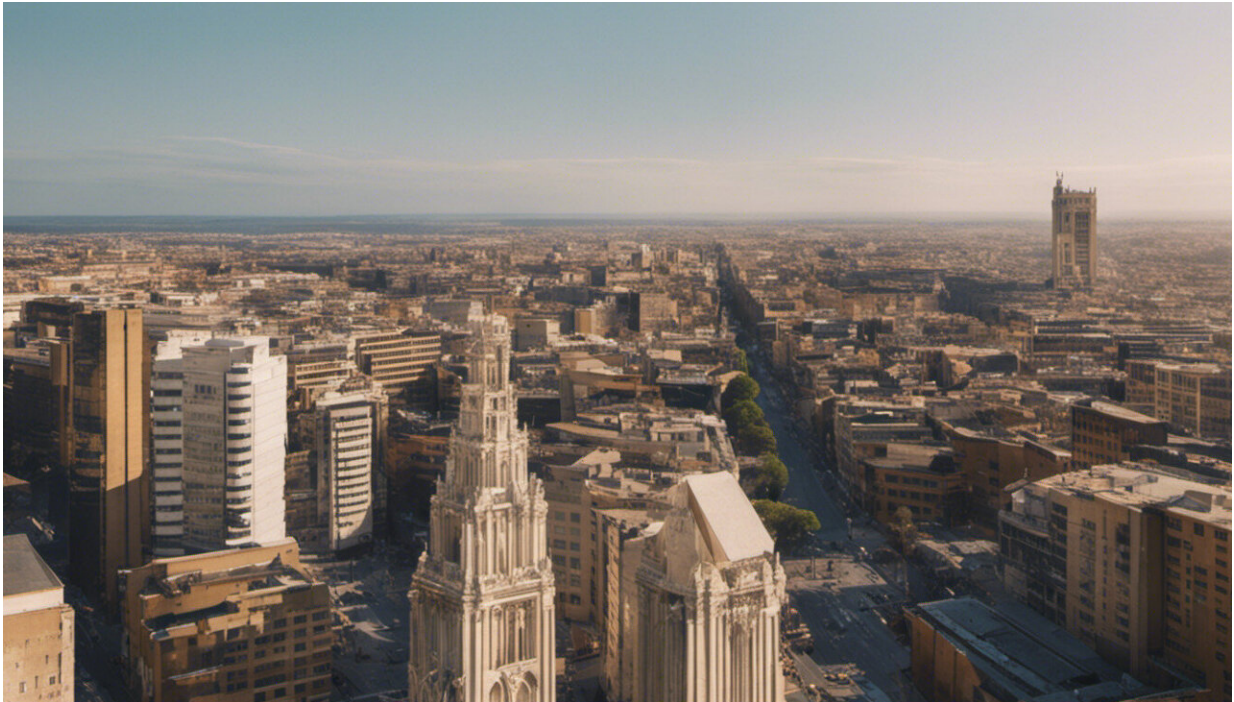


Adelaide joins with Italy to develop 'super spaghetti'

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Credit: AI-generated image ([disclaimer](#))

University of Adelaide researchers are working with colleagues in Italy to produce better quality pasta that also adds greater value to human health.

Two research projects - being conducted by the ARC Centre of

Excellence in [Plant Cell](#) Walls at the University's Waite Campus - will start next month in collaboration with researchers from the Italian universities of Bari and Molise.

The aim of the ARC Centre of Excellence is to look at the fundamental role of cell walls (biomass) in plants and discover how they can be better utilised. Both of these new projects will investigate key aspects of the cell walls in [durum wheat](#), which is commonly used for making pasta.

The first project, in conjunction with the University of Bari, will investigate how the growth of durum wheat affects the levels of starch and dietary fibre within it, and how the fibre levels in pasta can be improved. The second project, in conjunction with the University of Molise, will investigate the important roles played by two major components of [dietary fibre](#) - arabinoxylans and beta-glucans - in the quality of pasta and bread dough.

"The term 'super spaghetti' is beginning to excite scientists, nutritionists and [food manufacturers](#) around the world," says Associate Professor Rachel Burton, Program Leader with the ARC Centre of Excellence in Plant Cell Walls and chief investigator on both projects.

"In simple terms, 'super spaghetti' means that it contains a range of potential health benefits for the consumer, such as reducing the risk of heart disease or colorectal cancer. Our research - in collaboration with our Italian colleagues - is aimed at achieving that, but we're also looking to improve the quality of pasta as well as its health properties," Associate Professor Burton says.

The centre's Director, Professor Geoff Fincher, says: "These new projects highlight one of the great strengths of our Centre of Excellence, which is the ability to bring together complementary expertise and resources from across the globe to work towards a common goal. Our

centre has the opportunity to address key scientific issues and produce results that are meaningful to industries and communities worldwide."

Professor Fincher says these new projects could help pasta manufacturers in South Australia and Italy to carve a niche by supplying domestic markets with specialist pasta products that will benefit the health of consumers.

"Being able to sell high-quality South Australian durum wheat within a competitive market like Italy could bring economic benefits. Approximately 27kg of [pasta](#) is consumed per year per person in Italy, compared with just 4kg per person in Australia," he says.

Both of these projects have received funding and support from the South Australian Government, local governments in Italy, the University of Adelaide and the ARC Centre of Excellence in [Plant Cell Walls](#).

Provided by University of Adelaide

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