Let $r \geq 3$. Given an $r$-graph $H$, the minimum codegree $\delta_{r-1}(H)$ is the largest integer $t$ such that every $(r-1)$-subset of $V(H)$ is contained in at least $t$ edges of $H$. Given an $r$-graph $F$, the codegree Turán density $\gamma(F)$ is the smallest $\gamma > 0$ such that every $r$-graph on $n$ vertices with $\delta_{r-1}(H) \geq (\gamma + o(1))n$ contains $F$ as a subhypergraph. Using results on the independence number of hypergraphs, we show that there are constants $c_1, c_2 > 0$ depending only on $r$ such that

$$1 - c_2 \frac{\ln t}{t^{r-1} \ln t} \leq \gamma(K^r_t) \leq 1 - c_1 \frac{\ln t}{t^{r-1}},$$

where $K^r_t$ is the complete $r$-graph on $t$ vertices. This gives the best general bounds for $\gamma(K^r_t)$. (Received January 22, 2019)