The β cell stress hypothesis suggests that any phenomenon that induces insulin resistance, and thereby extra pressure on the β cells, should be regarded as a risk factor for type 1 diabetes (T1D). Psychological stress decreases insulin sensitivity and increases insulin resistance and may hence be important in the development/onset of T1D. The aim of the current review article was to evaluate existing empirical evidence concerning an association between psychological stress and development/onset of T1D as well as diabetes-related autoimmunity. Ten retrospective case-control studies were found. Nine studies showed a positive association between stress and development/onset of T1D in children, adolescents or adults. One study did not find an association between stress and development/onset of T1D. An association between stress and diabetes-related autoimmunity was found at 1 and 2-3 years of age in a large epidemiological study of the general population. The hypothesis that psychological stress (via β cell stress or direct influence on the immune system) may contribute to the induction or progression of diabetes-related autoimmunity has gained some strong initial support, but is in need of further empirical verification. It seems much clearer that stress can precipitate manifest T1D, although the biological mechanisms are still not known.

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