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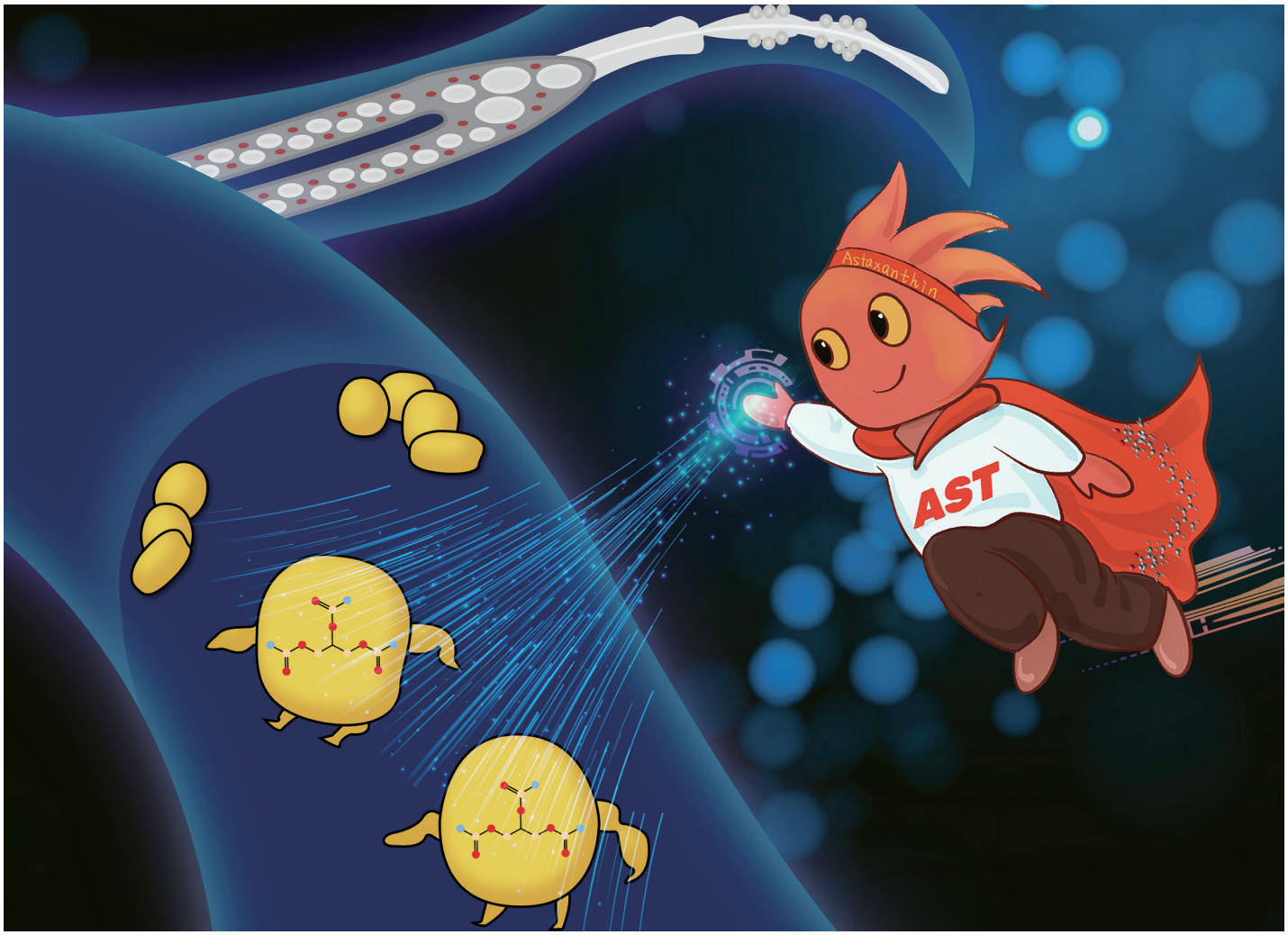

Showcasing research from Professor Xiaojuan Liu's laboratory, College of Food Science, South China Agricultural University, China.

Astaxanthin reduces fat storage in a *fat-6/fat-7* dependent manner determined using high fat *Caenorhabditis elegans*

Using the unique advantages of *Caenorhabditis elegans* model, especially gene mutant and green fluorescent binding transgenic nematodes, this study further illuminated the efficacy and specific action sites of astaxanthin's reducing fat storage. Our work revealed for the first time that the lipid-lowering effects of astaxanthin were induced by *sbp-1/mdt-15* and insulin/insulin-like growth factor pathways, and finally co-regulated the specific sites-*fat-6* and *fat-7* down-regulation. These results provided insight into therapeutic target for future astaxanthin as a nutritional health product to relieve obesity.

As featured in:

See Xiaojuan Liu *et al.*, *Food Funct.*, 2023, **14**, 7347.

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