



*Insulin Resistance*

*Visceral Obesity*

*Hypertension*

*High Triglycerides*

*Low HDL Cholesterol*



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## SCHIZOPHRENIA Factsheet

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### How is metabolic syndrome related to schizophrenia?

Metabolic syndrome is a risk factor for diabetes and cardiovascular diseases. It is defined as a clustering of at least three abnormalities including obesity, high blood pressure, high blood triglycerides, low levels of high-density lipoprotein (HDL) cholesterol and insulin resistance.

### What is the evidence for metabolic syndrome in people with schizophrenia?

Moderate quality evidence finds an overall prevalence of metabolic syndrome in people with schizophrenia of around 32%. Compared to age and gender-matched population controls, there are increased rates of abdominal obesity, hypertension, hypertriglyceridemia, and low HDL cholesterol in people with schizophrenia, with no differences when compared to people with bipolar disorder or major depression.

Compared to people in their first-episode of psychosis and compared to drug-naive patients, medicated patients have increased rates of metabolic syndrome, diabetes, obesity, high triglycerides, low HDL cholesterol, and hyperglycaemia > 100 mg/dl. There were also increased rates of high blood pressure in first-episode patients compared to unmedicated patients, and increased waist size in unmedicated patients compared to first-episode patients.

Compared to controls, moderate to high quality evidence finds small effects of reduced total and LDL cholesterol, and increased triglycerides in people with first-episode psychosis, with no changes in HDL cholesterol or leptin levels. There was a large effect of more impaired glucose tolerance and more insulin resistance in people with first-episode psychosis, with no differences in fasting plasma glucose.

High quality evidence finds small effects of more impaired processing speed and executive functioning in people with schizophrenia and metabolic syndrome compared to patients without metabolic syndrome. Moderate to high quality evidence also finds medium-sized effects of more impaired memory and attention, and a small effect of more impaired global cognition in patients with metabolic syndrome.

Moderate to high quality evidence finds benefits of lifestyle interventions for improving cardiometabolic parameters of weight, triglycerides, fasting glucose and insulin.

**For more information see the technical table**



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*NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.*

*Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.*

*Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.*

*While we hope you find this information useful, it is always important to discuss any questions about schizophrenia or its treatment with your doctor or other health care provider.*

### HOW YOUR SUPPORT HELPS

We are able to make significant advances due to the generosity of countless people. Your donation allows us to continue to work towards transforming lives. For information on how you can support our research, phone **1300 888 019** or make a secure donation at [neura.edu.au/donate/schizophrenia](http://neura.edu.au/donate/schizophrenia).