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Can you “feed yourself more energy”?

Nutritional intervention may be a useful tool in the management of fibromyalgia.

Fatigue

Many fibromyalgia sufferers report that global fatigue is one of the symptoms they find most difficult to deal with. With that in mind this article focuses on causes of fatigue and dietary interventions that may help boost your energy.

Have you wondered why the diet that seems to give one person more energy does not work for everyone?

There is no single cause of fatigue, hence there is not one universal way to boost energy levels.

Starting simple

Thirst for life

Being well hydrated is one of the first strategies for tackling fatigue. Research has shown that moderate dehydration (approx 4%) can reduce endurance by 15%¹. Ideally an average adult should drink 1.5-2l of water every day. Hot weather and exercise can increase how much water you need to stay well hydrated. Drink regularly, don't wait to feel thirsty. Feeling thirsty indicates you are *already* dehydrated!

Sweet tooth?

Research has suggested that a high intake of refined

carbohydrate (sugar and white flour) and the associated raised blood sugar levels, could trigger reduced blood supply to muscles, weakening muscle stamina² and inducing fatigue. It is well documented that a high intake of refined carbohydrates is a contributing factor to insulin resistance, a pre-cursor to type 2 diabetes.

Smoothing the ride

Moving to a less refined, low GI diet should help control blood sugar imbalances. It is a good idea to make a dietary change like this over a few days or even weeks, a very quick change can make you feel worse as your body adjusts. The best place to start a low GI eating plan is at breakfast. Often a high GI breakfast triggers the blood sugar roller coaster for the rest of the day. Eating a low carbohydrate and high protein breakfast is a good start. This is easy to achieve, scrambled eggs on a slice of granary toast or unsweetened muesli with added nuts and berries. It could be as easy as a protein shake if you can't face making anything else. The key is to eat little and often throughout the day to maintain a stable blood sugar level. Low blood sugar (hypoglycaemia) can trigger you to reach for a quick fix sugary snack, starting the vicious circle again. To slow the release of sugar into the blood, always try to have carbohydrate with some protein. Have fruit with a few nuts or a small piece of cheese.

Body power stations!

Every cell in our body has energy generating apparatus called mitochondria, often referred to as our internal powerhouses. The mitochondria convert energy from the food we eat into the energy we use in our bodies, through a process called oxidation. If the mitochondria are not functioning well we will not produce as much energy. Low energy production leads to fatigue. Generating energy is a complex process. There are several nutrients our body needs to support the process of energy production in the mitochondria.

Key nutrients for energy

- Magnesium (Mg)
- B vitamins
- Acetyl L- Carnitine
- CoQ10

Dangerous business!

Generating energy is a hazardous activity for the mitochondria. High energy oxygen is used, generating reactive free radicals. If there is not adequate protection in the form of anti-oxidants, damage can occur – oxidative stress. Oxidative stress in the mitochondria can slow the energy generating process, reducing the amount of energy produced. Mitochondria contain their own DNA to enable them to reproduce. DNA in the mitochondria is vulnerable to

oxidative damage. Damaged DNA can lead to dysfunctional mitochondria or prevent the mitochondria replicating. Fewer mitochondria reduces the potential for energy production. Problems with mitochondrial function leads to fatigue. A diet rich in fruit and vegetables (more than 5 portions per day) may help to prevent oxidative stress.

Boost your batteries

There are several things you can do that don't involve complicated diets or expensive supplements.

Regular gentle exercise Mitochondria multiply in active muscle, so regular exercise really does help to generate more energy.³

Drinking 1.5-2L water per day to stay well hydrated.

Following a low GI diet rich in fresh foods, including a wide variety of fruit and vegetables, may help to reduce oxidative stress. High blood sugar (hyperglycaemia) is known to increase production of free radicals.⁴

Providing good support for energy generation. Magnesium is thought to be the most important nutrient for energy production, it is involved in every step of the process⁵

A good strategy would be to increase: magnesium, B vitamins and L-carnitine as a first step. CoQ10 is important for some of the steps in energy generation however, it is also an expensive supplement. There are many nutrients needed for energy production. If after increasing the basic nutrients for energy production fatigue is still an issue it might be worth adding CoQ10 to a programme. Before starting supplementation remember we are all individuals.

We are all individuals

This article is based on the general principles of how energy levels can be boosted. Each individual has their own specific health issues. You should always consult your medical practitioner if you are concerned about your symptoms. When considering dietary supplements it is important to check for contra-indications between any medication or supplements you are taking and any dietary supplement you are considering. If you are in any doubt as to whether a supplement is safe for you always check with a qualified nutritional therapist or medical practitioner.

Supplemental information

The following products have been reported to give positive benefits to people who suffer with Chronic fatigue:

Ultra Muscleze by Nutri

A high strength magnesium drink, which includes B vitamins, L carnitine all of which are important for energy production.

Magnesium Supplementation.

Choose a form of magnesium that is more easily absorbed by the body. Magnesium citrate or magnesium malate.

CoQ10

To have real benefits you would need to use between 50 and 100mg/day. This is an expensive supplement, expect to pay around £20 for a month supply. If you see it significantly cheaper check the amount of CoQ10 in the product.

Omega 3

Fish oil supplementation.

Many people now supplement fish oils. It is advisable to choose a supplement that is from fish body rather than cod liver oil. Look for supplements that have been purified to remove environmental toxins. The most important Omega 3 constituents are EPA and DHA. Eskimo 3 fish oils have a good reputation.

Vegan omega 3

Viridian do a flax seed oil. Vegan sources of omega 3 have to be converted by the body to EPA and DHA, this conversion is quite inefficient, if omega 3 levels are a concern to you, fish oils may be the best choice for you.

References ¹⁻⁵ available on request.

If you would like to consult a Nutritional Therapist Find a registered practitioner in your area through the BANT website www.bant.org.uk.

The student clinic at CNELM www.cnelm.co.uk offers free consultations fully supervised by qualified Nutritional Therapists. Contact Alison to book an appointment Alison@cnelm.co.uk

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