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Eating for two: Consequences of parental nutrition on offspring autophagy

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Eating for two: Consequences of parental nutrition on offspring autophagy

Abstract (limited to 120 words, english only)*

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Pregestational nutrition events may result in permanent changes in the growth potential, health and metabolic status of the next generation. Possible biological mechanisms for 'imprinting' the nutritional event in the next generation comprise epigenetic phenomenon, such as DNA and histone methylation. In the present study, we demonstrate that feeding broodstock fish with a diet deficient in methionine (one of the main methyl-group donor needed for all biological methylation reactions including DNA and histones methylation) strongly perturbs the nutritional control of the expression of several autophagy-related genes in the next generation. Our current research aim at defining the epigenetic mechanisms involved in this effect.

Three keywords*

Methionine

Epigenetic

Autophagy

Poster : Yes