

**GROWTH AND FEED UTILIZATION OF LARGE SIZE
RAINBOW TROUT (*ONCORHYNCHUS MYKISS*):
DIET AND EFFECTS**

— research paper —

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Abstract: Four diets differing in crude protein/crude lipid concentrations (CP/CL), 570/200, 510/220, 460/240, 430/260 (g kg⁻¹ dry diet) were fed to near-satiety to rainbow trout (initial body weight, 1BW = 268 g.) for 308 days to determine the effect of diets, and fish size on efficiency of feed, nitrogen (N) and energy utilization. Weight gain, feed efficiency (FE), and energy retention efficiency (ERE, E gain/E intake) were not affected by diet (P < 0.05). N retention efficiency (NRE, N gain/N intake) increased linearly (P < 0.05) with decreasing CP/CL. There was a significant (P < 0.05) linear decrease in FE as fish grew, regardless of diet. NRE linearly decreased (P < 0.0001) and lipid to protein deposition ratio (LD/PD) increased (P < 0.05) as trout grew.

Keywords: Rainbow trout, diet, energy, growth

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