



are you eating enough

FAT?

whether you lie in the low-fat consumption camp or indeed, have ignored this dominant health message in pursuit of culinary content, you are almost certainly deficient in fats – good fats that is

report: Health Dept

A group of nutrients called essential fatty acids (EFAs), known as omega-3 and omega-6, are critical to our health and well-being. EFAs are the main structural component of every cell membrane, meaning that their presence contributes to the function of each system in the body. However, the average person today will consume only one sixth of the omega-3 fats that were consumed in 1850, a fact that results in more than 90% of the British public being deficient in these vital fats ⁽¹⁾.

Deficiency in EFAs will compromise our outward appearance with problems such as dry, flaky skin, weak nails and dull, brittle hair ⁽²⁾. This deficiency is possibly the fuel for the current boom of the cosmetics industry. Moisturisers are now a prominent feature on every woman's (and many men's) bedside cabinet. Have you ever stopped to consider, as you reach for a bottle of lotion from the chemist's shelf, why we need to improve our skin quality through the application of external creams? Our complexions are simply a reflection of our nutritional health, and cosmetics alone will not resolve the deeper imbalance in well-being.

fatty acid deficiencies

Besides poor skin quality, common indications of EFA deficiency include: water retention, lack of energy, lowered immunity, pre-menstrual tension, impaired brain function (e.g. attention deficit), depression, skin conditions (e.g. eczema or acne), food cravings and allergies.

On a more sinister note, deficiency in EFAs has been linked to hypertension, high cholesterol, heart and circulatory disease, mental deterioration, arthritis, male sterility, miscarriage, auto-immune diseases (e.g. multiple sclerosis), cancer, and many other potentially life-threatening illnesses ^(1, 3).

eat more fat and lose weight

Another sign of EFA deficiency is a sluggish metabolism, which may contribute to obesity. According to 'Fat' Guru, Udo Erasmus ⁽¹⁾

essential fatty acids (especially omega-3) may help us to lose weight for the following reasons, since they:

1. increase activity of the enzymes that control fat breakdown and decrease enzyme activity for fat storage
2. decrease reliance on carbohydrates for fuel and boost fat metabolism
3. help stabilise blood sugar and insulin levels
4. suppress appetite by increasing feelings of fullness
5. improve thyroid function, helping to normalise metabolic rate and energy levels, in turn making it more likely that the individual will increase their activity levels
6. help decrease inflammation (omega-3) and the resulting water retention in the body, removing excess water via the kidneys
7. help reduce food cravings
8. help enhance mood and decrease depression, factors that often lead to overeating and under-activity.

a closer look at the good fats

Omega-3

The parent omega-3 fatty acid is called alpha-linolenic acid (ALA), which can be converted in the body to longer-chain omega-3 fatty acids, eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). Among other protective mechanisms, EPA and DHA are responsible for keeping our arteries free of plaque and holding blood lipid levels, blood pressure and other cardiovascular risk factors in check ⁽¹⁾. In addition, DHA is an important structural component of the grey matter in the brain, so your mother was actually correct when she told you that fish will make you intelligent! In a healthy person, 5-10% of ALA will be converted to EPA and DHA, but this process can be inhibited in certain individuals ⁽⁴⁾. The conversion enzymes may be compromised in diabetics and people with excess consumption of: sugar, cholesterol, saturated

fats, alcohol, processed oils and trans-fats (from margarines and other processed foods). In this case, it is therefore recommended that individuals consume direct dietary sources of EPA and DHA such as fish or fish oil.

Omega-6

The parent omega-6 fatty acid is called linoleic acid (LA), which can be converted to the longer-chain gamma-linoleic acid (GLA) and arachidonic acid (AA). GLA has been associated with the same health benefits of omega-3 oils such as; cardiovascular protection, increase in metabolic rate, improved hair and skin quality, although it is perhaps best known for its ability to relieve pre-menstrual syndrome in up to 90% of sufferers ⁽¹⁾, usually via supplementation of Evening Primrose Oil. AA is not so beneficial to health and can be associated with inflammatory reactions and water retention. In a healthy person, conversion of LA to GLA and AA is much more efficient than the omega-3 process, although the enzymes can also be affected by the same health factors mentioned above.

The balance between omega-3 and omega-6 oil intake is crucial, because too much of one will lead to a reduced conversion of the other into its longer-chain fats. For example, a diet low in omega-3 and high in omega-6 (through consumption of vegetable oils) is a very common scenario, which will mean that more LA will be converted to arachidonic acid (AA). AA is known to increase inflammation in the body, with resulting conditions such as eczema and arthritis and increased fluid retention from the kidneys, with a resultant rise in body-weight. The National Institute of Health (NIH) in America recommends that we consume omega-6 and omega-3 oils in the ratio 2:1 to 3:1 ⁽⁵⁾.

where can i get good fats?

Omega-3: rich sources of ALA include; flax seed, hemp seed, canola, walnuts, soy and algae. Rich sources of EPA and DHA include deep-water fish (such as mackerel and sardines) and omega-3 enriched eggs.

Omega-6: rich sources of LA include; sunflower, sesame, pumpkin and hemp seeds, walnuts and soy beans. Rich sources of GLA include evening primrose (definitely recommended for Pre-menstrual Syndrome), borage and blackcurrant oils.

Since the majority of the population does not eat fish or flaxseed on a regular basis, omega-3 oils are the main source of deficiency. ALA should be incorporated into the diet in the shape of flaxseed (either its oil or milled). Be careful though, as long-term use of flax oil can cause a relative deficiency in omega-6. At Health Dept. we solve this problem with Udo's Choice Oil, which includes some omega-6 rich oils such as sunflower and sesame with flax oil. To obtain adequate levels of EPA and DHA, the American Heart Association recommends two servings of oily fish per week. Alternatively, you could supplement with fish oil daily (we use Eskimo 3).

In order to avoid an over-consumption of omega-6 oils, severely limit your intake of processed vegetable oils, margarines and processed foods. With a healthy, balanced diet that follows the guidelines above, it is unlikely that you will be deficient in the omega-6 GLA. 

recommendations for a healthy diet and effective weight management

prioritise:

- 1) consumption of omega-3 and omega-6 rich foods in their whole form or as a cold-pressed oil. Examples include: fresh seeds, nuts, oily fish and flax, Udo's or Eskimo 3 oil. Essential fatty acids should make up at least a third of total fat consumption.
- 2) intake of vegetables (five portions per day in varying colours and textures); fruit (3-4 pieces per day); whole grains (consume according to energy requirements). As a rule, a meal should constitute two thirds vegetables and one third meat and/or grains.
- 3) exercise – moderate aerobic exercise at least 2-3 times each week and weight training two times each week (has the effect of increasing muscle mass, which will boost metabolism).

reduce:

- 1) saturated fats and cholesterol (from meat and dairy products). Aim for within 20% of total calories from fat.
- 2) processed vegetable oils, hydrogenated fats and other 'altered' oils (from cooking oils, margarines and many processed foods).
- 3) refined carbohydrates (sugar, most baked goods and refined grains such as white flour, pasta and noodles). Use glycaemic index charts to help with carbohydrate choices ⁽⁶⁾

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