1. The identity message function m_i. $q_+(\tilde{m}) = \max\{\tilde{m} - \bar{\epsilon}, 0\}$ and $q_-(\tilde{m}) = \min\{\tilde{m} + \bar{\epsilon}, 1\}$.

$$I_k(\tilde{m}) := \int_{q_-(\tilde{m})}^{q_+(\tilde{m})} q^k f_\epsilon(\tilde{m} - q) dq \tag{1}$$