



Food and Mood



We all have good days and bad days; we all have foods we like more, or like less. But is there a connection between feeling fine and the foods we have eaten? Do some foods make us feel grumpy? Is it possible to plan a diet for a good mood?

Vitamins and minerals

When diets are very limited and inadequate, and result in deficiency states, effects on mood and brain function are well documented. Anaemia (low levels of haemoglobin in blood) can occur due to inadequate intakes of iron, which results in feeling weak, tired and lethargic all the time. This can be treated with iron supplements. The risk of anaemia is reduced with the regular intake of red meat and fish, and can also be helped with avoiding tea drinking with meals.

Deficiency of the B vitamins thiamin and niacin causes mood problems including fatigue, and feeling depressed or irritable.

Low intakes of some micronutrients may also affect mood. Studies have suggested that not having enough of the vitamin folate can increase the chances of feeling depressed, and this may be particularly important in older people. Folate is found in liver, green vegetables, oranges and other citrus fruits, beans and in fortified foods such as yeast extract and breakfast cereals; folic acid tablets are also effective.

Intakes of selenium in the UK have been in decline in recent years, and are often below the recommended levels. Some studies have shown that this may increase the incidence of depression and other negative mood states. A supplement may help improve mood in some people not getting enough selenium from foods. Good food sources of selenium include Brazil nuts, meat, fish and eggs.

Where there is the suspicion that intakes of one or several vitamins/minerals is inadequate, the use of supplements at safe levels can be an effective treatment strategy; in the longer-term, however, looking at eating more of particular foods rich in a nutrient is usually the best way to support good long term health.

Carbohydrate

The glucose in our blood comes from the carbohydrates we eat (both from sugars and starches) and is needed to fuel muscles and for the brain. Not having enough glucose in blood (hypoglycaemia) makes us feel weak and tired and 'fuzzy minded'; this may happen when not enough food is eaten, and is a particular risk for diabetics and sports people.

Having enough glucose in blood is the basis for the advice to eat breakfast and to consume regular meals containing some carbohydrate throughout the day; the ability to concentrate and focus comes from the adequate supply of energy to the brain.

However, once blood glucose is in the normal range there does not seem to be any improvement in mood or ability to concentrate with further increases in glucose, that is with eating more or different types of carbohydrate.

There is a messenger chemical in the brain called serotonin, which improves mood and how we feel. More serotonin is made when more of an amino acid called tryptophan enters the brain, and some researchers claim that this happens from eating foods that are high in carbohydrate and low in protein. This theoretical 'carbohydrate craving' to improve mood has been used to explain the eating of sweet comfort foods such as cakes and chocolate; in practice there is not enough evidence to support this effect.

Do some foods contain substances that are 'drug-like'?

Caffeine, found in coffee and cola drinks, acts as a stimulant and can improve alertness and feelings of energy, and counter the effects of fatigue. Too much caffeine may cause the adverse effects of irritability and headache.

Suggestions that chocolate contains particular mood-enhancing substances are often made, but measured pharmacological effects do not seem to explain the popularity of this food as a comforter.

Feeling ok or feeling fantastic?

There are many ways that foods can affect how we feel, just as how we feel has a large influence on what foods we choose. Some of the mood/food effects are due to nutrient content, but a lot of effects are due to prevalent associations of foods with pleasure and reward (chocolate) or diet and deprivation (plain foods). Some foods have religious, economic and cultural significance which will influence how we feel when eating them. Feeling good comes from a diet that provides adequate amounts of carbohydrate at regular times to keep blood glucose levels stable, and that contains a wide variety of protein and vitamin and mineral containing foods that support the many vital functions of the body. Plenty of fruits and vegetables and wholegrain cereal foods, with some protein foods will support a good supply of nutrients for good health and good mood.

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