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SECTION 20. Medicine.

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FOOD HABIT STUDY IN PATIENTS WITH CHRONIC GASTRITIS, LIVING IN TURKESTAN REGION (SOUTH KAZAKHSTAN)

Abstract: The article presents the features of the feeding habits of people with chronic gastritis and the daily consumption of nutrients, microelements and vitamins.

Key words: food habit, chronic gastritis, nutrients, microelements, vitamins.

Language: English

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BACKGROUND: Gastrointestinal diseases have a tendency for increasing day to a day. Consequently, gastrointestinal diseases define as an important problem in clinics nowadays, in which clinicians and public health care system are interested in. The main causes of these diseases are such factors as: unbalanced diet, stress, unfavorable environmental conditions and infectious agents [1].

Incidences of gastrointestinal diseases are on the third place after cardiovascular diseases. Gastritis is

the most common pathology from all gastrointestinal diseases and 50% residents of Kazakhstan suffer from it [2]. In the majority countries of the world nearly 80-90% of people suffer from gastritis, and moreover, atrophic gastritis, also named as "pre-malignant case" is defined 5% in people <30 years, 30% in 31-50 years old and 50-70% in older people, upon 50 years [3, 4].

Researchers from Germany looking at food habits of elderly people revealed, that in elder age



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there is often a deficit of vitamins B12 and D3 in a combination of chronic diseases and psych emotional problems. The most frequent cause of deficit of vitamin B12 was the result of malabsorption against a background of atrophic gastritis [6].

In researches, investigated in Kazan revealed a lack of carbohydrates and energy in a nutrition, which made developing chronic gastroduodenitis in youth man, when in youth women it was found a deficiency of proteins, carbohydrates and daily calories [7].

Explorers from Brazil identified link between chronic gastritis, related H. Pylori had more lower level of vitamin B12 [8]. The study made by Naja F., Kreiger N., Mc. Keown, Eyssen G., Allard J., and can suppose that H. Pylori decrease biological availableness of vitamins E and C [9]. Other

researchers: Ryz N.R. and Lochner A., investigated the level of vitamin D and revealed, that the lack of vitamin D make critical an intestinal inflammatory reactions on infectious, also reducing immune system, makes an organism more sensitive to chronic gastritis and other gastrointestinal diseases [10]. The result of next issue tells us about reducing abilities of vitamin D to an invasive intestinal flora, which influence on a mucous of gastrointestinal tract [10]. There is an another work, the result of which tell us that vitamin D can reduce unhealthy influence invasive intestinal flora, which impact on a mucous

of gastrointestinal tract, supporting it. Thus, authors think, that deficiency of vitamin D predispose to developing for gastrointestinal diseases [11]. In Russia there was explored the link between microelements such as Zn, Se, Mn with chronic gastritis. As the result they revealed, that lack of these microelements predispose to developing atrophic changes in mucous of a stomach [12].

AIM: To study the prevalence of chronic gastritis and to estimate the link between the food diet in Turkestan region residents.

METHODS: The research was in a Turkestan region among 1141 people, average age of whom was 51,9±13,7. There was questioning for studying food diet. Data of questioning was calculated with the help of online-calculator [<http://health-diet.ru/>]. With the help of this calculator there were identified calories, pies of proteins, carbohydrates, lipids, microelements, depending on gender, age, weight and the level of physical activity. Statistical program SPSS Statistics 17.0 was used. For comparing average points it was used Student's criteria.

RESULTS: In the result we revealed 122 respondents, suffered from chronic gastritis, 46 of them were- man, and women were 76, respectively. There was the most frequent prevalence of chronic gastritis in 60-74 age categories - among women (fig.1).

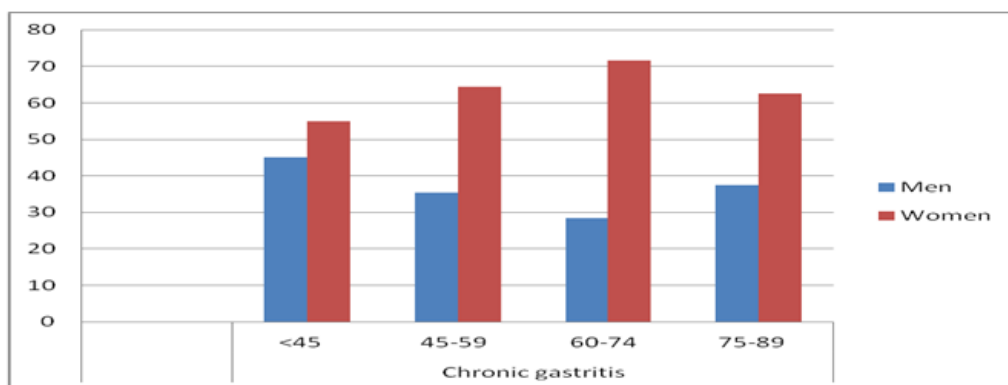


Figure1 - Prevalence of chronic gastritis, depending on gender and age.

Table 1
Comparing average trades of nutrients in patients with chronic gastritis and control group.

Nutrients	Chronic gastritis n=122 M(SD)	Healthy people n=100 M(SD)	p
Calories	143,5 (±72,9)	120,8(±38,9)	0,006
Proteins	127,2 (±95,5)	108,9 (±39,7)	0,075
Fat	140,4 (± 85,03)	116,04 (±36,5)	0,008
Carbohydrates	151,4 (±66,8)	125,1 (± 32,4)	0,0001
Water	46,07 (±14,4)	58,2 (± 17,8)	0,0001

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Dietary Fibers	127,6 (± 66,7)	111,2 (± 40,5)	0,032
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The results showed us, that in people with chronic gastritis there were statistically significant

trades of calories, lipids and carbohydrates, comparing to control group.

Table 2
Comparing average trades of vitamins level in patients with chronic gastritis and control group.

Vitamins	Chronic gastritis n=122 M(SD)	Healthy people n=100 M(SD)	p
b-car	3,8 (± 9,3)	8,8 (± 13,5)	0,001
A	223,9 (± 171,02)	129,08 (±53,6)	0,0001
B1	72,1 (± 29,6)	78,05 (±25,7)	0,120
B2	108,1 (±107,9)	87,2 (± 60,2)	0,085
B5	62,1(±28,5)	75,3 (± 23,5)	0,0001
B6	80,1 (±43,6)	89,09 (±27,7)	0,075
B9	38,2 (± 13,9)	57,4 (± 28,6)	0,0001
B12	93,7 (±90,2)	97,9 (± 61,5)	0,696
C	50,3 (± 33,03)	68,4 (± 31,4)	0,0001
E	96,2 (±53,8)	81,6 (± 32,5)	0,018
H	41,6(±24,6)	57,7 (± 29,8)	0,0001
PP	141,8 (± 93,2)	122,3 (± 43,3)	0,055
D	6,9 (± 10,1)	13,3 (± 17,6)	0,001
K	2,6 (± 12,9)	8,8 (± 9,9)	0,0001
Ch	80,4(± 28,3)	68,2 (± 17,3)	0,0001

While comparing average trades of vitamins, there was identified, that there were high levels of vitamins A, E and Ch in people, who suffer from

chronic gastritis. But there was a low level of beta-carotene, vitamin B5, B9, C, H, L, K in those people.

Table 3
Comparing average trades of microelements in patients with chronic gastritis and control group.

Microelements	Chronic gastritis n=122	Healthy people n=100	P
Ca	64,7 (±79,9)	79,2 (± 53,6)	0,121
Mg	82,2 (± 49,1)	87,9 (± 86,4)	0,535
Na	120,3 (±36,4)	97,4 (± 33,9)	0,0001
K	109,4 (± 65,7)	85,4 (± 49,1)	0,003
Ph	144,4 (± 102,8)	110,1 (± 87,7)	0,009
Cl	178,8 (± 63,8)	120,7 (± 66,5)	0,0001
S	71,05 (± 34,9)	65,2 (± 32,3)	0,205
Fe	127,4 (± 58,2)	96,2 (± 45,3)	0,0001
Zn	77,9 (± 37,5)	67,8 (± 33,1)	0,037

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I	27,3 (± 12,1)	29,4 (± 15,9)	0,253
Cu	120,3 (± 46,6)	102,4 (± 53,2)	0,008
Mn	171,5 (± 44,8)	115,5 (± 56,9)	0,0001
Se	47,5 (± 26,7)	54,1 (± 30,01)	0,087
Cr	75,8 (± 47,1)	61,3 (± 36,8)	0,012
F	11,2 (± 31,7)	21,6 (± 24,9)	0,008
Mo	123,3 (±29,09)	99,7 (± 35,3)	0,0001
B	25,1(±10,6)	47,2 (± 32,1)	0,0001
Si	93,07 (±75,7)	92,3 (± 58,4)	0,933
Co	177,1 (±52,2)	114,8 (± 43,8)	0,0001

Comparing average trades of microelements, there was identified, that there were statistically significantly high levels of such microelements as Na, Zn, K, Ph, Cl, Fe, Mn, Cu, Cr, Mo, Co in people, who suffer from chronic gastritis. But there was a low level of F, B microelements comparing to control group.

Conclusion:

1. As the result, there was revealed, that in 10,7% suffer from chronic gastritis. There was the most frequent prevalence of chronic gastritis in 60-74 age categories - among women

2. In people with chronic gastritis there were statistically significant trades of calories, lipids and carbohydrates, comparing to control group.

3. While comparing average trades of vitamins, there was identified, that there were high levels of vitamins A, E and Ch in people, who suffer from chronic gastritis. But there was a low level of beta-carotene, vitamin B5, B9, C, H, L, K in those people.

4. Comparing average trades of microelements, there was identified, that there were statistically significantly high levels of such microelements as Na, Zn, K, Ph, Cl, Fe, Mn, Cu, Cr, Mo, Co in people, who suffer from chronic gastritis. But on the other hand, there was a low level of F, B microelements comparing to control group.

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