The influence of nutritional factors on brain metabolism and the course of mental illness are increasingly being addressed in international research. It is a matter of discussion whether dietary habits, e.g., the amount of fish or vegetables, have an effect on the incidence of certain illnesses. Furthermore an optimized or supplemented diet could offer therapeutic possibilities; one example is the role of polyunsaturated fatty acids as an add-on therapy in affective disorders. The limitations of psychopharmacotherapy (drug interactions, side effects, noncompliance) underline the theoretical and practical relevance of nutrition in mental illness, the more so as mentally ill patients (especially when demented, anorectic, depressed, or schizophrenic) are at higher risk of malnutrition anyway. Even if the therapeutic evidence is still limited and the effects may be relatively weak, nutritional assessment and an optimized diet can be recommended for every patient.