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Poster Presentations

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Food groups intake and sperm variables in men referring to an Iranian Reproductive Sciences Institute: A cross sectional study

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Background: Infertility had an increasing trend between couples in the world. Several factors such as unhealthy dietary habits are associated with sperm abnormality.

Objective: This study was conducted to investigate the association between food groups intake and sperm variables in men referring to an Iranian Reproductive Sciences Institute.

Materials and Methods: 400 infertile Men 20-55 yr of age admitted to an Iranian Reproduction Research

Institute, were selected for this cross-sectional study according to the World Health Organization Fifth Edition Laboratory Guidelines. Usual dietary intake was collected by using a 168 items semiquantitative food frequency questionnaire. The relationship between food groups and sperm factors was measured by a multiple linear regression model while other confounding variables were adjusted. All data were analyzed using SPSS V. 22 software. P-value less than 0.5 considered as significant.

Results: According to this study, after adjusting for potential confounders, there was a significant relationship between sperm count with refined grains and soft drink, a significant association between normal morphology with whole grains, low-fat dairy intake and fruit, semen volume is significantly related to red meat intake, low-fat dairy, fruit and tea intake and progressive motility had a significant association between progressive motility with whole grains, low-fat dairy, fruit, soft drink and coffee intake (p-trend < 0.05).

Conclusion: We concluded that there is a relationship between grains, dairy, fruits, meat, caffeine and tea dietary intake with sperm parameters, which are sometimes in line or in contradiction with the results of previous studies.

Key words: Diet, Male infertility, Food groups, Semen analysis.