

vestigated further.

The total antioxidant status (TAS) increased significantly ( $P < 0.05$ ) after supplementation. There are many small-molecular-weight compounds which act as antioxidants in the human body. They react with oxidizing chemicals to reduce their damaging effects. These substances should play an important role in cellular defense against oxidative damage.<sup>24</sup> TAS represents the total antioxidant ability of some antioxidant substances in blood, including albumin, ascorbate, bilirubin, glutathione, SH-group substance, urate, and  $\alpha$ -tocopherol, etc.<sup>18</sup> The 18% increase in TAS after supplementation implies the presence of some antioxidant substances in *C. sinensis my* that may play an important role during oxidative stress. However, it remains to be determined which compounds are involved and what mechanism is mediated. In conclusion, this study confirms the safety of cultured mycelium of *Cordyceps sinensis*. Increases of 25% in HDL-Chol and 18% in TAS were observed with an intake of 2000 mg *C. sinensis my*/day for 2 weeks, suggesting that *C. sinensis my* can improve lipid metabolism and increase total antioxidant ability. Although, the actual mechanism of the physiological effects requires further investigation, *C. sinensis my* can be considered as a safe and healthy food supplement, in general.

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