

# Nutrition in Kazakhstan



CLN 1600: NUTRITION  
TUTOR: ELDA EICHER  
BY SABIT SHANGEREY

# 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

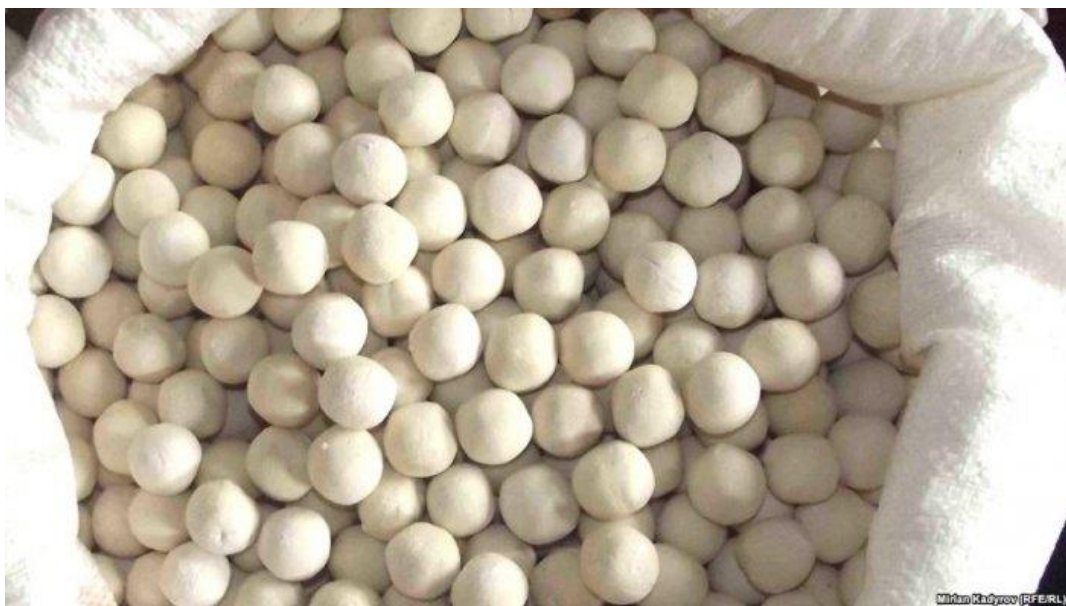


Kazy



Kuurdak





Qurt



Beshbarmak



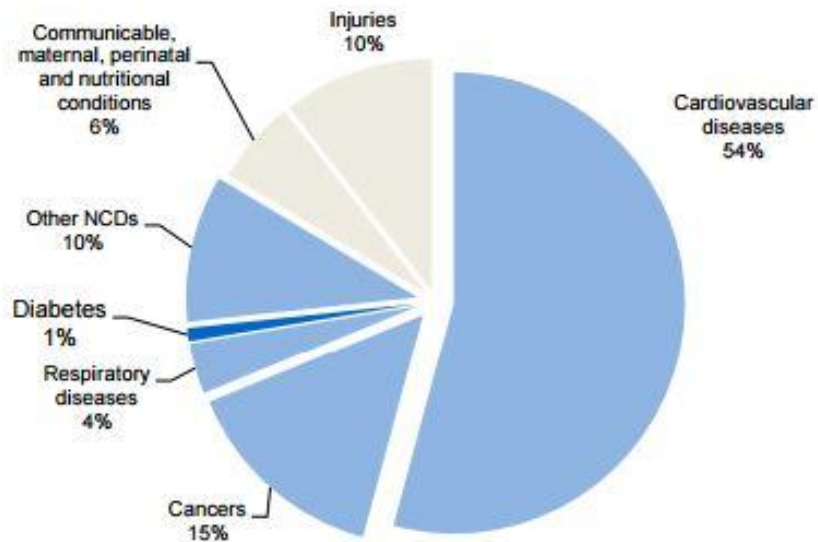
# Reasons of overweight

- ▶ 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

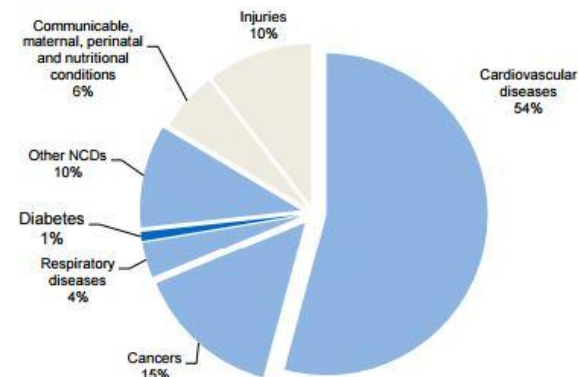
### Number of diabetes deaths

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

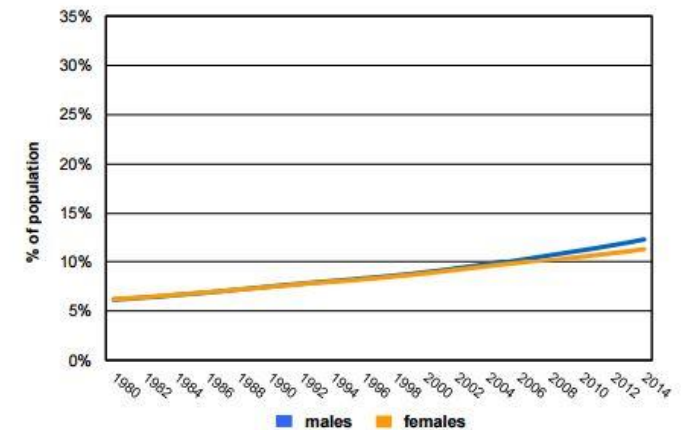
### Number of deaths attributable to high blood glucose

	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



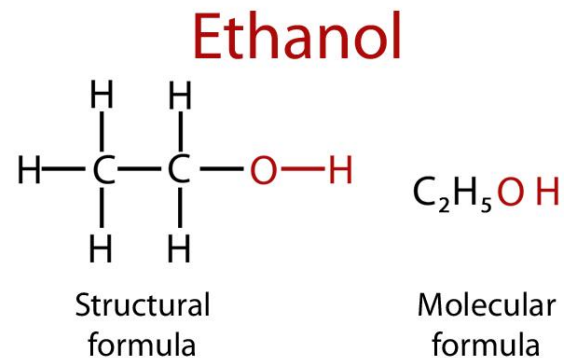
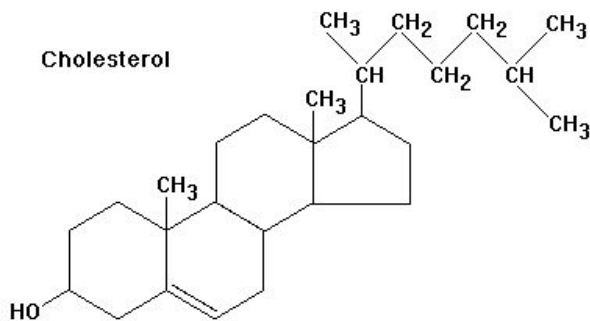


Does diet play a part in the development of heart disease?

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



## Diet Prevent from the risk of heart disease

- diet low in fat and salt



# Cancer mortality

Total population: 16,271,000

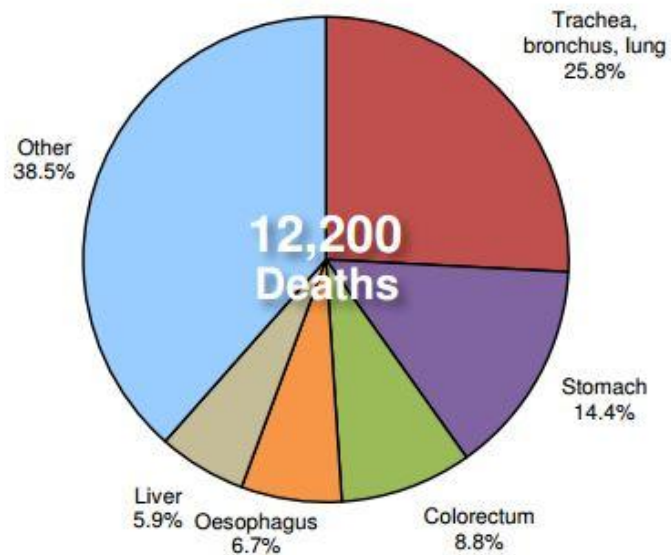
Income group: Upper middle

Total deaths: 158,000

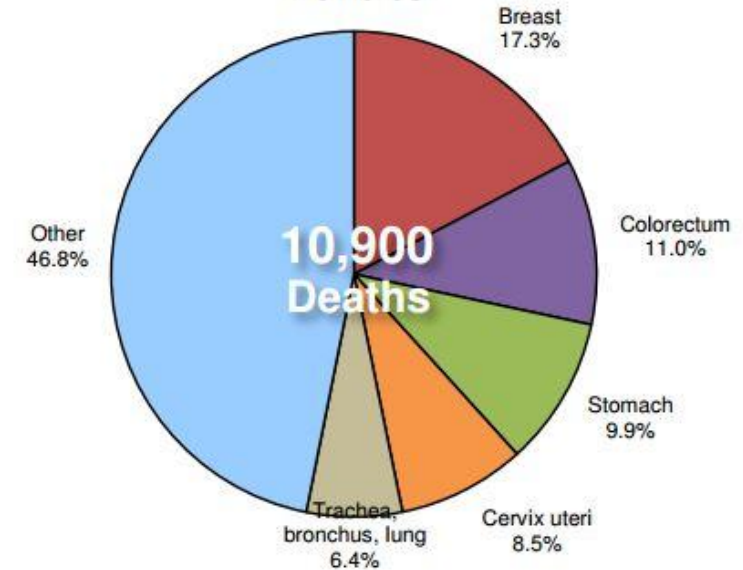
Life expectancy at birth: Total:68 Males:63 Females:72

## Cancer Mortality Profile

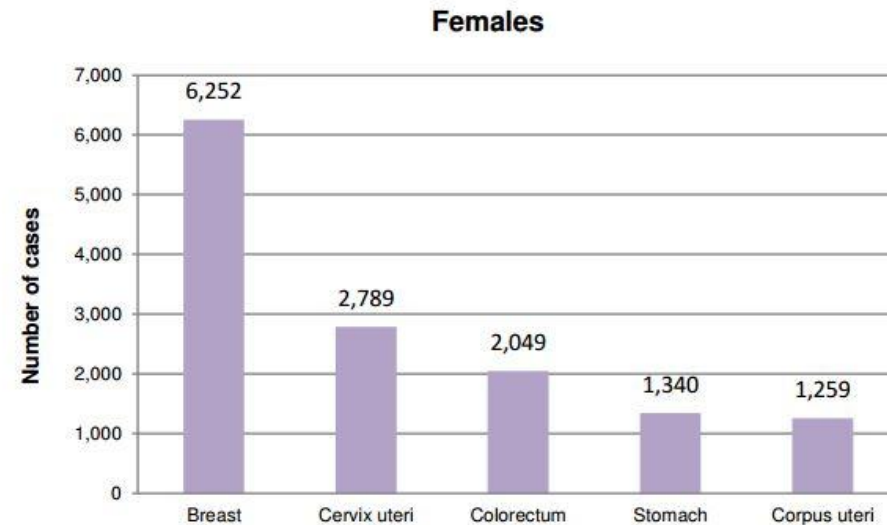
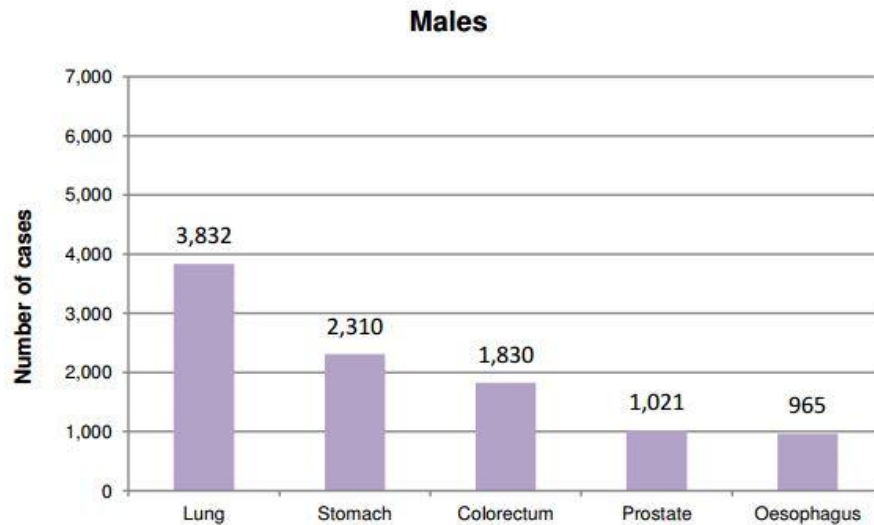
**Males**



**Females**



# Cancer incident



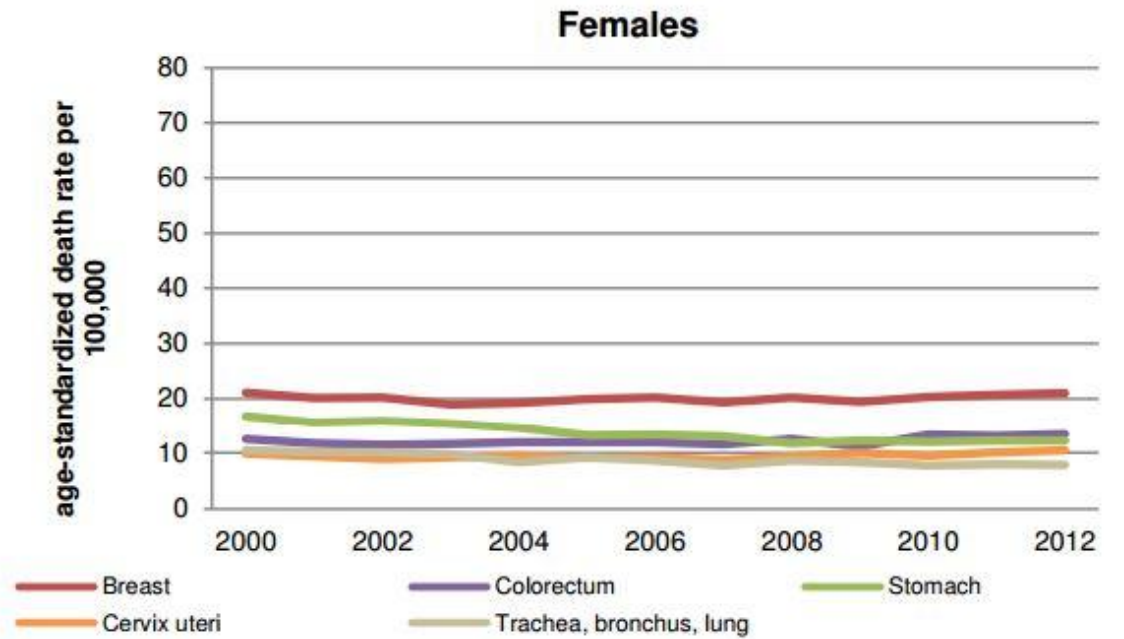
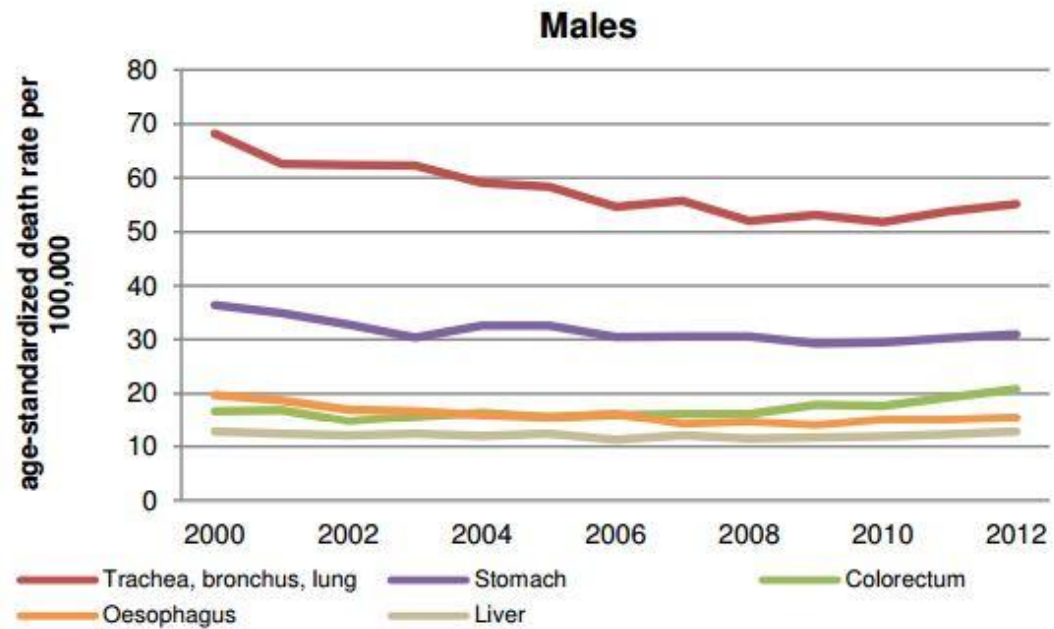
## Adult Risk Factors

	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
<a href="#">Kazakhstan</a>	278,376 (1%)	15,143,704 <sup>2</sup>

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

100

- ▶▶



PICTUREQUOTES.COM



# 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](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].