

Fish protein link to controlling high blood pressure

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Medical scientists at the University of Leicester are investigating how a species of fish from the Pacific Ocean could help provide answers to tackling chronic conditions such as hereditary high blood pressure and kidney disease.

They are examining whether the Goby fish can help researchers locate genes linked to high blood pressure. This is because a protein called Urotensin II, first identified in the fish, is important for regulating blood pressure in all vertebrates- from fish to humans.

The study is being carried out in the University's Department of Cardiovascular Sciences. Researcher Dr Radoslaw Debiec said: "The protein found in the [fish](#) has remained almost unaltered during evolution.

"This indicates that the protein might be of critical importance in regulation of blood pressure and understanding the genetic background of high blood pressure.

"Uncovering the genetic causes of high blood pressure may help in its better prediction and early prevention of its complications. My research at the University of Leicester has shown how variation in the gene encoding the protein may influence risk of hypertension."

Dr Debiec will be presenting his research at the Festival of Postgraduate Research which is taking place on Thursday 25th June in the Belvoir Suite, Charles Wilson Building at the University of Leicester.

He added: "Drugs affecting the protein might be a novel alternative to the available therapies in particular in those patients who have chronic kidney disease coexisting with high blood pressure.

"Analysis of large cohort of families has provided us with evidence that genetic information encrypted in the [protein](#) travels together with the risk of [high blood pressure](#) across generations. Furthermore, the same genetic variant responsible for elevated [blood pressure](#) is responsible for the development of chronic [kidney disease](#) in this group of patients.

"The present findings may have an impact on the development of new blood pressure-lowering medications."

Source: University of Leicester ([news](#) : [web](#))

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