#### AZIENDA OSPEDALIERA SAN CAMILLO – FORLANINI





AZIENDA CON OSPEDALI DI RILIEVO NAZIONALE E DI ALTA SPECIALIZZAZIONE
Via Portuense, 332 - 00149 ROMA

# DIPARTIMENTO INTERAZIENDALE TRAPIANTI (POIT) Direttore Prof. Salvatore Di Giulio.

**UO DI DIABETOLOGIA CON DAY HOSPITAL** 

Ospedale Carlo Forlanini – p.zza Forlanini ,17 - 00152 ROMA Responsabile Dott. Claudio Tubili.

**Table 1** Day Hospital - Diretto e Fax +39 06 58702601

# THE INFLUENCE OF DIET PASTA ENRICHED WITH FIBER (FIBERPASTA) ON ADHERENCE TO DIET IN OBESE SUBJECTS

MD Prof. Claudio Tubili Diabetes Unit Chief. San Camillo Forlanini Hospital – Rome (Italy)

Ms Odette M. S. Hassan Diabetes Unit Dietitian. San Camillo Forlanini Hospital – Rome (Italy)

#### **Introduction**

Quite often therapy of obesity fails because the weight lost by the patient, is gained back, no matter what diet he/she has followed. Patients usually give up because they cannot vary eating and cannot get a feeling of satiety. Products enriched with a high level of fiber are widely advisable in prescribing a low-calories diet, but there are no unequivocal data in medical literature about their efficacy in order to give patients a feeling of satiety. Pasta is a popular food in Italy, but its use in low-calories diet is not easy because of practical reasons (package, weight in grams, smaller portions than the ones usually served in catering and home cooking); therefore it is often completely banned. Furthermore diet pasta enriched with fiber. Is often considered a different food owing to different organoleptic features. This report aims at evaluating weight loss and adherence, in the short and middle term, in a group of obese patients undergoing low-calories diets which included pasta enriched with fiber.

#### Materials and methods

Thirty obese patients have been selected (BMI 33,4 +/- 1,56; age: 43,43 +/-10,33 aa., 6M/24F) excluding those suffering from psychosis, eating disorders, active drug addiction, pregnant women and people suffering from pathologies or using medicine interfering with nutritional assessment. Patients have been divided at random into 2 groups and they have been given two different diets with the same amount of calories (17 kcal/kg). The 1<sup>th</sup> group (A) was given a meal *per die* with

pasta enriched with fiber (bromatological composition per 100 grams of product: 283 kcal – protein 15 grams, cho 58 grams, lipids 1,3, dietary fiber 15 grams - 2% of inulin - resistant starch 4,5%) with glycemic index 23; the 2<sup>nd</sup> group (B) was a control group given ordinary semolina pasta. The diet pasta looked like ordinary pasta which enabled distribution of prepackaged portions to patients who were unconscious of eating a different pasta. The follow up included first examination and 5 fortnightly check-ups with anthropometric assessment and nutritional counseling. Efficacy and adherence have been established on overall weight loss and drop out. Feeling of satiety, liking of pasta and satisfaction of treatment have been evaluated by means of a question sheet with answers giving marks from 1 to 10, given to patients of both groups at the end of treatment. Patients who did not diet have been called again. Furthermore, metabolic index has been checked at the beginning and at the end of the treatment (3 months).

## **Results**

The overall weight loss of group A was kg  $6,29 \pm 3,62$  whereas the one of group B was kg  $1,86 \pm 1,66$  (p<0,01) in former group BMI was reduced to  $2,39 \pm 1,32$  whereas in the latter was  $0,62 \pm 0,62$  (p<0,01). In the former group 1 patient (6,6%) dropped out after the first check up, in the latter 3 patients did. The analysis of the test questions reveled that group A was satisfied with dieting with a score of  $8,66 \pm 0,97$ , whereas group B had a score of 1,09 (p<0,01).  $9,14 \pm 0,86$  of patients of the former group and  $6,07 \pm 2,05$  (p<0,01) of patients of the other group declared they had eaten enough. Referring to palatability both diet and ordinary pasta got the maximum score without any difference in the groups. Only one patient in group A showed asthenia and one in group B showed irritability owing to dieting. Patients of both groups stated that eating counseling helped them to change their lifestyle.

#### **Conclusion**

The use of pasta enriched with fiber in dieting of obese patients brought about a higher weight loss and a lower drop out in comparison with same isocalories portions of ordinary pasta; this result may be attributed to the ratio quantity/calories which enabled patients in the 1<sup>th</sup> group to eat more pasta and to the increased feeling of satiety after the meal. On the other hand, obese patients in the 2<sup>nd</sup> group appreciated having pasta in their diet, according to the answers given in the test sheet (Test A) which determined an increased adherence to diet in the long term.

### References

1 Standard Italiani per la Cura dell'Obesita S.I.O. / A.D.I. 2012 / 2013

2 F. Brighenti, M.C.Casiraghi, C. Baggio Resistant starch in the Italian diet British Journal of Nutrition (1998), 80, 333–341