



Healthy weight management

Messages abound in the media today about nutrition and body weight. But often these messages are more about controversy than provision of information. Dr Stephen Kreitzman and Valerie Beeson elaborate on the subject of weight management from beyond the hype

PHARMACY IS ONE OF THE FEW PLACES LEFT THAT THE public can rely on for responsible information. With regard to food, nutrition and especially weight management, the media appears to have totally abandoned its duty for accountability. The messages frequently given to the public by print and electronic media regarding the food they are eating are reckless, sensationalised (definition: “to cast and present in a manner intended to arouse strong interest, especially through inclusion of exaggerated or lurid details”) and apparently designed to be primarily entertainment rather than informative and helpful even when presented in a ‘documentary’ format.

What constitutes a ‘healthy’ diet

A ‘healthy’ diet is one that provides all of the components that human beings are required to recycle from eating the plant and animal materials we call food. Consider, for the moment, a carrot. A carrot was part of a living plant. It is made up of thousands upon thousands of different chemical components. If we had an unlimited budget and the best analytical capacity possible, we could isolate and identify each and every chemical that comprises ‘the carrot’. It would make a very long list indeed. The list, however, would not completely match the list of required substances for humans. In order for humans to remain

healthy, and support growth and development when necessary, repair tissues, provide protection and all the other requirements for life, the elements for *humans* need to be provided, not carrots. Carrots are considered healthy foods, but a diet that contained only carrots would quickly lead to ill health and an early demise.

The same can be said of every other item we use for food. We could develop the list for potatoes, beef, milk, soy beans – every common plant and animal substance we use for food. Not one of these ‘foods’ would, by itself, match all the human needs. In order to provide humans with all the required substances – vitamins, minerals, trace elements, essential amino acids and essential fatty acids – the nutrients, we have to mix and match from the available lists to match our requirements in both quality and quantity.

Each of the lists represents the chemical components of the food item. Regardless of whether the food was grown locally or in a remote part of the world, whether it was grown ‘organically’ or with the aid of technology, or frozen, canned or dehydrated, the list is still an inventory of chemicals. They are not necessarily chemicals added by the food industry. They are the chemicals required to be a carrot, potato or whatever. Some of those chemicals are useful for our nutrition, but most are not and some are

even harmful. It can't be avoided. It is true of every food. The only way to provide a healthy diet is to combine foods to provide all the essential nutrients and do it from a varied selection so that the good stuff is available in necessary quantities and the bad stuff is kept to low enough levels that our physiology can cope with them.

Not many people select their dinner choices on the basis of nutrient need; nevertheless, even if we don't know whether our food has enough selenium today, as an example, we still require selenium. It is the same selenium that can be provided as an isolated component in a nutritional supplement. Under ordinary conditions, supplements may not be necessary. When people eat a varied, mixed diet, the ordinary foods will supply the nutrients needed. Under conditions of food restriction, however, as would be common in a weight reduction diet, the nutrients will not all be there in enough quantity. The nutrient density in common foods makes it impossible to construct a nutrient complete diet with total calorie intake below 1,200. To accomplish this at 1,200 calories requires a computer and the necessity to consume some specific foods not usually found on family menus in the UK.

The editor of one of the glossy slimming magazines once argued that the only nutrients of concern were a short list of vitamins for which a daily intake has been widely published. Regardless of that ill-informed position, the human body will be compromised if not supplied with all the essential nutrients. Supplementation is almost always required during weight reduction or the dieter will be malnourished. It is the lack of available nutrients in restricted weight reduction diets that has led to the myth that a low calorie intake is hazardous.

The idea that extra calories are required during weight reduction can readily be seen as ludicrous when you consider that the one item the obese patient has in store in great excess is calories. The great bulk of extra fat is a massive store of extra calories: 35,000 calories are available from each stone of extra fat weight. The reason dieters were compromised was because they were depleted in essential nutrients. Provide all the essential nutrients and exogenous calories are unnecessary. The only calories required are the calories provided by the essential nutrients – primarily the essential amino acids and the essential fatty acids. Provide the nutrients and the dieter will remain perfectly healthy as long as there is a reserve of fat. In fact, if the nutrient content provided is complete quantitatively as well as qualitatively, the dieter will be healthier whilst dieting than at any time in the past.

What is a 'healthy' degree of weight loss?

Weight loss is important if weight is in excess. It is possible to debate the value of weight loss for cosmetic reasons, although one should not really devalue the quality of life issues associated with even a minimum amount of excess weight in our modern society. Far more important to health professionals, however, is the understanding that excess weight is a major health hazard. The precipitous increase in type 2 diabetes is a direct result of the pandemic of overweight and obesity. Excess weight is a cause of insulin resistance and if chronic will often lead to

diabetes. Up to 80 per cent of people with type 2 diabetes will die from cardiovascular disease.

It has become fashionable in recent years to denigrate BMI in favour of other simpler measures. Although calculating BMI is a challenge, it is valid. BMI risks were derived from a massive database by life insurance companies, who will not risk their money when BMI exceeds critical values. The negative consequences of elevated BMI begin even within the so-called normal range and rise exponentially into overweight and obesity. And it is misleading to believe that only excess fat weight is detrimental. The facts prove otherwise. Massive excess weight of muscle is as risky to health as excess fat. Professional athletes are not especially long-lived; in fact, the converse is usually true. The healthy range of weight to attain is within the normal BMI range of 20–25, regardless of the pre-diet weight. Having said that, however, every pound of weight lost reduces the medical risk and therefore although it may not always be possible to reach the ideal, it is still worth going part way.

It is time to stop looking for ways to violate the natural laws. Calories count. The number of calories used by the body has to be matched with the calories eaten for weight to be stable. Eat in excess, regardless of whether the calories are carbohydrate, fat, protein or alcohol, and weight will be gained. Eat fewer calories and weight will be lost. That is fewer calories than are used, not just fewer calories than normally eaten. It appears to be widely believed that reducing intake by 200 calories a day will result in more than 20 pounds of weight loss in a year. Obese people are eating hundreds if not thousands of excess calories daily. Reducing this excess by a few hundred calories may slow the weight gain a little, but will certainly not cause weight loss.

To lose weight in a realistic time frame, it is essential to reduce the calorie intake as much as is consistent with a complete supply of nutrients. To lose weight it is necessary to eat less. The value of exercise in weight management is seriously over-rated. To use up the calories in an average size chocolate bar, it is necessary to run about three miles (without a calorie laden sports drink).

If we are to really deal with the plague of obesity, it is time to go back to fundamental physiology and stop looking for scapegoats to blame and wishful thinking for miracle solutions. □

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