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Chemical, Rheological and Physical properties of Germinated Wheat and Naked Barley

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Abstract: The effect of germination on chemical composition, dough raising capacity, gluten changes and folic acid of wheat" variety Gammeza 7" and naked barley "variety Giza 131" were investigated. Crude protein ranged from 9.08 to 11.70% in germinated barley and wheat. Barley was the highest in ether extract and ash. Wheat was the highest in crude fiber. Flour extract (82%) was the highest in carbohydrate. Wheat was the highest in Na, K, Fe, and Ca. Dough raising capacity was highest in 75% germinated wheat flour. Wet, dry gluten in flour extracted (82%) have the highest percentages. While 75% substituted germinated wheat for flour 72% extraction was the highest in wet and dry gluten. Fresh germinated wheat and barley were higher in folic content than other treatments. Germination seems to be a natural and sustainable way to improving nutritional quality and functional food compound in wheat and barley.

Key words: folic acid, gluten, naked barley, nutritive value and wheat.

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