Poster Abstract – Original Research

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Title:
The effect on protein intake in hospitalized patients by substitution regular foods by protein-enriched foods, independent of malnutrition; pilot study.

Introduction / Objectives / Methodology / Results / Conclusion

Background
All hospitalized patients have higher protein needs because of their acute or chronic illnesses. A study in Bernhoven (Uden, The Netherlands) has shown that patients WITH a risk of malnutrition have a higher protein intake because of dietary interventions (extra protein enriched snacks), which are not used in patients without risk of malnutrition.

Objectives
The aim of this study was to examine whether it is possible to reach higher protein intake in ALL hospital patients by substitution of standard bread and fruit drinks by protein enriched bread and fruit drinks.

Methods:
In this before-after design all patients (n=64) received protein-enriched bread and fruit drinks. Patients with risk of malnutrition received a standard energy and protein-enriched diet which meant they were offered 3 snacks, together containing at least 30g protein. Protein intake were measured and calculated by weighing the main course before and after consumption. The intake from remaining courses was calculated by standard size of that product. The intake was compared to calculated protein (1,2g/kg/day) requirements. The data was compared with data from a previous study (n= 40), where energy and protein intake from hospitalized patients was calculated without use of protein-enriched bread and fruit drinks. This data was analyzed with the independent sample t-test.

Results:
The difference between protein intake using protein-enriched foods compared to a diet without protein-enriched foods was statistically significant. Patients without a risk of malnutrition consumed on average 107% of their recommended protein intake, by using protein-enriched products compared to 76% without protein-enriched foods. Patients with a risk of malnutrition consumed on average 113% of their recommended protein intake when protein-enriched foods were used, compared to 104% without protein-enriched foods.

Conclusion:
Substitution of standard foods by protein-enriched products is an effective and convenient way to improve protein intake in ALL patients during hospitalization.

three key references:
Patient Satisfaction, Energy and Protein Intake in a General Hospital Population After switching to
a New Hospital Room Catering Service. IAM de Groot, N. Kampman, AGCM van Oort, IAM Gisbertz. Clinical Nutrition; September 2017: Volume 36, Supplement 1, Pages S104–S105

Protein intake in hospitalized older people with and without increased risk of malnutrition. E. Vasse, J. Beelen NM de Roos, N Janssen, LCPGM de Groot. European Journal of Clinical Nutrition; May 2018

Please identify, where possible, up to three specific key messages that participants will take away from your poster presentation to inform their future practice.

- Often, dietary interventions to improve protein intake are focused on malnourished patients.
- A strategy using substitution of normal foods by protein-enriched products leads to improved protein intake in ALL hospitalized patients.