



FEDERAL RESEARCH INSTITUTE FOR  
HEALTH ORGANIZATION  
AND INFORMATICS  
OF MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

# Nutrition Risk Factors in the Russian Federation

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## 2. Statistics of Caloric Consumption in Russia

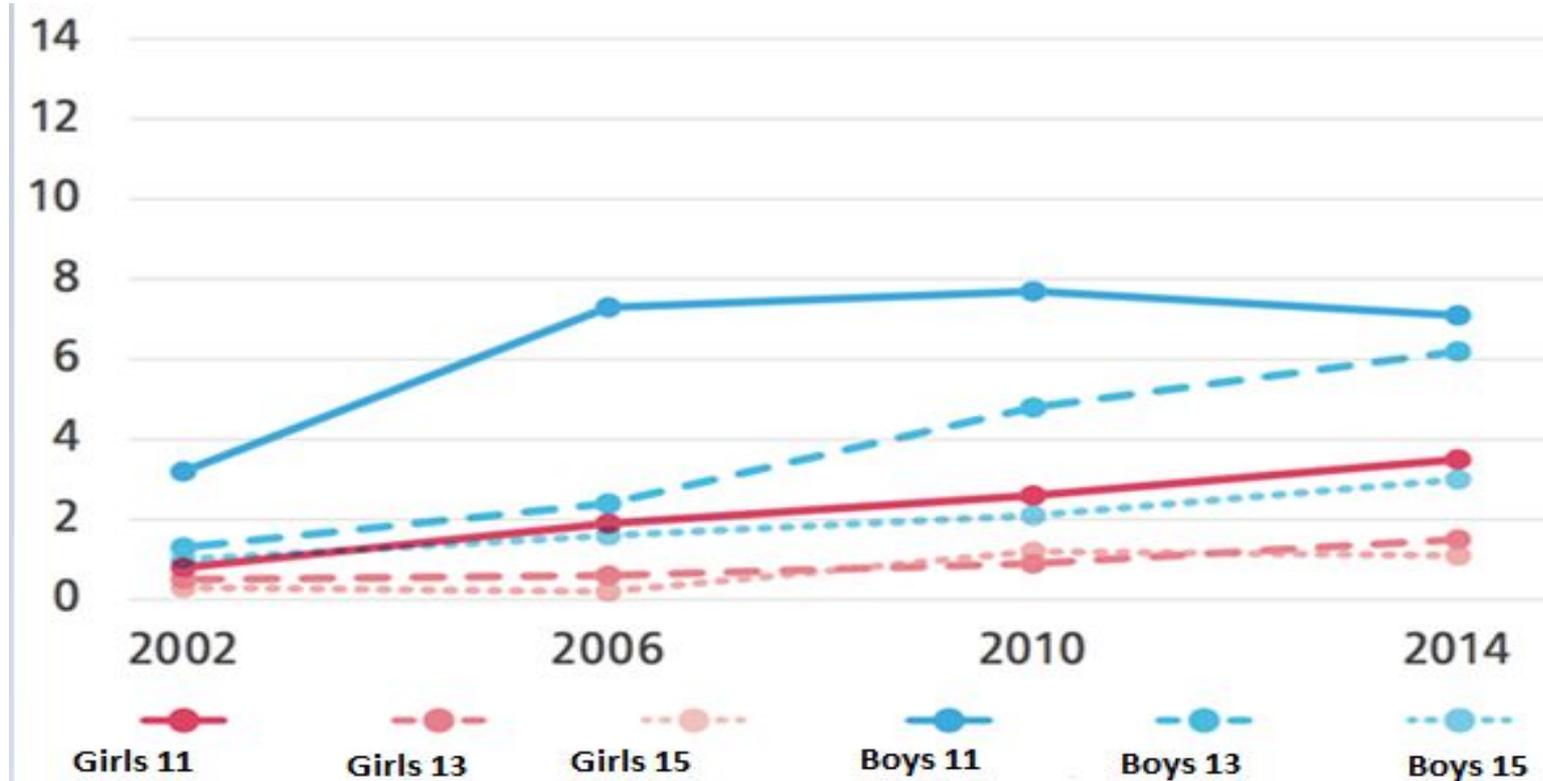
According to Rosstat household surveys, food consumption in the Russia, on average, was 2575 kcal per day in 2015.

According to the FAO in Russia, food consumption in 2013 was 3361 kcal per person per day.

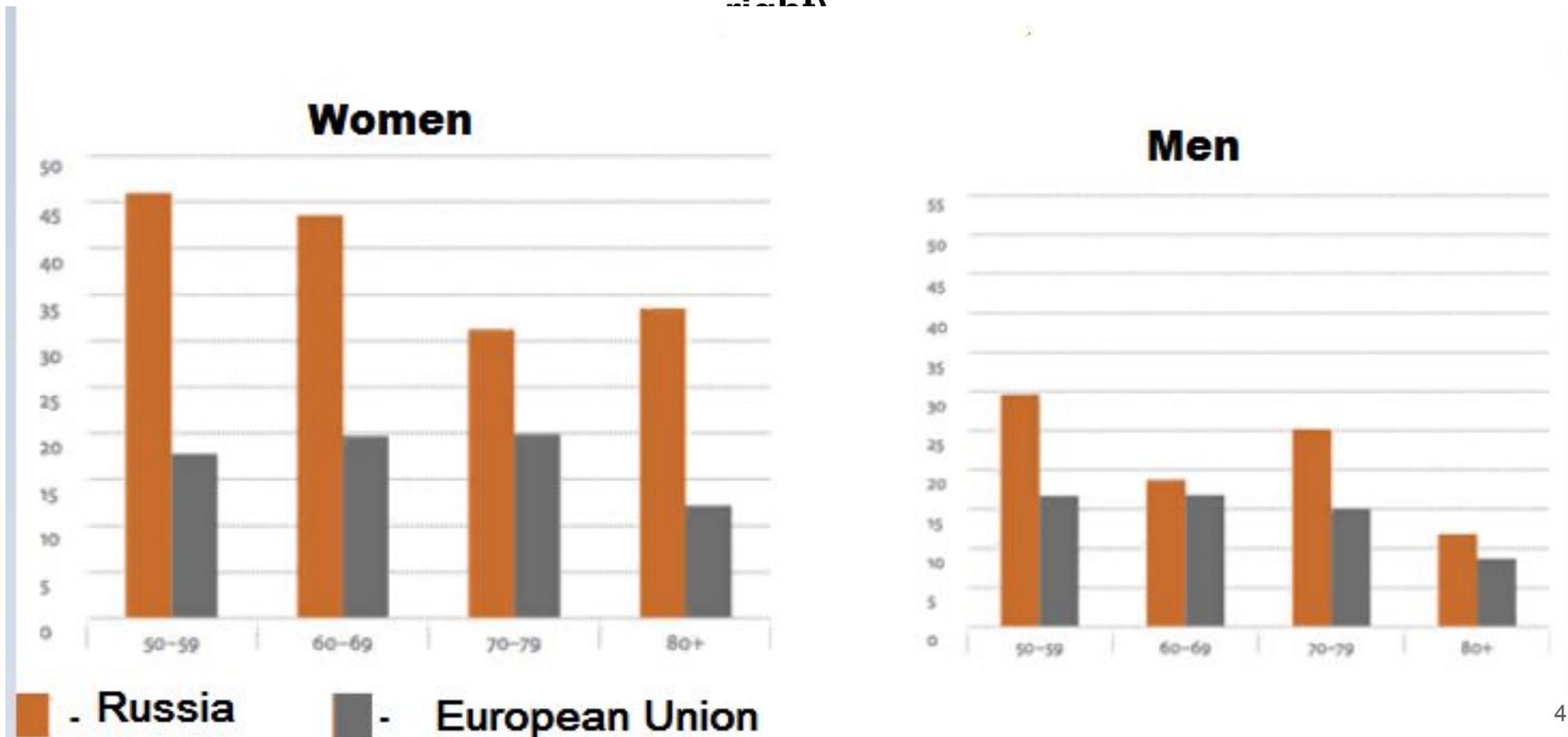
Which data is correct?

# 3. Obesity

The prevalence of obesity among 11, 13 and 15 year old children in the Russian Federation in 2002-2014 (HBSC, 2017)



#### 4. The prevalence of obesity among people over 50 year old in Russia (SAGE, 2009, bars on the left) and European countries (SHARE, bars on the right)



RLMS study shows growing obesity rates already more than half of Russians (55%) are overweight, and 20.5% of the population are obese, which could be underestimation.

Therefore, FAO estimates might be closer to reality than Rosstat data

Obesity rate is estimated at the range 23 (WHO) - 25.7 (FAO), and it is growing

Food security is lower than the average in some regions such as Ingushetia, Dagestan, Tyva, Kalmykia, Chechnya (Shaygada, Uzun, 2015)

## 6. Food products and human health

Earlier sugar, saturated fats, trans fats and sodium and low fruit and vegetable consumption were considered the major nutritional risk factors.

Currently, research in food groups and all-cause mortality and other major health outcomes (life stroke) shows a more complex picture.

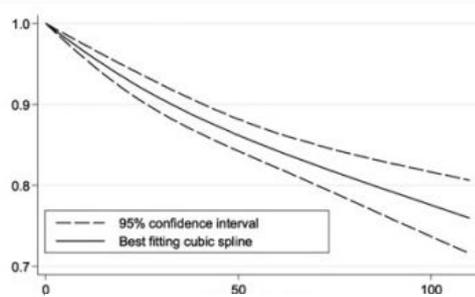
Harmful products and nutrients include: processed meat, red meat (possible), trans-fats, sugar-sweetened and artificially (e.g. sodas), high-sodium food (for people with hypertension).

Healthy products and nutrients include: vegetables, fruits, wholegrain products, nuts, seeds, legumes, yogurts, fiber, olive oil, coffee and possibly other vegetable oils, fish (with worse data in European studies), poultry and so on.

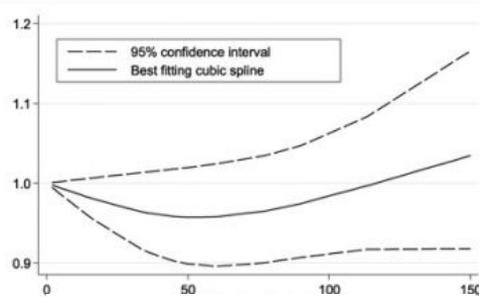
# 7. Food groups and all-cause mortality

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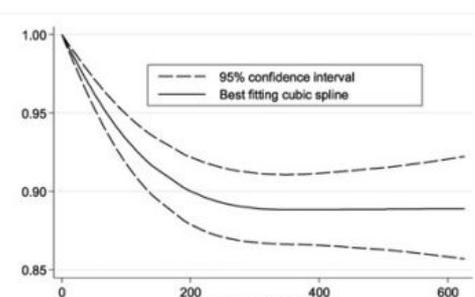
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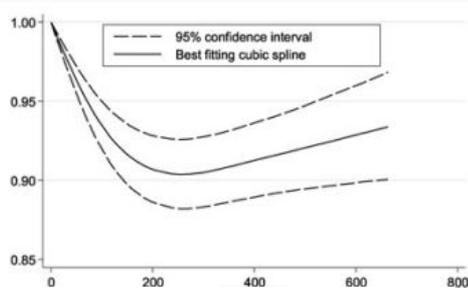
Whole grain products, g/day



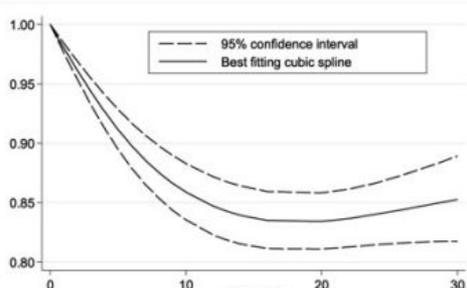
Refined grain, g/day



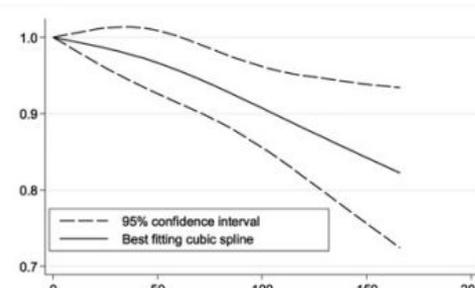
Vegetables, g/day



Fruits, g/day

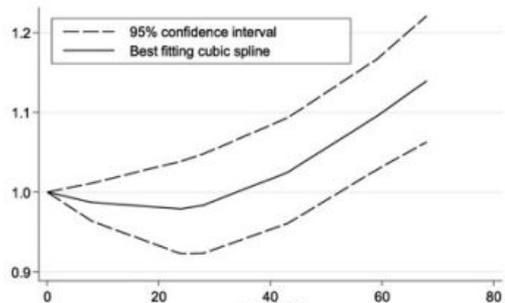


Nuts, g/day

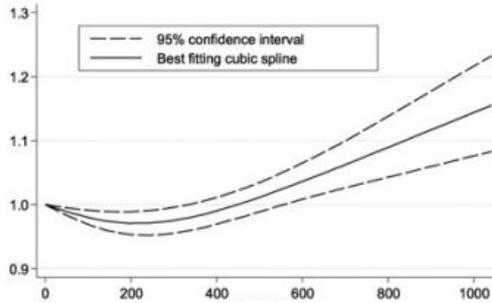


Legumes, g/day

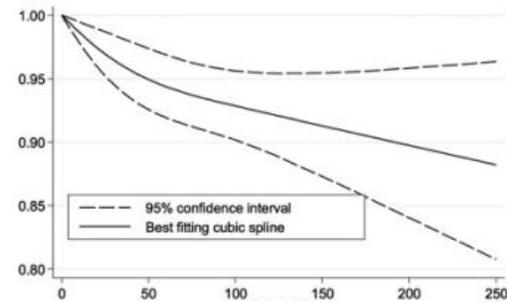
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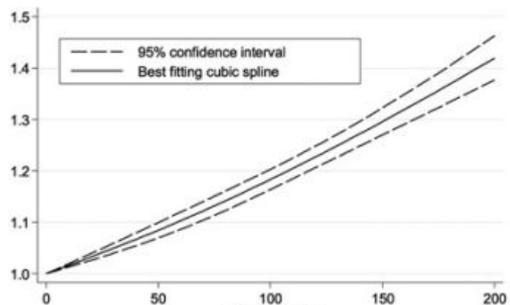
Eggs, g/day



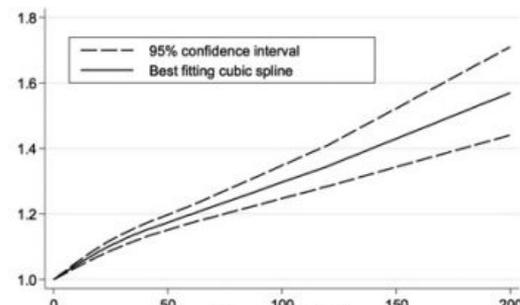
Dairy, g/day



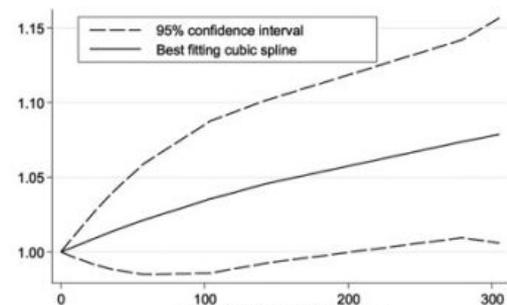
Fish, g/day



Red meat, g/day



Processed meat, g/day



Sugar-sweetened beverages, g/day

## 9. Excessive salt intake in the Russian Federation

Excessive salt intake is one of the causes of high blood pressure and cardiovascular diseases.

Reducing salt intake to the recommended level (less than 5 grams per day) will have significant positive effect on public health.

We could not find a national figure for salt consumption

According to a study, salt intake among healthy Russians is 10.9 g per day, and among patients with arterial hypertension, 15 g per day.

(Beloglazova I., Mogutova P. Poteshkina N. Salt consumption and cardiac remodeling in patients with arterial hypertension // Bulletin of Russian State Medical University. - 2013. - No 1)



Traditional pickled vegetables 9

# 10. Suboptimal intake of fruits and vegetables in Russia

- Consumption of fruits and vegetables reduces the risks of cardiovascular diseases, and is also associated with a reduced risk of all-cause mortality.
- The World Health Organization recommends consumption of at least 400 grams of fruits and vegetables per day (excluding potatoes). Based on the latest scientific data, this indicator can be increased to a level of at least 500 g and up to 800 g of vegetables and fruits per day.
- According to Rosstat, in 2016, the Russian people consumed about 470 grams of fruits and vegetables per day, and this figure also includes canned and salted fruits and vegetables, which are potentially harmful to health.
- HAPIEE cohort study showed that Russians' low consumption of fruits and vegetables significantly increases the risks of CVD mortality and the risks of developing hypertension (Stefler et al., 2016).

## **11. The problem of iodine deficiency in the Russia**

The actual average iodine intake of a resident of Russia is 3 times lower than the reference values (150-300 mcg) and is only 40 - 80 mcg per day.

The whole territory of Russia is iodine deficient.

Every year, more than 1 million adults and 650 thousand children are estimated to have thyroid diseases caused by iodine deficiency.

Universal salt iodization is not implemented in Russia (the most effective and low-cost method for eliminating iodine deficiency according to the recommendations of the World Health Organization).

# Conclusions

Obesity is a growing public health problem in Russia

More nutrition research is needed

IHME's nutrition risk factors are consistent with international and Russian research

Thank you for your attention!

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