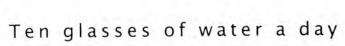


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Infants who are breastfed have a simple feeding cycle. They feed until they are full, and promptly fall asleep thereafter. Sother's milk is ideal for babies. When breastfed, babies do not ove: ed.

> As we grow older, our parents decide what and how much we should eat. With their ancient instincts for survival, and with the best interests of their children at heart, they often put more food than we need on our plates, telling us to finish it all up, and not waste the food. Notwithstanding our protests, often in tears, we end up eating all the food placed in front of us. Over time, we become conditioned to eat more than we need, faithfully finishing whatever is on our plates. Our stomachs get stretched and become trained to accommodate larger and larger quantities of food. At the same time, our instinctive taste for food that is fatty,* saltish and sweet develops. Commercial food manufacturers know our vulnerability to such tastes, and ensure that packaged and canned food

and snacks are always fatty, saltish or sweet, making them irresistible, so that we are reluctant to put them away. In short, food, especially commercial snacks, quickly become addictive.

As we grow up, these habits become more ingrained, becoming worse when we reach our teens — a stage when we are less dependent on our parents for supervision. With our pocket money, we can afford to buy all the food and snacks that we want. Parents often give up control of their children by now, and stop nagging at us to eat more vegetables and fruits.

When we sit in front of the TV, it is difficult to stop snacking — nuts, chocolates, icecreams, potato chips, pretzels, popcorn etc. Over time, our stomach walls are stretched further and further to accommodate the progressively larger quantities of food that we eat at a time. With the signals of a stretched stomach indicating a sense of fullness coming later and later, the increased food intake results in weight increase and obesity.

The first step in T.H.E. Diet is to accommodate the ancient instinct which has now turned harmful — namely, to eat as much as possible before the feeling of fullness kicks in. To do this, we fill our stomachs somewhat before the meal proper — with the aid of water. The human body is made up of about 60% water. Water is the greatest life-saver for those of us who are overweight and wish to bring our weights down to achieve a slimmer, healthier and fitter body. It has zero calories, is easily available and is free (most of the time). Step one of T.H.E. Diet is to drink two glasses[†] of water (totaling 500 ml) immediately before each meal. (For those with the habit of snacking in between meals, drink another two glasses of water, before snacking during your morning

> *In this book, the words "fat" and "fatty" will include "oil" and "oily". (Normally "fat" is used to refer to solids and "oil" to liquids.)

⁴In this book, we will take as our reference "a glass" to mean a medium sized glass of about 250 cc (cubic centimetres) or ml (millilitres). If a smaller glass is used, take three glassfuls instead of the two for mediumsized glasses.



Step one of **T.H.E.** Diet is to drink two glasses of water (totaling 500 ml) immediately before each meal. or afternoon breaks. If you can drink the two glasses of water only without taking your snacks, so much the better.)

Ignore all discouraging talk about drinking water before your meals. (Many people enjoy cocktails, and drink large quantities of alcohol or soft drinks (flavoured sugared water) before they eat. Also, in many societies, the normal practice is to drink a bowl of soup before the main course.) Remember, your body is sophisticated enough to adapt and will continue to digest the food that you eat after the two glasses of water.

the purer with the other half.



Halve your daily intake of food

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Drinking two glasses (500 ml) of water immediately in meal biases T.H.E. Diet in our favour, by making us feel to be for the meal begins.

Now with a knife, spoon or fork, cut and separate the food placed in front of us, straight down the middle - into two equal halves. Divide into two halves every item of food on the plate. Ideally, at least initially, you should take away the half that you will not be eating. Give it away to your dining partner if you are at a restaurant, or put it away for the next meal, if you are at home. After you are able to eat only half your current normal intake consistently, you can serve yourself the half portion if you are at home. In a restaurant, order only the smallest portion. (Do not feel embarrassed or intimidated by the waiter or waitress, who may prefer that you order the larger portions.) Wherever possible, practise ordering the "children's portion". If you feel more comfortable psychologically, you can trade off quantity for quality — by ordering the smallest portion of a more expensive dish. With two glasses of water in your stomach already, you will find that with only half your normal quantity of food, you will feel full and satisfied. Re-train your sensitivities so that you will heed the early signals of fullness. Persist in halving your intake of food, and your body will learn to recognise and adapt to the early warnings of fullness. You will be rewarded in next to no time with a slimmer, healthier and fitter body.

Initially this new practice of halving your intake of food requires some willpower, especially in a restaurant, as perhaps you do not wish to give the wrong impression that you cannot afford the bigger portions. Some people may also continue to heed the indoctrinating voice from the past, telling them not to waste the food on the plate. If these psychological pressures work on you, then you might want to ask the waiter or waitress to put the other half of the order into a "take-away bag".

Mentally counter the old belief with the new truth. The cost of the food that you "waste" is "small change" as compared to the medical bills that poor health resulting from overweight and obesity will inevitably bring. Even more importantly, no amount of money can compensate for the reduced lifespan that overweight and obesity may cause.

The act of eating only half of what you previously eat is the greatest challenge, both physically and more importantly,



Divide into two halves every item of food on the plate. Ideally, at least initially, you should take away the half that you will not be eating. tentally country (ne old costs) in the

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psychologically. Initially, your stomach may rebel by giving you "false alarms" — in the form of rumblings or feelings of hunger. Ignore such "false alarms". (Remember, you can survive without food for four weeks!) You know the alarms are false because you do not need more food (otherwise you would not be overweight in the first place, would you?). A partial solution to counter these "false alarms", initially, is to drink an extra glass of water, whenever you feel hungry or hear the rumblings. If you find the hunger pangs "unbearable", physically or psychologically, take a fruit. The body will respond positively in due course.

A true devoted pilgrim is not weary To measure kingdoms with his feeble Steps.





For thousands of years, our ancestors were most of food gatherers and more recently, farmers. Their natural involve a lot of active physical working of their bodies through the day. Physical activities burn up a lot of calories each day, while the same time, keep the muscles throughout the body firm, taut and strong, burning yet more calories even when they are at rest. (In scientific terms, their bodies had higher basal metabolic rates than ours.) It was not necessary for our ancestors to exercise, as life for them involved strenuous physical activities.

we should target to walk ten thousand

a day

Today, many occupations in the developed world are sedentary. It is not possible to go back to our ancestors' ways of life; so we must find ways of exercising our bodies so that we use our muscles and keep then firm and strong.

Most of us dislike exercise — that is why we are overweight. As noted in the introduction, eating way in excess of our needs is what the body does instinctively. Fortunately, working our muscles naturally is also what the body does instinctively because our bodies are programmed for physical activities. Unfortunately, our sedentary lifestyle, both at work (which mostly involves sitting in an office in front of a computer), or at leisure (sitting at home in front of a TV), does not give us any physical exercise at all. We have psychologically conditioned ourselves not to move our muscles more than is absolutely necessary. Then guilt and a sense of lethargy kick in, and prompt us to get active.

We swing to the other extreme and become "weekend exercise warriors". We go to the gym, the playing field, the running tracks, the basket ball or tennis courts, and then exercise for as long as our time and energy permit, in an effort to compensate for our inaction during the past week or weeks. Often we overexercise. Because our muscles are out of condition, needless to say, over the next few days our bodies ache in a thousand different places. And we swear never to exercise again, concluding that exercise Together with our two glasses of water before meals, and eating half of our normal quantity of food, we should target

to walk ten thousand steps a day.

is bad for us, and that our bodies are not meant for exercise.

That is wrong. Friends who exercise regularly will tell you of the pleasure they feel when they exercise regularly and in moderation. In regular exercise, the body is being used in the way it is designed to work. People feel fitter, healthier and happier when they exercise regularly.

FOR THOSE WHO DO NOT EXERCISE REGULARLY, DO CONSULT A DOCTOR BEFORE YOU START ANY EXERCISE OR ANY VIGOROUS ACTIVITY One of the easiest ways of exercising regularly is to build it into your daily lifestyle. An easy start is to buy a pedometer, costing only a few dollars. A pedometer is a simple device that counts the number of steps you take. Put the pedometer on your belt, or clip it around your waist. Each night before you sleep, check the number of steps that you have taken during the day, and record the number. Then re-set the pedometer to zero again for the next day. (Many of us, with our sedentary lifestyles, take less than a thousand steps a day!)

Together with our two glasses of water before meals, and eating half of our normal quantity of food, we should target to walk ten thousand steps a day. You do not have to do this overnight. But over a period of a month or two, it is possible to do so without too much difficulty.

Example

- Day One 1000 steps (your current norm).
- Week One target to walk 3000 steps daily (go for a walk in a park nearby; walk at a pace that is comfortable and without panting).
- Week Two target to walk 6000 steps daily (do whatever you do in Week One twice).
- Week Three target to walk 9000 steps daily (yes, do whatever you do in Week One thrice).

Week Four — target to walk 10,000 steps (very little extra effort required).

Without exception, walking is the best exercise. It costs nothing, other than a pair of comfortable shoes. The time spent in a park or in a quiet neighbourhood can bring much pleasure and relaxation, and help to relieve stress from the day's hard work.

Walking 10,000 steps is equivalent to walking about 6 kilometres since most of us have strides of about 600 cm long. This is equivalent to about an hour's walk at a brisk pace and burns about 300-350 Calories (depending on the individual's weight and the speed of walking).

You do not have to do the 10,000 steps at one go, though it would be ideal if you could build it into your daily routine. Some of us walk a fair bit each day — in the office, in the supermarket or shopping mall, in the park, etc. As long as our walks add up to about 10,000 steps a day, we know we are keeping our bodies in good shape.

For people who prefer sports and other physical activities, it is alright if such activities expend about the same 300-350 Calories a day.

Besides burning these calories during your walk or exercise, the activity also helps build up your muscles and provide better toning. These improved muscles, will keep on burning more calories than before, even when you are at rest, giving you a higher basal metabolic rate (BMR). Assuming all other factors to be equal, exercises or physical activities that burn about 300 Calories a day will burn about 300×30 Calories a month. This is equal to 9000 Calories (equivalent to 1000 g of fat!!! or 1 kilogram/2.2 pounds!!!).

Such simple calculations give an indication of the value of exercise and food intake. (Remember the body is a marvellous survival system, par excellence; if it "senses" that a famine is around the corner, because of lower intakes of food, it will slow your BMR down, leading to tiredness and lethargy. Exercise helps counter this lethargic effect.)

One of the best kept secrets of medical science is that, apart from helping you keep your weight on the downward trend, exercise helps to improve your



FOR THOSE WHO DO NOT EXERCISE REGULARLY, DO CONSULT A DOCTOR BEFORE YOU START ANY EXERCISE OR ANY VIGOROUS ACTIVITY immunity (test it among your friends to see how many of them know this). Daily, we are assaulted by billions of bacteria, viruses, and germs of-all sorts, through our contacts with objects such as door knobs, handles and dollar notes, and through our close encounters with our friends and colleagues. The air we breathe, the water we prink and the food

we eat, all inject more germs in large quantities into our bodies.

Nothing else helps strengthen our immune system more than the daily exercise. Even if regular exercise does not help reduce our weight (which it does!), exercise just for the sake of improving our immune system would be worth the effort that we put in. Without exception, Walking is the best exercise. It costs nothing, other than a pair of comfortable shoes.

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The greatest challenge for any dieting program is to sustain the program after the initial spurt of interest.

It is always easy to start a new diet. There is hope; there is promise of success; there is enthusiasm; there is new interest. But after the program has been underway for a couple of weeks or months, sustaining it becomes progressively harder, even when the initial efforts have resulted in some success.

To assist in self motivation in sustaining T.H.E. Diet, and to increase the likelihood that you will follow through consistently, three simple special features have been introduced to help you: markings). Each morning, after you have had your two glasses of water before breakfast (500 ml or 0.5 litre), fill the jug up to the brim. The 2-litre jug (equal to the remaining eight glasses) will have to be empty by the end of the day. This is a simple but highly effective way of ensuring that you finish your ten glasses of water every day. If you have meals at your workplace or at a restaurant, make the appropriate adjustments when you get home.

Buy yourself a 2-litre water jug with clear volume markings (most jugs have 0.5 litre, 1 litre, 1.5 litre, and 2 litre With the pedometer that you purchased, record the number of steps taken everyday (e.g. see Table 1). Do not worry if you have not taken exactly 10,000 (ten thousand) steps everyday. The

10,000 steps is a clear target to remind you to keep up with your daily exercise. Once you are into the full swing of the program, you will find that you may fall short of 10,000 steps on some days, and may exceed 10,000 steps on other days. What is important is that, on average, you should target to meet your 70,000 steps each week. For example, if you are short of the daily target for a few days, you can make up for the shortage with two slightly longer walks during your weekend. This way, you enjoy the flexibility of your daily schedule while still adhering to the general requirements of healthy living. If you enjoy other physical activities, you can always substitute walking with other physical activities, so long as you expend about 300-350 Calories a day (approximately

	Daily	Weekly
M	8800	
Т	9500	
W	11,500	
тн	9300	
F	7600	
S	11,800	
SU	12,500	71,000
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Table 1. 10,000 Steps (Target Weekly Total of 70,000 Steps)

Aerobics	420	Jogging	500
Aerobics (in water)	350	Kayaking	350
Backpacking	490	Moving lawn	3 8 0
Badminton	320	Rope skipping	700
Basket ball	420	Rowing (stationary)	450
Bicycling	300	Running (6 min mile)	1100
Bicycling (stationary)	350	Running (8 min mile)	900
Billiards	200	Running (10 min mile)	700
Bowling	210	Running (12 min mile)	550
Boxing	800	Skateboarding	350
Boxing (punching bag)	420	Skating (ice)	500
Calisthenics	320	Skating (roller)	500
Canoeing	300	Skiing (water)	420
Circuit Training	560	Snorkeling	350
Cleaning around the house	250	Soccer (football)	500
Dancing (aerobic/ballet/modern)	420	Softball	350
Dancing (general)	320	Swimming (moderate speed)	550
Fencing	420	Table tennis	300
Football	560	Tennis	500
Gardening	350	Volleyball (beach)	550
Golf (carrying clubs)	380	Walking/playing with children	300
Golf (pulling cart)	350	Walking (2 mph, slowly)	200
Gymnastics	280	Walking (3 mph, moderate speed)	250
Hiking	420	Walking (4 mph, briskly)	300
Hockey	560	Water polo	700

Table 2. Caloric Value of Some Sports and Physical Activities

an hour of moderate physical excertion; see Table 2 on the comparative energy expended for the different activities and sports).

Buy yourself a good weighing scale (preferably one with a digital readout with one decimal point) so that you can read your weight accurately, without biased guesses. (This is the most important investment that you will make in improving your health and fitness.) Then each day, preferably at the same time, and under the same conditions, e.g. just before breakfast every morning or just before bed every night, weigh yourself and record your weight in the table provided (see Table 3). Your weight



If you enjoy other physical activities, you can always substitute walking with these other activities so long as you expend about 300-350 Calories a day. For the greatest effectiveness, you should target to reduce your weight by about a pound (half a kg) a month. This will give you a loss of about ten to twelve pounds in the first year of the program. Such regular and consistent weight loss is most sustainable and requires minimal effort, and can be continued until you achieve a healthy BMI (Body Mass Index).

> will fluctuate slightly, up and down, day by day, showing you how significantly your daily activities and food intake can affect your weight (and health) on a daily basis. If you keep to **T.H.E.** Diet, you will see your weight fluctuating downwards over a week or two. This simple daily recording and graphing of your weight will provide you with a continuous feedback of your progress, and will give you a sense of achievement which will be extremely motivating and vital to help you sustain your program. For the greatest effectiveness, you should target to reduce your weight by about

a pound (half a kg) a month. This will give you a loss of about ten to twelve pounds in the first year of the program. Such regular and consistent weight loss is most sustainable and requires minimal effort, and can be continued until you achieve a healthy BMI (Body Mass Index).

Weight loss much larger than one pound a month is usually not sustainable in the long run. The body may be triggered into a "starvation mode", believing that a famine may be on, and may respond by lowering the BMR (basal metabolic rate), so that in the long run, the initial large weight loss may be in vain, or worse, counter productive.

What is most important is the development of the awareness of the correct diet and lifestyle, and the

change in attitude and habits towards food and exercise.

Soon you will get unsolicited compliments about how good you look, how slim, how healthy, how fit, and how much younger you look. As you progress in your exercise regime, your physical

correct

appearance will improve, beginning with better blood circulation giving you rosier skin and a livelier face. Even when your weight loss initially is marginal, the compliments will start rolling in. Such compliments are great motivators and will help you stay on with the program.

What is most important is the developmen of the awareness of the **CORRECT diet** and **lifestyle** and the change in attitude and habits towards food and exercise.

Example

Table 3. Daily Weight Graph

Ibs	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
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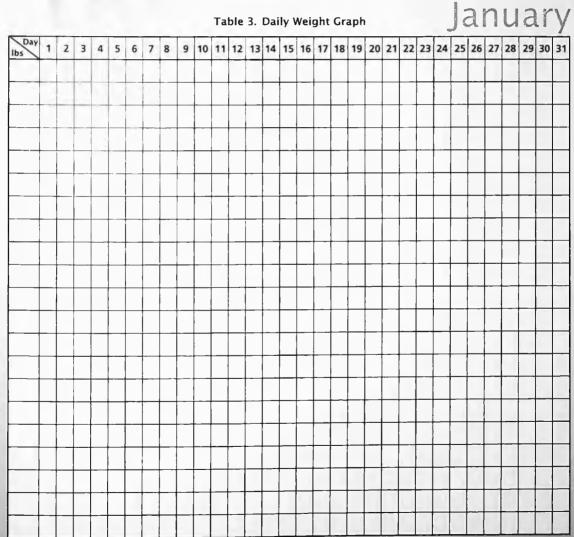


Table 3. Daily Weight Graph

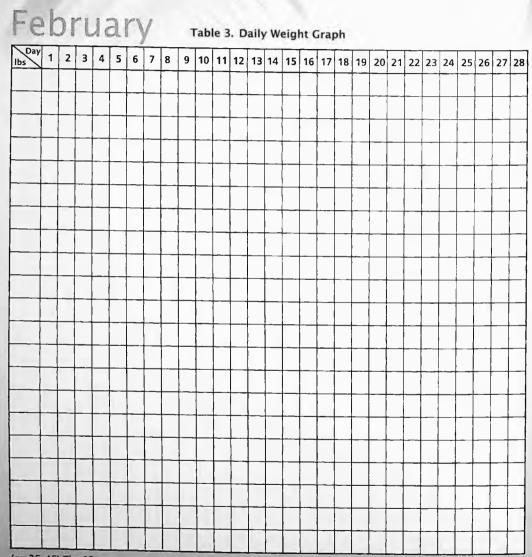
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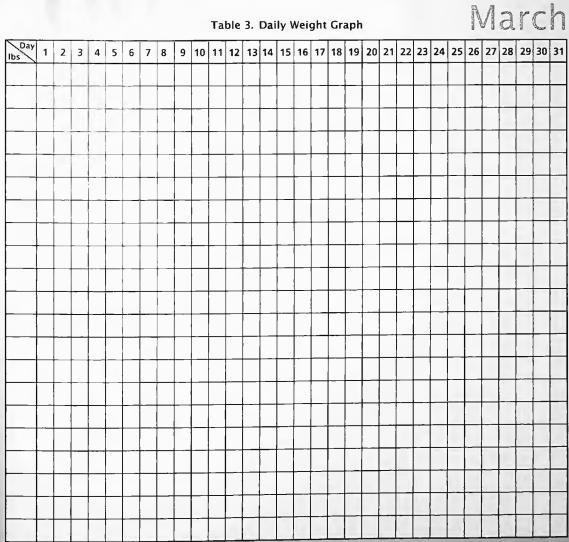
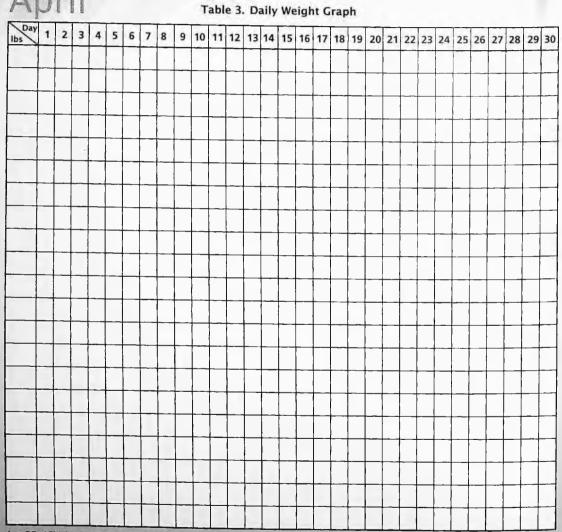


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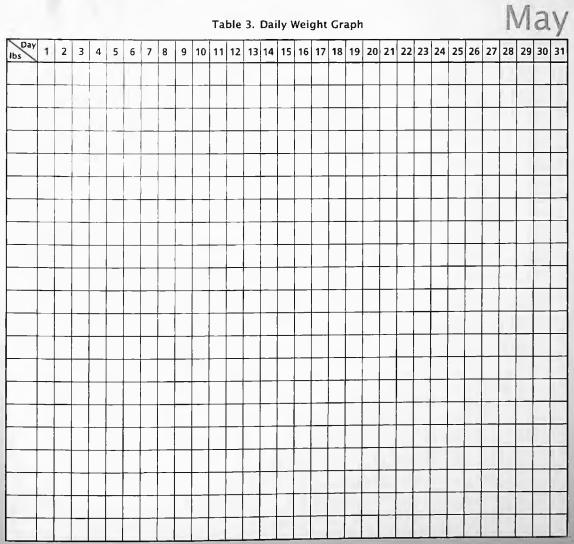
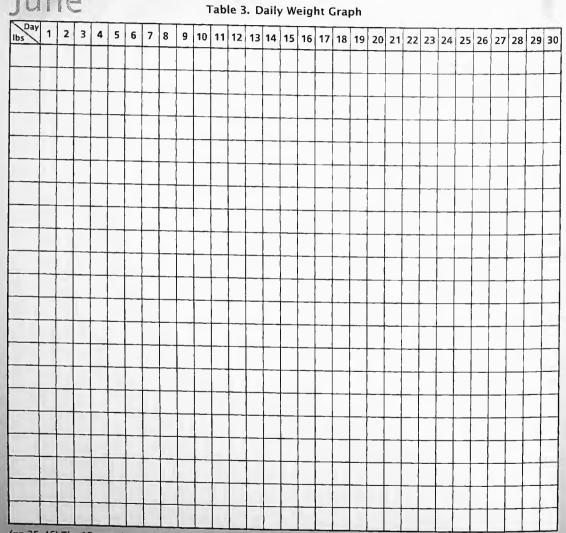


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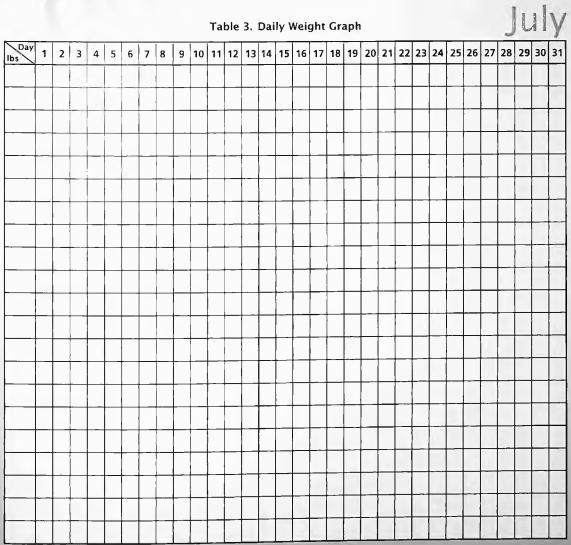


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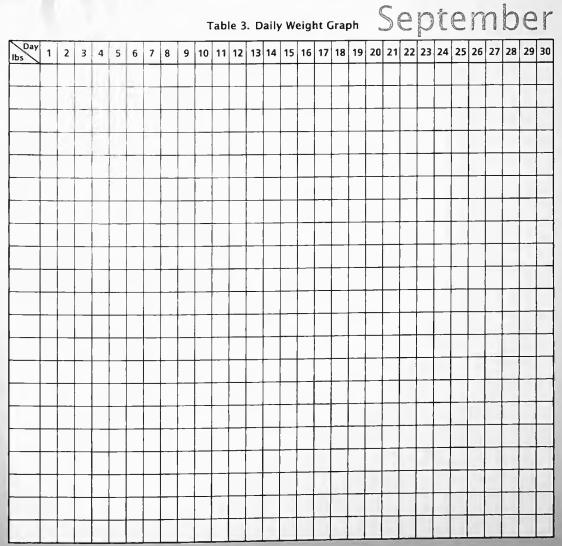
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Table 3. Daily Weight Graph

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Table 3. Daily Weight Graph

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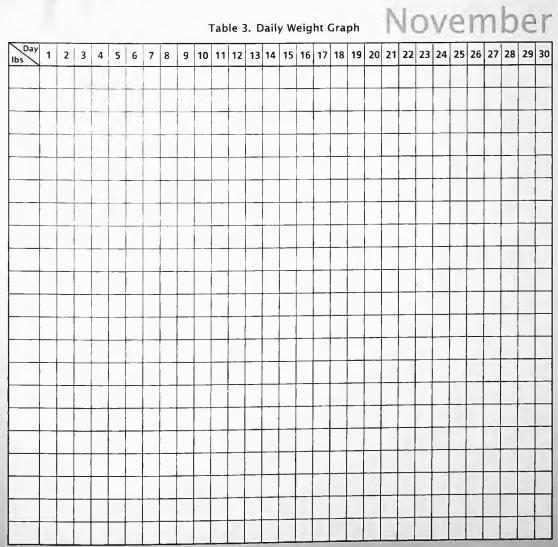


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December

Table 3. Daily Weight Graph

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(pp 35-46) The 12 most important pages in this book.

Increasing Upwards

4

The diamonds of a most praised Water Do appear, to make the world twice rich.

The human body is made up of about 60% of water. Water is the universal solvent. It dissolves many different nutrients in our food. In the form of blood, it helps transport such nutrients together with oxygen throughout the body to nourish all the different organs, especially the brain.

> Water also serves as the solvent for transporting waste matter that results from the body's metabolism, passing them through the kidneys and excreting them out of the body as urine. A less well-known role of water is to keep solid waste matter soft and fluid. (Normal faecal matter consists of about 70% of water.)

> Without enough water, the body may experience constipation and have difficulty with solid stools.

> It is no exaggeration to say that water is absolutely essential to life and for good health. No wonder the great Shakespeare waxed poetic about its value, extolling it as "The diamonds of a most praised water".

Yet, surprisingly, water has not been

given its rightful place of importance in dieting. This, I believe, is partly responsible for why so many diets do not work as effectively as they should.

Shortage of water in the body can result in dehydration. Indeed, it is estimated that a percentage of people are partially dehydrated most of the time. (A good indication of this is the darker coloration of the urine, and/or a feeling of thirst or dryness in the throat. This is especially common during hot summer days or in the tropics and in equatorial countries.) Medical experts estimate that partial dehydration may be responsible for a large number of physical discomfort such as headaches, and in extreme cases, physical ailments such as kidney stones. T.H.E. Diet, with its recommendation of ten glasses of water a day, ensures that

the body is always properly hydrated, functioning at its optimal level at all times.

(It should be remembered that the body eliminates about 1.5 litres (1500 ml) of water a day via urination, carrying with it the waste metabolites. Another 0.5 litres (500 ml) is lost largely through perspiration, to help the body maintain its constant temperature. The remaining 0.5 litre (500 ml) helps to keep the stool soft and free-flowing, thus preventing constipation. Hence the 2.5 litres (ten glasses) of water one drinks each day is just adequate for good health. In T.H.E. Diet, the 2.5 litres of water before meals serve another practical purpose by helping to re-train the stomach, making it feel slightly full (without calories) before meals are taken.



It is no exaggeration to say that water is absolutely essential to life and for good health. No wonder the great Shakespeare waxed poetic about its value, extolling it as "The diamonds of a most praised water".



praise of exercise

Our early ancestors did not need any exercise. Looking for food for survival was a muscle-working activity, a stremuous and energyexpending task. For the men, hunting was not and work; it was also very risky, often resulting in serious in the death. Long walks and occasional running and sprint main, or kill whatever prey that was within range, ensure the death activities.

> For the women, there were the long walks looking for food, in particular fruits, plants, and nuts, to collect and bring home for the family. These provided the steady sustenance day by day, with hope for the rare occasional meat from the men's hunt, to provide some protein and fat. This was our ancestors' normal routine.

With the advent of civilisation, most people no longer hunt or collect food from the wild. We buy them, packaged, canned and arranged for our ease and convenience, from supermarkets and other stores. Our livelihood comes from mostly sedentary jobs, sitting in front of a desk, looking and tapping at a computer.

For our entertainment, we slump into

our most comfortable seats, and glue our eyes to the TV, for hours at a time. No wonder, our bodies break down, slowly, imperceptibly, but disastrously, accumulating fat, discomfort and diseases as we age.

The sedentary lifestyle has contributed to a large number of "lifestyle diseases" such as heart failures, high blood pressure, strokes, diabetes, etc.

We need to get active. We must do it for our health's sake, for our own life's sake.

Exercise is the universal immunity booster. Very few people associate exercise with immunity. Exercise generates white blood cells in the body, which help us counter the billions of germs, bacteria and viruses which enter into our bloodstream, via the air we breathe in, and the food and drinks that we take in. When our immunity is low, the cold or flu virus that we encounter all the time, in the air, from our friends and colleagues, and from our family members, can easily overwhelm us, and in next to no time, we are sick. When our immune system is weak, we fall sick frequently.*

In our modern civilised society, stress at work, on the road, and in the family, all contribute to a weakening of our immune system.

Exercise is a great de-stresser. In lowering our stress levels, it improves our health — in the short-term against minor infections; in the longer term, it helps defend us against killer diseases



*As a result of my daily walk, I have not had a cold for many years. When my grandchildren bring home germs from school and kindergarten, other members of the family may progressively get infected. Inspite of my grandchildren coughing into my face when I read to them on my lap, I have so far been immune to their infection! such as heart diseases, cancer, strokes, diabetes, etc.

Exercise also builds muscles and strengthens bones and ligaments. More and stronger muscles not only make us look younger and healthier, we actually become biologically younger than our chronological age. (After you take up exercise, you will be surprised by the number of compliments that you will receive when people tell you that you look younger than your age). More and stronger muscles continue to burn more energy than before, 24 hours a day, round the clock, even when you are at rest or asleep.

Table 2 gives a comparison of the number of Calories expended for different games and physical activities. Apart from some competitive sports and vigorous games, which burn up to 600-700 Calories per hour, activities, games **300-400 Calories new hour** (This is all that we need to remember.) This means that an hour of any moderate physical activity or game a day is equivalent to the 10,000 steps that we target, to help us burn calories, build muscles and raise our basal metabolic rates. Indeed any moderate physical activity that is enjoyable and gets the heart pumping at a higher rate is good for our health.

Ancient wisdom teaches that "all work and no play make Jack a dull boy". In due course, it makes Jack a fat man too. And an unfit, unhealthy man is more prone to heart attacks, strokes, diabetes, cancer and all the other major spoilers of the good life. (Ditto for Jill.) In our modern age, most of us work much longer than the standard 9-5, eight-hour day, five days a week.

We need, desperately, to reclaim our hour of play, (exercise in whatever form that we find enjoyable, to burn the 300-350 Calories), to de-stress, to restore our health, and to keep our basal metabolic rates at an optimum level. Then the glow in the face that comes only from regular exercise will win the unsolicited compliments from all around.

Exercise is the universal immunity booster. Very few people associate exercise with immunity.



praise of fruits and vegetables

Our ancestors, especially our maternal ancestors, were gatherers of fruits, nuts and edible plants (vegetables), which formed the bulk of their diets. Our paternal ancestors hunted, foraged, and scavenged for meat, which was rarely available. Hence, we have evolved an anatomy with stomach and intestines that can handle both fruits and vegetables as well as meat.

> For people like us, with a tendency towards being overweight, fruits and vegetables are of the greatest value.

They are Mother Nature's gift of salvation to us overweighters. Fruits and vegetables are "water proxies", packaged as tasty palatable food. They are "water proxies" because they are made up of a large quantity of water with zero calories, trapped within a complex network of fibres (again zero calories), together with a lot of rich and valuable phyto-nutrients, vitamins and minerals and a small amount of carbohydrates (usually complex sugars). While there is controversy surrounding much of the details of most food items, diets and nutritional recommendations, there is unanimous agreement among all experts that fruits and vegetables are the healthiest food that money can buy. Indeed, study after study, consistently show that fruits and vegetables are good for healthy living and that the average person should eat more of them.

Fruits and vegetables are valuable for weight management for a large number of reasons:

- 1. It is full of water up to 80-90%.
- It is very low in calories, with practically no fat, no cholesterol, and no salt.
- It is very high in phyto-nutrients and anti-oxidants; many of them have been shown to help in the defence against some of the major killer

diseases such as cancer, heart attacks, diabetes, strokes, etc.

- 4. It is high in vitamins, especially vitamin C.
- 5. It is high in minerals, including the all important mineral potassium.
- It is full of fibres which help to prevent constipation.

Best of all, most fruits and many vegetables can be eaten uncooked (after proper washing) and are easily portable. This makes them ideal for snacks in the office or workplace or for picnics and outings.

Fruits and vegetables are "water proxies", packaged as

tasty palatable food.





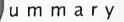
With the aid of two glasses of water before our meals, we can, with some self-discipline initially, reduce our intake of calories by about a half. This can be done without changing the type of food we eat, or remembering the different categories of food, or counting the calories of all the different dishes at the different meals. With some walking (or other moderate physical activity) we can burn off some excess calories (about 300–350 Calories a day). This simple program will help build muscles, making them firmer and stronger and hence increasing our basal metabolic rate, burning more calories even when we are at rest or asleep. Even more valuable, our immune system will improve, making us less prone to illnesses and diseases. with **T.H.E. Diet** in place, **you will stop you Weight increase**, feel and look better, and gradually see the beginning of a healthier life style with gradual weight loss.

With T.H.E. Diet in place, you will stop your weight increase, feel and look better, and gradually see the beginning of a healthier life style with gradual weight loss. Over a period of time, you will be surprised by the frequency of compliments coming your way, from friends and colleagues, and even from complete strangers — about how fit, how slim, how healthy and how much younger you look!

T.H.E. Diet's three conditions are the absolute minimum for effective weight

loss. They are the necessary and sufficient conditions, and are the most basic and fundamental principles for healthy weight management — more water to decrease the appetite and give a greater sense of fullness without calories; fewer calorie input, and more calorie output, with firmer muscles. (For the time being, if you so wish, you can continue with whatever other diet or program you may have. Adopt whatever advice you find helpful to you, as long as you maintain the three key principles of T.H.E. Diet.)





en glasses of water a day. alve your daily intake of food. xercise — 10,000 steps a day.

CAUTION

T.H.E. Diet is meant only for healthy individuals who are overweight (with BMI greater than 25), and who wish to bring their BMI gradually down to healthier zones below 25. Individuals who are severely overweight (obese), or those who have medical conditions or nutritional constraints should consult their doctors before embarking on T.H.E. Diet.





But like in sickness, did I loathe this food

But as in neath, come to my natural taste Now I do wish it, love it, long for it And will for evermore be true to it.





T.H.E. Diet helps us to break out of our wrong eating habits and lifestyle and to achieve steadily and progressively a slimmer, healthier, and fitter body with good muscle mass. T.H.E. Diet is the simplest and most elementary of effective diets. With immediate feedback from the weighing scale on a daily basis, we know we are on track in getting our weights moving downward gradually, in the right direction. If you are happy with the progress made, you can stay with T.H.E. Diet permanently, for the rest of your life, and stay slimmer, healthier, and fitter than before. However, after having enjoyed the benefits of T.H.E. Diet, you may wish to progress beyond it, and move towards something ever healthier. There is such a diet, and again, it is designed to be simple to follow. I call it T.H.E. A₂₂ Diet.

T.H.E. A_{2z} Diet covers all food items from A to z, as its name implies. Here, again, I have distilled the essence of nutrition down to the simplest principles, so that everybody can understand and practise them daily.

Basic Science of Nutrition

All food can be classified into five primary categories:

- 1. Water
- 2. Fibres which are largely indigestible

complex cross-linked carbohydrates. They normally pass unabsorbed through the body, giving no calories at all. Its primary function is to aid in ensuring a regular and healthy constitution. Together with water, this category is the most important and the most helpful component of food for overweighters.

- Carbohydrates which include simple sugars, complex sugars, and starch.
- Proteins which include the essential amino acids, the non-essential amino acids, peptides, and polypeptides.
- Fats which include the saturated fatty acids, the mono-unsaturated fatty acids and the poly-unsaturated fatty acids.

*Scientifically speaking, it would be more accurate to quote the calorific value of food in kilocalories e.g. 400 kilocalories for 100 g of carbohydrates. But most books for the lay readers use Calories to mean kilocalories (1000 calories), So we will follow this convention, and use Calories in this book.

> All food items are complex mixtures of water, fibres, carbohydrates, proteins, and fats, combined in different ways and in different proportions. For example, for the more common food groups:

Fruits and Vegetables are made up largely of water and fibres, with a small amount of carbohydrates.

Staples, such as wheat, corn, rice, millet and potatoes, are made up of a huge amount of carbohydrates, with some water, a small amount of fibres and protein, and occasionally a trace of fat.

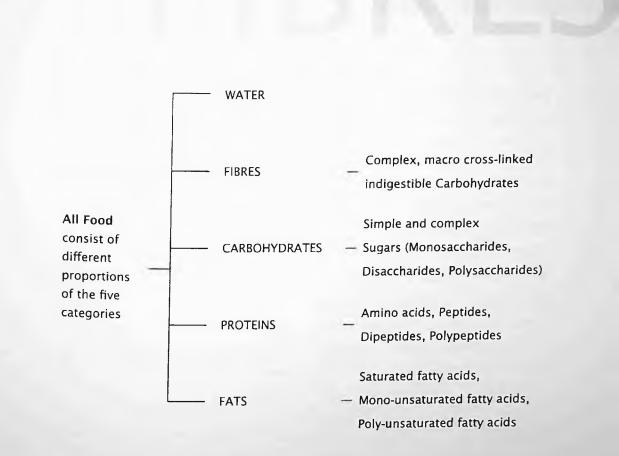
Meat is made up largely of protein, with some fat and a variable amount of water (with practically no fibres). The *various cooking oils* are almost wholly fat (about 98-100%, with a trace of water).

Calorific Values* of Food

One key set of scientific facts that all of us must remember is the approximate calorific values of the five categories of food:

- 1. 100 g of Water give zero Calories.
- 2. 100 g of Fibres give zero Calories.
- 3. 100 g of Carbohydrate give 400 Calories.
- 4. 100 g of Protein give 400 Calories.
- 5. 100 g of Fat give 900 Calories.

Hence, we can drink lots of water and eat lots of fibres without putting on weight!



We define the calorific density of a food item as the number of Calories that 100 g of that food item give.

T.H.E. A_{2z} Diet Classification of Food

Nutrition is a very complex subject. There is a mountain of information resulting from extensive scientific research and studies. Unfortunately, this mountain of minutiae has also led to a lot of confusion, even among the educated and well-read. To go beyond the basics, some understanding of the science of nutrition would be helpful. However, one does not require a university degree in chemistry, biochemistry, molecular biology, medicine or nutrition science to understand this, though such a degree would give greater understanding and depth.

For practical dieting purposes, to aid the vast majority of readers, we will group all food items into three broad classes, based primarily on their calorific density.[†]

1. Class-A

Food items with less than 100 Calories/ 100 g: Class-A food includes all the fruits and vegetables, most of which have a caloric density of 10-50 Calories/ 100 g. These are the food items with high proportions of water and fibres, making them very healthy indeed for overweighters.

The A in Class-A food can stand for:

- (i) Excellence, being the healthiest food;
- (ii) Any meal;
- (iii) Any time;
- (iv) All the time;
- (v) Any quantity that you like.

What a relief to know, at the beginning of T.H.E. A_{2z} Diet, that there are lots of healthy food items that you can eat, any amount you like, anytime you like, and not have to starve yourself!

Class-A food are food items with high water and fibre content — with very few calories, even when you fill yourself full with them. Furthermore Class-A food — fruits and vegetables — are full of valuable health-giving nutrients, giving the body extra protection against many lifestyle diseases.

2. Class-2

Food items with a calorific density of about 100-300 Calories/100 g. The "2" in Class-2 food alludes to the halving of the quantity of such food items as they have moderately high calorific density. Class-2 food items are largely made up of carbohydrates and proteins with small amounts of invisible fat. (Almost all the food items with carbohydrates and proteins also have varying amounts of invisible fat. Some food labels show their percentages.) Practically all staples potatoes, wheat, rice, corn, millet, most grains, and practically all *lean meat* — are Class-2 food. The advice is — feel free to enjoy yourself with Class-2 foods, but cut down the quantity by a half.

(We should remember that typical food pyramids recommend staples and grains as the base for diets. It must be emphasised that these recommendations are for normal weighters with satisfactory BMIS — and not for overweighters, who want to bring their BMIs down to the healthy zone. In meat, visible fat should be trimmed and discarded; so too with the skin of chicken and other fowls, which has to be stripped and discarded because they are very high in fat content.

Fish is a good Class-2 item, with lots of protein and little fat. Needless to say, Class-2 foods should not be deep-fried; otherwise, they would be soaking in fat (both visible and invisible!) and hence would qualify as Class-z food.

3. Class-z

z is for zero, an obvious message, if ever one is needed. Class-z food are food items that have very high fat content (remember 100 g of fat give 900 Calories), and hence have very high calorific density. Ignore for the time being, all the magazine articles and books about "good fat" and "bad fat". For overweighters, "ALL FAT IS BAD", BECAUSE THEY MAKE US FAT !!! Apart from having high fat content and hence high caloric density, Class-z foods are also highly addictive because they target the major weakness of our digestive system, namely our tongues. Class-z foods are usually very tasty - once you start eating, it is difficult to stop. Remember, our tongues and taste buds are programmed to enjoy fatty, saltish and sweet food. All the snacks such as chocolates, crunchies, nuts, etc. fall into this category.

To say that we should have zero consumption of tasty Class-z food is clearly wishful thinking. Nevertheless, by calling it Class-z, we call attention to the dangers of what we are doing when we eat Class-z food. They are extremely tempting, hence dangerous and hazardous to our health and wellbeing.

The advice, therefore, is to tread carefully and avoid Class-z foods as much as possible (for example, I have not used margarine or butter for the past forty years!). If it is really impossible or difficult to refrain from eating such foods, eat the smallest amount possible and as infrequently as possible, fully conscious and aware of the fact that it is class-ZERO food.

Ignore all the advertisements that promote the message that some fats and fatty foods are good for health. While some fats may have some redeeming nutritious quality,[‡] on balance, the very high calorific density of fats is definitely bad for the health of overweighters.

For example, 100 g of nuts give more than 700 Calories. On the other hand, 100 g of cucumbers and carrots give 12 and 20 Calories respectively. So if one has to snack, it will be healthier to snack with Class-A foods instead of Class-z foods.

T.H.E. Azz Diet is a refinement and an improvement over the simplest effective diet, namely, T.H.E. Diet. Instead of simply halving all the food items in T.H.E. Diet, we can now eat as much as we like



of the Class-A foods in the T.H.E. A₂₂ Diet regime, while keeping to a minimum Class-z foods. For all remaining items, Class-2 food, we still keep the amount to a half, as in T.H.E. Diet. This is a much more satisfactory and healthier diet, because it minimises further the quantity of fat intake.

As long as we keep the three basic classes in mind, we can have any recipe for our meals, prepared in any way we like (remember — use the minimum amount of oil for cooking, and do not go for deep fried food because they come soaking with fat, and hence are Class-z food).

Like the three legs of a stool that are essential for stability, the three basic principles of T.H.E. Diet and T.H.E. A₂₂ Diet are the minimum requirement for healthy living. Yet they are effective in providing us with a stable platform for a permanent lifestyle that will give us a slimmer, healthier, and fitter body.

enjoy the benefits of

However, after having enjoyed the benefits of T.H.E. Diet, some may wish

towards something EVER healthier.

1. Water	_	Zero Calories
2. Fibres		Zero Calories
3. Carbohydrates	-	400 Calories/100 g
4. Proteins	-	400 Calories/100 g
5. Fats	-	900 Calories/100 g

 Table 1. General Classification of Food (based on Calories/100

Table 2. General Classification of Food (based on T.H.E. A2z Diet)

Water — Zero Calories				
Class-A (0-100 Cal/100 g) (eat as much as you like)	Class-2 (100-300 Cal/100 g) (eat half of your normal intake)	Class-z (300-900 Cal/100 g) (keep as close to zero as possible)		
Fruits and Vegetables e.g. apples, oranges, pears, broccoli, lettuces, cabbages, carrots etc.	Staples and lean meat e.g. rice, wheat, corn, millet, lean chicken (without skin), lean beef, lean pork, lean lamb, turkey, fish, etc. (no deep fried food)	Fat, oils, nuts, fatty cuts of all meat, mayonnaise, fatty dressings, animal lard, butter, margarine, cooking oil (use minimum amount), commercial sausages, commercial hamburgers, deep fried food, etc.		

	Class-A	Class-2	Class-z
Water Fibres	Fruits and Vegetables, largely water and fibres and a little carbohydrates		
Carbohydrates Proteins		Staples such as rice, wheat, corn, etc.; lean meat and fish, skinless chicken and other fowls; all foodstuff not in Class-A or Class- z; they are largely proteins and or carbohydrates with a small quantity of invisible fat, and some water and fibres.	
Fats			Overwhelmingly fat, with small amount of proteins, and carbohydrates. Includes all cooking oils, nuts, and deep fried food.

Table 3. The Matrix of Food

Simple Analogy

A simple way to understand the basic chemistry of food is to think in terms of lego pieces:

- Imagine water to be small colourless transparent lego pieces. Water is present in most food, especially in fruits and vegetables. Water gives zero Calories, and performs a multitude of valuable and useful functions in the body. It is also essential for good health and life itself.
- 2. Imagine fibres to be green lego pieces. The best news in nutrition is that fibres, like water, give zero Calories, and are good for health. Scientifically speaking, fibres are super-large super-complex multiple cross-linked carbohydrate molecules, that the

body is unable to break down, and so cannot be absorbed into the blood stream. Hence fibres pass through the human body undigested, serving the useful function of scrubbing and cleaning our digestive tract.

3. Imagine carbohydrates to be made up of yellow lego pieces of different shapes and sizes, some large, some small. These yellow lego pieces are called sugars (the common table sugar that all of us are familiar with is scientifically called sucrose; it is just one of dozens of different sugars found in nature). The scientific classification and naming of the different types of carbohydrates are monosaccharides, disaccharides and polysaccharides. The different sugars (usually disaccharides and polysaccharides) in food normally break down to simple sugars (monosaccharides). 100 g of carbohydrates give 400 Calories.

- 4. Imagine proteins to be made up of orange lego pieces, called amino acids, again present in different shapes and sizes. Most amino acids in food are combined with other amino acids to give peptides (two-orange lego pieces stuck to each other), dipeptides, tri-peptides or poly-peptides (many orange lego pieces). Protein in meat and in staples (including legumes and beans) are made up of polypeptides. In the mouth and stomach, they break down into simple amino acids, which are absorbed into the blood stream. 100 g of proteins give 400 Calories.
- 5. Imagine fats to be made up of red

lego pieces, again of different shapes and sizes, called fatty acids. Some of the fatty acids are large molecules, often on their own, but sometimes in combination with other molecules to give glycerides. 100 g of fatty acids give 900 Calories.

All food are made up of combinations of water, fibres, carbohydrates, proteins and fats (transparent, green, yellow, orange and red lego pieces), much like lego pieces of five different colours that can be used to build thousands of different objects of different sizes and configurations, with different combinations of colours.

CLASS-A food are made up of mostly water and fibres (transparent and green lego pieces), with a sprinkling of carbohydrates (yellow legos). They are the healthiest food money can buy.

CLASS-2 food are the multi-coloured lego combination, predominantly transparent, green, yellow and orange, and very little red (i.e. with water, fibres, carbohydrates, proteins, and a small amount of fat). These are the normal staples of rice, wheat, corn, millet, tapioca, potatoes, etc. as well as the lean meats, fish and skinless fowls. (Avoid fatty meat and skins of fowls, as they are largely fat (red legos)!) Because of their moderately high calorific density, keep the quantity consumed to about half your normal intake.

CLASS-z food are largely fats (red legos!), sometimes with a small amount of the other food types such as fibres,

carbohydrates or proteins. In extremis, some Class-z foods e.g. cooking oils, are completely fat (red) and give 900 Calories per 100 g. In commercial and processed food, the fat is often well grounded, well-minced and well-mixed with the other food types, so much so that the fat becomes invisible. Read the labels carefully for the fat content. Any processed or commercial food with more than 30% fat should be treated as Class-z food. Watch out especially for sausages, hamburgers, luncheon meats and similar homogenised food. If you love hamburgers and such homogenised meat, buy the lean cuts and ask the butcher or staff at the supermarket to mince the meat for you on the spot. That way, your sausages and hamburgers will be free from the additional "invisible fat", and hence will still be Class-2 food.

Basic Chemistry in Nutrition

If you wish to know more about the chemistry in nutrition, beyond the simple analogy of lego pieces, here is a little of the heavier stuff.

CARBOHYDRATES (C_{6x}H_{12x}O_{6x})

Monosaccharides (simple sugars)

Disacharides (simple sugars) Polysaccharides (complex sugars

and starch)

Carbohydrates form a large class of food which includes most of the staples such as rice, wheat, corn, millet, potatoes, tapioca, etc. A common term used is starch, which breaks down in the body to smaller components, generally referred to as sugars. Carbohydrates are the basic fuel for energy for the body. There are dozens of different sugars with scientific names that end in -ose. For example table sugar is called sucrose, which is made up of two even simpler sugars called glucose and fructose. Milk sugar, called lactose, is made up of glucose and galactose.

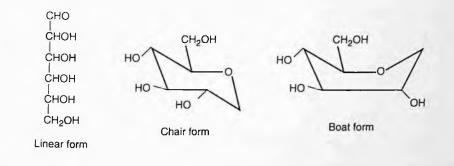
The simplest sugars are called monosaccharides and they include sugars like allose, altrose, fructose, glucose, gulose, mannose, idose, galactose and talose. Glucose is the most well-known of the monosaccharides.

At the next level of complexity are the disaccharides, made up of two monosaccharides linked together. The most wellknown disaccharide is sucrose — made up of a molecule of glucose linked to a molecule of fructose. Other disaccharides include lactose (made up of glucose and galactose) and maltose (made up of two glucose molecules linked together).

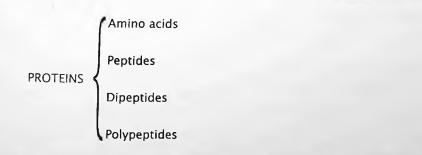
Beyond these simple sugars are the complex sugars, also known as the polysaccharides. They are made up of multiple linkages of monosaccharides. Starch is a common example of polysaccharides. In the body, disaccharides and polysaccharides break down into monosaccharides and provides Calories (sometimes referred to as "empty Calories" because sugars are often unaccompanied by other nutrients) for the body.

Unfortunately, excess sugar is not good for the body as it can result in a high glucose content in the blood for some people with diabetic pre-disposition. Fortunately, one special solucategory of carbohydrates, called fibres, is healthy for the body. Fibres are very special carbohydrates where the monosaccharides are cross-linked extensively into a huge and complex network of molecules such that the body is unable to break it down. Hence, they are not absorbed by the body at all, and give zero Calories. (Cellulose is an example of fibre, and is present in plants cells walls. Hence it is present in vegetables and fruits. Pectin is an other example of an edible fibre.)

Even the simplest of sugars, the monosaccharides, are complex chemically. They can exist in different forms and structures. For example, the simple monosaccharide, glucose, can exist in three different forms as illustrated on page 93.



Chemical Structures of Glucose

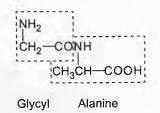


Like carbohydrates, proteins form another large class of food, present largely in meat (beef, lamb, pork, chicken, duck, turkey, etc.), fish, nuts, and in some legumes, such as beans. Proteins are made up of simpler components, the simplest of which are the amino acids. Apart from serving as fuel to provide Calories, amino acids are essential for the building of muscles for growth and replacement and the repair of routine wear-and-tear of the body's organs.

The simplest of the amino acids is called glycine (pronounced gly-sin). There are dozens of amino acids - fortunately, only about ten of them are essential because the human body itself is unable to produce them. However, they are present in significant quantities in most lean meat and fish, and hence these sources of protein should provide all the essential amino acids without difficulty. Apart from glycine, other amino acids include alanine, arginine, cystine, histidine, leucine, isoleucine, lysine, methionine, phenylalanine, proline, serine, threonine, tyrosine, valine (enough -ines?). Remember - although the names all end in -ine, they are pronounced as -in! (as in va-lin)

NH ₂	NH ₂	
CH2COOH	сн ₃ —сн—соон	
Glycine	Alanine	

A peptide is a compound made up of two amino acids.



Polypeptides are usually made up of ten or more amino acids, and proteins are made up of large quantities of polypeptides, inter-linked at different points. Different kinds of proteins have different polypeptides (i.e. different amino acids, linked in different ways). The simple amino acids give rise to a huge variety of proteins, just as a small variety of simple lego pieces can be used to build almost countless numbers of structures of different sizes and functions.

Saturated fatty acids (S-fat)

FATS FATS Acids (M-fat)

Poly-unsaturated fatty acids (P-fat)

Saturated fatty acids are long chain fatty acids without any double bonds. They are usually liquids (oil) at room temperature.

> CH_3 — $(CH_2)_{16}$ — COOH Stearic acid (from palm oil)



All foods are made up of combinations of water, fibres, carbohydrates, proteins and fats (transparent, green, yellow, orange and red lego pieces), much like lego pieces of five different colours that can be used to build thousands of different objects of different sizes and configurations, with different combinations of colours. *Omega-3 and omega-6 fatty acids refer to the position of the carbon atom that carries the last double bond; ω (pronounced "omega", the last Greek alphabet) refers to the last carbon atom. The carboxylic group COOH (the fatty acid group) is always termed α (pronounced "alpha", the first Greek alphabet), the first carbon atom.

> Mono-unsaturated fatty acids are long chain fatty acids with a single double bond (hence the adjective "monounsaturated"). Of all the fats, monounsaturated fatty acids are currently considered the healthiest. (For overweighters, we need to remember that mono-unsaturated fatty acids also give 900 Calories/100g). So if we must use oil for our cooking, let us keep it to a minimum, and use the oil with higher proportions of mono-unsaturated fatty

acids (Table 4). Mono-unsaturated fatty acids are usually liquids e.g.

$$CH_3$$
 – $(CH_2)_7$ – CH = $CH(CH_2)_7COOH$
Oleic acid

Poly-unsaturated fatty acids are long chain fatty acids with multiple double bonds — hence the adjective "polyunsaturated". The most famous of the poly-unsaturated fatty acids are the omega-oils, in particular, omega-3 oil and omega-6 oil*

$$CH_3 - CH_2 - CH = CH - CH_2 - CH = CH - CH_2 - CH = CH - (CH_2)_7 COOH$$

Linolenic acid (omega-3 oil)

 $CH_3 - (CH_2)_4 - CH = CH - CH_2 - CH = CH - (CH_2)_7 COOH$

Linoleic acid (omega-6 oil)

S-Fat Saturated (%)	M-Fat Mono-unsaturated (%)	P-Fat Poly-unsaturated (%)	
9	69	17	
		4	
-		32	
	6	2	
	28	59	
	44	10	
	71	11	
	40	10	
	48	32	
	13	78	
-	41	45	
	24	61	
	19	69	
16	28	66	
	Saturated (%) 9 46 6 83 13 42 14 50 13 9 13 15 12	Saturated (%)969464366283613284244147150401348913134115241219	

Table 4. Approximate Percentages of Different Fats in Some Cooking Oils

Trans-fat

A lot of publicity has been given to the unhealthy effects of trans-fat. These are liquid fats (oils) that have been treated by industrial processes (called catalytic dehydrogenation) to convert them into semi-solid fats which are "spreadable", for use in margarines, peanut butters, cookies, cakes, etc. Unfortunately in the industrial process some of the double bonds are converted into trans-isomers,

$$CH_3$$
--(CH_2)_x-- CH_2
 CH =- CH
 CH_2 --(CH_2)_y-- $COOH$
Trans-fat (Industrial)

In the body, glycerides break down to give free fatty acids which are absorbed into blood stream. Excess fatty acids are stored as fat around the abdomen, the buttocks and the thighs.

where the two ends of the fatty acid are on opposite sides of the double bond. Natural fatty acids are in the cis configuration, i.e. the two chains at the ends of the double bond are on the same side of the double bond.

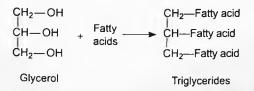
 CH_3 -(CH_2)_x- CH_2 CH_2 -(CH_2)_y-COOH сн=сн

Cis-fat (Natural)

Gly

- Monoglycerides
- Diglycerides
- Triglycerides

The glycerides are compounds derived from the reaction of glycerol with fatty acids, e.g.



In the body, glycerides can break down to give free fatty acids which are absorbed into blood stream. Excess fatty acids are stored as fat around the abdomen, the buttocks and the thighs.

Cholesterol

Scientifically speaking, cholesterol is not a fat because it is not a fatty acid (i.e. it does not have the carboxylic group). It is an "alcohol" (scientifically, any compound with an — OH group in the molecule is called an "alcohol").

The role of cholesterol in the body is extremely complex, and continues to be unravelled by the latest medical research. Cholesterol plays many "Jekyl and Hyde" roles — some good, some bad.

The body itself produces cholesterol in large quantities, so that some people with normal healthy diets may still end up with cholesterol levels that are too high and hence detrimental to their health. (Such cases are referred to as congential hypercholesterolemia.)

In different forms, cholesterol plays two primary diametrically opposite roles:

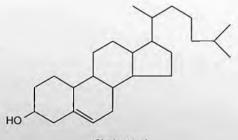
- Low-Density-Lipid Cholesterol (LDL): an easy way to remember — think of LDL as Lousy Cholesterol.
- 2. High-Density-Lipid Cholesterol (HDL): think of HDL as Healthy Cholesterol.

A huge amount of research has gone into the functions and roles of the different forms of cholesterol.

HDL (Healthy Cholesterol) comes from exercise, (though some research appears to indicate that some food may help increase the HDL). HDL helps to remove plaque and fatty deposits from choked arteries and other blood vessels. Hence, you want to keep your HDL high.

Conversely, LDL (Lousy Cholesterol) comes from the transformation of fatty acids (especially trans-fat) from food, and increases the formation of plaque and blockages in the arteries.

It is almost like a competition in the body, between HDL and LDL. For simplicity, remember that for good health, you want to get your HDL higher and your LDL lower.





for good health, keep your HDL Higher and your LDL Lower.







Question 1

What are the most taboo items in nutrition that overweighters must avoid at all costs?

For overweighters, the three most taboo words in nutrition are:

- the three-letter word FAT;
- the four-letter word SALT;
- and the five-letter word SUGAR.

As far as is humanly possible, overweighters should keep intake of these to a minimum. If you do not have to, do not even touch them with a ten-foot pole!

Unfortunately, these same three items (or ingredients) are also the very items that make food most tasty and most addictive to us all! We have evolved a body that helps us to get the most of these three items; in ancient times, these were the three key items that were essential for survival. With today's plentiful supply of FAT, SALT, and SUGAR, and with our problems of overweight and its harmful health consequences, we have to severely guard ourselves against our own outdated survival instinct.

A simple solution is to avoid taking:

- VISIBLE FAT,
- VISIBLE SALT, and
- VISIBLE SUGAR.

Let me illustrate with a personal example.

For the past forty years, I have not put butter (or margarine) on my bread. For the past thirty years, I have not added salt (from the shaker) to my food. And for the past 25 years, I have not added sugar (from the dispenser or in packets) to my drinks (coffee, usually). (You can see that I have been improving my diet progressively.)

Of course, FAT, SALT and SUGAR are present in practically all food items* in varying quantities. They are "invisible", especially in processed or manufactured food — read the labels carefully to see the quantities! Hence wherever possible, choose food with low "invisible fat", low "invisible salt" and low "invisible sugar" — i.e. choose food that is not too fatty, too salty or too sugary (sweet). Whenever possible, go for lean meat, remove the skin from chicken and duck, trim off any fat from meat served in restaurants, and avoid deep fried food



*With the rare exception of fruits and vegetables, which normally have no FAT or SALT, and only a small amount of sugar. as these have huge quantities of cooking oil trapped in them.

With these simple approaches, which soon becomes part of your normal healthy eating habits, you can reduce your intake of the three taboo items down to a healthy minimum.

Question 2

Isn't FAT an important and essential item in our diet? Why should we avoid it?

FAT (sometimes referred to as oil, or fatty acid) is indeed an important item found in practically all foods, in varying quantities, ranging from zero in most fruits and vegetables, to one hundred percentage in cooking oil of all sorts. Almost all meats, including the leanest cuts contain varying amounts of fat, from about 20 to 50%. Indeed if you look at any commercial food item, you will find the fat content listed, and know that many manufactured food items have a sizable quantity of fat.

FAT gives 900 calories per 100 g. Even when you avoid fat as much as possible, you will still end up with a lot of "invisible fat" in the normal food that you take! If you see any fat (visible fat) on your meat, cut it out and discard. If you see a layer of fat on your soup, skim it off and discard it. Remove the skin of chicken or duck, which is full of fat, and discard it. Avoid adding oil of any sort to your food. Avoid any food item that has a high percentage of fat content (30% or more) listed in the label.

and poly-unsaturated refers to the chemistry of the fat molecules. Saturated fats do not have any double bond in the fat molecule at all; monounsaturated fat molecules have one double bond, while poly-unsaturated fat molecules have many double bonds.

In spite of all the effort that you make, you will find that you have taken more then enough fat through "invisible fat" which is present in practically all the foods that you eat e.g. meat, dressing, noodles, desserts, cookies, pies, cakes etc.

Is it not true that some fat are good fat?

Put simply, as far as overweighters are concerned, all fat is bad because fat makes us FAT. We carry a huge quantity of fat in our own bodies as reserves. All fat, "good" or "bad", gives 900 calories per 100 g, and concentrated Calories in fat is the last thing we need. Yes, it is true that, for those with normal weights, with normal Body Mass Indices (BMI), they can take in some fat; and when they do, it is best if they go for the so-called "good" fat in preference to "bad" fat.

There are literally hundreds of different kinds of fat. They can be broadly grouped into three categories — Saturated Fat (S-fat), Mono-unsaturated Fat (M-fat), and Poly-unsaturated Fat (P-fat). Most fat from natural sources contain a mixture of all three categories.[†]

Saturated Fat is generally recognised as "bad" fat. Animal fat, generally, has a much higher quantity of S-fat than fat from vegetables. Hence, wherever possible, we should minimise animal fat in our food, and avoid animal fat for our



cooking. Mono-unsaturated fat (M-fat) is generally regarded as "good" fat. Well, to emphasise again, it is not good for us overweighters — remember all FAT gives 900 Calories per 100 g. But M-fat is the least of the three evils. Most oils or fats derived from vegetables have a higher proportion of M-fat.

Poly-unsaturated fat is also regarded by some in the food industry as "good" fat. To add to the complexity, there are many different sub-groups of poly-unsaturated fat. Two broad sub-categories are referred to as omega-3 poly-unsaturated fat (or omega-3 oil, for short) and as omega-6 poly-unsaturated fat (omega-6 oil). Current research suggests that a higher amount of 3-omega relative to 6-omega is better.

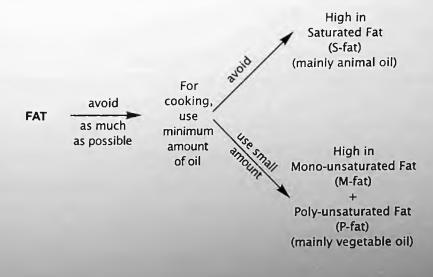
To cut through all the complexities, remember:

- For overweighters, all FAT or food with high fat content are bad, because they add to our basic problem of overweight and obesity. Never mind what the food industry tells us to the contrary.
- If we must use a small quantity of fat for cooking, we should use oil with higher proportions of M-fat and P-fat. Oil or fat with high proportions of saturated fat (S-fat) is bad, bad, bad, and we should avoid it as much as possible.

A practical way of ensuring that one takes a small amount of omega-3 oil and omega-6 oil, is to avoid all fat as much as possible, and take a capsule of SALMON oil from a reputable pharmaceutical company.

Looking at Table 4, the two common vegetable oils with characteristics that are least harmful to us would be olive oil and canola oil, both with high proportions of M-fat and P-fat.

Even then, use them sparingly in your cooking. (Do not be confused by advice to take these oils in quantity because regardless of their so-called "good" qualities, they will add to our basic problem of overweight and obesity.)



Question 4

Is salt not an essential item in our diet also?

Yes, salt (scientific name — sodium chloride) is essential for our good health. The sodium in salt is essential for maintaining the osmotic "sodiumpotassium pump" in our body, which regulates our blood pressure. The trouble is too much salt is bad, very bad for our health. And many of us take too much salt already. A diet high in salt can contribute to high blood pressure (hypertension), which can result in strokes (with resultant paralysis and in extreme cases, coma and death).

In ancient societies, when many people live far from the sea, and when transport

was primitive — largely by foot or animals — salt was a precious commodity. Humans evolve the desire to take salt. Salt also helps to preserve food as well as give flavour to food (in olden days, meat was often putrid and semi-decomposed, and salt helped to mask their unpleasantness). Governments used to impose a tax on salt. (And it was the protest against the salt tax — a tax against an essential food additive — which led to the revolt of the Indians against the British, then the colonial masters in India, which turned the tide of the British Empire, and led to its eventual total collapse.)

Today, salt is readily and cheaply available. The food industry has found that salty food sells better, especially snacks, and preserved meat such as bacon, sausages, ham, frankfurters, salami, etc. Do not be confused by advice to take these oil in quantity

because regardless of their SO-Called "good" qualities, fat will add to our basic problem of overweight and obesity.

Avoid adding salt to your food. Overtime, your tongue is re-educated to enjoy food with its more natural flavour without a heavy dose of salt. And best of all, progressively, you will find that you will not like food with high salt content.

What is bad with sweet stuff? Taste so good!

Yes, indeed, sweet stuff do taste good. Our tongues are programmed to enjoy sweet food. That was good for survival in primitive times, when food was scarce and any fruit that was sweet was helpful to put off hunger and to survive famines until better times came.

Again in this new age of plenty, eating sweet stuff will cause us to end up overweight and obese. Again we have to re-educate our tongues, so that we do not allow sweetness to be the only or predominant taste of all food. Fortunately, as with fat and salt, over time, the tongue learns to enjoy the natural tastes and flavours of food without the overpowering, overwhelming taste of sweetness.

Some people find it difficult to slowly decrease their sugar intake (spoonfuls for a cup of coffee or tea). An alternative is to switch to artificial sweeteners, which do not have as many calories as table sugar. But the tongue will not be re-educated, and you will continue to like things sweet, and will have to depend on "diet" food of all sorts — such as diet soft drinks.

Re-educating the tongue by adding progressively less and less sugar, and eventually (yes, it is possible, I have done it) not adding sugar at all, will help you get to that final stage — where you will find that food without sugar is preferable. You will find that sweet food stuff become less and less attractive to you. Ice-cream, chocolates, and snacks appeal less and less, and temptations no longer overwhelm. You will be in much better control over your tongue, your mouth, your weight and most important of all, your life.

With a restricted diet, is there any danger of insufficiency of the essential nutrients?

By halving your normal food intake, and by keeping away from visible fat and fatty foodstuff, you will still be able to have your full quota of essential nutrients which are normally found in meat. (Do not forget that by avoiding visible fat, you will still be taking about 30% or more of fat in your meals!)

To give myself full assurance, even though insufficiency is extremely unlikely, I take a tablet of multivitamins with multiminerals every day. By choosing a tablet from a reputable pharmaceutical company, I assure myself of the reliability and efficacy of the product. In addition, because of the much publicised benefits of Vitamin E and salmon oil (omega-3 oil and omega-6 oil), I take a capsule of salmon oil for added assurance.

Question 7

How does one cope with business lunches and social dinners where huge amounts of rich food are provided?

One of the greatest challenges to

maintain one's weight in the healthy zone is consistency.

Many diets and slimming programs are excellent, and if followed consistently, will yield good results. But almost always, these diets and programs are complex — requiring the detailed identification of food types, detailed Calorie counting, complicated eating procedures, memory of a huge quantity of information, and difficult-to-prepare or unusual recipes. After the initial enthusiasm, slow erosion of interest leads to the reversion to the old habits.

T.H.E. Diet's strength is its simplicity.

- Ten glasses of water
- Halve the food intake
- Exercise 10,000 steps (or about 300-350 Calories of activity) a day.

If would not recommend readers to forgo their breakfast. It is much easier to reduce the breakfast by a half. However, if after a few months, you feel comfortable, then you may wish to try stopping breakfast altogether. The advantage of not having breakfast is that you reduce your normal calorie intake by a third in one go. Then if you eat moderately for the next two meals (lunch and dinner), e.g. eating two thirds of your normal intake, will bring you down to half of your daily calorie intake. (Two-thirds of two-thirds is $2/3 \times 2/3 = 4/9$ which is less than half. 0.67 × 0.67 = 0.45

I found this approach so much easier that I have been using it for the past 20 years. It does not affect me at all and does not reduce my energy level. For example, while on a golfing holiday, without breakfast except for my usual glasses of water, I played 27 holes of golf, with buggy, grab a sandwich, two bananas and two bottles of water for lunch on the go, and carried on playing for another 27 holes, completing the 54 holes in 12 hours, and not feel tired at all. Indeed at the 52nd hole, for a par 3, 172 metres, I had a hole-in-one! (see attached certificate at the end of the book). What a lucky break for a sexagenarian!

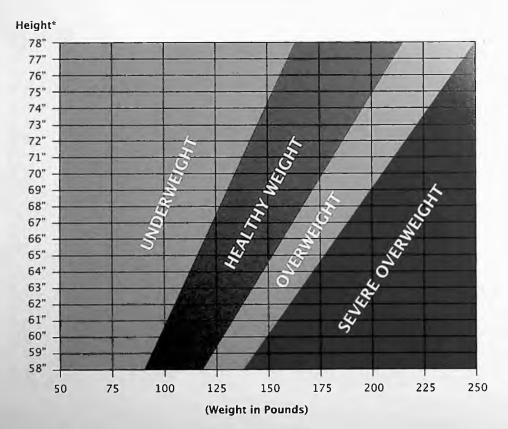
Because my career required a lot of business lunches and social dinners, where the food served was out of my control, I evolved my own personal solution. For more than 20 years, I forgo eating my breakfast[‡] - drinking two glasses of water, until lunch time. By eating moderately at lunch and dinner (when on business) and by eating mainly fruits, vegetables and steamed fish when I am at home, I keep my own version of T.H.E. A2z Diet without having to tell my hosts, that I am "on a diet". The best indicator of the effectiveness of whatever programme you choose, is the fluctuating graph of your daily weight (Table 3). As long as its fluctuating downwards over the months, and staying in the healthy zone of below BMI 25, T.H.E. A2z Diet is working just fine — effortlessly.



BMI	21	22	23	24	25	26	27	28	29	30	- 64	14
Height (inches)		F	IEALTH	Y			ov	ERWEIC	нт			EST
58	100	105	110	115	119	124	129	134	138	143	148	153
59	104	109	114	119	124	128	133	138	143	148	123	158
60	107	112	118	123	128	133	138	143	148	153	155	163
61	111	116	122	127	132	137	143	148	153	158	164	169
62	115	120	126	131	136	142	147	153	158	164	169	175
63	118	124	130	135	141	146	152	158	163	169	175	1.90
64	122	128	134	140	145	151	157	163	169	174	180	185
65	126	132	138	144	150	156	162	168	174	180	186	192
66	130	136	142	148	155	161	167	173	179	186	197	198
67	134	140	146	153	159	166	172	178	185	191	198	204
	134	144	151	158	164	171	177	184	190	197	20.8	210
68		149	155	162	169	176	182	189	196	203	209	570
69	142		160	167	174	181	188	195	202	209	118	222
70	146	153	165	172	179	186	193	200	208	215	222	.229
71	150	157	169	177	184	191	199	206	213	221	278	275
72	154	162		182	189	197	204	212	219	227	235	247
73	159	166	174		194	202	210	218	225	233	241	248
74	163	171	179	186:		202	216	224	232	240	246	256
75	168	176	184	.192	2001		221	230	238	246	254	263
76	172	180	189	197	-205	213	221	230	2.50			-

BODY MASS INDEX (Body Weight in Pounds)

(1 Kg = 2.2 lbs; 1 metre = 39 ins.)



BODY MASS INDEX CORRELATION

BODY MASS INDEX (Graphic Representation)

Class-A Food (Fruits) (Approximate Calorie Density)

	Water Content (%)	Calories/100g
Apple	86	52
Banana	75	89
Cantaloupe	90	34
Grape fruit	91	32
Honeydew	90	36
Mango	82	65
Orange	87	47
Papaya	89	39
Peach	89	39
Pear	84	58
Pineapple	86	48
Pomelo	89	58
Plum	87	46
Strawberry	81	69
Watermelon	91	30

This is no need to remember the numbers. They are given to illustrate why fruits have been grouped as Class-A food.

Class-A Food (Vegetables) (Approximate Calorie Density)

	Water Content (%)	Calories/100g
Broccoli	89	34
Cabbage	92	24
Carrot	88	41
Cauliflower	92	25
Celery	95	14
Corn (vacuum packed)		79
Cucumber	97	12
Garden cress	89	32
Green beans	90	31
Green peas	79	81
Lettuces	96	14
Radish	95	16
Spinach	91	23
Zucchini	93	21
Asparagus	93	20

There is no need to remember the numbers. They are given to illustrate why vegetables have been grouped as Class-A food.

	Water (%)	Protein (%)	Fat (%)	Calories/100g
Lean Meat		<u></u>		
Lean roast beef	64	26	10	193
Lean roast chicken	65	31	4	165
Lean roast pork	61	31	8	206
Lean Roast lamb	64	24	10	196
Lean roast turkey	65	29	5	170
Beans and Legumes Boiled garbanzo Boiled kidney beans Boiled lentils Boiled soybeans				164 127 116 141
Staples Oat bran Rice (boiled) Wheat (bread) Sphagetti (boiled) Macaroni (boiled) Muffins Noodles (boiled)				246 110 266 124 124 221 133

Class-2 Food (Approximate Calorie Density)

There is no need to remember the numbers. They are given to illustrate why they have been grouped into Class-2 food.

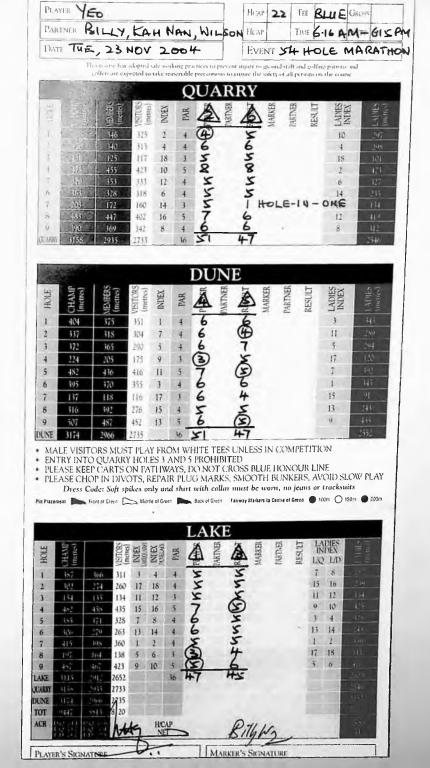
	Proteins (%)	Fat (%)	Calories/100g
Nuts			
Almond nuts	20	50	589
Brazil nuts	14	63	656
Cashew nuts	15	44	574
Hazel nuts	13	60	632
Macadamia nuts	8	70	702
Peanuts	26	47	567
Pecan nuts	8	64	667
Pistachio nuts	21	46	577
Walnuts	14	54	642
Oils			
Butter		81	717
Margarine		67	605
Peanut butter		50	588
Olive oil		100	900
Peanut oil		100	900
Corn oil		100	900
Sesame oil		100	900
Beef tallow		100	900
Mutton tallow		100	900
Canola oil		100	900
Coconut oil		100	900
Salmon oil		100	900
Sunflower oil		100	900
Soybean oil		100	900

Class-z Food (Approximate Calorie Density)

There is no need to remember the numbers. They are given to illustrate why oil of all sorts have been grouped as Class-z food.

	National Heart Centre			
	Patient Results			
Biochemistry	results - Performed or	n 12-Apr-2007		
Requested by: (Doctor)				
YEO DR	1	Sex: M Age: 63y		
MRN/Visit No:	NHC-Cardi	ac Clinic B		
Visit Status: Primary Provider:				
ist status. I finally fromuer.				
12-Apr-2007 00:00 Multi-Phasic Hea	Ith Screening			
Received Date/Time 12/04/20	007 1030			
Reporting Information				
Specimen Comment				
Urea, serum	7.6	[2.8-7.7 MMOL/L]		
Sodium, serum	143	[135-145 MMOL/L]		
Potassium, serum	4.1	[3.3-4.9 MMOL/L]		
Chloride, serum	107	[96-108 MMOL/L]		
Glucose, serum	5.5	[3.9-11.0 MMOL/L]		
		FASTING (3.9-6.0 MMOL/L)		
Creatinine, serum	84	[63-110 UMOL/L]		
Calcium Total, serum	2.26	[2.10-2.60 MMOL/L]		
Phosphate Inorganic, serum	1.42 H	[0.77-1.38 MMOL/L]		
	<pre># Significa</pre>	ntly different from last result		
Protein Total, serum	68	[62-82 G/L]		
Albumin, serum	38	[37-51 G/L]		
Bilirubin Total, serum	10	[3-24 UMOL/L]		
Alkaline phosphatase, serum	50	[32-103 U/L]		
Alanine Transaminase, serum	36	[7-36 U/L]		
	30	[15-33 U/L]		

Troponin-T Lipid Profile*	<0.01	[<0.03 UG/L]
Cholesterol Total, serum	3.91	[MMOL/L]
		DESIRABLE LEVEL <5.20 MMOL/L
Cholesterol HDL, serum	1.60	[MMOL/L]
		DESIRABLE LEVEL = >1.00 MMOL/L
Triglycerides, serum	0.50	[MMOL/L]
		OPTIMAL LEVEL <1.70 MMOL/L
Cholesterol LDL, Calc	2.08	[MMOL/L]
		OPTIMAL LEVEL <2.60 MMOL/L DESIRABLE LEVEL 2.60-3.30 MMOL/L
Uric Acid, serum	341	[232-494 UMOL/L]
Cholesterol/HDL Ratio	2.44	[0-4.50]
Aldolase, serum	5.3	[2.0-12.0 U/L]
Carcinoembryonic Antigen, serum	2.5	[0.5-3.5 UG/L]
Thyroxine (T4) Free, serum	12.5	[9.6-19.1 PMOL/L]
Thyroid Stimulating	2.07	[0.36-3.24 MU/L]
Hormone, serum		
Homocysteine	7.0	[<15.0 UMOL/L]
Hemogram*	******	
Haemoglobin	14.1	[14.0-18.0 G/DL]
WBC count	4.55	$[4.0-10.0 \times 10(9)/L]$
Platelet Count	170	$[140-440 \times 10(9)/L]$
RBC Count	4.39 L	$[4.5-6.3 \times 10(12)/L]$
Haematocrit	40.2	[38-52 %]
MCV	91.5	[78-98 FL]
MCH	32.1 H	[27-32 PG]
MCHC	35.1	[32-36 G/DL]
RBC Distribution Width	14.1	[10.9-15.7 %]
Mean Platelet Volume	9.6	[6.3-10.1 FL]







This invaluable book explains, in simple language, why we overeat, and why we find food that is salty, fatty and sweet so tempting and addictive. It then zooms into the simplest and most basic principles of effective dieting, which the author himself has used over the past 25 years with success. The book distills only what is absolutely necessary.

Cutting through the mountain of information on dieting, nutrition and healthy living, this book makes the message and advice so simple and clear that even a child can understand and appreciate it, as well as put it into practice everyday. An FAQ section addresses the key questions that so often confuses dieters.

Incorporating a simple graphing record of daily progress, The A_{2z} Diet will motivate those who desire a slimmer, healthier and fitter body to achieve the results that they seek.

World Scientific www.worldscientific.com

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