

South African Medical Journal

Suid-Afrikaanse Tydskrif vir Geneeskunde

P.O. Box 643, Cape Town

Posbus 643, Kaapstad

Cape Town, 19 May 1956
Weekly 2s. 6d.

Vol. 30 No. 20

Kaapstad, 19 Mei 1956
Weekliks 2s. 6d.

MANAGEMENT OF OBESITY*

MORRIS WITKIN, M.D., F.R.C.P. (EDIN.)

Johannesburg

'I'm putting on weight, doctor; What ought I to do about it?' is a popular lament.

No generation has been so figure-conscious as the present. Never in recorded history has there been such hostile aversion to obesity. Till the end of last century the rotundity of John Bull was symbolic of health and virility. Today, tall, lanky Uncle Sam with his flat midriff is the figure of choice. His personality is graced for action and longevity.

When is one over-weight? When it is 10% above normal. What should the normal weight be? Roughly speaking it is (in lbs) 110, plus or minus the number of inches above or below 5 feet in height multiplied by 5½. Thus if height is 5 feet. 7 inches, weight should be approximately 148½ lb. If height is 4 feet. 10 inches, weight should be about 99 lb.

What makes us eat? In the normal individual *hypoglycaemia* plays a principal role. So long as the difference in the arterio-venous blood sugar is above 15 mg. per 100 c.c. there is no hunger. When it falls to zero, there is a craving for food. So, when the blood sugar level is low, appetite goes up. This 'glucostatic mechanism' is highly sensitive and believed to reside in the medio-ventral nuclei of the hypothalamus. These nuclei function as the 'appetstat' or *governor* of food intake. Damage to these nuclei leads to enormous increase in appetite. The lateral nuclei of the hypothalamus stimulate appetite. When these are destroyed there is loss of appetite. It would appear that in the obese, the adrenal steroids provide the hypothalamus with perverted information demanding extra food in the midst of plenty.

Some believe, with the Freudians, that obesity is the result of arrested sexual development—the libido having stalled at the oral stage. Others maintain that it is the aftermath of parental neglect or overprotection

in childhood, and others contend that it is a substitute for frustrations.

The question is often asked why some eat a lot and never gain weight. It would appear that the healthy body regulates its weight with remarkable nicety—the 'homeostatic mechanism', also situated in the brain stem. In the over-weight this mechanism has broken down. It has lost its subtlety.

The quest for a successful *treatment* of obesity has always overshadowed the search for its *causes*. In the over-weight, the 'will power' to eat rich foods is mightier than the 'won't' power.

Obesity is the half-way house between health and disease. According to statistics 1 out of every 4 persons is overweight.

Overweight is commonest during middle life, and is due to excess of calories. As we grow older metabolism slows down and fewer calories are needed. At middle age there is less desire for physical exercise. Gormandizing is an outlet for emotional tension, boredom, and frustration. We put on weight when we are inactive.

To fight 'dangerous curves' and to conquer the 'battle of bulges' one's mental climate must change. We all realize that a slimmer waistline means a longer life-line. The over-weight loves to be told that the cause of the trouble is 'glandular'. No one welcomes the verdict that he eats too much. The endocrine system is seldom at fault. The only glands involved are the salivary glands.

What harm does this extra weight do? Assuming one is 20 lb. over-weight, the body has to provide a fleet of blood vessels a mile long to feed it, and the heart is forced to pump continuously extra blood through a widely scattered territory of useless tissue. Life expectancy is thus reduced.

POPULAR OBESITY CURES

Thousands of starvationists do themselves irreparable harm. Fortunes are flung away on worthless nostrums

* A paper presented at the South African Medical Congress, Pretoria, October 1955.

consisting of tablets, pills, teas, liquids, and chewing gums—all alleged to reduce weight. On analysis, they are found to consist of laxatives, thyroid, pituitary, dinitrophenol, and amphetamine. Some of these pills and tablets are given a 'new look' by turning them out in technicolour. They are expensive, useless and even dangerous. The nostrum vendors also sell vibrators, rollers, girdles, vanishing creams, and bath salts. They gull the intelligentsia as easily as they fool the illiterate and credulous public by claiming cures without diet and without exercise. They claim to convert stouts into sylphs.

Rapid cures for obesity hit the headlines in newspapers and journals with remarkable regularity. We have today a glut of 'diets': 18-day, 11-day, 7-day, 2-day, and 'skip-a-day' slimming diets. We have the 'crisp-carrot-and-lettuce diet', the 'all-meat diet', the 'morning-noon and- night egg diet', the 'pineapple diet', the 'banana-and milk,' 'egg-and-spinach,' 'bread-and-butter', and 'potato-and-gravy' diets, and other freak diets fabricated by food faddists *ad infinitum*. The results are uniform. While the enthusiasm lasts, the pounds melt away; but after a few weeks the appetite is cloyed and the devotee reverts to old habits—first a nibble, then a gobble, and then it is 'good-bye diet'. In the end he confesses that all he has lost is the zest to continue with the magic diet.

All these diets are badly balanced and one-sided. In the long run amateur dieting is harmful and best left alone. There are no short cuts. No easy way is safe, and no safe way is easy. When we think of reducing we search for short cuts. Most of us never realize what poor losers we are until we try to lose weight. The motto of the overweight is 'eat, drink and be merry, for tomorrow we *diet*'; but tomorrow never comes. We know full well that we should look more *spick* if we had less *span*.

Some dieters feel weak and miserable when they lose weight. For them it is better to be fat and alive than svelte and half-dead!

SUCCESSFUL WEIGHT REDUCTION

To reduce successfully, one must be quite serious about it. One must be prepared to unlearn old habits and adopt new. It requires strength and determination.

Weight reduction is the triumph of mind over platter. If the doctor gets full cooperation, the patient will lose weight as certainly as the sun rises in the east. The recruit must develop an abhorrence for succulent dishes. He must block his ears and shut his eyes to ridicule and commiseration. He must be prepared to stick to the new regime for the rest of his life. His resolve must never dissolve. His reward will be rich. He will be freed from his own fortress of fat, regain his physical vigour, and find it easy to bend down; unsightly bulges will disappear; he will be more alert, live longer, and enjoy many more years of happiness. He will have given nature a chance to undo the damage suffered by an outraged body.

In order to reduce, one should eat less, eat slowly and masticate thoroughly; have no more than 3 meals a day and no second helpings; eat nothing between meals and indulge in no nibbling and no alcohol.

Anorectics such as amphetamine may be necessary. When used with discretion they have proved a boon to the obese. They act as useful crutches and should be discarded as soon as possible. Pictures and charts should be used to help the patient to contrast his overweight with the normal weight for his height and age, and to realize the excess of weight he is carrying. For the obese, dinner in the morning, and breakfast at night is often good policy because he is less hungry in the morning, and does most of the eating after noon.

The over-weight should never eat when he is not hungry, or when he is emotionally upset or over-tired. Allow 5 hours between meals. He should rest when tired, sleep when sleepy, dress warmly, and avoid spirits, rich soups, sauces, spices, seasonings, and salad dressings.

Weight reduction is more than a cosmetic problem. Like the iceberg, the fat visible to the naked eye is but a fraction of the internal obesity that is invisible.

Fat children are usually a psychologic as well as a physiologic problem. They need discipline as well as diet.

In conclusion, the words of the Bard ring true:

'Make thy body less,
Hence thy grace more:
Leave gormandising and know
That the grave doth gape for thee
Thrice wider than for other men.'