

Diet can keep chronically ill patients fitter

An adapted diet can help improve life for chronically ill patients suffering from PAH, claims Paulien Vinke (Human Nutrition and Health) in her PhD thesis.

Pulmonary arterial hypertension (PAH) is a rare chronic disease in which patients have high blood pressure in the lungs. Patients often suffer from reduced fitness due to loss of muscle mass and function, and this affects their quality of life. The disease eventually causes an enlarged right ventricle, heart failure and an early death.

Vinke studied levels of the vitamins and minerals that are associated with fatigue in PAH patients. A sizeable proportion of the patients had an iron deficiency. This deficiency is partly caused by underlying chronic inflammation and is directly related to a decline in fitness.

Diet

In an animal experiment, Vinke found that mice with the same disease that were fed on a normal diet had an enlarged ventricle, fibrosis and smaller

muscles. If they were fed on a special diet containing extra protein, leucine and anti-inflammatory nutrients (fish oil and prebiotics), diseased mice maintained their normal muscle mass and had healthier right ventricles.

So Vinke concluded that an adapted diet has potential for improving the quality of life of PAH patients. Exactly how diet can be made part of the treatment package for PAH patients will be addressed in the next stage of the study. ^{ss}