An agent acquires a costly flexible signal before making a decision. We explore the degree to which knowledge of the agent's information costs help predict her behavior. We establish an impossibility result: learning costs alone generate no testable restrictions on choice without also imposing constraints on actions' state-dependent utilities. By contrast, for most utility functions, knowing both the utility and information costs enables a unique behavioral prediction. When the utility function is known to belong to a given set, we provide an exact characterization of rationalizable behavior. Finally, we show that for smooth costs, most choices from a menu uniquely pin down the agent's decisions in all submenus.