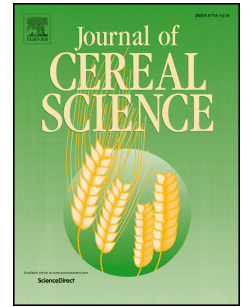


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Resistant starch could be decisive in determining the glycemic index of rice cultivars

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1 **Title: Resistant Starch could be decisive in determining the Glycemic Index of**
2 **Rice cultivars.**

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13 **Abstract:**

14 Rice (*Oryza sativa* L.) is consumed by more than half of the world's population for whom it is
15 the main source of nutrients and carbohydrates. Rice starch is hydrolyzed by enzymes in the
16 digestive tract and converted into glucose which is the main energy source for metabolic
17 functions. After meeting the energy requirement of the body, the extra calories from starch are
18 stored as glycogen or fats for later use. Therefore, overeating rice with sedentary lifestyle
19 potentially leads to some health problems, such as obesity, type-II diabetes, and colon diseases in
20 long terms especially in Asian countries. Starch hydrolysis begins in the mouth with the action of
21 salivary α -amylase and continues in the small intestine with involvement of other enzymes.
22 However, the resistant starch (RS) which normally comprises < 3% of cooked rice escapes

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