No single gene for ageing

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According to professor Thomas Kirkwood of the University of Newcastle, there is no single gene for ageing. Throughout time, Humans have used energy to get food, produce offspring and survive danger – not to repair and maintain cells. So the maintenance system in the body slowly breaks down.

This topic was of great interest at the seminar for ageing at the conference "Functional genomics and disease" taking place in Oslo, Norway. Thomas Kirkwood is the director of the internationally recognised Institute of Ageing and Health (IAH).

Developmentally it has been more important for humans to invest energy in reproduction and not in maintenance or repair of the body over time.

But genetic factors do exist. "Approximately 25 percent of how a person ages is inherited from parents," says Kirkwood. "Stress, environment, nutrition, lifestyle and immunity play an additional role. Great variation between individuals can be seen in organisms such as round worms – and in humans."

Studies of ageing also give insight into the causes of cancer, because cancer and ageing have the same background causes, thinks Vilhelm Bohr, professor at the University of Baltimore in the United States.

"Cancer is more frequent with age. We must understand the causes of ageing to be able to understand why we have cancer," points out Bohr during his presentation at the conference.

Kirkwood's paper was presented at the "Functional genomics and disease" conference - Genetics Conference, Oslo, Norway, University of Oslo and European Science Foundation (ESF)

Source: The Research Council of Norway