

Nutrition in Kazakhstan



CLN 1600: NUTRITION
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Content

- ▶ Introduction to Kazakhstan
- ▶ Determination of problems
- ▶ National cuisine / Cuisine of Kazakhstan
- ▶ Reasons of diseases
- ▶ Methods of treatment

Kazakhstan



- The climate is continental, with warm summers and cold winters (can be +40 and -40).
- The terrain of Kazakhstan includes flatlands, steppe, taiga, rock canyons, hills, deltas, snow-caped mountains and deserts.
- Kazakhstan has borders with Russia, China, Kyrgyzstan, Uzbekistan and Turkmenistan and also adjoins a large part of the Caspian Sea.
- Population: 17 078 241 people

Territory of Kazakhstan



National cuisine



Kazy



Kuurdak



Qurt



Beshbarmak

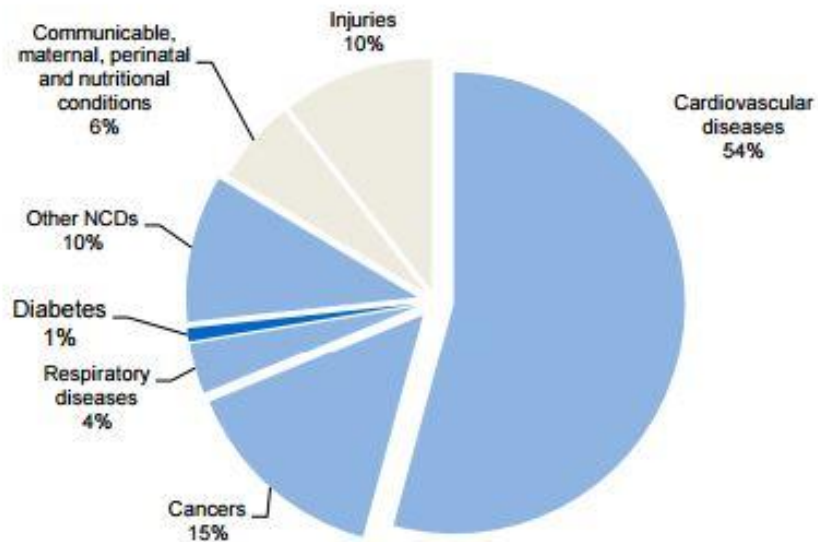


Reasons of overweight

- ▶ A global shift in diet towards over-consumption of energy-dense foods high in fat , sugar and salt and low in vitamins , minerals and other micronutrients
- ▶ Decreased physical activity due to widespread of sedentary forms of work and rest , changing ways of transportation, and increasing urbanization.

According to experts of the National Center Healthy Eating (NAC 2016), the young generations consume food and beverages that are harmful for a health. Every 3rd pupil spends pocket money on fast food, more than 1 time a week drinking sugary sodas and 1 of 10 drinks energy drinks. About 60% of students consumed fast food, with every seventh student eating fast food and drinking sodas or energy drinks on a daily basis.

Deaths diagram



Mortality

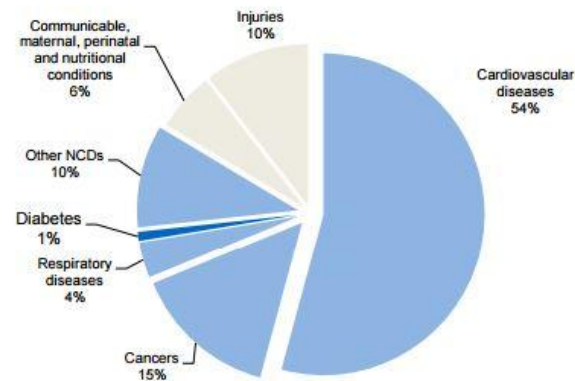
Number of diabetes deaths

| | males | females |
|------------|-------|---------|
| ages 30–69 | 350 | 430 |
| ages 70+ | 190 | 440 |

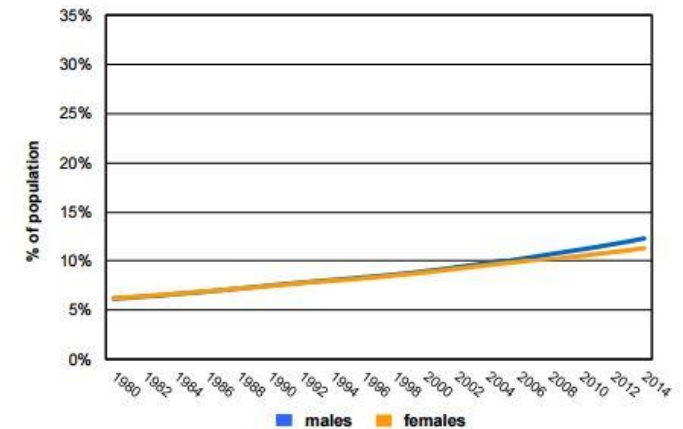
Number of deaths attributable to high blood glucose

| | males | females |
|------------|-------|---------|
| ages 30–69 | 4 090 | 2 340 |
| ages 70+ | 2 970 | 5 550 |

Proportional mortality (% of total deaths, all ages)



Trends in age-standardized prevalence of diabetes



Prevalence of diabetes and related risk factors

| | males | females | total |
|---------------------|-------|---------|-------|
| Diabetes | 11.3% | 11.7% | 11.5% |
| Overweight | 59.8% | 57.7% | 58.7% |
| Obesity | 21.3% | 25.4% | 23.5% |
| Physical inactivity | 18.8% | 21.0% | 20.0% |

National response to diabetes

Policies, guidelines and monitoring

| | |
|--|--|
| Operational policy/strategy/action plan for diabetes | Yes |
| Operational policy/strategy/action plan to reduce overweight and obesity | Yes |
| Operational policy/strategy/action plan to reduce physical inactivity | Yes |
| Evidence-based national diabetes guidelines/protocols/standards | <i>Available and fully implemented</i> |
| Standard criteria for referral of patients from primary care to higher level of care | <i>Available and fully implemented</i> |
| Diabetes registry | Yes |
| Recent national risk factor survey in which blood glucose was measured | No |

Availability of medicines, basic technologies and procedures in the public health sector

Medicines in primary care facilities

| | |
|---------------|---|
| Insulin | ● |
| Metformin | ● |
| Sulphonylurea | ● |

Procedures

| | |
|--|---|
| Retinal photocoagulation | ● |
| Renal replacement therapy by dialysis | ○ |
| Renal replacement therapy by transplantation | ○ |

Basic technologies in primary care facilities

| | |
|---|---|
| Blood glucose measurement | ● |
| Oral glucose tolerance test | ● |
| HbA1c test | ● |
| Dilated fundus examination | ● |
| Foot vibration perception by tuning fork | ○ |
| Foot vascular status by Doppler | ● |
| Urine strips for glucose and ketone measurement | ● |

What causes cardiovascular disease?

- ▶ Some people are born with conditions that predispose them to heart disease and stroke
- ▶ Poor diet
- ▶ Lack of physical activity
- ▶ Smoking

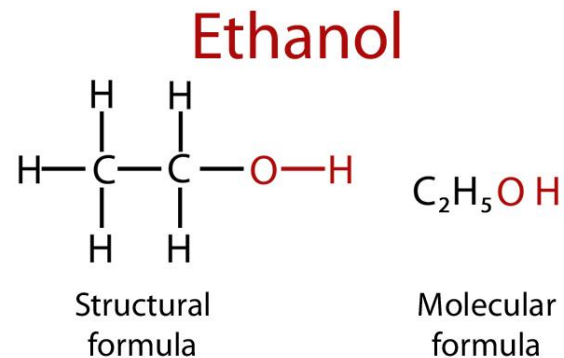
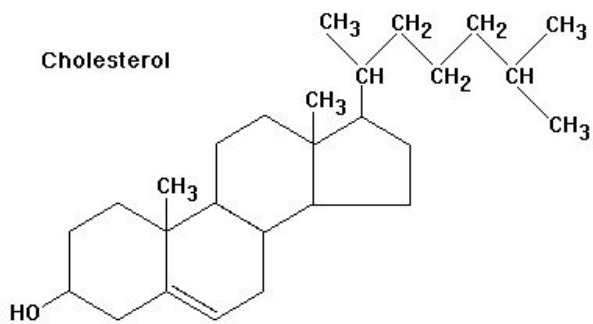


Does diet play a part in the development of heart disease?

Diet plays a significant role in protecting or predisposing people to heart disease.

Diet Increase the risk of heart disease

- high in animal fat (cholesterol)
- low in fresh vegetables and fruit
- Alcohol



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Diet Prevent from the risk of heart disease

- diet low in fat and salt

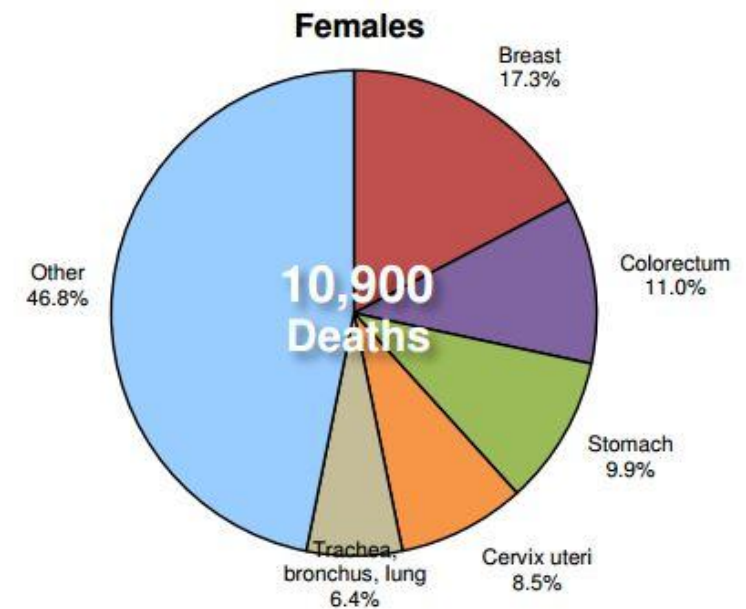
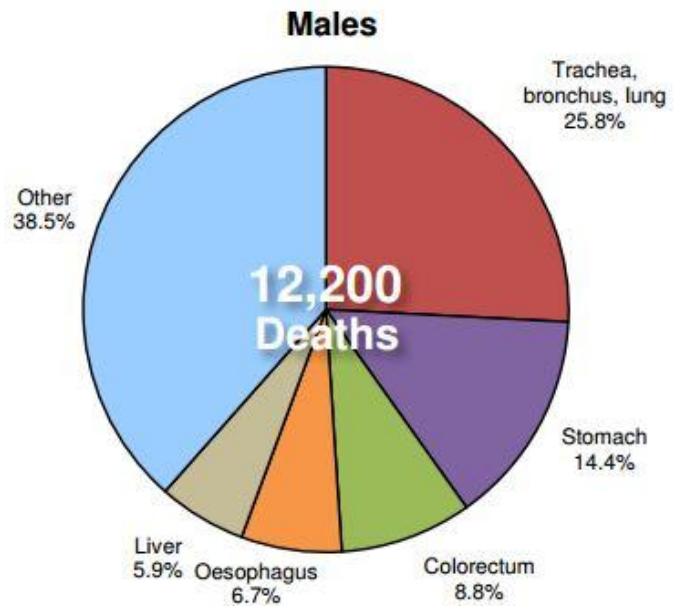


Cancer mortality

Total population: 16,271,000
Income group: Upper middle

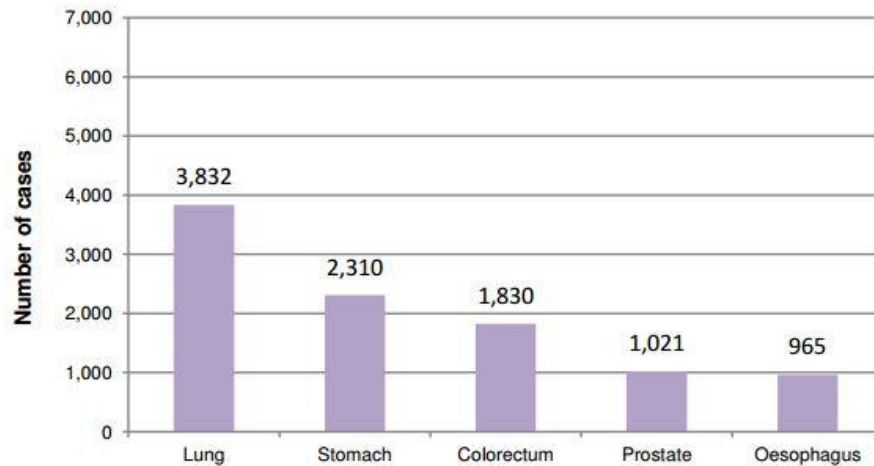
Total deaths: 158,000
Life expectancy at birth: Total:68 Males:63 Females:72

Cancer Mortality Profile

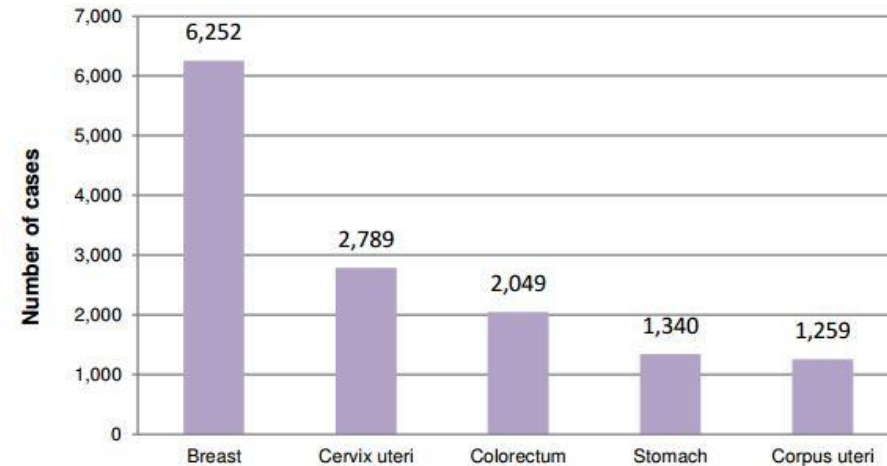


Cancer incident

Males



Females

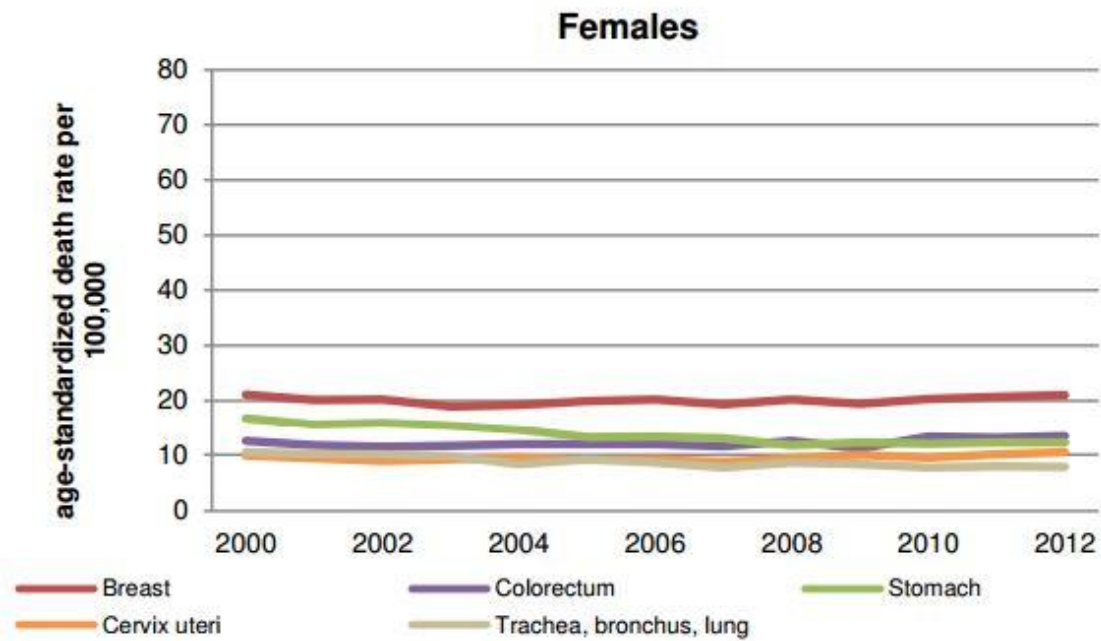
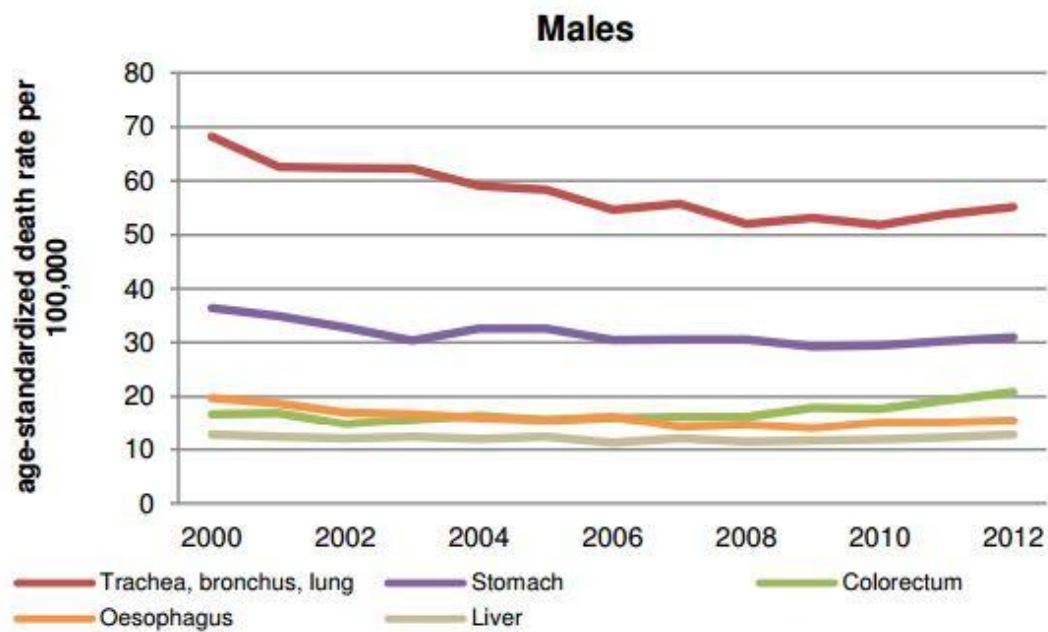


Adult Risk Factors

| | Males | Females | Total |
|--|--------------|----------------|--------------|
| Current tobacco smoking (2011) | 40.2% | 8.6% | 24.4% |
| Total alcohol per capita consumption, in litres of pure alcohol (2010) | 15.7 | 5.5 | 10.3 |
| Physical inactivity (2010) | 18.8% | 21.0% | 20.0% |
| Obesity (2014) | 21.3% | 25.4% | 23.5% |
| Household solid fuel use (2012) | - | - | 9.0% |

Mortality trend

Age-Standardized Cancer Mortality Trends



Eatin Disorder

| Country/Region | Extrapolated Prevalence | Population Estimated Used |
|----------------------------|-------------------------|---------------------------|
| Kazakhstan | 278,376 (1%) | 15,143,704 ² |

Eating disorders such as Anorexia, Bulemia is not very common illness in Kazakhstan.

Suggestion of treatment

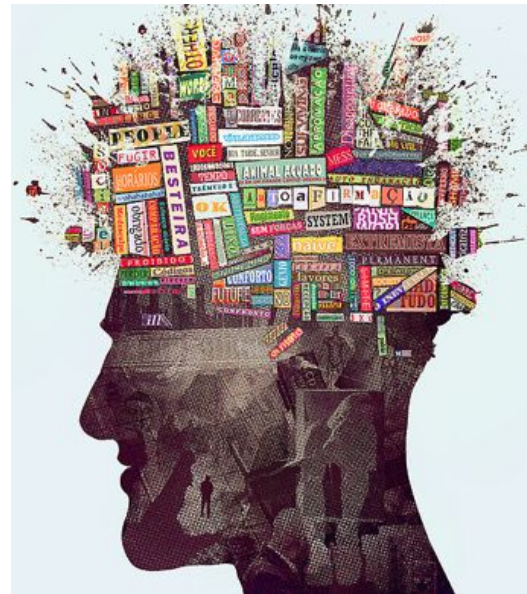
- ▶ Treat the reason of the illness not symptoms
- ▶ Provide people with knowledge of healthy life stile

The eatwell plate

Use the eatwell plate to help you get the balance right. It shows how much of what you eat should come from each food group.



Public Health England in association with the Welsh Government, the Scottish Government and the Food Standards Agency in Northern Ireland



**TREAT THE
DISEASE, NOT
THE SYMPTOM**

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Reference list

- ▶ Country meters. 2016. *Country meters*. [ONLINE] Available at: <http://countrymeters.info/ru/Kazakhstan>. [Accessed 30 March 16].
- ▶ National Analytical Center (NAC). 2016. *Country meters*. [ONLINE] Available at: <http://www.nac.gov.kz/upload/iblock/3f2/3f2795ec585ea99b73f6053697f60950.pdf>. [Accessed 30 March 16].
- ▶ World Health Organization. 2016. *Cancer Country Profiles*. [ONLINE] Available at: http://www.who.int/diabetes/country-profiles/kaz_en.pdf?ua=1. [Accessed 30 March 16].
- ▶ World Heart Federation. 2016. *What causes cardiovascular disease?*. [ONLINE] Available at: <http://www.world-heart-federation.org/heart-facts/resources/videos/about-cvd/key-facts/what-causes-cardiovascular-disease/>. [Accessed 30 March 16].