Psychology and consumer behavior researchers have long known that the self has limited will-power. After exerting self-control at time 1, people show evidence of ego depletion, a difficulty in self-control at time 2. Research in this tradition has offered many demonstrations of ego depletion, but has yielded relatively few insights into why it occurs. The present paper reflects the first effort to understand what aspect of self-control is depleting. But also, the research examined a new source of depletion: concealment. Participants who were instructed to conceal information during a short interview—either their sexual orientation (Studies 1-3) or specified words (Study 4)—showed evidence of ego depletion. Concealment led to deficits in intellectual acuity, interpersonal restraint, physical stamina, and executive function. We decomposed depletion into two component processes that, together or separately, might contribute to the observed depletion. When actively concealing information, one must monitor for specific content to inhibit. If taboo content is detected, one must modify or alter one’s speech from what one would have said otherwise. Concealment produced depletion even when there was no need to actually alter one’s speech (Studies 2 and 4), demonstrating that monitoring one’s speech for content to conceal was sufficient to cause depletion. In contrast, having to alter one’s speech without having to monitor for specific content to inhibit—either by adding false content (Study 3) or inserting specific words (Study 4) into one’s speech stream—did not lead to measurable depletion. In this way, the studies are the first to assess which part of an act of self-regulation—monitoring for specific behavior to override or the actual altering of that behavior—is responsible for observed depletion. Furthermore, the research suggests that social environments that explicitly or implicitly encourage identity concealment may prevent people from performing optimally.