

## Treating gum disease may help manage Type 2 diabetes

October 26 2018



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Treating periodontitis (gum disease) could help people with Type 2 diabetes manage their blood glucose levels, according to a new study led by UCL.

The research, published in the Lancet Diabetes and Endocrinology



journal and funded by Diabetes UK and the NIHR Biomedical Research Centre also showed that treating oral health is linked to improvements in kidney and blood vessel function.

Over 250 patients with poorly-controlled <u>diabetes</u> and active periodontitis took part in the trial. After 12 months, those who has received the more intensive gum therapy had reduced their blood <u>glucose</u> level by on average 0.6 per cent

The participants also showed reduced chronic inflammation—which could lower their risk of serious diabetes-related complications, such as heart <u>disease</u>, stroke and kidney disease.

Lead researcher, Professor Francesco D'Aituo (UCL Eastman Dental Institute), said: "Gum disease is closely linked to diabetes and it is well known that it can lead to a higher blood glucose level as well as chronic inflammation around the body, which both could promote the development of kidney and vessel damage if sustained for long periods of time.

"This is the first long-term, randomised study to show a substantial benefit of treating gum disease on diabetes control.

"Lowering blood glucose level by 0.6% is the equivalent of prescribing a patient an additional, second blood sugar lowering drug.

"We were delighted with the improvement in health and quality of life of those in the test group compared with those in the control group whose teeth were only given a scale and polish."

The researchers are closely working with NHS authorities to increase awareness of the link between gum disease and diabetes amongst diabetes professionals, suggesting the inclusion of dental and gum



assessments for people with diabetes as standard practice.

Senior author, Professor John Deanfield (UCL Institute of Cardiovascular Sciences) said: "Inflammation may be part of the biological pathways that lead to several health conditions including diabetes, heart disease, dementia and cancer.

"Our findings that reduction in periodontitis, which is a common cause of inflammation, improves vascular, renal, as well as <u>blood</u> glucose control, in people with Type 2 diabetes, are exciting and could lead to new strategies to improve care. Large-scale clinical outcome trials should now be designed."

Chief Dental Officer, England, Sara Hurley said: "This new research helpfully builds on what we already know about the importance of patients with diabetes receiving vital gum assessments and it allows us to work closer with the wider NHS to improve the overall health and quality of everyday life for these patients."

## Provided by University College London

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