

Schweizerische Anorexia Nervosa Stiftung  
Fondation Suisse d'Anorexie Nerveuse  
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## **Brain Structure and Function of Children at High Risk of Developing an Eating Disorder**

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### **Authors**

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### **Introduction**

Eating Disorders (ED) have the highest mortality rates of any other psychiatric disorder, however, unlike in other disorders, there has not been much research into specific vulnerabilities for their development. A large percentage of patients with ED do not respond well to current treatments and this could be due to our lack of understanding of the complexity of the disorder. In the last decades, there have been advances in our understanding of the neuropsychological (specific ways of thinking) and brain characteristics present in ED. As first-degree relatives have a higher risk of developing the disorder, and might present similar ways of thinking and brain characteristics as sufferers (without necessarily developing ED), one way of understanding these characteristics is to study children of parents with ED who do not have symptoms.

### **Objectives**

This is the first time that this type of study has been done in ED, therefore we aimed to study ways of thinking in children at risk for developing an ED. We also explored differences in brain structure and white matter connectivity.

### **Methods**

We assessed a total of 17 girls between the ages of 8 and 15 whose mothers had an ED at some point in their life, and 29 girls of mothers who had never had a psychiatric illness.

### **Results**

Early results show that children at risk for ED show some differences in attention and processing information compared to control girls. We also found some differences in the way brain areas are connected and in grey matter, particularly in some areas of the brain.

### **Conclusion**

These preliminary findings have allowed us to start understanding possible brain and thinking characteristics that might predispose young people to developing an ED. We will be extending this work thanks to a grant from the Swiss National Fund.

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