begins to explain why at least some, if not most, overweight people burn up fewer calories as heat and store the extra energy as fat. In a metabolic sense, obese people are more efficient than thin people — they make each calorie count for more.

THE METABOLIC quirk that apparently causes so much anguish for millions of obese Americans was probably a great advantage to our forebears who had to make the most of an uncertain food supply that regularly swung from feast to famine.

In essence, modern-day obese people with the biochemical trait are saving up for a famine that never comes.

The finding, one of the very first to pin down a biochemical basis of obesity, was made by a Boston-based research team at the Beth Israel and New England Deaconess Hospitals, and reported Friday in the *New England Journal of Medicine*.

THE DISCOVERY marks "the first time we have evidence that obese people have a biochemical defect not caused by overeating or excess weight," said Dr. Jeffrey S. Flier of Beth Israel, leader of the research team.

Flier and his colleagues, Australian Mario De Luise and Dr. George L. Blackburn of the Deaconess, say they believe the finding will open new avenues of inquiry into the interaction of brain, behavior and biochemistry that lies behind the stubborn obesity problem.

But they are nowhere near a pill, a special diet or a treatment that would compensate for the biochemical abnormality.

The specific defect is a markedly lower level in obese people of an important enzyme whose role is to maintain the chemical balance between the interior of cells and their external environment.

THIS ENZYME, called sodium-potassium-ATPase, functions as a chemical "pump" to transport sodium and potassium across the membrane of every living cell. For life to be possible, a precise balance of these electrically charged chemicals — low sodium levels, high potassium — must be maintained at all costs inside the chemical factory of each cell.

Apparently many fat people can sustain life while spending far less energy on the continuous business of maintaining sodium-potassium balance.

PHOTO: OCT 31, 1980

COLUMBIA DISPATCH

EDITORIALS

THE NEW ENGLAND JOURNAL OF MEDICINE

Oct. 30, 1980

METABOLIC OBESITY?

FOR the adipose tissues of an animal or a human being to increase, more calories must be ingested and absorbed than are needed to satisfy the organism's metabolic requirements. In normal persons, there is a close coupling between metabolic demands and caloric intake, so that weight normally remains relatively constant in adults. Many reasons for disturbances in regulation of caloric intake are fairly well understood. These causes include damage to the hypothalamic satiety center, certain types of emotional disturbances, socially established patterns of eating, persistent high caloric intake in persons whose needs have lessened as a result of alterations in their level of activity, and a few endocrine diseases, especially hyperadrenocorticism.

Although these classifications suggest a clear recognition of the nature of the disturbance, there are many gaps in our knowledge of the intimate mechanisms involved. For example, although the importance and interplay of the satiety and hunger centers of the hypothalamus are well understood, the factors that activate them are not clear. This deficit in our understanding makes the provocative article by De Luise, Blackburn, and Flier in this issue of the *Journal* especially interesting. They have demonstrated that, like the ob/ob mouse, some obese patients have reduced activity of the sodium pump and therefore have an increased level of sodium in their intracellular fluid. Since the energy requirements of the sodium pump represent a substantial proportion of the total caloric requirement at rest, this finding implies that the obese human being, again like the ob/ob mouse, can gain weight on a caloric intake that would not permit weight gain in normal persons. Of course, this paper represents only a prelude to the necessary studies, since the only human cells that have been studied so far are erythrocytes, whose contribution to the total-body energy requirement is certainly small. But let us assume that further studies show the same difference in the sodium pump in tissues constituting a larger mass, such as muscle, liver, or brain tissue. How should such findings be interpreted?

If a normal person undergoes a change in caloric requirements, the caloric intake is reduced sufficiently to maintain a metabolic balance. This statement is true whether the reduction occurs because of lessened physical activity or because of the development of hypothyroidism. What happens in the case of obese patients? Why do they not also reduce their intake, since their needs are less? To use De Luise's observation to help explain the pathogenesis of obesity, therefore, it seems to me that one must also postulate a defect in the hypothalamic regulatory mechanisms. Perhaps this observation is not important merely because it shows that obese patients are more efficient and therefore can become fat with less caloric intake. Its major importance may lie in the implications that it raises about the mechanisms of appetite control.

In ob/ob mice, the abnormality involves the brain as well as the erythrocytes and other somatic cells. The same situation probably exists in obese human subjects. If so, the flow of energy in the hypothalamus resulting from the activity of the sodium pump would be less than normal. It is known that an increase in body temperature decreases feeding and that a decrease in temperature increases it.^{1,2} Decreased local temperature as a result of reduced energy flow in the hypothalamus might stimulate this increase of food intake. Is it possible that the major effect of reduced activity of the sodium pump is to cause obesity by cooling the hypothalamus?

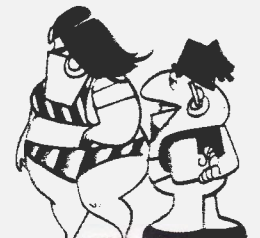
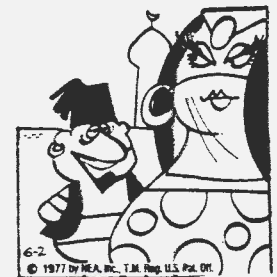
Whatever its importance in physiologic terms, the observation probably has a practical clinical utility. With this difference as a key, it should be possible to sort out the patients with hyperphagia caused by hypothalamic damage, Cushing's syndrome, or mere psychoperversity (if such a condition exists) from those with this metabolic abnormality. This application alone would be a considerable contribution.

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2. Short Ribs



I'M AN AVID WEIGHT-WATCHER!



Frank A. Lee

Fated to Be Fat

THE NEW YORK TIMES, MONDAY, MARCH 2, 1981



There's for insa

Ellen Goodman

For years, this weight-obsessed nation has considered fatness and slimmess matters of willpower. The corpulent are blamed — by others or by guilty conscience — for a disgusting inability to turn down dessert. And the verdict is surely just in some cases. But more and more evidence suggests that many fat people may be in the grip of biochemical forces that are indeed hard to control.

This does not mean they are helpless. It means that losing or maintaining weight, for some, can often seem impossible. It also means that unknown numbers of the obese deserve more sympathy than scorn, and more scientific research into their condition.

Most of us have long known intuitively that chemistry may govern as much as personality. We envy the lean who eat incessantly without gaining an ounce. Just as they deserve no moral credit, many of the fat deserve no condemnation.

The unfairness of life is vividly apparent in the research on weight loss described in the science pages of The Times last week. Experiments suggest that many fat people gain weight after eating only moderately, and have difficulty losing weight even on a stringent diet. They are victims of evolutionary mechanisms for surviving cycles of feast and famine. They store calories as fat when food is plentiful and burn it off slowly when they are starved.

Moreover, some people just burn far fewer calories than others, sitting or working. To compound the injustice, fat people burn fewer calories than muscular people of the same weight; so women, with typically more body fat than men, gain weight more easily.

Some bodies refuse to shrink. People who have overeaten in the past have acquired more fat cells, which shrivel in a diet but wait to swell when the diet's over. Some diets fail because too many enzymes promote fat storage or too few enzymes use up calories. Some people lack a hormone that turns off appetite. These findings are tentative but they indicate that brain and body chemistry may be the key to weight control.

What's a fat person to do? Fad diets seldom work; if they did, there wouldn't be so many of them. New habits of eating and exercise are still the best way to reduce caloric intake and burn up more energy. There is also some intriguing evidence that a morning meal may produce less weight than the same meal in the evening, and that several small meals produce less weight than a single big meal with the same number of calories.

Science may be closing in on the problem. For now, there's no escape from eating less, or much less. But many who truly diet and exercise without losing enough fat ought at least to stop feeling guilty.

THE HARVARD MEDICAL SCHOOL HEALTH LETTER 2/80

FURTHER INSIGHT INTO FAT

In our December 1980 essay on weight control, we state: "There clearly are differences between people in how easily they add or shed pounds, but the ways in which fat and thin people differ from each other are still poorly understood; and just as there is no magic key, there is not, as a rule, any 'medical' secret to weight loss."

Since that essay went to press, dramatic and widely heralded evidence of "differences between people" has been described (in the October 30, 1980, *New England Journal of Medicine*) by Boston researchers. Specifically, they reported that energy use by the red blood cells of 21 severely obese people was 22% less than that observed in the red blood cells of normal controls. The implication of such a finding is clear: some obese persons may burn up calories less vigorously than their thin counterparts. Put another way, obese persons may be more "fuel efficient" than thin people: instead of getting more miles per gallon, however, they end up with more pounds per calorie.

Given the implications of this research (which supports earlier results obtained in animals), it is no wonder that the public press jumped to headline conclusions suggesting that some obese people are "born to be fat." Put in more scientific terms, these findings argue for the concept of "metabolic obesity," the idea that there are basic physiologic differences between obese and non-obese persons. And all of this lends a new credibility to the lament so often heard from the protesting lips of someone overweight: "I really don't eat any more than my thin friends."

Certain words of qualification must be added to these interpretations. The research reported concerns only red blood cells; if this finding is to explain differences in weight gain, the reduced energy use must be demonstrated in other body tissues. And the total metabolic story is undoubtedly more complicated than just decreased energy use; for example, relationships between energy production and body temperature effects in the brain are of great interest.

But the most important note of qualification is still this: calories do count. Indeed, they apparently count more for some than others. Totally unfair, you might say; but as the cynics would reply, that's life. In short, while this research is obviously important, it does not yet point to any "medical secret" for weight loss other than taking in fewer calories than the body needs. But it does lend moral and scientific support to those who struggle to keep off the pounds while eating no more — "honestly!" — than the next guy.

NOTE: There are often duplicate or similar articles submitted. We regret space prevents our using them all.

BOSTON — In my long career as lunch eater, I have been flanked by thin coconut-cream pie eaters and fat carrot-stick munchers. I have heard underweight people tell me they can eat anything they want and overweight people swear that they hardly eat a thing.

I confess that I have not always believed them.

The way I figured it, the thin people probably skipped things... like supper. They probably stopped eating when they were full. Kinky stuff like that.

As for the chubbies, I assumed they kept Hershey bars in their sock drawers and didn't count anything they ate between meals... even the meals.

But now scientists have proved that Mother Nature has played another nasty little trick on us. Some people can eat whipped cream and look like whippets. Others eat modestly and look mountainous.

Lurking in the blood cells of each innocent newborn is the real villain of the weight-watching world, something known as ATPase. According to a study by a group of Harvard-affiliated hospitals in Boston, there is a biochemical base to weight.

That is the ultimate proof that life isn't fair. If you have a lot of ATPase, you will burn more calories — so you can eat more. If you have a little, you will use up fewer calories and add more fat.

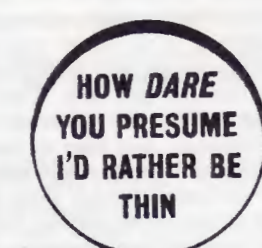
The good news is that people might stop judging their self-worth by the pound. Some of us apparently have no more control over our weight than we have over our height.

The bad news is that you can't go out and buy a pack of ATPase. Yet.

There is room for fantasy. After all, the growth industry of the decade has been in weight loss. Anybody who can get a patent on this stuff could make a fortune.

If I were king or president of Harvard University, I'd drop all those plans to go into DNA development and start talking ATP.

3. COLUMBUS (OHIO) C



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Good news for diable eaters

The sales possibilities are endless. Every day, millions of Americans are eager to turn up the weekend bloat-over. Every day, millions more are starting the eternal 10-pound crash diet. An ATPase tablet could replace everything from the Scarsdale to saccharin.

Few of us actually suffer from a loss of ATPase. I have a different sort of biochemical problem. I was born with a defect in my genetic makeup that forces me, against my will, to keep moving my hand toward my mouth. My hand rarely is empty.

Also, from time to time, a metabolic glitch in my brain is turned on which can only be satisfied with a bag of chocolate-covered wintergreens. A friend of mine has a similar problem, a deep chemical response to the sight of a full plate. He is compelled to empty it.

But the discovery of this wonder ingredient gives hope to the hopeless.

The drug companies, which have brought all kinds of goodies, are inventive enough to develop a blue pill that would burn off excess cake, and a red one to gobble up a banana split. Someone will produce a mainline injection smack into the old blood cells to work off a regular six-course pig-out.

The market is wide open. Travel agents could include it in package vacation trips to Rome. Restaurants would serve it with the cappuccino. The multi-national peanut butter conglomerates could put it directly in their

There is a danger of overdosing, but the FDA-approved antidote would be a simple bread feeding of potato salad.

In envision television ads with cartoon ATPase creatures gobbling up human hips. Billboards across America will boast, "Eat, drink and be thin." The Anti-Exercise Institute will instruct: "Let enzymes do the jogging."

At last there is promise from the wonderful world of science. Today, eat your heart out. Tomorrow, eat to your heart's desire.

CITIZEN JOURNAL 11/7/80

Don't always follow

Given that the fat child is father (mother) at adult.

That a new study reported in the British Journal now takes issue with this belief. Researchers at Middlesex Hospital sought to determine whether it is possible to predict adult fatness by measuring skin thickness in children. (Grab the "hand" your abdomen between your thumb and index. That's one measure of skin-fold thickness—a good index of fatness.)

When first looked at, the children were between 3 and 15. They were re-examined 15 years later, at ages 18 to 30.

Conclusion: You cannot tell by looking at a child in childhood just how fat he or she will be in life. The idea that a fat baby becomes a fat adult is absolutely false.

NEWSDAY, MONDAY, MARCH 19, 1979

The Pornography of Fat

Every era needs its own taboos, its own pornography. What is the pornography of modern America? Certainly not sex, not in a time when the most explicit devices and images are available over the counter or the television cable. But if our pornography is not sex, then what is?

Death, said Geoffrey Gorer, a British anthropologist, in the British magazine *Encounter* 25 years ago. Through the Victorian years, he wrote, sex was unmentionable — while death was unremarkable: "Children were encouraged to think about death... The cemetery was the centre of every old-established village." But gradually, as talk about sex became more open, death became unmentionable. Mr. Gorer could remember no modern novel or play with a deathbed scene of the kind familiar to Victorian and Edwardian authors.

At the time, the argument had the crystal ring of insight. Now, alas, one hears a dated clank. It may still be questionable to take children to funerals. But death has become wholly mentionable; as for deathbed scenes on stage, one quickly thinks of Tom Conti, or Mary Tyler Moore, in "Whose Life Is It, Anyway?"

If neither sex nor death constitute the contemporary pornography, then what does? Anthropologists tell of primitive peoples who attach as much shame to eating as to excretion. There is reason to think our society does

Which Is Worse, Occasional Gluttony Or Relentless Puritanism?

something similar — and that our pornography is fat.

A facet of it became evident in "Tom Jones," the 1963 movie. "In one incomparable scene," Bosley Crowther wrote in *The Times*, Joyce Redman and Albert Finney "make eating a meal an act so lewd, yet so utterly clever and unassailable, that it is one of the highlights in the film."

That, however, was only one facet. The pornography of fat offers a choice of pleasures. One can, with a racy sense of tasting forbidden fruit, plunge into gluttony. Or, resisting, one can become a modern puritan, telling others how unhealthy — how repugnant — it is to be fat.

This second pleasure seems to offer richer satisfaction. Indeed, if some of us sometimes feel a compulsion to eat, the rest of us seem to feel a constant compulsion to gloat. Society sends an unending stream of stern signals: A young Providence woman, 5 feet 1 inch and 210 pounds, is fired as a home health aide because of her weight... the Los Angeles school board issues rules requiring weight loss among teachers... Wisconsin officials halt

an adoption because of overweight. How much? The husband, 6 feet 2 inches, weighs 215 pounds, and his wife, 5 feet 7 inches, weighs 210.

Such harsh moralizing may have reached its perverse ultimate a few years ago in the X-rated movie "Behind the Green Door." Among the circus-related sexual acrobatics was a segment in which an exceptionally gross circus fat lady was observed writhing in explicit sexual pleasure. See, the movie was saying, what's really disgusting is not sex, but fat.

The social pressure against obesity no doubt benefits the general health. What's troublesome is that we are all so humorless about it, so relentless, so determined to punish the overweight. People who think of themselves as enlightened in every other respect become, on the subject of fat, every bit as blue-nosed as, say, the Moral Majority.

Last winter Jack Kamerman, of the sociology faculty at Kean College in New Jersey, told a *Times* reporter: "Not only are the overweight the most stigmatized group in the United States, but fat people are expected to participate in their own degradation by agreeing with others who taunt them."

He's right; and his observation exposes in us all an intolerance more obscene and far more damaging than any form of pornography.

JACK ROSENTHAL

Letter: On Being Fat

THE NEW YORK TIMES, THURSDAY, JUNE 11, 1981

Battling Bigotry on Obesity

To the Editor:

"Relentless puritanism" toward fat — discussed in your Editorial Notebook of May 29 — is something that NAAFA (the National Association to Aid Fat Americans Inc.) has been fighting since 1969.

Our culture's attitude toward obesity is so degrading and humiliating that fat people today are allowing their bodies to be cut open by the surgeon's scalpel; having their jaws wired shut; spending billions of dollars a year on diet gimmicks, pills and books; literally losing their lives on dangerous fad diets — anything to lose weight and satisfy society's demands.

Day after day I become more and more horrified at how fat people are allowing themselves to be used as

guinea pigs — something that thin people would never dream of allowing!

Fat people are the butt of countless cruel jokes, social prejudice, employment discrimination, medical and life insurance bias, searing attacks by the media and advertising, unending harassment by the medical profession, excruciatingly uncomfortable public seating, denial of entrance into higher education institutions, and until recently almost completely ignored by the fashion industry.

Medical researchers are finally proving that there are many hormonal and chemical differences in fat and thin people. Not all fat people are compulsive eaters; and not all compulsive eaters are fat. Furthermore, it is well known that maintaining one's weight

at what would be considered an elevated weight is far healthier than constantly losing and gaining weight (which is what 98 percent of dieters are doomed to do).

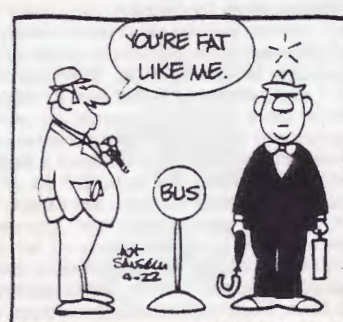
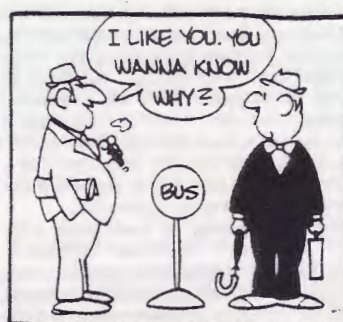
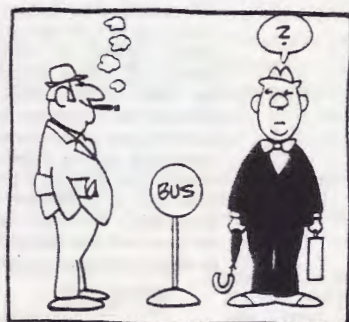
NAAFA has been involved in many of the cases you cited in your notebook, and many more. We are fighting for self-acceptance, societal acceptance and a Federal law that will ban discrimination against fat people in every sector of society, which must be re-educated in its attitudes toward weight.

Fat has been overemphasized, and the obsession with it must be stopped. It is, surely, the last bigotry.

LISBETH FISHER
Executive Secretary, NAAFA
Bellerose, N. Y., May 30, 1981

(This letter was printed in the editorial column.)

THE BORN LOSER



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Scientists make big gains on obesity

THE MIDLAND REPORTER-TELEGRAM, WED., DECEMBER 14, 1980

By ARTHUR FRANK
Special to The Washington Post

WASHINGTON — Why is the standard treatment for obesity — diet and exercise — so rarely effective? The doctors who prescribe it have a simple answer: They blame the patient.

Lots of patients do sneak snacks or skip knee bends. But even for the most highly motivated, best disciplined patients, the statistics are dismal: less than 5 percent manage to lose any significant amount of weight, and less than 10 percent of these successful patients — one in 200 who start a traditional weight-loss program — are able to keep their weight down for a significant time.

Imagine this kind of record in the treatment of any other disease. Cancer, for instance: If a cancer therapy had this low a success rate, we would discard it and presume that the few cures had occurred by spontaneous remission.

Yet the traditional diet-and-exercise therapy persists. Doctors, dietitians, self-help diet clubs, best-selling books — all rely on some variation of calorie counting and exercise. If you haven't lost weight, it must be that you haven't followed the rules.

BUT OBESITY IS NOT that simple. For many patients, it may be that the treatment doesn't work because the theory is wrong. That doubt has finally brought capable scientists around to examining the question. As a result, we are just now approaching an understanding of what makes fat people fat.

First, consider people who maintain a normal weight. They usually do so without any particular conscious effort. Although they are often careless about their eating habits and although their eating and activities vary enormously, their weight remains stable. An increase of 10 calories of food a day theoretically should increase a person's weight about a pound a year; 40 pounds by an adult's middle years. Most people's weight is much more stable than that. This stability is much greater than most of us could achieve simply by conscious effort. With even herculean attention to detail it is not possible to be that accurate in your calorie counting.

It seems inescapable that some kind of nonconscious regulators are functioning in normal-weight humans. These regulators assemble information about caloric intake and activities and send the body various signals to control caloric balance. These signals, controlling hunger and satiety, for example, maintain your weight at a fixed level. All other mammals have these regulators. It would be a biological curiosity, and a very destructive one, if this kind of system did not function in humans.

Many fat people have normally functioning regulators set at abnormal weight. Various medical or psychological events (pregnancy, puberty and divorce are good examples) appear occasionally and unpredictably to shift the regulator to an abnormal setting. Most people who are fat tend to keep their weight stable if abnormally high, and to return to about that same weight after loss. Nothing about losing weight appears to change the regulators.

Recently a new type of regulator has been explored and the disease should become easier to understand. Again, consider normal people. Many studies show that normal volunteers, when overfed even by huge quantities, do not gain what they should by caloric calculations. In one study some lean adults overfed by over a million calories during a 200-day experiment did not gain weight. The excess calories somehow seem to be dissipated.

The new studies identify how lean animals waste the unneeded calories: They burn them, increasing the skin's surface temperature, and radiate the heat away. There appear to be at least two mechanisms for the creation of heat. One is anatomically localized in a specialized form of fat, known as brown adipose tissue, located just beneath the skin. A second, which involves the transfer of sodium and potassium into and out of cells, appears to function in all cells. Both systems function abnormally in obese animals and humans. Obese animals do not convert their excess calories into heat, while lean animals can do so readily.

THESE REMARKABLE DISCOVERIES explain the paradox of obese rats who cannot survive in a laboratory cold room while lean rats, with no insulation, do fine. The fat rats cannot generate enough heat; the lean rats have an excellent system for creating heat. For many fat people, the problem may not be insufficient calorie burning because of no exercise, but because of abnormal heat creation.

Calorie needs for humans may vary far more than we have assumed. Since heat creation may be abnormal in many fat humans, their caloric requirements may be much lower than we have ever calculated, perhaps too low to allow them the luxury of a normal diet. They may be right that "everything I eat turns to fat," and it probably is true that at least some fat patients really don't overeat. Surely some obesity is caused by overeating. But for many fat patients a spartan and religiously cautious intake may be more than enough. This will be biologically protective if we have a famine, but in 20th century America it is a biological disaster. We no longer die of starvation. We now die of degenerative diseases and these diseases are almost always made worse by obesity.

A series of new studies also demonstrate that fatness is associated with abnormalities in various parts of the body's chemistry. Hormone function is different in obesity. Some hormones prevent the body from losing weight; they function to sustain fatness. Small endorphin molecules, which function as one of the brain's neurochemical information transmitters, are probably abnormal in

some types of obesity. Substances which prevent the endorphins from functioning in their usual way correct obesity in certain types of fat rodents.

Many people, including physicians and patients, are convinced that obesity is an emotional disorder. Obese patients usually identify situations in which their food intake gets out of control: "I eat as a reward" or "I eat when I am depressed, lonely, bored, etc."

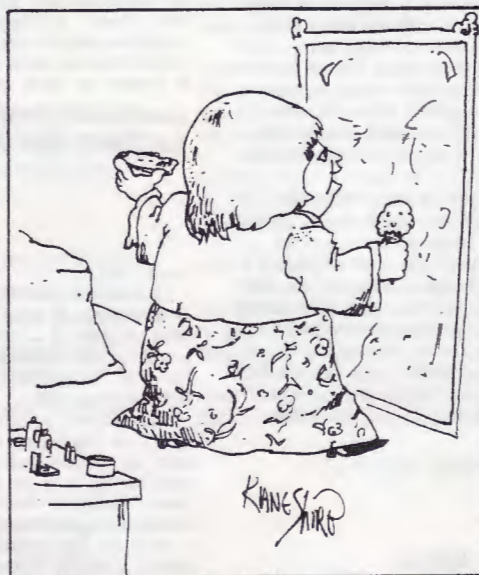
Psychological factors have always been assumed to be characteristic of obesity, but many of the assumed differences have never been verified. Is there a personality pattern or emotional disorder associated with obesity? Are obese people fat and jovial? Isn't it an addiction just like cigarettes, alcohol or even drugs? The answers here are probably "no." Personality factors seem to play a very small role in the generation of obesity. Many studies indicate that fat people are much like everyone else. Personality traits which do exist in obesity appear only to be those which form in reaction to a chronic disease. The major role of stress and emotional factors is not to cause obesity but to make it more difficult to control.

DESPITE THIS DIVERSITY, some regulator abnormalities probably exist in most forms of obesity. The normal regulators collect an enormous amount of information. They assess food intake, and compare it to our activity, exercise and rest. They gauge the social situations and stress of our lives. They send hunger and satiety signals that control our eating behavior. They secrete hormones and neurochemicals to affect our metabolism. They regulate our system of generating and wasting heat in response to excess calories. Considering the enormous variation in our patterns of food and activity, they do all this with remarkable precision. In one way or another, these regulators are probably malfunctioning in fat humans.

All of this doesn't mean that dieting and exercise should be scrapped. "Eat less and move more" is still good advice. Newer variations on this theme, particularly comprehensive programs using aggressive very low calorie diets (modified fasting) together with training in behavior modification, are achieving control in as many as 50 percent of those who start. The old therapy can be improved and it can succeed more often, but future therapy will depend on a more direct attack on the faulty regulators.

5.

New Woman, July-August 1980



"Sugar and spice and everything nice.
That's what this ole gal's made of."

6. Diet Food Diarrhea Noted

By The Washington Post

Dieters who ease their hunger by chewing all day on sugarless gum or candy can develop severe, sometimes dangerous diarrhea, according to a new medical report. The hazard of "dietetic food diarrhea" occurs in heavy users of gum and foods containing the sugar sorbitol or related sugars, according to Dr. Mario J.R. Ravry, a gastroenterologist who warned of the risk in this week's *Journal of the American Medical Association*. Sorbitol and its relatives, the hexitols, are naturally occurring sugars which are not absorbed during digestion. They have been used as dietetic sweeteners since 1929. While they are considered safe in moderate amounts, Ravry said diarrhea from their overuse could lead to dehydration — a serious risk for anyone with heart disease, diabetes or other medical problems.

MAY 16, 1980

Columbus Dispatch