

A Healthy Diet

By

Dr. William Reville, University College, Cork.

The general public must feel confused by the torrents of recommendations that constantly issue from official sources as to what constitutes a healthy diet. To make matters worse, the detail of these recommendations can change substantially from year to year – sometimes what was good for you last year is bad for you this year. It is easy to get the impression that picking a healthy diet is a complex matter and one can easily make a mistake, with serious consequences. In my opinion, this impression is very much mistaken. Picking a healthy diet is easy, and, if you follow the formula, you cannot really go wrong.

Let me give you this simple formula right away, which applies to the average healthy adult. Eat a wide variety of foods in moderation, particularly vegetable oils, whole grain foods, vegetables and fruit, drink about two litres of water a day and take plenty of aerobic exercise. The wide variety ensures that you don't miss out on anything important, while at the same time protecting you from over-exposure to anything bad. Water flushes your system and aerobic exercise keeps your heart and lungs in good shape.

Usually the advice I have just quoted is given more detailed expression by referring to food groups and the food pyramid. In 1992 the US Department of Agriculture issued detailed guidelines that became widely accepted worldwide. This recommended eating daily:- 2 to 3 servings from the dairy group (milk, yoghurt, cheese); 2 to 3 servings from the meat, fish, poultry, eggs, nuts and dry beans group; 3 to 5 servings of vegetables; 2 to 4 servings of fruit,

and 6 to 11 servings of bread, cereal, rice and pasta. The recommendations also advised using fats, oils and sweets only very sparingly.

What counts as a serving? One serving in the dairy group would be one cup of milk or yoghurt or 1.5 ounces of natural cheese. One serving in the meat, fish, beans, eggs and nuts group would be 2 to 3 ounces of cooked lean meat/fish or a cup of cooked beans, or two eggs. One serving in the vegetable group would be one cup of raw leafy vegetables, or a half cup of other vegetables, cooked or chopped raw, or one cup of vegetable juice. One serving of fruit would be one medium apple, banana or orange, or a half cup of chopped fruit or one cup of fruit juice. One serving of the bread, cereal, rice, pasta group would be one slice of bread, or one ounce of ready to eat cereal, or a half cup of cooked cereal, rice or pasta.

The US Department of Agriculture recommendations give out the strong message – “Complex carbohydrate is good, fat is bad”. However, we now know that this message in such a simple unqualified form is wrong. Not all complex carbohydrate is good, and not all fats are bad – some are very good indeed. I will discuss the fats first.

Fats come in two chemical forms – saturated and unsaturated. Saturated fats have relatively high melting points and are solid at room temperature. Red meats and dairy products contain saturated fats. Unsaturated fats have lower melting points and are usually oils at room temperature. Unsaturated fats are found in vegetable oils, fish and nuts.

Eating saturated fat tends to raise blood cholesterol levels and higher levels are associated with a higher risk of heart disease. On the other hand, eating unsaturated fats tends to reduce blood cholesterol. Societies that eat relatively large amounts of unsaturated fat tend to have

lower rates of heart disease. Heart disease is lower in Crete where 40 per cent of the calories in the diet are from, mostly unsaturated, fat (olive oil and fish) than in Japan where fat represents only about 8 per cent of the calories in the diet.

The USDA 1992 pyramid recommends eating lots of complex carbohydrate. Complex carbohydrates, also called polysaccharides, are storage forms of sugars (mostly glucose) in which the large molecules contain hundreds of individual glucose units. It was thought that complex carbohydrates breakdown slowly to sugar after ingestion, and produce a slow rise in blood sugar levels, rather than a rapid rise which can cause problems. However, refined carbohydrate products (white bread, white rice, pasta) and also potatoes, do produce a rapid rise in blood sugar soon after ingestion. Most whole-grain carbohydrate foods, e.g. brown rice, are much slower acting in this regard.

The USDA is now reassessing the details of the food pyramid but has not issued revised recommendations yet. However, it is clear how the land lies and W.C. Willett and M.J. Stampfer describe their new version of the food pyramid in *Scientific American*, January 2003. They recommend eating vegetable oils (olive oil, sunflower oil and so on) and whole grain foods liberally, i.e. at most meals. They also recommend vegetables in abundance and 2 to 3 servings of fruit per day. One to 3 servings of nuts and legumes, zero to 2 servings of fish, poultry and eggs and one to two servings of dairy products are recommended per day. People are cautioned to use red meat, butter, white rice, white bread, pasta, potatoes and sweets sparingly. Most people should take a multi-vitamin supplement, and moderate consumption of alcohol (up to 2 standard drinks per day) is recommended, unless contraindicated.

So there you have it. It is not very complicated and, as I said at the start, you won't go far wrong if you just eat a wide variety of things in moderation.

(This article first appeared in The Irish Times, May 5, 2003.)