Impact of oral nutritional supplements on growth outcomes in underweight children (5: 12 years) with no systemic disease.

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Introduction

Liquid nutritional supplements (ONS) are used successfully in the management of underweight infants and young children with undernutrition. However, their use in healthy old children and adolescents with underweight and/or poor weight gain has not been reported.

Aim

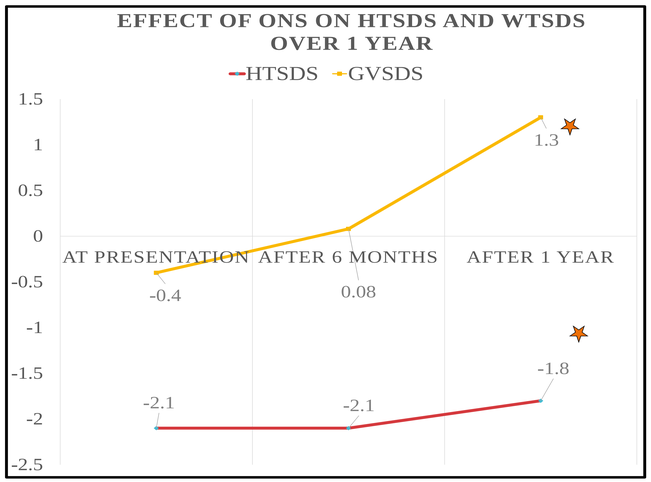
This study describes the effect of OSN on nutritional outcomes in healthy underweight children and adolescents with no systemic illness.

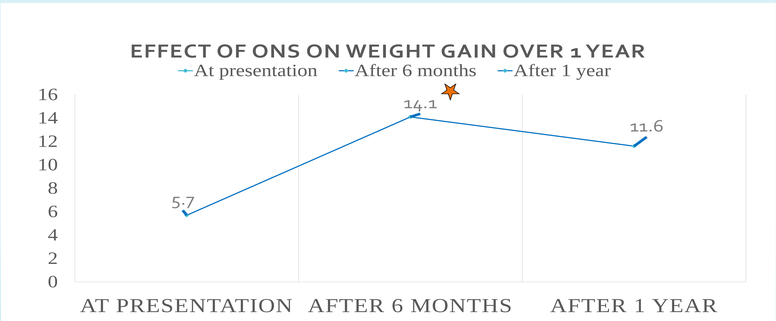
Methodology

- **20 underweight children (BMISDS < -1), aged 10.1 ±3.8 years, received ONS (1.5 cal/1ml, 500 kcal/day) in addition to their habitual diet for one year.**
- **We recorded their anthropometric measurements including weight, height, BMI, weight gain /day (WGD), height growth velocity (GV), height SDS (HtSDS) for a year.**

Results

- **WGD and linear GV markedly improved during the year of ONS.**
- **After 6 months of ONR, there was a significant increase in the BMI SDS and GVSDS.**
- **After a year of OSN, GVSDS continued to increase and there was a significant increase in the HtSDS.**
- **After OSN, there was a significant decrease in the difference between the HtSDS and their mid parental HtSDS (MPHt SDS).**





Age= 10	N.20			
	WGD	HTSDS	BMISDS	GVSDS
At presentation	5.7	-2.1	-1.3	-0.4*
After 6 months	14.1	-2.1	-1	0.08
After 1 year	11.6	-1.8**	-1.2	1.3**

Conclusion

ONS is effective in improving nutritional/growth outcomes in underweight older children and adolescents with slow weight gain and poor appetite who had no systemic illness.