

## Microwave Cereal for 2 minutes to Manage Diabetes

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Diabetes can now be managed by heating barley in a microwave for 2 minutes after soaking in it water and germinating it that increases its antioxidant potential, suggests a recent study by researchers at the University of Kashmir in collaboration with Prince of Songkla University, Thailand.

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Diabetes is on the rise and is estimated to affect nearly 422 million people worldwide as per the WHO global report on diabetes 2016. The problem is increased because till date, it cannot be cured but can only be managed.

An important strategy to manage diabetes is diet that should be rich in fibers or foods with low glycemic index.  $\beta$ -D-glucan is a dietary fiber present in cereals such as Barley, called Jau in Hindi that is known to lower cholesterol, glycemic response, and aid weight management. The properties of  $\beta$ -D-glucan depend on its molecular weight; the lesser the molecular weight, more its antioxidant potential.

Researchers at University of Kashmir in collaboration with Prince of Songkla University, Thailand have found that a simple home-based treatment of barley can enhance its antioxidant potential making it more beneficial for patients of diabetes. The scientists claim, "...germination of barley can be a good approach for enhancing the antioxidant potential of beta-D-glucan". After soaking the cereal in water for 16 hours and germinating it on a muslin cloth for about 24 hours, the seeds are treated in a 950W microwave for 2 minutes. The seeds can then be milled into flour for consumption. This lowers the molecular weight and viscosity of the  $\beta$ -D-glucan making it easy to digest and enhancing its antioxidant properties.

It is a well known fact that day to day exposure to pollution, stress, junk food, and occupational hazards increase free radicals in the body that modify fats and proteins, and damage DNA, accelerating the process of ageing. The antioxidant property of the treated barley seeds converts free radicals in the body into stable products conferring good health and immunity. A simple process of germinating and microwaving cereals at home can enhance their antioxidant potential and nutritional benefits.

*Ref: Carbohydrate Polymers* **153**: 696-702.