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## Fresh produce linked to gut health

Plant & Food Research study suggests fruit and vegetables support beneficial microorganisms in the gut



**N**ew Zealand-based Plant & Food Research has released details of a new study suggesting that compounds in fruit and vegetables help people stay healthy by supporting natural beneficial microorganisms in the gut, helping humans digest food and keeping our bodies in balance.

The study, published in the journal *Anaerobe*, showed that polyphenols produced naturally in plants and including the compounds that give fruits and vegetables colour, are one of a few classes of compounds that reach the colon without being digested.

Research by scientists at Plant & Food Research has demonstrated that

these compounds are broken down in the colon to produce molecules that have a positive effect on microorganisms naturally found in the digestive system. Healthy populations of these microorganisms are known to be beneficial to human health, supporting digestion and the immune system.

"Dietary fibre and polyphenols both reach the colon and therefore can have an effect on colonic microbiota," said Dr Shanthi Parkar, who led the research. "Many studies have shown the beneficial effects of dietary fibre, but polyphenols have not been widely studied as yet.

"Our research has shown that the polyphenols found

in fruits and vegetables are broken down by bacteria in the colon," Parkar added. "Our studies in the lab have shown that these simpler products influence the microorganisms in the digestive system to support optimum gut health.

"Our next step is to check that this also happens in the gut environment but, if our studies are proved correct, it may be possible to extract these plant polyphenols and use them as ingredients in functional foods that promote gut health."