

THE FACTS OF MEDICINE--

Overweight

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OVERWEIGHT

PW So, Dr. Rutstein, you're going to talk about another subject your viewers requested tonight.

DDR Yes, Mr. Wheatley, tonight, we're going to talk about overweight which has been requested by a number of listeners, and we're going to try to give you a complete and clear cut statement about the things that you're most interested in; that is, what is overweight - and what does it do to you, and what might you do about it. But, I realize that in this short time, a topic like this, which is of such great interest, that I can't possibly answer all of your questions. And so, what we thought we'd do would be to let you, at the end of this program, write in to us those particular questions which we just didn't happen to cover tonight, and when you do this, we will set up our next week's program so that Mr. Wheatley and I.....he will ask your questions for you, and I will try to answer them, so that we will try to have a little variety next week, and have a question and answer program on those particular things that you are most interested in about overweight simply because we can't cover all those things ourselves tonight. And so, we hope after tonight's program is over, you will drop us a line and let us know what you would like to know about.

PW A big subject....

DDR Yes, it's a very big subject and it's a little bit hard to tell just what the subject is...it's a little hard to define because there are gradations of overweight...you can be a little bit overweight, or you can be a lot overweight, and it would seem that the way we tell if someone is overweight is to determine whether certain tables that are set up.... they're supposed to be ideal weights, mostly set up by insurance companies....whether or not people are over the levels of these tables for people of certain weight, sex and height and width and so on....all these things are calculated out and then you're supposed to be normal if you fit these things. But if your weight, in all this set-up is larger by 10%, then you're considered (as far as the insurance companies are concerned, for example) to be overweight, and this has been a general definition.

PW Could you figure this out for yourself on the scales?

DDR Well, you might be able to if you had one of these tables, you could tell better where you were. If you were just that little bit overweight that you just have to look up a table to figure it out, it probably isn't very important; it's really very important though when you weigh up above, because when you weigh up above it makes a lot of difference. Now, people are overweight mostly because they eat more than they burn up. It's true, there are some few diseases which do cause overweight by themselves, but they're very rare, and only about 5% of all overweight is due to just something else then the problem of eating more than you're burning up. It's unfortunately true because overweight is a very serious and difficult problem for many people and it's particularly serious and difficult for those people whose systems work efficiently. You see, if you drive an automobile, some automobiles give you more miles to the gallon; well, some people can take in a certain amount of calories (which I'll tell you about in a minute) of energy and they can do a lot more with those calories and energy than other people can do.

PW Too many miles per gallon?

DDR Too many miles per gallon if you want to look at it that way, but very efficient if you want to look at it another way. And so, it's these very efficient people with the way they handle the food that's given them that really get into the most trouble, particularly if they eat too much. Now, this is sort of an in-put, out-put situation. On the one side you're putting in energy in the form of what we call a calorie...you know what a calorie is...it's a way of measuring how much energy you take in in different kinds of food just the same as you measure maybe the octanes in your gasoline to see how much energy you get out of your gasoline....this is a way of measuring energy, you see, and that means then that if

DDR (cont) you don't burn this up in the form of exercise, or in the usual things you do when you breathe, when your heart beats, when you digest your food, and so on, then this energy has to go someplace, and our bodies being very efficient and probably having developed in a period of time when there wasn't quite as much to eat as there is now in this country, that we've gotten pretty efficient about storing away what we don't burn up in the form of fat.

PW You mean way back in our evolutionary history?

DDR Evolutionary history probably, and in many parts of the world now, people sort of have to store up when there's a lot around for times when there isn't so much around, and this is the way it seems to work. But in a country like ours which is blessed with lots of food for most of the people in our country, we get into another kind of problem which is eating too much and storing away too much with all that happens from that. Now, what does obesity do anyway: what does overweight do to people? This is the first question I think we ought to talk about.

PW Everyone's supposed to love overweight people, and they're supposed to be happy and jolly.

DDR Well, I guess some of them are; I know lots of them that are, some of them don't seem to be too happy about being overweight, but as doctors, we're more concerned with overweight because it seems to predispose to certain kinds of diseases and because people seem to not live so long if they are overweight. And by not living so long, I mean that if you take the number of people and who have normal weight and then follow them to see how long they live; and then take another group of people who are overweight and follow them, you'll find that the people who are overweight won't live as long. And insurance companies have done studies like this and Dr. Dublin has done an interesting study in which the years of 1926 to '34'....they....put '25' to '34', I think that we can make a fact out of it..... they admitted a lot of people and then followed them ^{to 1950} and then during that period of time, it was easily seen that people who were overweight had died more frequently, and I've got a little chart here that maybe might show this. Now you see, this fellow over here...he's a normal-weight fellow; he doesn't have anything tohave any of what we call excess mortality. Now by excess we mean, excess deaths over what you would ordinarily expect in a person of normal weight. So that if you're a little less than 30% overweight...these are mostly 20 to 30% here....then 42% more people die who are in this weight group than are in this weight group. In other words, if 100 people were to die in this weight group in that period of time, 142 people would die in this particular age group in the same period of time. And so it goes right up, you see. The fatter people are....30% overweight, 40% overweight...50% overweight....60% overweight, you see the higher this excess death rate goes up so that here in this last one, 60 to 74% overweight, instead of 100 people dying here, it would this 100 plus this 182 or 282 people who will die in that group. So there you see, we're concerned then very seriously as doctors with the fact that people who are overweight tend to die earlier and of certain diseases....and of course, we ought to list those diseases on the board.

PW Good...is there a relationship between the age of a person and the weight and this death....and disease.

DDR Yes, it may be...the differences between mortality rates because of weight is much greater among younger people than it is among older people...it's the young heavy weights who have the high relative mortality compared with theolder people. As they get older this range gets together....it narrows, but it never gets down to the point where it's the same. It's always more if you're overweight.

PW May I translate that Dr. Rutstein? You mean that if your overweight as a young person, the chances are that you're going to die earlier?

DDR Your mortality rate will be higher depending on your overweight than it is for an

DDR excess mortality is greater among young people.

FW Okay, thank you

DDR Now back to diseases that make up this excess mortality..first is diabetes. That's a disease particularly among older people or fatter people and most people who die of diabetes die of heart disease or diseases of the vessels so a cardiovascular disease, or heart disease.....cardiovascular disease and also includes diseases of the kidneys....these are much higher among overweight people than they are among normal people. And then the diseases of the liver, particularly cirrhosis of the liver and then disease of the gall bladder which lies next to the liver, more gallstones in fatter people....more cancer of the gall bladder, more cancer of the liver among these people...among heavyweights. And then we have the problem of hernia which is rupture and that's more common among fat people probably because fat replaces muscle in the abdominal wall and it gets weak, but there's another thing too, this includes almost all kinds of abdominal surgery....because it's much harder for a surgeon to do a job properly when he has to **work** through a very thick, fat abdomen so that most deathsif there are excess deaths from appendicitis and things of that sort....gall bladder disease...anything that requires major abdominal surgery among fatter people than among thinner people. So that there are these diseases and there are a few more....we can't cover them all, but these are the most important in this group that are associated with an increased mortality among people who are overweight.

FW The overweightness takes its toll through these particular diseases?

DDR That's right. That's where you find, what we doctors call "the excess mortality". Now of course, there's a little discomfort that gets involved in this; people who are overweight tend to have a little harder time getting around and are a little bit more uncomfortable; and more than that there....for instance last week we talked about arthritis how overweight people put extra strain on their knees and get this old age kind of arthritis where they wear out their knee caps and of course, there are of course, this extra load on the heart and the blood vessels because you've got more weight to carry around and the interesting thing about this weight is you see...you can carry a 20 pound sack around on your back...20 extra pounds, but you can put the pack down whenever you want to. But if you're carrying 20 pounds extra on your abdomen...an extra pack, you can't put it down, it's there all the time and the load is on your cardiovascular and on your heart all the time, and you just can't put it down; it's just there unless you can get rid of it and that's not so easy as lots of us have found out when we try to reduce too..it's hard work to reduce and get rid of it.

FW We need sympathy...

DDR We need sympathy and we need very careful understanding, and it's almost an individual problem...this business of reducing. I frankly think it's worth while reducing because even though we don't have any facts....and this, I like to stress this since this is The Facts of Medicine, we have no real facts to show that if you're overweight and you reduce that you will become the same in terms of getting diseases as an individual who never was fat...no we can't say that. But,we can guess a lot about this as a result of our observation of patients, we know that patients who are already sick with heart disease and they start puffing when they get up the first flight of stairs that when they lose some weight, they find they can climb a flight and a half or two flights...they have this much less load to carry around, you see and that makes it possible for patients to do more and to feel more comfortable, and patients who lose weight always say they feel better after they've lost weight, they've less work to do when they walk around. So that putting this altogether, I think it's unquestionably worth while if it is at all possible, and I like to point out that we're not out to tell people tonight what they should do, we're just pointing out what the facts are and what our guesses are, and then we think everyone should decide for themselves whether or not it's worth all the effort and trouble because losing weight is'nt a simple process. Now, what can we do about this problem if possible. Well, the first thing I think those of why you who are really thinking about really reducing better do is to probably get to

DDR (cont) see your doctor first and make sure you haven't got some kind of disease to which your overweight may be related and if that can be done....and I think, if that's all right, then you can start on your reducing schedule. Now in order to start on this, the first thing you ought to do and have to do is to keep a diet; you've got to write down everything you eat before you go on a diet to see what you eat, and then you've got to add up the number of calories, the number of units of energy that are in your food. Now, this may sound like an awfully complicated thing to do....to go out and decide how many calories are in all these things, but it's really not so hard. We have available a little pamphlet, distributed by the Health Department, which you can carry in your wallet; it's a very simple little table put out by the Massachusetts Department of Health, and it just lists very simply here "beverages", "dairy products", "cereal products", "desserts", "fats and oil" and "fruits" and so on and you can just look and just by adding it up you can tell how many calories a day you're eating and if you will drop us a note and just ask for "calories!.... and we'll send you a little copy of this table that you can put in your pocketbook or your wallet and you can carry it around with you and it'll help you...at least you can know what you're doing. Now, after you've done this I suppose the next thing you will want to know is whether or not you can take any drugs that will help you reduce to make it easy. Well, there've been a lot of drugs recommended; there's been thyroid which is commonly talked about...I'd like to say that I would think for most people thyroid is very undesirable and certainly should never be taken unless it's prescribed by a doctor specifically, and unless you're under his observation all the time you're taking it. In general, I sort of don't like the idea. Then there are a bunch of drugs called "the anti-apetite drugs" and, I must say that we know very little about appetite and we really don't know how to control appetite, if we did, probably we could take care of this whole problem....if we could tell people just how to cut off their appetite so they wouldn't want to eat at various times, it would make it easy for them, But we can't really do that; there have been some drugs....one of them with a big name "amphetamine" which should only be taken under doctor's prescription, which I wouldn't recommend anyway, but you may see some advertisements for things like it; they also tell you to take some sugar before you eat your meals to take your appetite away. They have things called "benzocaine" for the same kind of purpose. Well all of these things are really individual things; if they happen to work for you, you're lucky, but for most people they really don't work. Finally, there's these bulk producing things you chew on crackers, they have no food value, but they fill you up. Well, some people can take them and some people don't like them .

PW Eating yourself thin?

DDR Eating yourself thin...trying to eat yourself thin, but I think this is an individual problem and you can't really make any general recommendations...if they work for you, it's good, but some of them, as I say, you shouldn't take without a doctor's prescription. Now, about the question of exercise. How about burning more of this stuff off instead of just stopping the intake...how about increasing the output? Well this is a good idea except that our bodies in general are so efficient that we can do an awful lot of work on very few calories. From this point of view it's unfortunate; in general it's very fortunate that we can be so efficient, but to get rid of 100 calories, you'd have to walk...oh it would be something like a mile on a level at a pretty good rate and when you think that after all, a bottle of soft drink has 30 calories in it, or a bottle of beer has got 160 calories in it, it makes you realize that it's hard to walk off some of these calories.

PWa bottle of beer.....

DDR A bottle of beer, for example....we'll talk more about that later. But, exercise, however, we think is a good idea. In the first place, it is good to walk off some of this stuff and exercise taken in moderation, within the limits in which you can exercise yourself, will make it possible for you to burn some stuff up, also keep fit...you'll feel better.... your muscles will be in better tone, but...and also there's an extra dividend that comes in, when you're up walking around you can't eat very well; sitting around at home, looking at television programs, and so on, you can sort of eat television snacks and one thing or another...eat between meals, but if you're walking around, you're not as likely to eat, so

DDR (cont) to speak

FW You can eat and run.

DDR You can eat and run, yes. I'm afraid that's done only too often. But about the diet problem which I think is the important one, the one I really think you have to think about a little bit and this is what I'd like to concentrate on for the rest of the session. The most important thing about a diet, regardless of whether you eat a lot or a little, is to make sure you eat a balanced diet, and you know we talked about this a few weeks ago on Thanksgiving night and perhaps we might pull up here a little bit....we'll get rid of this so it won't get in our way. Now remember we said that there were 3 kinds of things in food; protein, these are the things that we use to repair our bodies with, to build back the things that are worn out and then there's the thing called "carbohydrates" and these are the fats and sugars and these just have straight calories in them and nothing else...these are just the straight energy foods and then there are fats, which also are practically straight energy foods, these are more concentrated than these are so that for each unit of protein, we call a gram, you get 4 calories and 9 calories so that you see you want to keep away from the fats because every time you get a unit of fat, you take in 9 calories.....we all need a small amount of fat to make our diet palatable, a little fat in the diet makes it palatable, and I'll say....I'll talk in a minute about a recommended diet. Carbohydrates are almost all empty calories, as we call them, as they have no vitamins associated with them....they're things like straight sugar, all kinds of sweets, the thing you get in cakes, candies, things of that sort...starches, straight starches don't do anything except provide energy so we like to keep this end of it down. Now proteins are the stuff that build our bodies back up and so we'd like to recommend that if people are not going to cut anything that they keep up their intake of protein. Now protein is meat, fish, cheese, dried beans and milk; these are the things in which we have a lot of protein and this kind of food sticks to your ribs too after you eat it so that you're not so in a hurry to go out...eat some more. It does away with appetite for awhile and more than that, as I pointed out previously on another program, protein foods have a lot of vitamins in them so it's worth while eating proteins because you get a lot of vitamins. So that the proteins are what we ought to concentrate on and then to make it even easier when you take in protein into your system and you chew it up, it takes a certain amount of energy to burn up that protein so that about 10% is used up in just the digesting of it. So that you sort of gain a little bit. So we'd recommend then that proteins be the things you concentrate on, get rid of the carbohydrates and fats, and practically speaking in the diet, what that means is getting rid of sweet desserts, getting rid of all except a very small amount of butter, which is a fat, you see, not eat fat on meat....eat meat when it's the lean part of meat, not eat sweets, candies, cake, things of that sort and potatoes have a lot of starch in them, that might be something else that might be worth cutting out or else cutting down....cutting down on things like bread and so on. Certainly no jams or jellies because those are just straight empty calories...and one of the worst offenders are the sweets we take in in the form of soft drinks or the carbohydrate we take in with our beer; these are very important things that add weight and I think these are things that can easily be avoided.

FW They tip the scales?

DDR Well, they may tip the scales, particularly if you eat between meals; if you have a balanced diet and you eat between meals, you tend to drink these sweeter things or to drink beer or things of that sort. Now this beer problem is one which interested me because I think all of you have been exposed to lots of information about the value of beer as a reducing agent. This disturbs me as a doctor because I see patients whose very life depends on keeping their weight down....getting their weight down and then they get misinformation and it makes it harder for people like me to try to give them the facts of medicine because I've got to compete with misinformation which they get from other sources.

FW A lot more of it often.

DDR Well, a lot more of it with the result that things like beer that have been touted so

DDR (cont) strongly as not being.....you don't have to worry about it....maybe you don't have to worry about it, but you're going to put weight on, after all a bottle of beer....an 8 ounce bottle of beer has got 160 calories in it; a diet....a reducing diet shouldn't have more than about 1400 calories in the whole day. If you drink just 3 bottles of beer, you've already used up more than one-third of your total food intake for the whole day and that means then that you've also taken them in the form of empty calories because of course there isn't any protein in beer and there are no vitamins in beer, and there are no minerals in beer so that you're really taking in just a lot of empty calories. Now, I got so interested in this that I wrote down to the Alcohol and Tax unit of the Treasury Department; I was interested to see why it was possible for people to advertise about things like beer and give misleading information to people....I mean, how is it possible? Well, I got this statement from the Alcohol and Tax Unit dated March 31st, "55"; this is the last statement; I called them today on the telephone and this is the last statement they've produced, and what the statement says....this is addressed to members of the Brewing Industry and others concerned...and what it really says is that for 3 years they've been concerned about this advertising and wonder just what effect this had on people. So in 1954, they decided to do a consumer survey, to ask consumers what consumers thought would happen to them if they drank beer, or what wouldn't happen, and they just completed that survey the early part of "55" and here's what they found: it says here " a substantial percentage of the people interviewed in the survey received the impression that the advertised product was either entirely non-fattening or at least negligible in calorie content, that it was less fattening than other competitive beers".....and by the way, I might say that all beers are the same, there are no differences at all practically speaking, in all the beers that I've seen analyzed and reported "that the consumer could lose weight by drinking it , that the product was approximately equal in food value to food items in which the calorie content was compared. For instance, there were some advertisers who said there was just as much as in orange juice you see, but nobody drinks 3 bottles of orange juice as far as I know. I mean, it's quite a different problem...it has less than milk, but milk's got calcium, it's got protein, it's got vitamins and all kinds of things in it. This has nothing in it except calories and fluid and some taste. Now, this doesn't mean you shouldn't drink beer, Mr. Wheatley, I like beer and I drink beer, but I wouldn't go on drinking beer if I were on a reducing diet and I don't know of any doctor who would recommend it on a reducing diet.

PW Some people use it to whet up an appetite.

DDR Yes, they might even do that, but in any event what the Government said last March.....I don't understand why we still have such advertising, it said "members of the Brewing Industry should promptly desist in the use of any further references to calorie content of their product and the more specific implications, however made that their products are non-fattening or virtually so. Inasmuch as the Department has not previously objected to calorie treatments pending the development of specific evidence of this point, a reasonable time will be allowed for the preparation of substitute advertising copy. This was last March, and now it's almost January . I think it's time we had no more advertising on this because I think it's going to do a lot of people harm and it makes it difficult to get good information to people about their health when they've got to forget so many things they're told...I guess deliberate misinformation, really. But in any event, coming back to our problem about reducing, if you take a balanced diet and make sure you have plenty of protein in it, if you drink a little milk with it, if you get some kind of fruit juice, particularly orange juice or grapefruit, tomato juice, fruit juices with vitamin C in it, and if you take a green and yellow vegetable once in a while and an occasional pat of butter, you have all the things you need for a balanced diet, then you can decide how much you want to add on to that depending on how many calories you want to put into your diet. This doesn't mean to go without breakfast, or without lunch or without dinner, it means to refuse second helpings, it means you should take small helpings....a lot of people who are overweight and have trouble losing weight often gulp their food....if you eat more slowly and let it taste longer, so to speak, that's another way of sort of stretching out the same amount of food. I know all these things have been told to you before probably and maybe you can't do anything about it, but these are the things that will help you if you could do them. I would think that if you kept away from the empty calorie foods during the time that you're reducing and make up in your mind that a crazy kind of diet isn't going to solve your problem because keeping down weight is a life time job....this doesn't mean you have to go on a tough

DDR (cont) diet all your life. You'll be on the tough diet when you're on the down plane and then when you level off, you can eat a little more, but it does mean that you're going to have to watch your diet more or less gradually, you can go on a binge once in a while when you want something particular as long as you watch your weight on the scale and see that you're doing all right....you can do all that, but you've got to keep within certain limits. If you start on some crazy diet, such as bananas and milk something else in it and nothing else, you can't keep on that diet the rest of your life, the thing you've got to develop is good food habits and this is almost a family problem as well as an individual problem because the individual is in a group, particularly if the mother of the house prepares foods that fall into these categories and everybody just eats these foods and you sort of eat with each other and no one over-eats, it's easier to go along and do this. But there are a lot of tricks about this, and maybe we can talk about more of them next week when we answer the questions we hope you will ask, but I think this in general rounds off what I have to say tonight about the importance of not being overweight, or trying to get your weight down and the methods by which you can do it the importance of maintaining a balanced diet no matter what you do and get rid of those empty calories and the things that add calories and nothing else, particularly fats and carbohydrates, those sweet things....the things that taste so good, but still you can make foods taste well even though you may have to cut into the things that you can't eat as often as you would like. I think that's it, Mr. Wheatley.

PW Thank you, Dr. Rutstein,