

# Zebrafish as a model organism for nutrition and growth: Towards comparative studies of nutritional genomics applied to aquacultured fishes

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Zebrafish (*Danio rerio*) is a common research model in fish studies of toxicology, developmental biology, neurobiology and molecular genetics; it has been proposed as a possible model organism for nutrition and growth studies in fish. The advantages of working with zebrafish in these areas are their small size, short generation time (12-14 weeks) and their capacity to produce numerous eggs (100-200 eggs/clutch). Since a wide variety of molecular tools and information are available for genomic analysis, zebrafish has also been proposed as a model for nutritional genomic studies in fish. The detailed study of every species employed as a model organism is important because these species are used to generalize how several biological processes occur in related organisms, and contribute considerably toward improving our understanding of the mechanisms involved in nutrition and growth. The objective of this review is to show the relevant aspects of the nutrition and growth in zebrafish that su