

## REGULATION OF APPETITE CENTRE IN THE HYPOTHALAMUS BY NUTRIENTS

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**T**he obesity problem is dramatically increasing worldwide. The surgical gastric bypass has been found to be the most effective treatment for obesity and it is associated with two benefits: the changes in dietary behavior and suppression of appetite by increasing anorexigenic signals secretion (peptide tyrosine tyrosine and glucagon-like peptide 1 secretion). These gut hormones stimulate the anorexigenic neurons and inhibit the orexigenic neurons in the hypothalamus. Some nutrients have been studied for their effect on appetite, as protein, and dietary fibre. High fibre diet and high protein diet were effective in reducing food intake, body weight, fat mass, and preserved lean mass, through increasing anorexigenic gut hormones, which affect anorexigenic and orexigenic neurons in the hypothalamus.

**Keywords**—appetite regulation, dietary fibre, hypothalamus, protein.

### *Biography*

Dina Muharib has MSc in Human Nutrition (subspecialty Molecular Nutrition) from University of Aberdeen, UK 2016. Her Master's project underwent at Rowett institute of nutrition and health, titled (Appetite-related Hypothalamic Gene Expression in Rats on High Fibre Diet). She is a bariatric dietitian at King Saud Medical City, KSA. She had participated in many national and international conferences.

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