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## Fatigue in autoimmune diseases: Which non-drug treatments can help?



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Autoimmune diseases are long-term (chronic) conditions. The person's body acts as though its own tissues are foreign, and constantly mounts an immune response against itself. This means that the symptoms and damage to the body that the disease causes will generally get worse over time.

Multiple sclerosis (MS), rheumatoid arthritis (RA) and lupus or SLE (systemic lupus erythematosus) are autoimmune diseases. Each of these diseases has flares and remissions, and they develop in individual people in quite different and unpredictable ways. In each of the conditions, inflammation or swelling of tissues plays a part.

MS affects the central nervous system, which means that the muscles will be affected. RA and SLE are both rheumatic diseases, so they affect the joints and the connective tissues in various organs. Most of the people affected by these diseases experience severe fatigue, although it is not clear why. Some people rate this fatigue as the worst symptom of their disease.

There are several non-drug options for fatigue in autoimmune diseases, including relaxation, exercise, education, counselling, rehabilitation and energy conservation techniques. Exercise in particular can be controversial, because overdoing it can itself cause fatigue, and some kinds of exercise could do harm, for example to the joints of people with RA. There are also competing theories about which techniques could help manage their fatigue and get more out of their days with less tiredness.

Australian researchers looked for trials and other studies that evaluated the effects of any non-drug technique to try to reduce fatigue in people with MS, RA or SLE. They found 33 studies involving just over 1,700 people. The majority of them (1,170 participants) had MS, and far fewer participants had RA and SLE. For many techniques, there was very little evidence. But the researchers found enough evidence to be able to draw a few conclusions that might be helpful for people with these autoimmune diseases.

### **Advantages and disadvantages of exercise**

Exercise reduced fatigue in many people, but not all. Some people found that exercise made them even more tired than they were before. Low-impact aerobics, brisk walking,

cycling and jogging were the types of exercise shown to help. Other exercise like swimming could also help, but there were not enough trials studying these to say for sure.

The programmes were generally individualised and graded. This means that there was first an assessment of the individual person's fitness and illness, and then they started out with low intensity activities. If this did not cause any symptoms, the amount of exercise was increased progressively, as long as it did not cause worse symptoms for that individual. In these trials, the exercise progressed up to 15- to 30-minute sessions, at least three times a week.

The exercise programmes in these trials lasted for up to 12 weeks. This means that the studies did not continue for long enough to show how much people were helped in the long term, and whether the exercise had any positive or harmful effects on the progress of their disease or on symptoms other than fatigue.

### **Occupational therapy**

The only one of these programmes that had good proof of value from a high-quality trial was training in energy conservation. This kind of training was developed by occupational therapists. It aims to help people use their body's energy more carefully and efficiently. The different aspects of a person's everyday life are analysed by an occupational therapist to find out what uses up a lot of energy. Then, the activities are rearranged, for example by making sure there is a good balance between work and rest. Approaches like this helped a number of people to use their energy more efficiently and prevent them from getting tired too quickly. If you would like to know more about the kinds of strategies that are typically taught in energy conservation programmes, you can read about them [here](http://www.informedhealthonline.org/index.408.en.html) (URL: <http://www.informedhealthonline.org/index.408.en.html>) .

### **Other treatment approaches**

There were also results showing that cognitive-behavioural therapy and occupational health education strategies helped some people self-manage their fatigue better. Cognitive-behavioural therapy involves training to learn how to adjust behaviours and think in ways that help you manage better.

There were also some studies looking at various other

options, but none of these have been proven to help with fatigue. If more research becomes available, we will update our information. In the meantime, the main messages from the research are that exercise could help if the person does not do too much and it is tailored to their individual fitness and condition. Learning to use your body's energy more carefully in everyday life could be helpful too.

## **Glossary**

### evidence

Evidence is what we call scientific proof from well-conducted, good-quality scientific trials that have been carefully designed to answer specific questions. Depending on the types of questions, different scientific research methods (types of study) are most appropriate to find reliable answers to these questions. Randomized controlled trials (RCTs), for example, are the best way to get reliable evidence on the effectiveness of medical treatments (interventions). This type of study, however, is not the best form of evidence for all possible questions, and does not provide the best answers to all kinds of questions, either. Epidemiological studies, for example, are very suitable for establishing well-founded proof for the spreading of a disease in the population.

### inflammation

An inflammation is a (defense) reaction of the body to an injury, irritation or infection. More blood is brought to the respective body part to protect the body. This is why this body part feels warmer, becomes swollen and red and is usually more sensitive. If the inflammation affects the mucous membranes, they secrete more fluid than usual. This helps to wash out the germs that have entered.

## **Sources**

Neill J, Belan I, Ried K. Effectiveness of non-pharmacological interventions for fatigue in adults with multiple sclerosis, rheumatoid arthritis, or systemic lupus erythematosus: a systematic review. *J Adv Nursing* 2006; 56: 617-635. [PubMed summary (URL: <http://www.ncbi.nlm.nih.gov/pubmed/17118041?dopt=Abstract> ) ]

## **The German Institute for Quality and Efficiency in Health Care (IQWiG)**

The German Institute for Quality and Efficiency in Health Care (IQWiG) was established by legislation to provide evaluations of the effectiveness, quality and efficiency of healthcare services. This includes the assessment of medicines as well as the publication of health information for consumers and patients.

## **Evidence basis of our health information**

Our information is based primarily on systematic reviews of the effects of health care. Systematic reviews are necessary to gain an objective picture of health care. In order to do this, a clear question is formulated. Researchers then find all the relevant studies that could answer this question. They then evaluate those studies.

You can find a list of the evidence and other scientific literature on which this information is based at **[www.informedhealthonline.org](http://www.informedhealthonline.org)**

## **Disclaimer**

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