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Poster Presentations

P-28

Dietary fat and minerals intake are related to semen quantity and quality in men referring to an Iranian Reproductive Sciences Institute: A cross sectional study

Haeri F¹, Shirani M¹, Nouri M², Dehghan Marvast L³, Ghiasvand R⁴.

1. Department of Community Nutrition, School of Nutrition and Food Science, Isfahan University of Medical Sciences, Isfahan, Iran.

2. Department of Community Nutrition, School of Nutrition and Food Science, Shiraz University of Medical Sciences, Shiraz, Iran.

3. Andrology Research Center, Yazd Reproductive Sciences Institute, Shahid Sadoughi University of Medical Sciences, Yazd, Iran.

4. Food Security Research Center, Isfahan University of Medical Sciences, Isfahan, Iran.

Email: rghiasvand@yahoo.com

Background: Some epidemiological studies have reported a relationship between infertility and lifestyle patterns including dietary habits.

Objective: Our objective was to identify the relation between sperm parameters and dietary fatty acid and mineral intake among Iranian infertile men.

Materials and Methods: This cross sectional was performed on 400 newly diagnosed infertile men in Yazd Reproductive Sciences Institute from July to December 2019. Men were recruited when their infertility was confirmed by the expert andrologist based on World Health Organization criteria. They delivered a semen sample and answered a 168 items semiquantitative food frequency questionnaire. All data were analyzed using SPSS V. 22 software. P-value less than 0.5 considered as significant.

Results: We found a positive association between poly-unsaturated fatty acid intake, total motility, and normal morphology ($p = 0.03$). Also, there was a significant negative association between the second quartile of sodium and calcium intake and sperm volume (ptrend: 0.04), compared with the first quartile.

Conclusion: We concluded that dietary of poly-unsaturated fatty acid intake, sodium and calcium intake are related to sperm morphology, volume and total motility in Iranian infertile men. However, more research is needed to confirm these relations and provide the evidence needed to exert these findings into clinical practice.

Key words: Sperm parameters, Male infertility, Fatty acid, Minerals.