POPULAR DIETS

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A. INTRODUCTION TO POPULAR DIETS

Overweight and obesity are rapidly increasing in prevalence and are becoming major health problems all around the world. Current treatment approaches are not very effective and many overweight and obese individuals attempt to achieve healthier weights with a wide variety of diets. Of the many available diet approaches, some are nutritionally sound and consistent with recommendations for healthy eating for most adults while others are "fad" diets endorsing irrational and, sometimes, unsafe practices, In this chapter, I am comparing some of the potential health advantage and potential health risks of popular diets used for weight-reduction.

Popular diets today include diets like "Atkins diet", "The Zone diet", "South beach diet", "Low Glycemic diet", "Beverly Hills diet". Another popular low-fat diet is "Ornish diet". Any particular diet should never be started without first talking to your doctor. This is especially true with fad diets because they are often stringent and are most likely a very significant change from your normal eating habits.

B. SUGAR BUSTERS DIET

Published in 1995 and recently modified, the Sugar Busters diet is based on the idea that sugar produces insulin which stops us losing weight, despite strict dieting and exercise. Thus, added sugar is restricted (it was banned) and mostly it recommends foods which are low on the Glycemic Index (GI).

Sugar Busters diet plan is based broadly on 30 percent protein, 40 percent fat and 30 percent carbohydrates.

The diet allows red meat, poultry, fish, olive oil, dairy foods, nuts and a selection of fruit and vegetables. Potatoes are banned, as are white bread, pasta, white rice, and most sugar. However, small amounts of whole grain bread, whole wheat pasta and oats are permitted.

Sugar Busters diet is easy to follow and, if you follow their 14-day diet exactly, you should lose weight. That said, the success of the diet is almost certainly due to the fact that restricting sugar helps to reduce calories, not because of anything to do with insulin.

The idea that insulin causes weight gain is highly controversial. There can be no weight gain in the absence of a calorie surplus caused by eating too many or burning too few. It's true that

high insulin levels increase the risk of heart disease, but there is little if any evidence that insulin causes extra fat storage.

Interestingly, a UK study of weight loss published in the International Journal of Obesity (2001), found that the elimination of sugar from weight loss diets made very little difference. Two sets of dieters who followed (a) sugar-free and (b) 10 percent sugar diets, respectively, lost similar amounts of weight.

In addition, other clinical studies show that diets with zero sugar have lower compliance rates.

Sugar Busters Diet – Claims

- Sugar not fat is the cause of excess weight.
- For best weight loss, eat according to the Glycemic Index.

Sugar Busters Diet – Drawbacks

- Based on a false premise, sugar is not toxic and insulin does not lead to weight gain.
- bans some healthy foods, like potatoes and bananas.
- Difficult to follow for vegetarian.
- Downplays the idea that calorie intake causes weight gain or weight loss.

Sugar Busters Diet – Summary

- Recommended despite the above drawbacks, Sugar Busters diet still promotes enough healthy eating to justify a recommendation, especially on view of the current diabetes problem.
- But losing weight on Sugar Busters diet will be much easier if you pay attention to the calories -in /calories out principle. This (and not insulin) is the determining weight loss /gain factor.

C. ATKINS DIET

Dr.Robert C.Atkins invented the Atkins diet. The theory behind the diet is that a diet high in carbohydrates rapidly increases the body's production of insulin, and insulin invites body cells to store fat. The high protein diet restricts carbohydrate intake, causing lower insulin levels and as a result a reduction in weigh. In addition, the diet makes the body produce ketones, which is said to be "a sign that the body is burning its fat stores and suppressing appetite."

Atkins Diet Details

The Atkins Diet is separated into three phases, and the initial phase, or Induction phase can result in rapid weight loss – between 8 and 10 pounds, attributed to fluid reduction – common in most diets.

Induction Phase: Lasting 14 days, places a limit on carbohydrate intake (limited to 20g per day – less that the amount of carbohydrate contained in one banana). The diet consists of meat, chicken, fish, eggs or cheese with some green and salad vegetables, butter and oil. All carbohydrate containing foods such as fruit, many vegetables, bread, cereals, rice, potatoes, pasta, biscuits, sugar and so on must be avoided, as must milk and yogurt.

Ongoing Weight Loss Phase: lasting from completion of the induction phase until the weight loss target has been achieved. The diet remains similar to the induction phase diet, but with an increase in the amount of carbohydrate allowed – about 40 g a day on average – to enable on going weight loss of 1 to 2 pounds a week. In food terms this basically means adding some berries or melon, some more vegetables, nuts and occasional crisp bread, Vitamin and mineral supplements are advised on the diet.

Stabilisation Phase: Once the target weight has been achieved, the aim is to slowly increase the carbohydrate intake until weight stabilizes. The amount of carbohydrate at this stage of the diet should not go over 90g a day. (However, a balanced diet has on average around 250g a day).

After the initial weight loss period, following the diet will result in weight loss, figures suggest between 5 and 2 pounds weight reduction a week.

What You Can Eat

The plan allows you to eat foods that many dieters have only dreamed about. Atkins maintains his diet will work even if other diets have left you feeling depressed and deprived. The Atkins Diet at a glance:

- Sets few limits on the amount of food you eat but instead severely restricts the kinds of food allowed on your plate: no refined sugar, milk, white rice, or white flour;
- Allows you to eat foods traditionally regarded as "rich"; meat, eggs, cheese, and more;
- Claims to reduce your appetite in the process.

On the Atkins diet, you're eating almost pure protein and fat. You can consume red meat, fish (including shellfish), fowl, and regular cheese (not "diet" cheese, cheese spreads, or whey cheeses). You can cook with butter, have mayo with your tuna, put olive oil on your salads. On the other hand, carbs are severely restricted (less than 20 grams per day) in the first two weeks, which translates to no more than three cups of loosely packed salad or two cups of salad with two-thirds of a cup of certain cooked vegetables each day.

There are no exceptions to the above rules during the first two weeks, because Atkins considers it important to keep the carb consumption low to "jumpstart" the weight-loss biochemical activity of the diet. You're not counting calories (in fact you may be eating more calories than you were before).

Later, the carb allowance is upped, but you do not return to eating refined sugar (by the teaspoonful or in desserts), milk, white rice, white bread, or pasta made with the dreaded white flour. Those remain on a life-long list of forbidden pleasures.

How It Works

By restricting carbohydrates drastically to a mere fraction of that found in the typical American diet, the body goes into a state of ketosis, Atkins reasons, whereby it burns its own fat for fuel. A person in ketosis is getting energy from Ketones, little carbon fragments that are the fuel created by the breakdown of fat stores. When the body is in ketosis, you tend to feel less hungry, and thus you're likely to eat less than you might otherwise. However, ketosis can also cause a variety of unpleasant effects.

As a result, your body changes from a carbohydrate – burning engine into a fat-burning engine. So instead of relying on the carbohydrate – rich items you might typically consume for energy, and leaving your fat stores just where they were before (alas, the hips, belly, and thunder thighs are popular fat – gathering spots), your fat stores become a primary energy source. The purported result; weight loss.

What the Experts Say

Both in the U.S. and abroad, the Atkins diet remains highly controversial.

"The Atkins diet is a viable option that requires more testing," Gary D. Foster, Ph.D, clinical director of the weight and eating disorders program at the University of Pennsylvania, tells WebMD. "The Atkins diet works at producing weight loss. If you are looking for weight loss, yes, it works. If you are looking for improvement in triglycerides and HDL cholesterol, yes, it works."

But Foster, like other experts, remains concerned about the long-term safety of the diet.

The American Dietetic Association also has concerns about the Atkins diet. Gail Frank, Ph.D, spokeswoman for the organization and professor of nutrition at California State University in Long Beach, says, "The body needs a minimum of carbohydrates for efficient and healthy functioning – about 150 grams daily, "Below that, normal metabolic activity is disrupted.

"The brain needs glucose to function efficiently, and it takes a long time to break down fat and protein to get to the brain," says Frank. Carbohydrates, especially in the form of vegetables, grains, and fruits, are more efficiently converted to glucose. And this more efficient use of glucose has developed over a long period of time, according to Frank. "Fruits and berries are much more indicative of early man's eating pattern than eating only protein, and we haven't changed all that much physiologically.

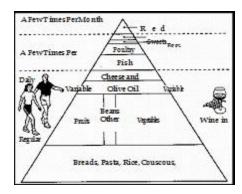
"Volumetrics author Barbara Rolls, PhD, who holds the Guthrie Chair in Nutrition at Penn State University, offers this: "No one has shown in any studies that anything magic is going on with Atkins other than calorie restriction. The diet is very prescriptive, very restrictive, and limits half of the foods we normally eat, she says," In the end it's not fat, it's not protein, it's not carbs, its calories. You can lose weight on anything that helps you to eat less, but that doesn't mean it's good for you.

Conclusion

The diet has many critics, not just because of its calorie-related claims, but because it is high in fat and low in nutritious foods such as fruits and whole grains which should for part of a healthy diet. There is also limited research about how healthy it is in the longer term. Weight can return quite quickly when you stop the diet, again not offering a long term solution to weight loss. Unlike the South Beach diet it has a high drop out rate for the induction phase.

D. MEDITERRANEAN DIET

The traditional diets of the Mediterranean region were mainly based on the foods from a rich diversity of plant sources and included fruits, vegetables, whole grains, beans, nuts and seeds. In North Africa, vegetables and legumes form the center of the diet; in Southern Europe it was rice, polenta, pasta, potatoes with vegetables and legumes. In Eastern Mediterranean, bulgur and rice together with vegetables and legumes such as chick peas constitute the core of many meals. Throughout the Mediterranean bread is a staple in the diet and is eaten without butter or margarine.



In January 1993, the Harvard University School of Public Health and Oldways Preservation & Exchange Trust (a Boston based educational organization) held a conference on the Mediterranean diet and its impact on public health. They reviewed data from a variety of epidemiological studies that described the dietary traditions of the people from the Mediterranean area (Creete, Greece, Southern Italy and Northern Africa) which may be responsible for the low rates of chronic disease. From this a committee, the Mediterranean Food Guide Pyramid was developed.

Now that we know it may be beneficial, what exactly is the Mediterranean diet? The Mediterranean diet is not a diet per se, but rather a loose term that describes the eating practices of the people in this region. Below are the characteristics of the "diet" that may indeed protects us in the fight against heart disease. In the traditional Mediterranean diet, fruits and vegetable were locally grown and often consumed raw or minimally processed.

This may be crucial given our ever growing understanding of the potential protective factors of dietary fiber, antioxidants and other micronutrients found in plant foods.

Olive Oil vs Total Fat

Olive oil, high in monounsaturated fat is a good source of antioxidants and is the area's principle source of fat. Evidence suggests the traditional diets were about 40% fat (The American Heart Association recommends 30%). However; the diet was very low in saturated and polyunsaturated fat.

For more than 30 years, researchers have known that a high intake of fat in the form of olive oil in the traditional Greek diet did not have any apparent negative health consequences. Researchers believe that olive oil was neutral with respect to effects of serum cholesterol. However, current research has found olive oil and its high monounsaturated fat may actually increase HDL (good) cholesterol, but has little effect on LDL (bad) cholesterol.

Low to Moderate Consumption of Dairy Products

Dairy products from a variety of animals, goats, sheep, buffalo, cows and camel, primarily in the form of cheese and yogurt, were traditionally consumed in low to moderate amounts. In the entire region, very little fresh milk was consumed and meals were usually accompanied by wine or water.

Researchers, suggest that the live bacterial cultures of yogurt may have contributed to the regions good health. Following the Mediterranean diet, butter and cream should be used on special occasions. Olive oil is the preferred fat.

Sparing Use of Fish, Poultry and Red Meat

All foods from animal sources, especially red meat as illustrated on the pyramid was used sparingly. Total red meat and poultry consumed was about 15oz per week. Fish intake varied between countries but overall was slightly higher, about 5 - 15 oz per week.

Although the available data can not be definitive, there is evidence that suggests red meat is associated with colon cancer, prostate cancer and heart disease. We cannot assume the risk is due solely to the fat content, but possibly the carcinogens formed from cooking. Furthermore, animal products contain no fiber or antioxidants and may displace plant based foods that do contain these important elements.

Physical Activity

The people of Mediterranean incorporate physical activity into their everyday lifestyle and was considered vital to maintain good health and optimal weight.

It has been well documented that exercise benefits people's physical, psychological and social well being and improves their resistance to disease.

Wine in Moderation with Meals

Throughout the Mediterranean wine is drunk in moderation and usually taken with meals. For men moderation is two glasses per day, for women moderation is one glass per day.

Current research suggests there is a correlation between alcohol intake and a reduction in heart disease. However, even in a modest amount, alcohol may be associated with an increase in the risk of breast cancer. Therefore, wine consumption should be considered optional.

E. THE ZONE DIET

Sandra bullock Demi Moore Sarah Jessica Parker and Jennifer Aniston might all be in Hollywood but their celebrity status isn't the only thing they have in common .All these stars claim to have followed the Zone diet to help them get – and keep – their famous figures . But just what does 'Being in the Zone' involve and more importantly , is it a healthy way to shift those pounds?

'Enter the Zone' and you'll lose weight permanently, achieve peak physical performance, enhance mental productivity and delay the signs of ageing.

At least that's what Barry sears, creator of The Zone diet tells us!

In the mid 1990's the zone was all the rage with many celebs, including Jennifer Aniston and hubby Brad Pitt, all claiming to be fans of the plan.

Before long, millions of people were following the zone and the diet had become a household name. Now even though newer diet plans such as the Atkins and south beach diets gain more column inches and their books currently head the New York Times Bestseller list the zone diet continues to remain a popular choice for some.

What's the theory?

The zone diet works on the theory that excess insulin, a hormone that helps control our blood sugar levels makes us fat and keep us fat. By closely regulating our blood sugar levels and therefore keeping our levels of insulin in a tight 'zone', the body burns fat more efficiently so that we lose weight.

To control blood sugar levels and consequently insulin levels you need to get the perfect balance of carbohydrates, proteins and fats in every meal.

Achieving this perfect balance effectively means following a low- carbohydrates high – protein diet that includes moderate amounts of fat.

And if that sounds familiar, you'd be right!

In fact the zone diet is not too dissimilar to many of the other low- carb, high- protein diets that are currently in vogue either in terms the theory or the foods you can and can't eat.

What does the zone diet involve?

If the theory sounds simple, the reality is far more complicated. First off, you'll need plenty of patience, a head for science and the desire to learn more about 'zoning', either by looking at the zone website or indulging in some bedtime reading, courtesy of creator Barry Sears.

The idea is that to reach 'the zone', every meal and snack should provide 40 percent of calories from carbohydrate, 30 percent from protein and 30 percent from fat. This is what some zone fans call the 40:30:30 ratios.

To help with this, zone food blocks' been developed where each 'blocks' contains a standardized amount of carbohydrate protein or fat .To lose weight, a certain number of blocks are allocated for each and snack.

The number of zone food blocks you should have each day is calculated according to your weight height and waist and hip circumferences. Generally the bigger you are the more blocks you are allowed. For example, a woman who weighs 10st, is 5ft 2in, has a 28in waist and 37in hips should have 12 blocks a day (four for breakfast, three each for lunch and dinner one for an afternoon snack and one for an evening snack). Meanwhile, a larger woman who weighs 12st, is 5ft 10in has a 30in waist and 40in hips need 14 blocks (four for each main meal and one each as an afternoon snack and one for an evening snack).

With help from weight loss resources or the zone's website, zone perfect, calculating the daily number of block you should have —and how they should be divided throughout the day-is the easy bit. Crating meals and snack that have the correct number of zone diet book to help you put meals together .And if that's still too much like hard work there are many prepackaged zone diet meals and snacks for delivery that you can order over the internet- at a fairly hefty price!

This sounds like hard work! Is there an easier way to follow it?

Although the creator of the diet is quite adamant that for best effects you should really stick to counting food blocks, it's still possible to follow the basic principles of the diet without going through this complicated process.

In simple terms the zone diet involves cutting out most carbohydrates such as breakfast cereals, rice potatoes, pasta, noodles, bread, bagels, croissants, muffins, crisps, pastries, pies, chocolates, sweet sugar and preserves as these have the greatest effect on blood sugar levels and therefore insulin levels. Most fruit and vegetables, however, are allowed. Low-fat protein-rich food such as skinless chicken, turkey and fish should be eaten with every meal. Meanwhile, eating fewer foods that contain saturates and choosing foods that are rich in mono-unsaturates, such as olives oil avocado and nut is recommended.

To make the zone diet even easier to follow the creator recommends dividing your plate into three equal sized sections and then filling one section with low- fat protein such as chicken —making sure it's no larger or vegetable and fruit. Adding a little olives oil, avocado or a few nuts will help to boost intakes of monounsaturates!

So how much weight can I expect to lose?

Advocates of the zone diet claim you lose at least 51b in the first two week followed by1-1.5 lb every week after this.

What do the experts say?

Achieving 40:30:30 ratios is certainly a departure from current healthy eating guidelines, which recommend 50 percent of our calories should come from carbohydrate, 15 percent from protein and 35 percent from fat. While most nutrition experts agree with the advice to eat less fat, saturates, and to fill up on fruit and veg, most remain sceptical about the theory that weight loss that occurs is due to taking in fewer calories than the body uses up. In fact if followed properly the diet provides around 1,000 to 1,300 calories a day, thanks mainly to cutting out most high- calorie sugary and starchy foods —and replacing them with low — calorie vegetables and fruit. And if you're still not convinced maybe this example will help: swap a large Danish pastry, containing around 650 calories for a 50- calorie apple and you'll save a staggering 600 calories. Do this every day for a week and you'd expect to lose more than 1lb in a week!

Are there any pros?

The zone diet genteelly has fewer dietary restrictions that many other low- carb plans and recommends eating more fruit and vegetables. It also encourages you to out a lot then 'junk' or low-nutrient carbs in your diet such as crisps, cakes ,biscuits and chocolate. Eating fewer fatty food and swapping foods that are high in saturates for those containing monousaturates – is sensible, heart- healthy advice too.

And the cons?

Unfortunately the zone diet is very complicated and time-consuming if you' going to follow it properly. You'll need to invest in a zone diet book and a decent set of measuring scales and spoons if you don't already have them. It also recommends eliminating some very nutritious foods ,which are not only a good source of carbohydrate but are also packed with fiber and important vitamin and minerals .for example, wholegrain cereals are packed with fiber ,B vitamins and iron, while cheese is an excellent source of calcium and zinc .it can also be really expensive if you decide to purchase pre – packaged zone products! As for eating out-if you're counting food blocks you might as well forget is.

F. NO STARCH DIET

The goal of this diet is to remove the foods that most stress your insulin system. when you ear , your food will stimulate the release of insulin ,which helps the nutrients , especially glucose (blood sugar) to enter your cells. Not all food stimulates insulin equally. However, starches tend to require maximal insulin function to be removed from the blood. Thus, people who are insulin resistant (i.e. their insulin doesn't work adequately) or have diabetes, benefit by removing these tough to dispose foods from their diet. To begin a no starch diet you shift to eating foods which don't stress your glucose-insulin system.

This is not the Atkin's diet!!! The Atkin's diet is a protein sparing modified fast (PSMF). A PSMF has been shown to be an effective tool for encouraging weight loss, and has also been shown to be safe and effective for up to 18 week, when medically supervised. The no starch diet places any limits on consumption of fruits and vegetables, whereas a PSMF generally

limits vegetables to 2-3 serving a day and permits no fruit at all. In addition a PSMF does not permit legumes and at best, one or two dairy servings a starch day. Finally a PSMF is designed to limit calories intake, while the no starch diet does not specifically focus on limiting calories. The no starch diet only tries to eliminate food that may be problematic due to the stress they impose on the glucose- insulin system.

You may eat unlimited:

- Meats: beef, pork, chicken, turkey, fish, seafood, lamb
- Fresh fruit: any type, including bananas ,melons, and grapes
- Dried fruits: any type, but no canned fruit, however
- Vegetable: any type in any quantity. corn, peas and potatoes are not considered Vegetables(to starchy)
- Dairy: you may drink low fat milk, and eat low fat dairy such as yogurt (sugar free) and cottage cheese. No CHEESE, however
- Legumes: you may eat kidney beans, pinto beans, navy beans black eyed peas, etc.
- Nuts: you may eat any type of nut, but should limit to one ounce a day
- Eggs are OK also.

The starches you need to avoid completely:

No bread	No crackers
No cookies	No rolls
No breakfast cereals	No pancakes or waffles
No rice	No pasta
No potatoes	No snack foods
No fat-free, sugar-free frozen yoghurt	No corn or peas

G. THE CABBAGE SOUP DIET

Basically a very low calorie diet; cabbage soup diet works, temporarily by cutting daily calories to near-starvation levels.

What is the cabbage soup diet?

Interestingly no person or organization seems to want to claim responsibility for inventing the cabbage soup diet! So there isn't "official"

Propriety vision, but various cabbage diet plans based around eating copious quantities of cabbage soup, and very little else.

Claims made for the cabbage soup diet range from the ludicrous, i.e. the cabbage soup itself has fat burning properties to the dubious i.e. you can lose 10 lbs in a week. The diet is often put forward as a quick way to drop pound for a special event and most proponent advise that it only be followed for a week.

What's involved?

The cabbage soup diet plan is very strict. The idea is to eat as much cabbage soup as you like every day – enough to keep you full up so you don't cheat! Plus specific addition food on each day of the seven day diet. No alcohol is and other drinks are limited to water and unsweetened fruit juice on day when fruit juice on day when fruit is allowed.

- Day 1- cabbage soup plus as much fruit as you like, excluding bananas
- Day 2- cabbage soup plus vegetable including 1 jacket potato with a little butter
- Day 3- cabbage soup plus fruit and vegetables excluding potatoes and bananas
- Day 4- cabbage soup plus up to eight bananas and as much skimmed milk as you like
- Day 5- cabbage soup plus up 20 ounces of beef and up to six tomatoes
- Day 6- cabbage soup plus as much beef and vegetables(excluding potatoes)
- Day 7- cabbage soup plus brown rice, vegetables (excluding potatoes) and unsweetened fruit juice.

Recipes for the cabbage soup vary but all are based on cabbage, onions, tinned tomatoes, green peppers, celery, carrots, mushroom and onion soup mix.

Does the cabbage soup diet work?

In the short term most people would lose weight very quickly. However, the loss of weight will come from loss water and muscle tissue not from fat reserves. The combination of foods "allowed" would force most people to nearly starve each day. This could actually be counterproductive, forcing the body into starvation mode will slow metabolism and encourage the body to hang on to fat reserves!

This diet regime requires a lot of planning and frequent shopping trips for the supply of vegetables and fruit. For many people it will involve cooking and eating separately from other family members not following this eating regime.

Many are attracted to this short –term "quick fix" diet to lose weight quickly. It is not a solution to a healthy long term eating plan.

Is the cabbage soup diet healthy?

The ingredients of the cabbage soup in themselves are mostly healthy-though if stock is used as well as soup mix the finished soup could be quite high in salt. Overall the cabbage diet is deficient in protein, carbohydrate days, and essential fats. Since the diet is only supposed to be followed for seven days this shouldn't cause people in good health any long – term problems, but people who have special dietary needs diabetics, should definitely consult a doctor before starting the cabbage soup diet. No one should follow the diet for more than seven days.

"A balance, healthy diet combined with exercise is still the most effective and safe long-term way to lose weight. However the results are gradual and require perseverance."

H. GLYCEMIC INDEX DIET

In 1981 ,professor of nutrition Dr David Jenkins was looking at different carbohydrate-rich foods affected blood sugar levels in people with diabetes and discovered that, contrary to popular belief, many starchy foods affected blood sugar levels quite dramatically while some sugary food had little effect. From his research he developed a scale called the Glycaemic index which quite simply ranked foods based on the effect they had on blood sugar levels.

How it works?

The Glycaemic index runs from 0 to 100 and usually used glucose- which has a GI values of 100 —as the reference. The effect other food have on blood sugar levels are then compared with this. In simple terms the GI index tells us whether a food raises blood sugar levels dramatically, moderately or a little bit. Foods that have only a slow, small effect on blood sugar have a low GI value, while those causing a rapid massive rise in blood sugar have a high GI value.

So what's the link with weight loss?

The theory behind diets based on the Glycemic Index is that foods with a low GI value slowly release sugar into the blood, providing you with a steady supply of energy, leaving you feeling satisfied longer so that you're less likely to snack. In contrast, foods with a high GI value cause a rapid – but short-lived-rise in blood sugar. This leaves you lacking in energy and feeling hungry within a short time, with the result that you end up reaching for a snack. If this pattern is frequently repeated, you're likely to gain weight as a result of constantly overeating.

Glycaemic Index Of Foods

There are many books and websites that list the GI index for different foods. Food values may vary slightly depending on the source, but in general, they should all be roughly the same.

Many lists divide the foods into low, medium/moderate and high categories. Foods in the low category usually have a GI value of 55 or less; in the medium category, a GI value of 56 to 69; and in the high category, a GI of 70 or more. This Glycaemic Index Table gives examples of the GI values of food. You might be surprised by some of the foods included in the low and high categories – for example, "healthy" rice cakes and branflakes actually have a high GI whereas salted peanuts and milk chocolate have a low GI value!

How do GI diets work?

Diets based on GI index simply encourage you to eat plenty of foods with a low GI value and avoid those with a high GI value. This helps to prevent swings in blood sugar, helping you feel fuller for longer. However, most GI diets also recommend cutting down on fat, especially saturates. This means many of the foods which have a low GI value but are high in fat – whole milk, crisps and chocolate, for example – are still limited.

What affects the GI value of a food?

There are several things. Firstly ,the overall nutrient content of a food will affect its GI. For example, fat and protein affect the absorption of carbohydrate. This helps to explain why chocolate, which is high in fat, has a low GI value. It also explains why high-fat crisps have a lower GI value than low-fat jacket potatoes. Whole milk also has a low GI value because it's packed with protein and fat.

How you cook a food, the degree of processing and the ripeness and variety of a fruit, for example, also affect its GI. Even the structure of the carbohydrate itself influences the GI. For example, processed instant oatmeal has a higher GI than traditional rolled oats used to make porridge. This is because, as a result of the processing, the starch in instant oats is more easily exposed to digestive enzymes, causing it to break down and enter the bloodstream more rapidly. Meanwhile, some foods have low GI values because they are packed with fibre, which acts as a physical barrier, slowing down the absorption of carbohydrate into the blood.

GI value of Meals

GI index charts only identify the effect different foods have on blood sugar levels when they are eaten on their own and, consequently, many nutritionists believe this is one of the main problems with GI diets. Basically, when you eat a mixture of foods together as in a meal, the GI value of that whole eat changes. As a guideline though, the more low GI foods you include in a meal, the lower the overall GI value of that meal will be.

Are there any cons to the GI diet?

As outlined above, one of the main limitations to GI diets is the fact it's difficult to identify the GI value of a meal. Meanwhile, some foods with a low GI value are also packed with fat and/or salt and contain few nutrients. Chocolate and crisps, for example, are high in fat and contain few vitamins and minerals. Meanwhile, a 50g pack of salted peanuts contains around 5g of salt – that's almost the maximum amount recommended by nutrition experts for good health! Consequently, it's possible to follow a GI diet that's packed with fat and lacking in many of the nutrients you need to stay healthy. However, most GI diet plans come with advice to cut down on the amount of fat you eat and recommend avoiding many of the high-fat, low GI foods. For example, they recommend choosing skimmed milk over whole milk.

What do the experts think?

In general, most nutritionists and dieticians are supportive of the basic principles of the GI diet. They do, however, believe that you shouldn't get too hung up about avoiding all high GI foods because when foods are eaten together in a meal, that meal can have a very different GI value to the individual foods it contains.

How much weight can I expect to lose?

Most GI diets suggest you will lose around 1-2 lb a week, possible with a slightly greater loss in the first few weeks when your body loses water as well as fat. This follows the guidelines recommended by nutrition experts.

How does it differ from the Atkins Diet?

Unlike the Atkins Diet, which bans most carbohydrates, especially in the early stages, GI diets actively encourage you to eat many carbohydrates and antioxidant-rich fruit and veg. The diet is also high in fibre which means you're less likely to get constipated and, because carbohydrate isn't restricted to any great degree, you won't get the other unpleasant side effects associated with the Atkins Diet, such as bad breath and headaches. GI diets also tend to follow healthy eating guidelines and are low in fat, especially saturates. And if that's not enough, GI diets are much easier to follow if you are a vegetarian!

Are there any other health benefits to the GI diet?

Following a diet that includes plenty of foods with a low GI index may have a role in helping to prevent or reduce the risk of getting Type 2 or maturity-onset diabetes, according to experts at Diabetes UK, the largest diabetes organisation in the UK. Research has also shown that lower GI diets can help improve levels of 'good' cholesterol and so may reduce the risk of heart disease. Anyone with diabetes should always check first with their doctor before making changes to their diet. However, most diabetes experts agree that including foods with low GI value in meals can help to maintain even blood sugar levels. However, they also agree that eating to control diabetes, isn't just about looking at the GI value of foods. You should also focus on eating a balanced, healthy diet you can stick with for life. At last, here's a diet that's popular with the media but still follows basic healthy eating guidelines! The diet generally contains plenty of fruit and veg and recommends eating fewer refined and sugary carbohydrates. Meanwhile, if you want to give the diet a go, always remember to apply the general principles of healthy eating- a healthy diet wouldn't recommend including huge amounts a chocolate, crisps or whole milk and neither should a GI diet. Having said this, there's little to argue about with a diet that recommends swapping baguettes and bagels for wholegrain breads, cornflakes for porridge, and white rice for wholemeal pasta.

GI Diet Plan Sample Day

Breakfast

Bowl of porridge made from traditional oats and skimmed milk and sweetened with a little honey. Plus a pear.

Mid-morning

1 Pot low fat-fruit yoghurt and a banana.

Lunch

Bowl of lentil soup plus an open tuna sandwich made with 2 slices of wholegrain bread, a thin scrape of low-fat spread and tuna in brine. Plus a handful of cherries.

Mid afternoon

Small pack of low-fat crisps

Dinner

Spaghetti Bolognese (made from extra lean minced beef and lots of vegetables) served with whole wheat spaghetti and salad.

Low Glycaemic Index foods (55 or less)

Include some of these foods in each meal or snack, but go for low-fat choices where possible, such as skimmed milk. If you want to lose weight, you'll also need to watch your portion sizes. That means sticking to small servings of pasta and noodles, limiting yourself to two slices of bread with a meal, and having only a couple of squares of chocolate or a small handful of peanuts!

Medium Glycaemic Index foods (56 to 69)

You may include a few of these foods each day, but again limit portion sizes if you want to lose weight.

Table – 1

Food	GI
Roasted and salted peanuts	14
Low-fat yoghurt with sweetner	14
Cherries	22
Grapefruit	25
Pearl barley	25
Red Lentils	26
Whole milk	27
Dried Apricots	31
Butter beans	31
Fettucine pasta	32
Skimmed milk	33
Low fat fruit yoghurt	37
Whole meal spaghetti	38
Apples	38
Pears	38
Tomato Soup, Canned	40
Apple Juice, Unsweetened	40
Noodles	41
White Spaghetti	42
All Bran	42
Chick peas, canned	42
Peaches	42
Porridge made with water	42
Lentil soup	44
Oranges	44
Macaroni	45
Green grapes	46
Orange juice	46
Peas	48
Baked beans in tomato sauce	48
Carrots, boiled	49

Milk chocolate	49
Kiwi fruit	52
Stone ground wholemeal bread	53
Crisps	54
Special K	54
Banana	55
Raw oatbran	55
Sweet corn	55

Table – 2

Food	GI
Muesli, non toasted	56
Boiled potatoes	56
Sultanas	56
Pitta bread	57
Basmati Rice	58
Honey	58
Digestive biscuit	58
Cheese and tomato pizza	59
Ice cream	60
New potatoes	61
Coca Cola	62
Apricot, canned in syrup	63
Raisins	64
Shortbread biscuit	64
Couscous	65
Rye bread	65
Pineapple, fish	66
Cantaloupe melon	67
Croissant	67
Shredded bread	67
Mars bar	68
Ryvita	69
Crumpet, toasted	69
Weetabix	69
Wholemeal bread	69

High Glycaemic Index foods (70 or more)

Swap these foods for those with a low GI value or eat them together with a low GI food Having a jacket potato with baked beans, for example, will lower the GI value of that whole meal.

Food	GI
Mashed Potato	70
White bread	70
Watermelon	72
Swede	72

Bagel	72
Bran flakes	74
Cheerios	74
French fries	75
Coco Pops	77
Jelly beans	80
Rice cakes	82
Rice Krispies	82
Corn flakes	84
Jacket potato	85
Puffed wheat	89
Baguette	95
Parsnips, boiled	97
White rice, Steamed	98

I. GENERAL MOTORS DIET

The following diet and health program was developed for employees and dependents of General Motors, Inc. and is intended for their exclusive use. This program was developed in conjunction with a grant from U.S. Department of Agriculture and the Food and Drug Administration. It was field tested at the Johns Hopkins Research Centre and was approved for distribution by the Board of Directors, General Motors Corp. at a general meeting on August 15, 1985. General Motors Corp. wholly endorses this program and is making it available to all employees and families. This program will be available at all General Motors Food Service Facilities. It is management's intention to facilitate a wellness and fitness program for everyone.

This program is designed for a target weight loss of 10-17 lbs per week. It will also improve your attitudes and emotions because of its cleansing systematic effects.

The effectiveness of this seven day plan is that the food eaten burns more calories than they give to the body in caloric value.

This plan can be used as often as you like without any fear of complications. It is designed to flush your system of impurities and give you a feeling of well-being. After seven days you will begin to feel lighter because you will be lighter by at least 10 lbs. You will have an abundance of energy and an improved disposition.

- During the first seven days you must abstain from all alcohol
- You must drink 10 glasses of water each day.

Day One: All fruits except bananas. Your first day will consist of all the fruits you want. It is strongly suggested that you consume lots of melons the first day. Especially watermelon and a loupe. If you limit your fruit consumption to melons, your chances of losing three lbs. on first day are very good.

Day Two: All vegetables. You are encouraged to eat until you are stuffed with all the raw or cooked vegetables of your choice. There is no limit on the amount or type. For your complex carbohydrate, you will start day two with a large baked potato for breakfast. You may top the potato with one pat of butter.

Day Three: A mixture of fruits and vegetables of your choice. Any amount, any quantity. No bananas yet. No potatoes today.

Day Four: Bananas and milk. Today you will eat as many as eight bananas and drink three glasses of milk. This will be combined with tee special soup which may be eater in limited quantities.

Day Five: Today is feast day. You will eat beef and tomatoes. Eat two 10 oz. portions of lean beef. Hamburger is OK. Combine this with six whole tomatoes. On day five you must increase your water intake by one quart. This is to cleanse your system of the uric acid you will be producing.

Day six: Beef and vegetables. Today you may eat an unlimited amount of beef and vegetables. Eat to your hearts content.

Day seven: Today your food intake will consist of brown rice, fruit juices and all the vegetables you care to consume

The next morning you will be 10-17 lbs. lighter than one week ago. If you desire further weight loss, repeat the program again. You may repeat this program an often as you like, however, it is suggested that on the GM diet you are allowed two glasses of white wine in addition to the instructions on the program. You may substitute champagne for white wine. Under no circumstances are you to drink any other alcoholic beverages with the exception of beer which is allowed. Any liquor (bourbon, vodka, rum) is forbidden. Cream drinks are especially forbidden. You may have an occasional cordial such as crème de men have schnapps, but you must always limit yourself to two drinks. If you have wine, drink only wine that day. If you have beer, drink only beer that day, etc. Alcohol adds empty calories to your diet. However, after the first week it will help your digestion and settle your stomach.

G.M.'s Wonder Soup

The following soup is intended as a supplement to your diet. It can be eaten any time of the day in virtually unlimited quantities. You are encouraged to consume large quantities of this soup.

28 oz. Water,6 Large Onions,2 Green Peppers, Whole Tomatoes (fresh or canned),1 Head Cabbage,1 Bunch Celery,4 Envelops Lipton Onion Soup Mix, Herbs and Flavouring as desired.

Vegetables as may be taken in the form of a salad if desired. No dressing except malt, white or wine vinegar, squeezed lemon, garlic herbs. No more than one tea spoon of oil. This soup is a supplement while you are on the green peppers, celery etc. This recipe is not inflexible. You may substitute vegetables according to your taste. You may add any vegetables you like: asparagus, peas, corn, turnips, green beans, cauliflower, etc. Try to stay away from beans

(lima, pinto, kidney, etc), however, because they tend to be high in calories even though they are very good for you.

Beverages you may consume while on the program:

- 1. Water (flavoured with lemon/lime if desired)
- 2. Club soda is OK
- 3. Black Coffee. No cream or cream substitute. No sugar or sweetness.
- 4. Black Tea Herb or Leaf.
- 5. Absolutely nothing else except the fruit juices which are part of day seven .No fruit juices before day seven.

How and Why It Works

Day One: You are preparing your system for the upcoming programme. Your only source of nutrition is fresh or canned fruits. Fruits are nature's perfect food. They provide everything you could possibly want to sustain life except total balance and variety.

Day Two: Starts with a fix of complex carbohydrates coupled with an oil dose. This is taken in the morning for energy and balance. The rest of day two consists of vegetables which are virtually calorie free and provide essential nutrients and fibre.

Day Three: eliminates the potato because you get your carbohydrates from the fruits. Your system is now prepared to start burning excess pounds. You will still have cravings which should start to diminish by day four.

Day Four: bananas, milk and soup sound the strangest and least desirable. You're in for a surprise. You probably will not eat all the bananas allowed. But they are there for the potassium you have lost and the sodium you may have missed the past three days. You will notice a definite loss of desire for sweets. You will be surprised how easy this day will go.

Day Five: Beef and Tomatoes. The beef is for iron and proteins, the tomatoes are for digestion and fibre. Lots and lots of water purify your system. You should notice colourless urine today. Your allowance calls for the equivalent of five "quarter ponders". Do not feel you have to eat all this beef. You must eat the six tomatoes.

Day Six: is similar to day five, Iron and proteins from beef, Vitamins and fibre from vegetables. By now your system is in a total weight loss inclination. There should be a noticeable difference in the way you look today, compared to day one.

Day Seven: finished off the program like a good cigar used to finish off Victorian meals, except much healthier. You have your system under control and it should thank you for the flushing and cleaning you just gave it.

J. SOUTH BEACH DIET

South Beach Diet reaches a way of life where you rely on the right carbohydrates and fats. This new way of eating allows you to live contently without eating the bad carbohydrates and

fat. In contrast, when a person eats bad carbohydrates and fats they feel hungrier, causing them to eat more, which causes weight gain. In exchange for eating right, you become healthier and can enjoy an 8 to 13 pound weight loss in two weeks.

The Diet was created by Dr.Arthur Agatston, a highly respected cardiologist. This diet works in phases, the first two for a specific time frame and the third phase for life. With this new approach, you can stop counting calories; stop-weighing foods portions, and stop feeling as though you are deprived from eating good-tasting and satisfying food. Actually, you will be eating three, normal size meals. You will also get two snacks each day and with meal plans that are designed to be flexible, you can enjoy a variety, based on what sounds good to you on any particular day.

Best of all, you will see amazing results in a short amount of time. Your hips, thighs, and stomach will be thinner, the number on the scales (weighing machines) will go down, and all those overwhelming food cravings will be gone.

The Phases

There are basically three phases in South Beach Diet. You eat normal portion sizes.

In Phase 1, all carbohydrates are restricted. This is the strictest phase in this diet and will last for two weeks. It emphasizes lean meats, such as chicken, turkey, fish, and shellfish.

Low – Glycemic –index vegetables are allowed as well as low-fat cheese, nuts, eggs. Dieters should expect to lose somewhere between 8 to 13 pounds.

In Phase 2, some of the banned foods are slowly introduced while weight loss continues to around 1-2 pounds per week. You should remain on it until you lost your desired amount of weight.

Phase 3 is for maintenance and should be followed for life. It is all about maintaining your desired weight with a healthy balanced diet. Should your weight begin to climb, simply return to Phase 1.

As mentioned, the South Beach Diet is unique, successful, easy, and works in a three-phase process. Unlike many other diets, the South Beach Diet, simply substitutes your bad carbohydrates and fats for good ones.

Phase 1:

South Beach Diet Phase 1 lasts for two weeks. During this first phase, you will eat normal meals of chicken, turkey, fish, and shellfish, lots of vegetables, eggs, cheese, nuts, and garden salads using 100% olive oil for your salad dressing. Each day for 14 days, you will eat three, well-balanced meals. While eating until your hunger is satisfied may go against most diets, with the South Beach Diet, it is part of the plan.

In addition to the three meals each day, you will also eat a snack between breakfast and lunch, and then again between lunch and dinner. Even if you do not feel like eating these snacks, for the South Beach Diet to work, you need to, and after dinner, you will even have

dessert. Additionally, during this phase, you can drink all the coffee and tea you want and be sure to drink lots of water.

You may be thinking that this is a lot of food-it is! With most diets, you deprive your body, eating only small portions of foods that are unappealing. The change you will make during this phase is that you will cut out all bread, rice, potatoes, pasta, baked goods, fruit, candy, cake, cookies, ice cream, or sugar. Keep in mind that these eliminated foods will be added back into your diet, starting in Phase 2. In addition to taking these foods out of your diet temporarily, you will also need to avoid beer, or any kind of alcohol. Once you start Phase 2, reasonable amounts of wine can be added back in.

To achieve a life of health and lose unwanted weight, two weeks is a small investment to make. The first two or three days will be somewhat challenging, but breaking any bad habits starts out a little bumpy. Once you pass this small hurdle, the rest of the time will go by quicker than you think.

Phase 2:

South Beach Diet Phase 2 is different from the first in that it will last as long as it takes you to lose your desired weight. This phase will last different lengths of time depending on each individual person, how well they follow the diet, and how their body reacts.

Do not forget that by the time you start this phase, you will already be 8 to 13 pounds lighter. Other changes you will notice when starting Phase 2 is that your outlook on eating will be changed. During the past two weeks, the way in which your body was reacting to foods making you overweight was corrected.

The secret is not that you are eating less food, but eating fewer foods that start cravings and store excessive fat. Once the first phase ends, the weight will continue to come off by staying on the plan. Some of the indulgences you took out of your diet during Phase 1 will be added back in, but less often. When you want a piece of chocolate cake, you can have one, just not every night. If hot garlic bread sounds good, you can have this too, but not as often and with less enthusiasm.

As you go through phase 2, your weight loss will not be as dramatic, but it will be consistent. On average, you can expect to lose from one to two pounds. While these numbers are lower than what you achieved in the first phase, losing slowly is healthier and you will keep the weight off.

Phase 3:

South Beach Diet Phase 3 begins when you have hit your target weight. To help you maintain your new weight, you will be able to enjoy options that are more liberal. Once you get to this phase, you will stay there for the rest of your life. After completing Phase 1 and 2, this phase will feel like normal eating to you. Now you are eating differently – for life! If your weight starts creeping back up, modify the foods you are eating and the amounts.

Along with losing extra weight and changing the way your body responds to food, your blood chemistry is also changing, improving your cardiovascular system. With heart disease being a

leading cause of death where the only symptom of heart attack is often death, improving your cardiovascular system will add quality years to your life. So much more is achieved than just losing weight.

South Beach Diet Food list

During Phase 1, the foods eaten will be in controlled portions to include chicken, beef, turkey, fish, and shellfish. These types of foods along with vegetables, eggs, cheese, nuts and salads can also be eaten, although all of it will be in controlled portions. Refer to the following list to see the types of foods that are acceptable in phase 1, 2, and 3. Remember that bread, rice, potatoes, pasta, baked goods, fruit, candy, cake, cookies, ice cream, or sugar will be slowly added back into your diet in phase 2.

Foods to enjoy:

- Canola Oil
- Chicken breasts (Skinless)
- Cheese (fat-free or low fat-American ,cheddar, cottage, cream substitute, feta (paneer)
- Fish (all types)
- Green vegetables
- Peanut butter
- Peanuts
- Pecans
- Pistachio nuts
- Sugar substitute (sugar-free)
- Vegetables (beans, broccoli, cauliflower, cucumbers, eggplant, mushrooms, spinach, tomatoes)

Foods to avoid:

- Alcohol
- Baked goods
- Bread
- Fruit
- Fruit juice
- Ice cream
- Milk (whole, low-fat)
- Pastries
- Poultry (Chicken wings, legs, thighs, wings, duck, goose, poultry products)
- Vegetables (beets, black-eyed peas, carrots, corn, pinto beans, sweet potatoes, white potatoes)
- Yogurt

Advantages:

- Promotes rapid initial weight loss of 8 13 pounds in 14 days.
- Thereafter, offers weight loss of about 1-2 pounds, per week.

- Helps to improve eating habits and stabilize blood sugar levels.
- Helps to improve good to bad cholesterol ratio and reduce triglycerides.
- The diet is fairly balanced after the initial strict phase.
- The diet does not rely on high levels of saturated fat.
- There is no calorie or fat counting on this diet
- The diet encourages regular meals and snacks.

Disadvantages:

- The diet is very demanding for those that are accustomed to carb-rich diets.
- This diet can work out to be quite expensive and time consuming.
- Lapsing into old eating habits may result in speedy weight gain. This has to be a new way
 of life.
- The South Beach Diet is subtitled "The Delicious, Doctor Designed, Fool proof Plan for Fast and Healthy Weight Loss". Such a description is bound to raise expectations to unrealistic levels. The truth is, there is nothing especially new about this diet-or any diet plan that cuts out unhealthy processed foods together with excess sugar, and recommends less saturated fat.
- Much of the initial 8-13 pounds weight-loss is likely to be water-weight loss caused by carbohydrate restriction. Such weight loss is typically regained, as soon as carb-intake resumes.

K. BEVERLY HILLS DIET

The Beverly Hills Diet is a food combining diet that relies heavily on fruits. According to the diet, papaya softens body fat, pineapple burns it off and watermelon flushes it out of the body.

Judy Mazel, actress and founder of the diet plan, promises not only that you'll lose weight, but that you'll be "skinny". The problem is she chooses a slight different way of combining foods –there are days where all you can eat are grapes; on other days you can only have melon.

The plan maintains that you can lose 10 to 15 pounds in 35 days. This diet claims that the eating one type of food with another (a protein with a carbohydrate) destroys digestive enzymes and causes weight gain and poor digestion. Eating foods separately prevents this and causes weight loss according to this diet.

Claims:

- Healthy
- Cleans you out
- Prevents disease
- Helps you lose weight fast

Sample Meals:

Breakfast − 8 oz. prunes

Lunch – Unlimited strawberries

Evening – Baked Potato

To drink – Water, coffee or tea

Advantages:

- Fruit is known to prevent cancer
- Easy to follow
- Limited number of overall calories consumed
- Initial weight loss can be rapid

Disadvantages:

- Not based on scientific evidence
- Hard to live on one food each day
- Monotonous and unhealthy. Too much fruit not only is this diet plan monotonous, but also it results in an inadequate intake of protein and fat, as well as iron, zinc, vitamin B-12, calcium and essential fatty acids.
- Weight loss is hard to maintain
- Doesn't teach you how to eat properly.

L. ORNISH DIET

The Dean Ornish *Eat More Weigh Less* diet is a low-fat, mainly vegetarian diet plan. Meat, poultry or fish foods aren't recommended, while only a few dairy products are allowed – like fat-free yogurt, fat-free milk and lower-fat cheese.

The Ornish diet lists "Eat Freely" foods, "Eat Moderately" foods and "Banned" foods. Providing you observe these dietary instructions, you can eat all you want without counting calories or portion sizes. (Note: Banned foods include, all fats and oils, nuts, seeds, avocados, as well as refined carbs like sugar, white flour and white rice.)

Sample Meals

Breakfast – Wholegrain cereal with fat-free yogurt, fresh berries, orange juice.

Lunch – Baked potatoes stuffed with spicy spinach and cheese, plus broccoli, potato and garbanzo bean (*white chand*) salad & fat-free dressing, plus green salad, followed by fresh fruit.

Evening Meal – Bruschetta with sun-dried tomatoes; whole-wheat pasta with dry-roasted vegetables, green salad; for dessert, peaches in wine.

Liquids – Water, tea, Coffee, skimmed milk, and juices.

Advantages

Like any diet that is high in fruit and vegetables, low in refined carbs, saturated fat and salt, the Ornish diet is undeniably a healthy way to eat, even if – according to current theory- the diet is low in essential fatty acids. Furthermore, the unrefined carbs and fiber in the diet will definitely keep you full. Even so, it is some way removed from the average Western diet and requires a fair amount of adaptation. Give his success in helping people to lose weight and his experience in helping patients reduce their symptoms of heart disease, Dean Ornish's approach to diet nutrition and weight reduction has worked well.

Disadvantages

Fat has many important roles in our diets. Although 10% of calories from fat may be adequate to prevent essential fatty acid and aid in the absorption of fat-soluble vitamins, a very-low-fat diet is difficult for most people to follow. Fat provides a pleasant taste to food. It also gives us a feeling of satiety, meaning it helps us feel satisfied, curbs our appetite, and guards against overeating. People who follow a very-low-fat diet often feel hungry and unsatisfied.

M. SCARSDALE DIET

A very famous diet from the 1970s, written by Dr.Herman Tarnower, the Scarsdale Diet weight – reducing plan provides :43 percent protein,22.5 percent fat and 34.5 percent carbohydrates.

You follow the weight-reducing plan (about 1000 calories) only for two weeks at a time and then the Scarsdale keep-trim program. The keep-trim program allows more calories but also contains a large number of banned foods.

Like many of the fixed-formula, high protein diets, the Scarsdale Diet only causes weight loss because of the reduced calories – not because of the nutrient – formula.

The diet is based on a plan, which uses artificial sweeteners and herbal appetite suppressants. The diet allows fruits and vegetables as well as lean animal fats. Like the Atkins diet the Scarsdale Diet has been known to produce results, especially near the beginning. However, much of the weight lost is water weight. The diet is low in calories, so some weight loss has to be expected.

Artificial sweetners are used instead of sugar in all drinks.

Sample Meals

Breakfast: ½ grapefruit and cup of coffee or cup of tea

Lunch: Coffee and Fruit salad

Dinner: Hamburger meat with no bun, cooked vegetables.

Drinks: Drink at least eight glasses of water per day.

Advantages:

• Expect a very speedy reduction in weight

- The plan is generally very easy to follow
- Portions are not limited in such a way, which will cause you to cheat on your diet, or want to not abide by the guidelines of the diet.

Disadvantages:

- Too low in calories for optimum health
- A very strict diet plan ,with restricted food choices
- Recommending such a high protein intake can (in practice) lead dieters to consume more fat than is safe for their health.
- The weight, which is lost on this diet, is mainly water.

N. PALEO DIET:

Courtesy Mayo Clinic

A paleo diet is a dietary plan based on foods similar to what might have been eaten during the Paleolithic era, which dates from approximately 2.5 million to 10,000 years ago.

A paleo diet typically includes lean meats, fish, fruits, vegetables, nuts and seeds — foods that in the past could be obtained by hunting and gathering. A paleo diet limits foods that became common when farming emerged about 10,000 years ago. These foods include dairy products, legumes and grains.

Other names for a paleo diet include Paleolithic diet, Stone Age diet, hunter-gatherer diet and caveman diet.

Purpose

The aim of a paleo diet is to return to a way of eating that's more like what early humans ate. The diet's reasoning is that the human body is genetically mismatched to the modern diet that emerged with farming practices — an idea known as the discordance hypothesis.

Farming changed what people ate and established dairy, grains and legumes as additional staples in the human diet. This relatively late and rapid change in diet, according to the hypothesis, outpaced the body's ability to adapt. This mismatch is believed to be a contributing factor to the prevalence of obesity, diabetes and heart disease today.

You might choose to follow a paleo diet because you: Want to lose weight or maintain a healthy weight

Details of a paleo diet

Recommendations vary among commercial paleo diets, and some diet plans have stricter guidelines than others. In general, paleo diets follow these guidelines.

What to eat

- Fruits
- Vegetables
- Nuts and seeds
- Lean meats, especially grass-fed animals or wild game
- Fish, especially those rich in omega-3 fatty acids, such as salmon, mackerel and albacore tuna
- Oils from fruits and nuts, such as olive oil or walnut oil

What to avoid

- Grains, such as wheat, oats and barley
- Legumes, such as beans, lentils, peanuts and peas
- Dairy products
- Refined sugar
- Salt
- Potatoes
- Highly processed foods in general

A typical day's menu

Here's a look at what you might eat during a typical day following a paleo diet:

- **Breakfast.** Broiled salmon and cantaloupe.
- **Lunch.** Broiled lean pork loin and salad (romaine, carrot, cucumber, tomatoes, walnuts and lemon juice dressing).
- **Dinner.** Lean beef sirloin tip roast, steamed broccoli, salad (mixed greens, tomatoes, avocado, onions, almonds and lemon juice dressing), and strawberries for dessert.
- Snacks. An orange, carrot sticks or celery sticks.

The diet also emphasizes drinking water and being physically active every day.

Results

A number of randomized clinical trials have compared the paleo diet to other eating plans, such as the Mediterranean Diet or the Diabetes Diet. Overall, these trials suggest that a paleo diet may provide some benefits when compared with diets of fruits, vegetables, lean meats, whole grains, legumes and low-fat dairy products. These benefits may include:

- More weight loss
- Improved glucose tolerance
- Better blood pressure control
- Lower triglycerides
- Better appetite management

However, longer trials with large groups of people randomly assigned to different diets are needed to understand the long-term, overall health benefits and possible risks of a paleo diet.

Dietary concerns

A paleo diet is rich in vegetables, fruits and nuts — all elements of a healthy diet.

The primary difference between the paleo diet and other healthy diets is the absence of whole grains and legumes, which are considered good sources of fiber, vitamins and other nutrients. Also absent from the diet are dairy products, which are good sources of protein and calcium.

These foods not only are considered healthy but also are generally more affordable and accessible than such foods as wild game, grass-fed animals and nuts. For some people, a paleo diet may be too expensive.

Questions about the paleo diet hypothesis

Researchers have argued that the underlying hypothesis of the paleo diet may oversimplify the story of how humans adapted to changes in diet. Arguments for a more-complex understanding of the evolution of human nutritional needs include the following:

- Variations in diet based on geography, climate and food availability not only the transition to farming also would have shaped the evolution of nutritional needs.
- Archaeological research has demonstrated that early human diets may have included wild grains as much as 30,000 years ago well before the introduction of farming.
- Genetic research has shown that notable evolutionary changes continued after the Paleolithic era, including diet-related changes, such as an increase in the number of genes related to the breakdown of dietary starches.

The bottom line

A paleo diet may help you lose weight or maintain your weight. It may also have other beneficial health effects. However, there are no long-term clinical studies about the benefits and potential risks of the diet.

You might be able to achieve the same health benefits by getting enough exercise and eating a balanced, healthy diet with a lot of fruits and vegetables.

This is what Nutritionist **Kerry Torrens** has to say about the Paleo Diet

The history of Paleo

Paleolithic diets are all about eating like our ancestors did. While you may not be inclined or even required to chase down a wildebeest, Paleo fans aim to eat as naturally as possible, opting for grass-fed meats, an abundance of fruit and veg and other wholefoods like nuts and seeds. Some relaxed versions of the diet allow taboo foods (that were not necessarily available during that era) like low-fat dairy products and potatoes, while others shun even fruit or veg that is considered to contain too much fructose.

Paleolithic living as a dietary concept was first promoted by gastroenterologist, Dr Walter L Voegtlin. His book, The Stone Age diet, was published in 1975 and paved the way for a plethora of different Paleolithic approaches, all similar in their core principles but with varying rules and restrictions. Common terms for these types of diet include the caveman diet, the hunter-gatherer diet and of course, the Paleo diet.

While there are many ways to practice, the most popular and respected Paleo 'gurus' around are:

Dr Loren Cordain

A professor at Colorado State University specialising in health & exercise science. *Dr Cordain* is considered by many to be the authority on Paleolithic living. His book, The Paleo diet, published in 2002 talks about the benefits of Paleo for weight loss and health.

Robb Wolf

A former biochemist, *Wolf* studied under Dr Cordain and is author of The Paleo solution, another popular resource, first published in 2010.

The diet

The Paleolithic era was pre-agricultural for the most part and certain foods that we consume in abundance today were unsuitable for consumption in their raw form. Many Paleo followers believe our digestive systems have changed little since then and therefore the following foods put a strain on our gastrointestinal tract:

- Legumes (including peanuts)
- Cereal grains
- Refined sugar
- Potatoes
- Processed foods
- Salt
- Dairy
- Refined vegetable oils
- Root vegetables

As mentioned, different forms of the diet vary in their restrictiveness so in some cases low-fat dairy products and root veg are allowed. All versions of the diet encourage lean proteins, fruit, vegetables and healthy fats from whole foods such as nuts, seeds and olive oil and grass-fed meat.

Described as a "lifetime programme and not a quick fix weight loss diet" the Paleo diet is said to promote a more natural way of eating with low levels of sugar, salt plus the elimination of processed, refined foods. The idea is that this is more in tune with how our bodies have evolved and how over the centuries we would have fuelled ourselves. As a consequence the plan typically (but not always) omits dairy foods, cereal grains, starchy vegetables as well as sugar in favour of wild, lean animal foods, non-starchy fruit and vegetables and honey. Healthy fats are encouraged such as unsaturated varieties and specifically oils like olive, flax, walnut and avocado.

The diet is relatively low in carbs but rich in lean protein and plant foods. These plant foods contribute all-important fibre, vitamins, minerals and phyto-chemicals. Unlike certain other low-carb diets, the Paleo diet doesn't promote salty, processed meats and it encourages the inclusion of certain fruit and vegetables. The diet is not low fat but instead promotes the inclusion of natural fats from pasture-fed livestock, fish and seafood as well as nuts, seeds and their oils. The elimination of such a wide range of foods like grains, dairy, processed foods and sugar means the diet is more than likely to lead to some weight loss. However,

many followers of the Paleo way of eating do so not to lose weight but to address a digestive or inflammatory health issue. In fact, a number of small studies have suggested that those following a Paleo diet report *positive health outcomes* including weight loss, improved blood sugar control and a reduction in the risk factors for heart disease.

However, the logic behind the plan does have its faults. What our ancestors ate would have been dependent on where they lived in the world, making avocados an unlikely dietary staple for us Brits. Our ancestors were also far more physically active, having to hunt and gather for their food. The Paleo diet also ignores the health benefits of consuming whole-grains as well as beans, legumes and starchy veg. Numerous studies have reported a *reduced incidence of heart disease* in those who regularly consume three servings of whole-grains a day. The low GI (glycaemic index) properties of beans and legumes make them especially useful for those with blood sugar issues and starchy veg are a great source of nutrient-dense energy. All of these foods supply B vitamins, which among other things help us unlock the energy in our food. Finally, omitting dairy has received much criticism in that it may *limit the intake of minerals like calcium*. As a consequence, those who have been diagnosed or who are at risk of medical conditions, including osteoporosis, or who have particular dietary requirements should consult their GP before making changes to their diet.

Those following a diet restricting certain food groups may experience:

- Nutrient deficiencies (when meals are not properly planned) because of the restricted food choice for example, calcium
- Problems sticking with the diet especially when socialising and eating out because of the restriction on grains and dairy

O. THE KETOGENIC DIET

Courtesy Harvard Medical School

In the world of weight-loss diets, low-carbohydrate, high-protein eating plans often grab attention. The Paleo, South Beach, and Atkins diets all fit into that category. They are sometimes referred to as ketogenic or "keto" diets.

But a true ketogenic diet is different. Unlike other low-carb diets, which focus on protein, a keto plan centers on fat, which supplies as much as 90% of daily calories And it's not the type of diet to try as an experiment.

"The keto diet is primarily used to help reduce the frequency of epileptic seizures in children. While it also has been tried for weight loss, only short-term results have been studied, and the results have been mixed. We don't know if it works in the long term, nor whether it's safe," warns registered dietitian Kathy McManus, director of the Department of Nutrition at Harvard-affiliated Brigham and Women's Hospital.

How does it work?

The keto diet aims to force your body into using a different type of fuel. Instead of relying on sugar (glucose) that comes from carbohydrates (such as grains, legumes, vegetables, and

fruits), the keto diet relies on ketone bodies, a type of fuel that the liver produces from stored fat

Burning fat seems like an ideal way to lose pounds. But getting the liver to make ketone bodies is tricky:

- It requires that you deprive yourself of carbohydrates, fewer than 20 to 50 grams of carbs per day (keep in mind that a medium-sized banana has about 27 grams of carbs).
- It typically takes a few days to reach a state of ketosis.
- Eating too much protein can interfere with ketosis.

What do you eat?

Because the keto diet has such a high fat requirement, followers must eat fat at each meal. In a daily 2,000-calorie diet, that might look like 165 grams of fat, 40 grams of carbs, and 75 grams of protein. However, the exact ratio depends on your particular needs.

Some healthy unsaturated fats are allowed on the keto diet — like nuts (almonds, walnuts), seeds, avocados, tofu, and olive oil. But saturated fats from oils (palm, coconut), lard, butter, and cocoa butter are encouraged in high amounts.

Protein is part of the keto diet, but it doesn't typically discriminate between lean protein foods and protein sources high in saturated fat such as beef, pork, and bacon.

What about fruits and vegetables? All fruits are rich in carbs, but you can have certain fruits (usually berries) in small portions. Vegetables (also rich in carbs) are restricted to leafy greens (such as kale, Swiss chard, spinach), cauliflower, broccoli, Brussels sprouts, asparagus, bell peppers, onions, garlic, mushrooms, cucumber, celery, and summer squashes. A cup of chopped broccoli has about six carbs.

Keto risks

<u>A ketogenic diet has numerous risks</u>. Top of the list: it's high in saturated fat. McManus recommends that you keep saturated fats to no more than 7% of your daily calories because of the link to heart disease. And indeed, the keto diet is associated with an increase in "bad" LDL cholesterol, which is also linked to heart disease.

Other potential keto risks include these:

Nutrient deficiency. "If you're not eating a wide variety of vegetables, fruits, and grains, you may be at risk for deficiencies in micronutrients, including selenium, magnesium, phosphorus, and vitamins B and C," McManus says.

Liver problems. With so much fat to metabolize, the diet could make any existing liver conditions worse.

Kidney problems. The kidneys help metabolize protein, and McManus says the keto diet may overload them. (The current recommended intake for protein averages 46 grams per day for women, and 56 grams for men).

Constipation. The keto diet is low in fibrous foods like grains and legumes.

Fuzzy thinking and mood swings. "The brain needs sugar from healthy carbohydrates to function. Low-carb diets may cause confusion and irritability," McManus says.

Those risks add up — so make sure that you talk to a doctor and a registered dietitian before ever attempting a ketogenic diet.

What about the other diets?

The popular low-carb diets (such as Atkins or Paleo) modify a true keto diet. But they come with the same risks if you overdo it on fats and proteins and lay off the carbs. So why do people follow the diets? "They're everywhere, and people hear anecdotally that they work," McManus says. Theories about short-term low-carb diet success include lower appetite because fat burns slower than carbs. "But again, we don't know about the long term," she says. "And eating a restrictive diet, no matter what the plan, is difficult to sustain. Once you resume a normal diet, the weight will likely return."

Keto diet: everything you need to know

The ketogenic diet, as it is officially known, is a medical success story. In the early 1900s, physicians in France and the US were experimenting with fasting and low-calorie diets to help reduce the frequency of seizures in epilepsy patients. As the theory became more refined, they found that they could trick the body into thinking it was fasting by limiting the intake of carbohydrates and sugars and upping the intake of fat. The result was that epileptics experienced a reduction in seizures of up to 90 per cent. In 1923, American diabetes expert Dr Russell Wilder designed an eating regime called ketogenic therapy for treating epilepsy and other health issues.

While still used today in the treatment of epilepsy, cancer, Alzheimer's, some autoimmune diseases and a number of other conditions, the keto diet, as it's now more commonly known, has become a household name due to our thriving diet culture, which is always hungry for a new way to cheat the scales. For people watching their diet, a weight loss plan that says you must eat more cheese and cream sounds like a dream. But, is it?

Just low carb?

Matt Marney is a personal trainer, Pilates instructor and fitness educator and, having taught hundreds of fitness and nutrition courses, he knows a thing or two about the body and how it burns fat. He says: "Back in our hunter-gatherer days, we had periods of starvation where our bodies had to adapt to the lack of food by breaking down our protein and fat stores into fuel sources. This is called ketosis. To achieve this, you have to limit your intake of our regular fuel sources, carbohydrates and sugars.

"But, low-carb diets have been around for a while and there are lots of them, including the Atkins diet and even the paleo diet.Losing weight is about achieving a caloric deficit, whereby there is less energy going in than there is going out. Whichever diet you go on, you can do this. The keto diet is just one way to lose weight."

There are health benefits, however, he says. "For the first time in the history of homo sapiens, we live in an obesogenic environment, meaning we have an abundance of food. We are surrounded by high-energy, high-carb, highly processed foods – all day, every day. If people eat sugar and carbs throughout the day, their bodies can get used to always having glucose – the quickest and easiest fuel source – available and forget how to use protein and fats for fuel. Then they have lost metabolic flexibility."

When this happens, says Marney, people can start to feel dizzy and shaky if they haven't eaten due to low blood sugar levels. "These people are known as sugar-burners. They can benefit from going keto to help their body remember how to use other fuel sources. Additionally, cancer thrives on sugar. If I got cancer tomorrow, I would go straight on the keto diet."

Strict ratios

The classic keto approach recommends a 4:1 ratio of fats to protein and carbs, meaning 90 per cent of your calories come from fat, 6 per cent from protein and 4 per cent from carbohydrates. In real food terms, this means you would be eating approximately 10 to 15 grams of carbohydrates each day (a slice of bread or a third of a cup of cooked rice), with one gram of protein per kilogram of body weight (if you weigh 60 kilograms, this might be a 250-gram steak) and the rest of your diet would be fat, according to the American Fitness Professionals Association.

An upward trend

The keto diet is undoubtedly popular. Online searches for ketogenic has seen the largest growth among most-searched dietary requirements in the UAE over the past three years, with a 1,028.21 per cent rise, according to digital marketing suite SEMrush. Offline, an increasing number of keto-friendly restaurants and delivery companies are also opening in the country.

Doing it right

For Marney, the most important thing is doing it right. "People get locked into a dogma. They like to be able to say that they are on the keto diet, but they often aren't doing it properly. If you have cut out carbs and sugar, but you haven't increased your fat enough, you aren't keto, you are just low-carb.

"I haven't done keto myself, as I like carbs too much, but as a personal trainer, I would never tell a client to go on the diet. Personal trainers are not nutritionists or endocrinologists — we shouldn't be giving that advice. Some people get flu-like symptoms on the keto diet and other side effects. It's a serious business for your body. Yes, you may lose weight, but that's because you have cut out an entire macronutrient. There are lots of ways to lose weight and we are all different physiologically, so if you want to try the keto diet, do so, but see a qualified dietitian first.

P. INTERMITTENT FASTING

Intermittent fasting has recently become a health trend. It's claimed to cause weight loss, improve metabolic health, and perhaps even extend lifespan. Several methods of this eating pattern exist. Every method can be effective, but figuring out which one works best depends on the individual.

Here are 6 popular ways to do intermittent fasting.

The 16/8 method

			THE 16/	8 METH	OD		
	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
Midnight							
4 AM	FAST						
8 AM							
12 PM	First meal						
4 PM	Last meal by 8pm						
8 PM	5.0 5						
Midnight	FAST						

The 16/8 method involves fasting every day for 14–16 hours and restricting your daily eating window to 8–10 hours. Within the eating window, you can fit in two, three, or more meals. This method is also known as the Leangains protocol and was popularized by fitness expert Martin Berkhan.

Doing this method of fasting can actually be as simple as not eating anything after dinner and skipping breakfast. For example, if you finish your last meal at 8 p.m. and don't eat until noon the next day, you're technically fasting for 16 hours.

It's generally recommended that women only fast 14–15 hours because they seem to do better with slightly shorter fasts.

For people who get hungry in the morning and like to eat breakfast, this method may be hard to get used to at first. However, many breakfast skippers instinctively eat this way.

You can drink water, coffee, and other zero-calorie beverages during the fast, which can help reduce feelings of hunger. It's very important to primarily eat healthy foods during your eating window. This method won't work if you eat lots of junk food or an excessive number of calories.

SUMMARY The 16/8 method involves daily fasts of 16 hours for men and 14–15 hours for women. Each day you'll restrict your eating to an 8–10-hour eating window during which you fit in 2, 3, or more meals.

2. The 5:2 diets

The 5:2 diet involves eating normally 5 days of the week while restricting your calorie intake to 500–600 for 2 days of the week.

		ТН	IE 5:2 DI	ET			
DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	
Eats normally	Women: 500 calories Men: 600 calories	Eats normally	Eats normally	Women: 500 calories Men: 600 calories	Eats normally	Eats normally	

This diet is also called the Fast Diet and was popularized by British journalist Michael Mosley. On the fasting days, it's recommended that women eat 500 calories and men 600. For example, you might eat normally every day of the week except Mondays and Thursdays. For those two days, you eat 2 small meals of 250 calories each for women and 300 calories each for men.

As critics correctly point out, there are no studies testing the 5:2 diet itself, but there are plenty of studies on the benefits of intermittent fasting.

SUMMARY The 5:2 diet, or the Fast Diet, involves eating 500–600 calories for 2 days out of the week and eating normally the other 5 days.

3. Eat Stop Eat

		EA	г-ѕтор-е	AT			
DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	
Eats normally	24-hour fast	Eats normally	Eats normally	24-hour fast	Eats normally	Eats normally	

Eat Stop Eat involves a 24-hour fast once or twice per week. This method was popularized by fitness expert Brad Pilon and has been quite popular for a few years. By fasting from dinner one day to dinner the next day, this amounts to a full 24-hour fast. For example, if you finish dinner at 7 p.m. Monday and don't eat until dinner at 7 p.m. the next day, you've completed a full 24-hour fast. You can also fast from breakfast to breakfast or lunch to lunch — the end result is the same.

Water, coffee, and other zero-calorie beverages are allowed during the fast, but no solid foods are permitted.

If you're doing this to lose weight, it's very important that you eat normally during the eating periods. In other words, you should eat the same amount of food as if you hadn't been fasting at all.

The potential downside of this method is that a full 24-hour fast may be fairly difficult for many people. However, you don't need to go all in right away. It's fine to start with 14–16 hours, then move upward from there.

SUMMARY Eat Stop Eat is an intermittent fasting program with one or two 24-hour fasts per week

4. Alternate-day fasting

		ALTERNA	ATE-DAY I	FASTING	i		
DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	
Eats normally	24-hour fast OR Eat only a few hundred calories	Eats normally	24-hour fast OR Eat only a few hundred calories	Eats normally	24-hour fast OR Eat only a few hundred calories	Eats normally	

In alternate-day fasting, you fast every other day. A full fast every other day can seem rather extreme, so it's not recommended for beginners. With this method, you may go to bed very hungry several times per week, which is not very pleasant and probably unsustainable in the long term.

There are several different versions of this method. Some of them allow about 500 calories during the fasting days

SUMMARY Alternate-day fasting has you fast every other day, either by not eating anything or only eating a few hundred calories.

5. The Warrior Diet

			THE WAI	RRIOR D	IET		
	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7
Midnight							
4 AM	Eating only small amounts of	Eating only small amounts of	Eating only small amounts of	Eating only small amounts of	Eating only small amounts of	Eating only small amounts of	Eating only small amounts of
8 AM	vegetables and fruits	vegetables and fruits	vegetables and fruits	vegetables and fruits	vegetables and fruits	vegetables and fruits	vegetables and fruits
12 PM							
4 PM	Large meal	Large meal	Large meal	Large meal	Large meal	Large meal	Large meal
8 PM							
Midnight							

The Warrior Diet was popularized by fitness expert Ori Hofmekler.

It involves eating small amounts of raw fruits and vegetables during the day and eating one huge meal at night. Basically, you fast all day and feast at night within a four-hour eating window.

The Warrior Diet was one of the first popular diets to include a form of intermittent fasting. This diet's food choices are quite similar to that of the paleo diet — mostly whole, unprocessed foods.

SUMMARY The Warrior Diet encourages subsisting on only small amounts of vegetables and fruits during the day, then eating one huge meal at night.

6. Spontaneous meal skipping

SPONTANEOUS MEAL SKIPPING										
	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7			
	Breakfast	Skipped Meal	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast			
	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch			
	Dinner	Dinner	Dinner	Dinner	Skipped Meal	Dinner	Dinner			

You don't need to follow a structured intermittent fasting plan to reap some of its benefits. Another option is to simply skip meals from time to time, such as when you don't feel hungry or are too busy to cook and eat.

It's a myth that people need to eat every few hours lest they hit starvation mode or lose muscle. Your body is well equipped to handle long periods of famine, let alone missing one or two meals from time to time.

Thus, if you're really not hungry one day, skip breakfast and just eat a healthy lunch and dinner. Or, if you're travelling somewhere and can't find anything you want to eat, do a short fast. Skipping one or two meals when you feel inclined to do so is basically a spontaneous intermittent fast. Just make sure to eat healthy foods during the other meals.

SUMMARY Another way to do intermittent fasting is to simply skip one or two meals when you don't feel hungry or don't have time to eat.

The backstory on intermittent fasting

Intermittent Fasting as a weight loss approach has been around in various forms for ages, but was highly popularized in 2012 by BBC broadcast journalist Dr. Michael Mosley's TV documentary *Eat Fast, Live Longer* and book *The Fast Diet*, followed by journalist Kate Harrison's book *The 5:2 Diet* based on her own experience, and subsequently by Dr. Jason Fung's 2016 bestseller *The Obesity Code*. IF generated a steady positive buzz as anecdotes of its effectiveness proliferated.

The *Obesity Code* seemed the most evidence-based summary resource. Fung successfully combines plenty of research, his clinical experience, and sensible nutrition advice, and also addresses the socioeconomic forces conspiring to make us fat. He is very clear that we should eat more fruits and veggies, fiber, healthy protein, and fats, and avoid sugar, refined grains, processed foods, and stop snacking.

Intermittent fasting can help weight loss

IF makes intuitive sense. The food we eat is broken down by enzymes in our gut and eventually ends up as molecules in our bloodstream. Carbohydrates, particularly sugars and refined grains (think white flours and rice), are quickly broken down into sugar, which our cells use for energy. If our cells don't use it all, we store it in our fat cells as, well, fat. But sugar can only enter our cells with insulin, a hormone made in the pancreas. Insulin brings sugar into the fat cells and keeps it there.

Between meals, as long as we don't snack, our insulin levels will go down and our fat cells can then release their stored sugar, to be used as energy. We lose weight if we let our insulin levels go down. The entire idea of IF is to allow the insulin levels to go down far enough and for long enough that we burn off our fat.

Intermittent fasting can be hard...

Initial human studies that compared fasting every other day to eating less every day showed that both worked about equally for weight loss, though people struggled with the fasting days. New research is suggesting that not all IF approaches are the same, and some are actually very reasonable, effective, and sustainable, especially when combined with a nutritious plant-based diet.

We have evolved to be in sync with the day/night cycle, i.e., a circadian rhythm. Our metabolism has adapted to daytime food, nighttime sleep. Nighttime eating is well associated with a higher risk of obesity, as well as diabetes. Based on this, researchers from the University of Alabama conducted a study with a small group of obese men with prediabetes. They compared a form of intermittent fasting called "early time-restricted feeding," where all meals were fit into an early eight-hour period of the day (7 am to 3 pm),or spread out over 12 hours (between 7 am and 7 pm). Both groups maintained their weight (did not gain or lose) but after five weeks, the eight-hour group had dramatically lower insulin levels and significantly improved insulin sensitivity, as well as significantly lower blood pressure. The best part? The eight-hour group also had significantly decreased appetite. They weren't starving.

Just changing the timing of meals, by eating earlier in the day and extending the overnight fast, significantly benefited metabolism even in people who didn't lose a single pound.

Why might changing timing help?

But why does simply changing the timing of our meals to allow for fasting make a difference in our body? An in-depth review of the science of IF recently published in New England Journal of Medicine sheds some light. Fasting is evolutionarily embedded within our physiology, triggering several essential cellular functions. Flipping the switch from a fed to fasting state does more than help us burn calories and lose weight. The researchers combed through dozens of animal and human studies to explain how simple fasting improves metabolism, lowering blood sugar; lessens inflammation, which improves a range of health issues from arthritic pain to asthma; and even helps clear out toxins and damaged cells, which lowers risk for cancer and enhances brain function.

So, is intermittent fasting as good as it sounds?

According to metabolic expert Dr. Deborah Wexler, Director of the Massachusetts General Hospital Diabetes Center and associate professor at Harvard Medical School. "There is evidence to suggest that the circadian rhythm fasting approach, where meals are restricted to an eight to 10-hour period of the daytime, is effective," though generally she recommends that people "use an eating approach that works for them and is sustainable to them."

There is some good scientific evidence suggesting that circadian rhythm fasting, when combined with a healthy diet and lifestyle, can be a particularly effective approach to weight loss, especially for people at risk for diabetes. (However, people with advanced diabetes or who are on medications for diabetes, people with a history of eating disorders like anorexia and bulimia, and pregnant or breastfeeding women should not attempt intermittent fasting unless under the close supervision of a physician who can monitor them.)

4 ways to use Intermittent Fasting, for better health

- 1. **Avoid sugars and refined grains**. Instead, eat fruits, vegetables, beans, lentils, whole grains, lean proteins, and healthy fats (a sensible, plant-based, Mediterranean-style diet).
- 2. **Let your body burn fat between meals**. Don't snack. Be active throughout your day. Build muscle tone.

- 3. **Consider a simple form of intermittent fasting**. Limit the hours of the day when you eat, and for best effect, make it earlier in the day (between 7 am to 3 pm, or even 10 am to 6 pm, but definitely not in the evening before bed).
- 4. **Avoid snacking or eating at nighttime**, all the time.