

Balanced diet across the ages

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Whether you are a busy toddler, an active 30-year old or a frail person in your 70s, we all need good nutrition. There exist many contradictory theories on nutrition. To me the answer lies in simplicity and practicality. We should eat *unprocessed whole food in the right proportion*. Following a balanced, natural, wholefood diet these days is already enough of a challenge!¹

Whole versus processed food

The concept 'wholefood' means literally the 'whole food' in its most natural state, therefore unprocessed. Whole foods such as seeds, nuts, fruits and vegetables, pulses and whole grains, supply the body with all the necessary building blocks to promote health and wellbeing. Processed food, on the other hand, actually depletes nutrients from the body.

Carbohydrates have to be transformed into simple sugars for the body to metabolise them, for it is only in this simple form that they can be absorbed into the bloodstream. Various enzymes, vitamins and minerals are needed to support this process. Whole grains, sugar cane, fresh fruits and vegetables naturally contain the necessary enzymes, vitamins and minerals for the breakdown of their carbohydrates. However, by refining sugar or grains, enzymes and most vitamins and minerals are destroyed. If these nutrients are not present in the refined or processed product, it will be depleted from the body's own resources to sustain the metabolic processes. Consumption of processed food can therefore lead to an imbalance of nutrients in the body. This imbalance in return leads to diet-related diseases such as obesity, diabetes, digestive disorders and even cancer or heart attacks.

When we eat a chocolate bar, we only tend to think about the extra calories and do not realise that it is actually depleting vital nutrients from our body. As a rule, stick to foods as close to their natural state as possible, avoiding processed, fried, canned, sugary and fatty foods. Avoiding processed food also means avoiding everything derived from them – white flour, white rice, refined sugar and oils. This includes commercial cakes, biscuits, pastry, bread, packaged cereals, sweets, chocolates, ice cream and jams. Beside the obvious, remember to also avoid the following: sweetened yoghurts, flavoured milk, processed cheese, canned vegetables, fruit and soups.

Since a good diet involves natural whole foods, it is obvious that at least 75% of the food in the supermarkets is on the 'avoid' list. It is easy to forget that our present lifestyle based on convenience foods is fairly new and is only present in Westernised societies. Those who have forgotten how to eat in a healthy manner will look at this list and feel that there is nothing left to eat! It is important to first realise the benefits of a natural wholefood diet and then to start making slow changes towards a healthier balanced wholefood diet.

Balanced diet

Ideally, for a healthy person the main meal of the day should consist of 20% complex carbohydrates (starch), 20% protein, 10% fats and oils, and 50% salad and/or vegetables.² These percentages (per weight) also reflect the proportions of your overall food intake per day. When your food intake is balanced in this way, you will have balanced proportions of acid and alkaline foods as well as all the fibre and nutrients your body needs for health and vitality.

Furthermore, at least 50% of your diet should include *raw* (unprocessed) whole food, e.g. fruits, vegetables, seeds and nuts. Raw food is 'live' food. Cooked food is 'dead' food. Raw food contains the necessary enzymes and nutrients that aid digestion.^{2,3} Be adventurous and serve a raw grated beetroot or butternut salad to your family and friends!²

Eating a variety of foods is also important. When we look at the intricate chemical make-up of the body, we can see it is composed of, and needs, many different kinds of vitamins, minerals, enzymes, cell salts and chemical elements. It is therefore very important to eat a variety of foods that are whole, pure, natural and fresh. Eat multicoloured foods, as each natural colour contains different health-promoting phytochemicals. Therefore, vary your proteins, starches, vegetables and fruit from meal-to-meal and from day-to-day.

Complex carbohydrates

Good examples of complex carbohydrates in the diet are sweet potato, butternut and whole grains. Millet, short-grain brown rice, sorghum, spelt, quinoa and corn are the best grains to use. Use rolled oats, rye and buckwheat in moderation. If the grain is whole, it means that although it has been flattened, flaked or made into flour, no part of it has been removed.

In our Western society, wheat has become a staple food. However, of all the grain allergens, wheat is the number one culprit. It seems that health problems have arisen mostly from the alteration of the chromosome structure of wheat to make it more suitable for the intensive cultivation methods of modern agriculture. Gluten and wheat intolerance is common today with

many sufferers being totally unaware of their condition. Wheat products can result in digestive disorders, e.g. abdominal bloating, constipation or spastic colon, excess mucous formation and dry skin.

Protein

Protein can be found in pulses, meat, fish, egg or dairy. Animal protein is the best source of protein; it is a complete protein containing all the essential amino acids. However, meat should ideally be consumed at lunchtime and not more than once per day. Stay away from processed meat such as bacon, salami, sausages and ham because of their high sodium content and they contain nitrites, which are carcinogenic.

It is best to buy organic meat because it doesn't contain residues of antibiotics and hormones that are present in intensively farmed animals. Of the non-organic red meats, ostrich, lamb and venison are the best choices. Battery chicken is highly contaminated, owing to the way it is mass-produced. Try to buy organic or free-range chickens that are fed on natural home-mixed chicken feed.

Excessive meat consumption is a leading cause of illness for several reasons. Consumption of animal protein creates acidosis in the body on a cumulative basis. Eating small amounts of organic meat, however, will not usually cause a problem with acidosis, provided that enough vegetables and alkali-forming foods are consumed during the same meal.

Eggs are probably the most nutritious staple food available. They contain lecithin in the egg yolk, which is highly effective in lowering cholesterol. One can therefore comfortably include 6 to 8 eggs in one's diet each week.

Fish should be consumed at least three times per week. It is a very good source of animal protein and essential fatty acids, if it is found in natural cold, deep-water habitats.

We should limit dairy in the diet. Cow's milk is not an ideal source of calcium or protein, and often creates more problems than it is worth with acidosis.² Many of the problems surrounding milk also stem from the chemical residues found within commercially farmed animals. Furthermore, commercial milk is pasteurised and homogenised, which means the milk is heated and the fat droplets are broken down to a much smaller size. These processes have detrimental effects to our health. They change the unsaturated content of milk to a saturated form and damage 42% of the protein, so that it cannot be assimilated. Long-life milk's protein is 72% altered, and it is this altered type of protein that causes mucous. Vitamin C, beneficial micro-organisms, valuable trace minerals as well as all enzymes, including those needed for calcium absorption, are destroyed by pasteurisation. Nutrient wise, raw milk is better than pasteurised milk, but is virtually impossible to find since farmers are not allowed to sell unpasteurised milk legally.

Limit soy protein only to small amounts of sprouted soy or fermented miso and tofu. Avoid soy in the unfermented state, such as soy milk, flour and meat-substitute products. One of the main concerns about high intake of soy isoflavones is their clearly defined toxic effect on the thyroid gland.⁴⁻⁶ Nuts, seeds and pulses are other good sources of vegetable protein.

Fats and oils

It has been publicised *ad nauseam* that a high-fat diet causes common health problems. However, the swing to the other extreme, i.e. the low-fat or no-fat diets that are all the rage today, also produces health problems. Low-fat or no-fat diets lead to stunted growth in children, depression, produce dry skin and low energy levels, lead to high cholesterol and triglycerides, sometimes compromise immune function, enhance the likelihood of producing leaky gut and allergies, and lower testosterone production.

Fats and oils in their natural form provide numerous health benefits, but processing methods turn fats that heal into fats that kill. Except for extra-virgin olive oil and unrefined oils, all oils that line supermarket shelves have gone through processing where they are subjected to several harsh treatments.²

There are two essential fatty acids that we need to obtain through our diet. One is alpha-linolenic acid (omega-3) and the other is linoleic acid (omega-6). Both are sensitive to destruction by light, oxygen and high temperature. Heating oils rich in essential fatty acids damages them, rendering them quite toxic. Good sources of essential fatty acids are hempseed oil, flaxseed oil and oily fish, e.g. wild salmon, mackerel, sardines, galjoen, snoek, yellowtail and fresh tuna. Other healthy fats to enjoy are avocado, seeds and nuts, and unrefined oils, e.g. avocado oil, nut oils, apricot kernel oil, sesame oil, coconut oil, palm fruit oil and extra-virgin olive oil.

Fruits and vegetables

Both fruits and vegetables should form the bulk of your diet. Since fruit is more appetising than kale, broccoli and Brussels sprouts, vegetables are usually neglected in the diet. However, the ideal is to eat only two fruits and rather seven to nine servings of vegetables per day. In general, vegetables are more nutrient dense than fruits, with the latter containing a higher water and sugar content.

Where possible, buy organically grown fruit and vegetables. It is also best to buy fresh produce that is in season. The skins and peels of fruits and vegetables contain a significant portion of their nutrients and fibre – 85% of the food value of carrots is in the skin. It is therefore better not to peel or skin organic fruits and vegetables, only wash them thoroughly before eating. It is recommendable to peel non-organic fruits and vegetables because of the high level of pesticides on them.

Importance of water

Water is the essence of life and yet the most neglected nutrient. The average adult is composed of 60 to 65% water. That's more water than the total of all other substances in the body. Our cells literally owe their existence to an adequate supply of fresh, clean water. To maintain health, we should consume at least 300 ml of pure, clean water per 10 kg of body weight every day. This should be drunk in small quantities spread out during the course of the day. Alternatively, drink hot water with a slice of lemon and/or fresh root ginger or herb teas. Additionally, drink only freshly squeezed vegetable juice or fruit juice

diluted with water (1:1). There are a couple of coffee alternatives (not decaffeinated coffee) on the market and carob is a healthy alternative to hot chocolate. Above all, filtered or distilled water still remains the best source of rehydration for the system.

Conclusion

With health in mind, food is usually selected according to calorie or fat content and the glycaemic index.⁷ However, these criteria say nothing about the nutrient content of the food. The presence of phytochemicals and micronutrients, i.e. enzymes, vitamins and trace minerals should be the main consideration to keep in mind when choosing healthy food. For optimal nourishment, we should therefore consume a balanced diet consisting of natural whole foods, as opposed to refined, processed and convenience foods.

References

1. Du Preez H. The whole food truth. *The South African Journal of Natural Medicine* 2006; **22**: 14-17.
2. Du Preez H, Werge Tilney K. *Naturally Nutritious*. Cape Town: Aardvark Press, 2005.
3. Du Preez H. Enzymes – the missing link. *The South African Journal of Natural Medicine* 2005; **18**: 16-17.
4. <http://www.naturalnutrition.co.za/shadowofsoy.asp>
5. <http://thyroid.about.com/cs/soyinfo/a/soy.htm>
6. <http://www.ghchealth.com/june03.html>
7. Attwel E. Beware the glycaemic index! *South African Food Review* 2003; **30**: 37.