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# Czech J. Food Sci.

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Microencapsulation can be a novel tool in wheat flour with micronutrients fortification: current trends and future applications – a review

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Wheat flour fortification can be a novel and effective food based approach to improve effective micronutrient deficiencies that affect millions of people worldwide especially in the developing countries. Wheat is an important cereal crop grown worldwide and its per capita consumption is high even in the developing countries. Being a most popular dietary food component, fortification of wheat flour with micronutrients like iron, vitamin A, folic acid, zinc, and iodine is expected to be

the most effective strategy to overcome the related deficiencies and, if mandated, could be helpful in achieving the international health goals. However, on the other hand food fortification (Direct mixing) with micronutrients might cause unwanted sensory changes and interaction with food components resulting in a lower bioavailability. Microencapsulation may be helpful to prevent unwanted sensory changes and diminish micronutrients interactions with wheat flour components. The current review will focus on the technical issues related to the fortification (Direct mixing) of wheat flour and prospects of microencapsulation technology in fortification.

#### Keywords:

bioavailability; folic acid; iron; sensory changes; vitamin A; zinc

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