

Article 3 - Fatigue Part one.

It is normal for most people to experience occasions where their energy levels are not one hundred percent, but this should be the exception rather than the norm. Fatigue, lack of stamina or constant tiredness would have to be some of the most common symptoms expressed in the people who come to see me, whether this be their primary reason for coming or a secondary one.

When taken back to basics, continuous or abnormal fatigue is an indication that the body is either not being supplied with sufficient energy to meet its needs, or is not able to use the energy source efficiently. To discover what has gone wrong and why, we need to look at each piece of the energy-producing puzzle; that is, the role of the blood in oxygen transport, the function of the body's energy producing "factories" which are known as mitochondria, the role of the thyroid and adrenal glands, the quality and quantity of the "fuel" provided (food), and the role of certain nutrients and water. Some medications can also increase the feelings of fatigue because of the way they deplete the body of certain nutrients. Often for people on long term medication, one of the most simple and effective things I can do is to identify these short falls and help correct the deficit.

So, where to start? One of the first things I look at is the health of the blood because it is the transport system for everything our bodies need in the way of nutrients and oxygen to produce energy. If the blood isn't being built properly or is being damaged, there will be a problem. Blood is actually a type of connective tissue and when looking specifically at the health of the blood in relation to fatigue, there are three major nutrients and one potential abnormality which stand out – iron, vitamin B₁₂, and folic acid, and free radical damage respectively. To check your iron, vitamin B₁₂, and folic acid status you can get a blood test done through your GP, or we can do a live blood analysis at the clinic which gives the added advantage of being able to check other factors which contribute to blood health such as the level of free radical damage, dehydration, blood stickiness and platelet aggregation.

All new blood cells are manufactured in the bone marrow. A shortage of iron results in the production of undersized red blood cells which have less hemoglobin in them and therefore less ability to transport oxygen. Undersized cells also tend to whiz through the blood vessels which then interferes with their ability to drop the oxygen off at the required destination. A shortage in B₁₂ will initially result in oversized red blood cells and after three months, cells which are oval rather than round. This may not sound too bad, but the repercussions can be quite pronounced. A lack of B₁₂ causes the red blood cells to stay in the bone marrow for longer than normal to allow formation of the hemoglobin to take place, which then results in a larger or abnormally shaped hemoglobin structure around which the cell membrane has to fit. This creates cells which are not as flexible as they should be, or which are simply too large which interferes with their ability to get down the smallest blood vessels in the body and also affects their oxygen carrying capacity. Any abnormally shaped red blood cell whether it be due to nutrient deficiencies or free radical damage will not be able to do the job it was designed to do, and this in turn affects the rest of the body in its ability to produce energy because the delivery of one of the key raw ingredients (oxygen) is not up to scratch. When oxygen delivery is affected, you will generally get people who feel tired all the time, may yawn a lot or sigh a lot, and who may have cold hands and feet on a regular basis even in warm weather.

Where shortages of iron, B₁₂ or folic acid have been identified, a concentrated supplement containing these nutrients will often do the trick. It is essential however,

that any chronic digestive issues are addressed because iron and B₁₂ require good stomach acidity and a healthy gut environment to ensure their uptake. I have come across many individuals who have had a history of anaemia and poor responsiveness to iron supplementation, or who have adequate levels of iron and B₁₂-containing foods in their diet but are still low in these nutrients. This is where the treatment needs to broaden to correct poor stomach function and/or gut function. It also pays to get the most bio-available form of the required nutrient and the majority of iron supplements do not fall into this category. We have a very inexpensive but highly effective and non-constipating form of iron available as a tablet through the clinic. (Please note: It is important to establish that iron is deficient before supplementing, because too much iron can be just as damaging as not enough. Live blood screening is an excellent way of ascertaining what the health of the blood is like, and we can do this for you at the clinic).

To build healthy blood your body needs the right fuel and adequate water. The blood also needs to be kept at the right acidity which maximizes oxygen uptake and assists the function of the white blood cells (your immune system). This means having a good intake of fresh water and eating lots of fresh fruits and green vegetables, moderate amounts of good quality protein such as plain fish, chicken, eggs, lean beef or lamb and moderate amounts of healthy whole grain products. Refined, sugary and processed foods should be avoided because these deplete your body of valuable nutrients, change the chemistry of the blood and upset the body's fine hormonal balance.

One of the things which will often show markedly in fatigued patients when doing a live blood screen is free radical damage to the cells. This occurs when the person's body does not have enough anti-oxidant substances or anti-oxidant enzyme systems available to "mop up" the unstable molecules (free radicals) being generated at the time. These unstable molecules unless disarmed, will go about looking for places from which they can steal electrons to make themselves stable, and one of the places they can get these from is our cell membranes. When a cell membrane is "burgled" it will lose its strength and eventually collapse which is why they show up as funny shaped cells under the microscope.

To protect your blood cells and all cells in your body from free radical damage you need to include foods every day which are high in anti-oxidants such as culinary herbs, berries and colourful fruits and vegetables. These are really the only natural sources of these vital nutrients and supplements while useful, are not a replacement for the bulk of your daily requirement. Choose to eat these foods raw or very lightly steamed and you will gain significantly more of their anti-oxidant value.

While on the subject of food, I feel it necessary to point out that in addition to the food quality, the quantity and regularity of supply is also important. Irregular eating habits and skipped meals will upset the body's ability to produce energy consistently just as much as eating the wrong types of food. Activities which increase the energy demand on the body such as pregnancy or regular prolonged or intense exercise will also call for an increase in the amount of food required to fuel things properly. Eat small amounts of food regularly, focusing on the fresh whole foods as mentioned above and stay well away from the refined or processed foods.

If you would like more information on this or would like to get the health of your blood checked via the live blood screening, please contact us at the clinic on 06 304 8177.