附件1： 英文摘要格式

1. 论文投稿以详细摘要，格式同《Journal of Dairy Science》；摘要字数不超过1200字，格式如下：

摘要需含题目、作者、作者单位、地址、邮编、目的、材料与方法、结果、讨论与结论、关键词等，原则上不插入图表，不列参考文献；请参见如下模板。

1. 2022年6月后已发表的论文也可投稿，但需在论文首页左下角注明发表时间、期刊名称及刊次。

摘要格式范例如下，供参考：（本次会议只接收英文摘要）

**Adipocyte differentiation-related protein promotes lipid accumulation in goat mammary epithelial cells**

**XXX\*，XXX†[[1]](#footnote-0)**

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Milk fat originates from the secretion of lipid droplets (LDs) synthesized within mammary epithelial cells. Adipocyte differentiation-related protein (ADRP; also known as PLIN2) is an LD binding protein that is crucial for synthesis of mature LD. The hypothesis is ADRP regulates LD production and metabolism in goat mammary epithelial cells (GMEC), thus, plays a role in determining milk fat content. To understand the role of ADRP in ruminant milk fat metabolism, ADRP was overexpressed or knockdown in GMEC using an adenovirus system. Immunocytochemical staining revealed that ADRP localizes to the surface of LDs. Supplementation with oleic acid (OA) enhances its localization on the LDs surface and enhances lipid accumulation. Overexpression of ADRP increased lipid accumulation and the concentration of triacylglycerol in GMEC. In contrast, morphological examination revealed that knockdown of ADRP decreased lipid accumulation even when OA was supplemented. This response was confirmed by the reduction in mass of cellular TG when ADRP was knockdown. The fact that knockdown of ADRP did not completely eliminate lipid accumulation at a morphological level in GMEC without OA suggests that some other compensatory factors may also aid in the process of LD formation. ADRP reversed the decrease of LD accumulation induced by Adipose triglyceride lipase (ATGL). This is highly suggestive of ADRP promoting TG stability within LD by preventing access to ATGL. Collectively, these data provide direct in vitro evidence that ADRP plays a key role in LD formation and stability in GMEC. Further experiments need to explore the mechanisms for enlargement of LD via ADRP activity in GMEC.

**Key words:** milk fat; lipid droplet; triacylglycerol; hydrolysis

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