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### Mioga (*Zingiber mioga* Rosc.) Extract Prevents 3T3-L1 Differentiation into Adipocytes and Obesity in Mice

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We examined the effect of edible plant extracts on prevention of obesity. 3T3-L1 cell that differentiated into a mature adipocyte was used as a model for screening *in vitro*. After the cells had formed a confluent monolayer, they were treated with DEX-MIX and incubated in a medium containing edible plant extract for 12 days. The mioga (*Zingiber mioga* Rosc.) extract significantly suppressed the increase in glycerol-3-phosphate dehydrogenase activity and triglyceride accumulation in 3T3-L1 cells. The results of Oil-Red O staining supported these findings. We further investigated the effect of mioga extract in prevention of obesity in male ICR mice *in vivo*. Through oral administration of the extract (10 or 50 mg/mouse), increases in body weight and epididymal fat weight were prevented in the animals. These results indicate that mioga extract may be useful in preventing obesity.

**Keywords:** [mioga](#), [3T3-L1](#), [adipocyte](#), [differentiation](#), [mouse](#), [obesity](#)



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