

Role of Resistant Starches Particularly Rice Containing Resistant Starches in Type 2 Diabetes

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ABSTRACT Non-insulin-dependent or type 2 diabetes mellitus is on the rise in India particularly in the affluent urban and rural population. The exact cause is unknown. Malnutrition, defective intake of essential fatty acids and reduced intake of fibres are found in Indian diet, particularly rural Indian diet and the dietary factors may be one of the causes leading to increased incidence of the disease. Dietary fibers reduce blood glucose and cholesterol levels. Resistant starches behave as dietary fiber. As rice is the staple food in Indian villages, to increase the fibre consumption, a special variety of rice is processed which contains more of resistant starch. The high protein efficiency ratio (PER) in rice is presumably due to the balance of essential amino acids in rice protein. This high resistant starch containing rice was fed to diabetic patients for three months and effects observed. Results showed that total cholesterol, fasting blood sugar, low-density lipoprotein cholesterol were reduced while other parameters showed no significant changes.