

New link found between osteoporosis and coeliac disease

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People with coeliac disease may develop osteoporosis because their immune system attacks their bone tissue, a new study has shown.

It is the first time an [autoimmune response](#) - a condition whereby the body can attack itself - has been shown to cause damage to bones directly.

Researchers from the University of Edinburgh studied a protein called osteoprotegerin (OPG) in people with coeliac disease - a digestive condition that affects 1 in 100 people.

In healthy people, OPG plays a crucial role in maintaining bone health by controlling the rate at which bone tissue is removed.

The latest research shows that 20 per cent of coeliac patients produce antibodies that attack the OPG protein and stop it working properly. This results in rapid bone destruction and severe [osteoporosis](#).

It was previously thought that osteoporosis - a known complication of coeliac disease - develops in coeliac patients because they cannot properly absorb calcium and vitamin D from their diet. Both nutrients are essential for healthy bone development.

The team found that although this new form of osteoporosis did not respond to calcium and vitamin D supplements, it can be easily treated with drugs that prevent bone loss.

The research is published in the [New England Journal of Medicine](#).

Professor Stuart Ralston, of the Institute of Genetics and Molecular Medicine at the University of Edinburgh, who led the team, said: "This is a very exciting step forward. Not only have we discovered a new reason to explain why osteoporosis occurs in coeliac disease, but we have also found that it responds very well to drugs that prevent [bone tissue](#) removal. Testing for these antibodies could make a real and important difference to the lives of people with coeliac disease by alerting us to the risk of osteoporosis and helping us find the correct treatment for them."

Source: University of Edinburgh

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