

## عنوان مقاله:

Effect of modified starch on some physico-chemical and sensory properties of low fat Hamburger

## محل انتشار:

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## خلاصه مقاله:

**BACKGROUND:** Fat replacers are ingredients that can replace fat in many foods, therefore, many consumers have limited their dietary intake of fat and calories due to diet and health concerns. **OBJECTIVES:** The present study investigated the effect of modified starch on some physico-chemical and sensory properties of low fat Hamburger. **METHODS:** In this research, modified starch potato, tapioca (Acetylated distarch adipate) and waxy maize (Hydroxypropyl distarch phosphate) at 0.5, 1.5 and 3% levels were used as the fat replacers. The amount of fat was reduced from 20% to 10% in control. Physical (cooking losses), chemical (e.g. moisture, protein, fat, ash) and sensory characteristic were assessed compared with control one. **RESULTS:** Results showed that moisture content in samples containing starch was decreased and there was a significant difference between samples containing starch and the control ( $p < 0.05$ ). Among the samples by increasing the amount of starch and reduced added water, the moisture content was decreased. Ash and protein showed no significant difference between starch samples and control. The sensory analysis showed, the panelist group nominated the sample containing 1.5% tapioca modified starch as the best specimen. Cook loss revealed that the cooking losses of the control sample were more than the samples containing starch. **CONCLUSIONS:** This study shows that modified starch can be used successfully as a fat replacer in ground meat product.

## کلمات کلیدی:

hamburger, low fat, meat products, modified starch, starch

## لینک ثابت مقاله در پایگاه سیویلیکا:

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