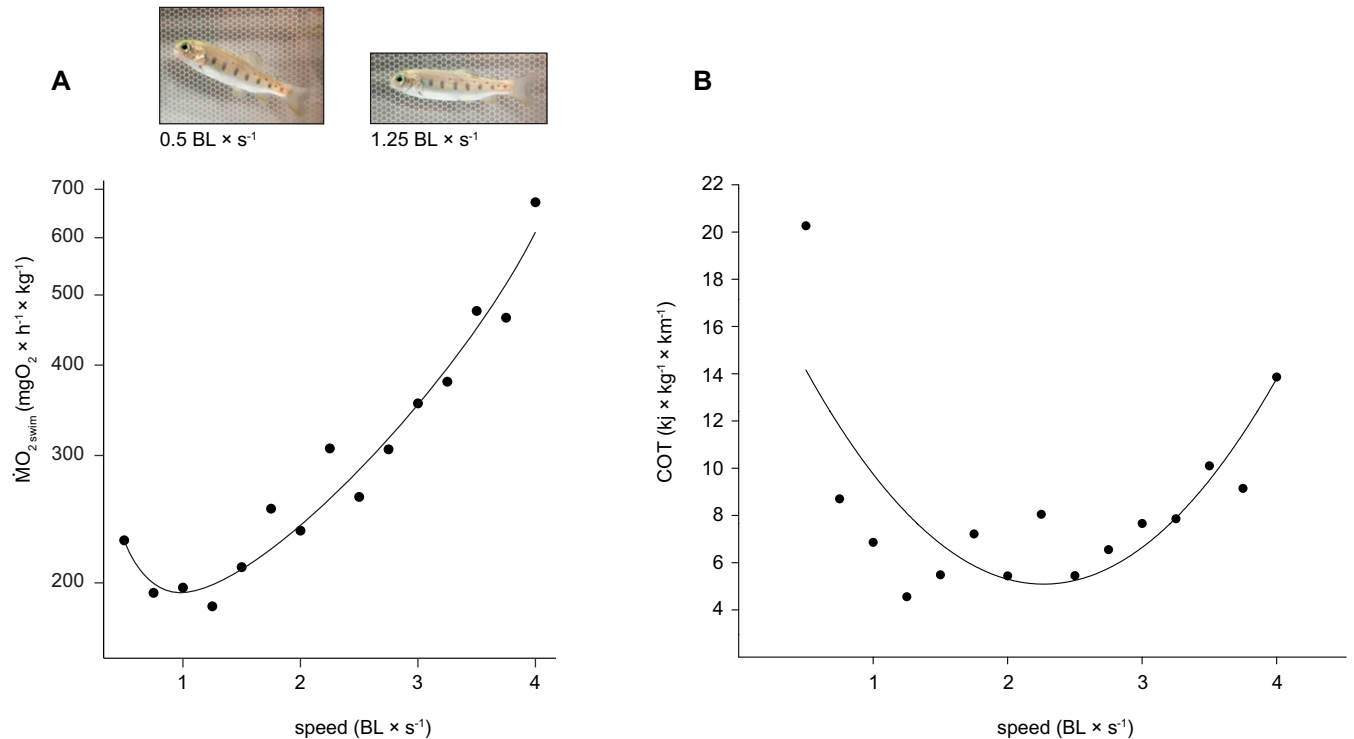


# Supporting Information

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**Fig. S1.** Swimming energetics and COT of rainbow trout (*O. mykiss*) at different speeds. (A) Metabolic rates during 10 min of steady swimming ( $\dot{M}O_{2\text{ swim}}$ ) measured at 15 speeds ( $0.5\text{--}4 \text{ BL} \times \text{s}^{-1}$ , at  $0.25\text{-BL} \times \text{s}^{-1}$  intervals) exhibit a sharp J-shaped curve. Trout assume a positive body angle at  $0.5 \text{ BL} \times \text{s}^{-1}$ , but use a nearly horizontal body orientation while swimming at intermediate/higher speeds. Shown is an image from swimming at  $1.25 \text{ BL} \times \text{s}^{-1}$ . Note that the dorsal, pelvic, and anal fins are extended and are actively engaged in oscillatory motion while swimming at  $0.5 \text{ BL} \times \text{s}^{-1}$ , and are folded back at intermediate/higher speeds. (B) COT assumes a U-shaped relationship with speed. Previous work on rainbow trout using the critical speed protocol analyzed the kinematics and energetics of steady swimming, but did not note a similar J-shaped pattern in  $\dot{M}O_{2\text{ swim}}$  (1, 2).

1. Webb PW (1971) The swimming energetics of trout, I: Thrust and power output at cruising speeds. *J Exp Biol* 55:489–520.

2. Webb PW (1971) The swimming energetics of trout, II: Oxygen consumption and swimming efficiency. *J Exp Biol* 55:521–540.

## Other Supporting Information Files

[Dataset S1 \(XLSX\)](#)