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~~A Comparison of Per Capita Food Availability in Russia~~

~~1913 and 1956~~

~~SUMMARY and Conclusions~~

Although averages hide seasonal, regional and social class variations in food consumption rates (all of which variations are probably significant in the Soviet Union), several facts stand out in a comparison of the present average food availabilities in 1913 and 1956. The present average diet continues to be primarily a bread and potatoes diet with only moderate improvement since 1913. Diets with such a high proportion of starch, and low proportion of animal products, are typical of countries with low levels of living.

There has been some improvement in the quantity of so-called "quality" foods and in some cases the percentage increases have been substantial. In general, however, the consumption of these foods was at a low level to begin with in 1913 so that, even with the increases, the per capita availability still remains below that of most Western European countries.

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The absence of any sizable area climatically suitable for winter production of vegetables, plus the lack of refrigeration and rapid transportation facilities imposes even greater monotony in the diet during the winter season due to the absence of fresh or frozen fruits, and vegetables. The general lack of refrigeration and rapid transportation facilities also adversely affects the regional distribution and ready availability of other food items such as meat, fish and milk.

The average Soviet diet apparently is entirely adequate as far as total calories are concerned, containing approximately as many calories as the average diet. Furthermore the average Soviet diet does not appear to be deficient in any of the nutritive elements commonly recognized as necessary for the maintenance of health. This diet is monotonous by U.S. standards, but since dietary tastes are apparently a function of habit it is probably more palatable to the Soviets than to Americans or Western Europeans, who are accustomed to quite a different diet. The fact that there have been some improvements in recent years probably also helps to make this diet acceptable.

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11. Food Availabilities 1913 and 1957

In prerevolutionary Russia food items prepared from grain constituted a major share of the average diet. The Russians ate grain in the form of dark bread and as stiff porridge (*kasha*) and drank *kyaz* (a slightly fermented beverage made from baked bread) and *yodka* (with a grain base). Despite the high per capita consumption of grain in the prerevolutionary period the Russians exported more than 10 million tons of grain annually\*, three or four times more than Soviet exports in recent years.

A very high per capita grain consumption still is a predominant feature of the present day Soviet diet although an increase in certain so-called "quality" foods (e.g. milk, vegetable oils, sugar, etc.) has made possible some decrease in the percapita consumption of bread. The present estimate of per capita grain consumption in the USSR (230 kilograms) compares with an

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\* In some years however exports probably did not represent genuine surplus. Jasny quotes a famous statement: "We will not eat enough but will export."

Jasny, Leon. The Socialized Agriculture of the USSR, Stanford, 1949.

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average consumption in the U.S. of only about 100 kilograms, in Denmark of about 120 kilograms, and in Italy of about 200 kilograms. ✓

Potatoes have traditionally formed an important supplement to grain in the Russian diet in regions where climate permitted their production. It is estimated that in recent years the per capita consumption of potatoes has even exceeded the prerevolutionary level. (See Table 2). It should be noted, however, that the estimated availability of potatoes for food in 1956 (190 kilograms) is higher than in previous post World War II years, due to an excellent potato crop in 1956.\* An estimated per capita availability of about 160 kilograms probably would be more representative of recent years in the USSR. Within the USSR there are significant regional differences in the per capita consumption of potatoes, varying all the way from 300 kilograms per capita in Belorussia to only 25-45 kilograms in Central Asia and the

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\* These figures and subsequent data on consumption in the U.S., Denmark, and Italy are computed from FAO data in Yearbook of Food and Agriculture Statistics, Vol. II, Part I, 1955, p. 202-203.

\* The 1956 potato harvest was officially reported to be 50 percent greater than the 1955 harvest.

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in 1913. 1/

As contrasted with the present estimated Soviet consumption of potatoes about 160-190 kilograms per capita, the comparable figures in the U.S. are less than 50 kilograms, in Denmark about 135, and in Italy 45.

Per capita meat consumption in Russia in 1913 was at a relatively low level (less than one-third that of the U.S. 2/) and much of the meat was of

poor quality. There has been no improvement during the intervening years and the estimated per capita availability of meat in the USSR at the present

time is even slightly less than in the prerevolutionary period. Soviet

leaders recognize that the livestock industry is one of the lagging sectors of their agricultural economy and have been taking special measures

in the last few years to improve the situation. As far as meat

production is concerned, however, their efforts to date have had

little success. Present U.S. per capita meat consumption exceeds that of

Profile 14, 1956, p. 21.

1/ Computed from data in U.S. Department of Agriculture Miscellaneous Publication No. 691, Consumption of Food in the United States, 1909-13.

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the Soviet Union by more than 4 times.\* Per capita consumption of meat in Denmark is almost 3 times that of the USSR while in Italy the consumption of meat is about equal to that of the Soviet Union.

In some regions of the USSR, fish are an important supplement to meat in the diet. The average per capita consumption of fish in the Soviet Union has doubled from 1913 to the present (from 4.5 kilograms to 9 kilograms). Thus at the present time the average Soviet diet contains about 40 percent as much fish as it contains meat (in terms of weight). This high percentage relationship of fish to meat is a reflection of low meat consumption rather than exceptionally high fish consumption. The per capita consumption of fish in the U.S. and Italy is only about half of that in the USSR, but in Denmark consumption of fish per capita is about one-third greater.

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\* In recent speeches Khrushchev has launched a program of "catching up with the U.S. in per capita meat and milk production." His comparative figures show the U.S. to be leading by 3.2 times in per capita meat production but it is believed that official Soviet meat figures are overstated by as much as 30 percent. For a more detailed discussion of this subject see the as yet unpublished Project EIC-P-12, "Policies, Performance, and Prospects of Soviet Agriculture" (Section on Analysis of Khrushchev's New Livestock Goals).

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The per capita availability of milk in the USSR at the present time is estimated to be about 20 percent greater than in 1913, but all of this increase has taken place within the last two years. An increased supply of feed, particularly green fodder, for cows has made possible this increased output of milk. According to figures given by Khrushchev in his recent "heat and milk" speeches, milk production in the U.S. on a per capita basis exceeds that of the Soviet Union by about 40 percent. This percentage figure is probably too low since it is believed that the current published Soviet milk production figures may be overstated by as much as 15 percent. 1/ The per capita consumption of milk in Denmark is only slightly less than that in the U.S. and thus considerably higher than in the USSR but consumption in Italy is probably somewhat below that in the Soviet Union.

Vegetable oil production in the Soviet Union has increased significantly in recent years and at the present time exceeds the 1913 level by over 3 times.

See the as yet unpublished Project XIC-F-12, "Policies, Performance and Prospects of Soviet Agriculture" (Section on Analysis of Khrushchev's Five Year Livestock Goals).

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The industrial use of these oils for soap, paint, etc. has also increased so that the per capita availability for food is now about twice the pre-revolutionary level.

Sugar is another high caloric value food, the per capita consumption of which has increased sharply in the USSR in recent years. The per capita consumption now is more than three times the 1913 level, and exceeds the Italian level of consumption, but is only a little over half the consumption rate in the U.S. and Denmark.

Vegetables have long formed an important part of the Russian peasant diet, particularly during the summer season. The importance of vegetables in the Soviet diet lies in the variety they add to an otherwise rather monotonous diet, and also in the fact that they have a protective, nutritive value all out of proportion to their low caloric value. Cabbage, cucumbers and beets, both fresh and pickled, have been the 3 main vegetables. The widely consumed "borshch" soup contains cabbage or beets as a primary ingredient. The present per capita consumption of these and other vegetables is slightly

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higher than in 1913 but the high degree of seasonality in the rate of consumption of this food has not been significantly changed since the prerevolutionary era.

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Table 1  
Production of Selected Food Items in the USSR,  
1913 and 1956.

	Units: Million Metric Tons	
	1913 <sup>a/</sup>	1956 <sup>d/</sup>
Grain	83.7 <sup>b/</sup>	115.0
Potatoes	32.1 <sup>c/</sup>	100.0
Meat (including edible body fats)	3.8 <sup>c/</sup>	4.5
Vegetable oils	0.47 <sup>d/</sup>	1.52
Fish	1.09 <sup>d/</sup>	2.62
Milk and milk products in terms of milk	28.8 <sup>d/</sup>	43.4
Sugar (raw)	1.36 <sup>d/</sup>	4.35
Vegetables	9.0 <sup>d/</sup>	35.2

a. Production data for 1913 are based on present boundaries and, hence, are comparable to the 1956 data.

b. Based on an area of 104.6 million hectares <sup>1/</sup> and a yield (1909-13 average) of 8 centners per hectare. <sup>2/</sup>

c. Based on an area of 4.2 million hectares <sup>3/</sup> and a yield (1909-13 average) of 76.5 centners per hectare. <sup>4/</sup>

d. Includes beef and veal—1.5 mil. tons; pork—1.4 mil. tons; mutton, lamb and goat meat—0.6 mil. tons; poultry meat—0.3 mil. tons.

These estimates (except poultry meat) were obtained by multiplying 1 Jan 1916 numbers (Jasny states: "The livestock figures of the 1916 census are believed to be applicable also to 1913 and are always so used in the USSR." <sup>5/</sup>) by factors of kilograms of meat per head of livestock as follows: beef and veal—25.43; pork—60.8; mutton, lamb and goat meat—6.67. (For a more detailed discussion of the use of these factors see source <sup>6/</sup>) Poultry meat was assumed to be 8.3

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percent of total meat production, as was the case in 1938. 7/  
e. 8/. This includes only industrial processing and does not include home  
processing. However, Jassy states that in the prerevolutionary period  
farmers marketed most of their oilseeds. 9/

f. 10/

g. Based on 23.8 million cows 11/ and an estimate average yield of 1000  
liters per cow. 12/

h. 13/

i. Based on an area of 642,000 hectares 14/ and an estimated yield (1926-29)  
average 15/ of 138 centners per hectare.

j. For all 1956 data see source 16/.

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Sources, Table 1

- Harodnyye Khozyaystvo SSSR y 1956, p. 112. U.  
Jasny, ibid. The Socialized Agriculture of the USSR, Stanford, 1949,  
p. 791. U.
- Harodnyye Khozyaystvo SSSR y 1956, p. 112. U.  
Jasny, op. cit. (2, above), p. 791. U.  
Ibid., p. 189. U.
- EIC-P-12, (ORR Project "Policies, Performance, and Prospects  
of Soviet Agriculture, TO BE PUBLISHED. See the Meat section/  
Ibid., 8.
- Harodnyye Khozyaystvo SSSR y 1956, p. 65. U.  
Jasny, op. cit. (2, above), p. 192. U.
- Harodnyye Khozyaystvo SSSR y 1956, p. 9.  
Ibid., p. 134. U. Eval. RR 2.
- Jasny, op. cit. (2, above), p. 190. U.
- Harodnyye Khozyaystvo SSSR y 1956, p. 98.  
Ibid., p. 126. U.
- Jasny, op. cit. (2, above), p. 599. U.  
EIC-P-12, op. cit. (6, above), 8.

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Table 2  
Comparison of Per Capita Availability\* of Selected  
Food Items in the USSR, 1913 and 1956.  
(\* after deductions for non-food uses)

	1913 <sup>a/</sup> kg/capita <sup>b/</sup>	1956 <sup>c/</sup> kg/capita <sup>b/</sup>
Grain	260 <sup>d/</sup>	230
Potatoes	130 <sup>d/</sup>	190
Meat (including edible body fats)	24 <sup>d/</sup>	21.5
Vegetable oils	3 <sup>d/</sup>	6
Fish	4.5 <sup>d/</sup>	9
Milk and milk products in terms of milk	167 <sup>d/</sup>	197
Sugar (raw)	6.5 <sup>d/</sup>	23
Vegetables	56.5	75

a. All data for 1913 are based on present boundaries and, hence, are comparable to the 1956 data. Population in 1913 (present boundaries) gives as 199.2 million. <sup>1/</sup>

b. After deductions for net trade, stocks, seed, waste, feed, and industrial uses.

c. Estimated average 1909-13 per capita consumption. <sup>2/</sup>

d. Assumed to be the same as the 1924-27 per capita consumption of 130 kilograms. <sup>3/</sup> This is probably not an underestimate since at this consumption rate in 1913 only about 1 million tons of potatoes would have been available for food and industrial uses, after deductions for seed and waste. If no potatoes were fed or used industrially the per capita availability of potatoes would have been only 138 kilograms.

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4. Includes all edible body fats. Actually a small percentage of these fats probably were used industrially in the manufacture of soap, etc.
5. Includes all edible vegetable oils, although it is possible that a very small percentage was used industrially.
6. Amount available for consumption was obtained by taking total fish catch less waste, assumed to be 32% total catch as in recent years. 4/
7. Amount available for consumption was obtained by taking total milk production less feed and waste. Feed and waste were assumed to account for 7.5% of total production, as in the 1920's. 5/
8. Amount available for consumption was obtained by taking total sugar production less exports. Sugar export was estimated at 330,000 tons, the 1911-13 average. 6/
9. For all 1956 data see Source 7/. Population in 1956 (end of year) was estimated at 202.8 million.

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Sources, Table 2

Народное хозяйство СССР в 1956, p. 17. U.  
Jassy, Anna. The Socialized Agriculture of the USSR, Stanford, 1949,  
p. 751. U.  
Ibid., p. 591. U.  
Project KIC-F-12, (ORR Project Policies, Performance, and  
Prospects of Soviet Agriculture, TO BE PUBLISHED. /See section on Fish  
S.  
Jassy, op. cit. (2, above), p. 766. U.  
Ibid., p. 194. U. Eval. BR 2.  
Project (ORR Project Policies, Performance and  
Prospects of Soviet Agriculture, TO BE PUBLISHED. S.