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JOINT EVENT

## 10th International Conference on **Childhood Obesity and Nutrition**

2<sup>nd</sup> International Conference on **Metabolic and Bariatric Surgery** 

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## Deficiency in vitamin D and calcium associated comorbidities in overweight children

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Desity is increasing in epidemic proportion around the world with most concern for health issues among children. Vitamin D (25OHD) deficiency is reported in obese children. Low 25OHD levels are associated with dyslipidemia and insulin resistance with increased risk of cardiovascular complication in adulthood. Studies suggest that a low vitamin D which is linked to dysregulation of white adipose tissue and that calcium influences adipocyte metabolism. High calcium intake depresses levels of parathyroid hormone and 1, 25-hydroxy vitamin D. These decreased hormone levels cause decreases in intracellular calcium, thereby inhibiting lipogenesis and stimulating lipolysis. Dietary Calcium has been also shown to increase faecal fat excretion. Deficiency of vitamin D in children is linked with further comorbidities in life such as hypertension, myocardial infarction, and stroke, as well as other cardiovascular-related diseases, such as diabetes associated with impairment of cooperative signaling from the 1,25-(OH)(2)D(3)-activated vitamin D receptor (VDR). Vitamin D and calcium insufficiency causes cellular dysfunction in many organs and could increase the risk of diseases, particularly of osteoporosis, colorectal and breast cancer, inflammatory bowel disease, insulin-dependent diabetes mellitus type I, metabolic syndrome, diabetes mellitus type II, hypertensive and cardiovascular disease. This research focuses on the mechanisms by which calcium and vitamin D could regulate body weight and adiposity and prevent future health issues in children.

## **Biography**

Ellie Wright completed her Bachelor of Arts and master degree at arizona state university. she completed her graduate certificate in geriatric and gerontology at university of arizona. in 2015, she completed her doctoral degree in naturopathic medicine at southwest college of naturopathic medicine, USA. she is a passionate researcher in natural medicine, prevention and cure.

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