



Oral nutritional supplement (ONS) or energy and protein dense in-between meals snack as nutrition supplements for patients with Chronic Obstructive Pulmonary Disease (COPD)

Postprandial blood glucose, acceptance and total energy and protein intake

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Introduction



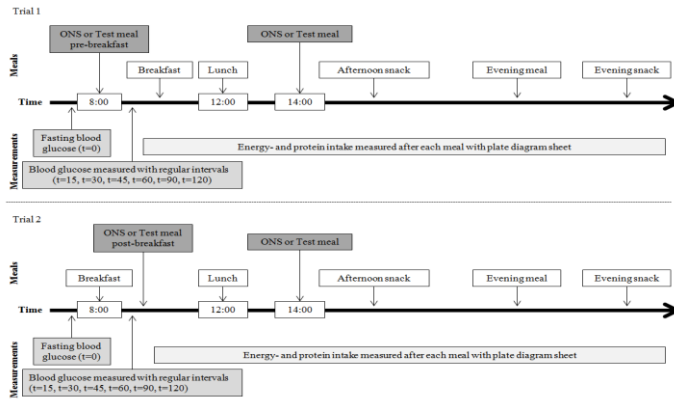
- Chronic obstructive pulmonary disease (COPD) is a group of chronic obstructive lung disorders
- Liquid oral nutrition supplements (ONS) are often used by COPD patients
- Corticosteroids commonly used → hyperglycemia → longer hospital stay and increased mortality
- Aims
 - To test the effect of the two interventions on postprandial blood glucose
 - To estimate the effect of providing nutritional support by the two interventions on total energy and protein intake during hospitalization
 - To assess the acceptance of the two interventions provided after an overnight fasting or as an in-between meal

Baker & Bell, 2009; Collins, Elia, & Stratton, 2013; Ferreira, Brooks, White, & Goldstein, 2012; Islam, Limsuwat, Nantsupawat, Berdine, & Nugent, 2015; Walters et al., 2014; Marsh et al., 2008



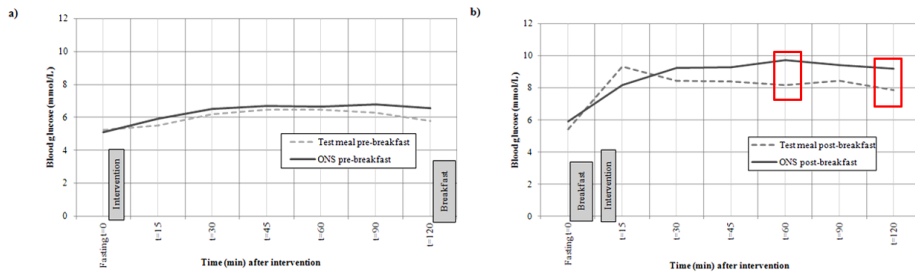
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Methods



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Results



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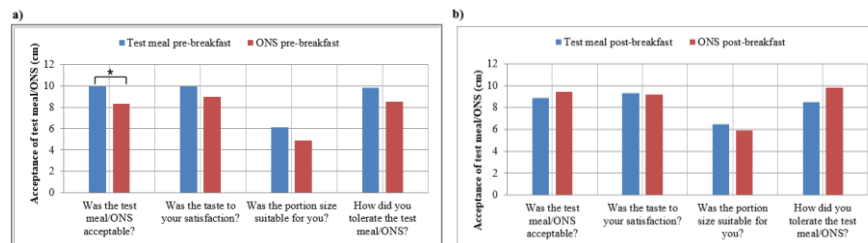
	Intervention		No intervention		p-value
	Median	95% CI	Median	95% CI	
Energy, kcal/day					
Breakfast	379	(280; 417)	403	(276; 420)	0.386
Lunch	441	(327; 577)	441	(309; 589)	0.433
Afternoon snack	162	(41; 216)	194	(74; 260)	0.034
Evening meal	395	(238; 475)	400	(259; 521)	0.972
Evening snack	94.5	(47; 162)	163	(93; 178)	0.182
Overall intake from hospital food ^a	1386	(784; 1894)	1592	(1097; 1907)	0.209
Other food ^b	593	(473; 638)	39	(0; 120)	0.001
Total intake	2131	(1348; 2345)	1616	(1097; 1927)	0.005
Total intake, kcal/kg/day ^c	30	(19; 39)	22	(13; 30)	0.005
Intake/requirement, % ^d	119	(76; 155)	87	(51; 119)	0.005
Reaching $\geq 75\%$ of requirement, %	86		79		
Protein, g/day					
Breakfast	11	(8; 12)	12	(8; 12)	0.385
Lunch	23	(19; 30)	21	(17; 30)	0.975
Afternoon snack	3	(2; 4)	4	(2; 4)	0.050
Evening meal	18	(13; 27)	22	(10; 31)	0.753
Evening snack	3	(1; 7)	6	(1; 7)	0.534
Overall intake from hospital food ^a	63	(39; 82)	67	(41; 78)	0.695
Other food ^b	25	(20; 25)	1	(0; 5)	0.001
Total intake	85	(60; 100)	70	(44; 80)	0.004
Total intake, g/kg/day ^c	1.2	(0.8; 1.3)	0.9	(0.7; 1.3)	0.004
Intake/requirement, % ^d	103	(70; 123)	76	(62; 101)	0.004
Reaching $\geq 75\%$ of requirement, %	71		54		



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Results



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Thank you for listening



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