## NUTRITION IN THE UKRAINIAN S.S.R.<sup>1</sup>

## WILLIAM P. FORREST, D.P.H.2

HIS short account of the nutritional position in the Ukraine is based upon seven months' personal experience and observation, interviews with officials, Government reports to the UNRRA Mission, and the observations of other members of the Mission, including agricultural economists, supply officers, etc. I lay no claim to exhaustive or complete knowledge but I believe that this constitutes a fairly comprehensive and unbiased picture of the true state of affairs.

## THE BACKGROUND

The Ukraine is the historic granary of Russia, the soil is very rich and almost everyone has heard of the famous Ukrainian "black earth." The population is about 40,000,000, of which about 13,000,000 is urban. In 1940 agriculture was collectivized and probably about 50 per cent mechanized on the well-known Soviet plan. The Germans and their Rumanian allies occupied the Ukraine in its entirety for two years. The destruction of equipment, livestock, and farm buildings was enormous. For example, in 1940, on the 28,000 Collective Farms, there were 90,000 tractors; in 1945, after some replacements, there were only 34,000; in 1940 there were 31,000 combines and in 1945 only 7,000; 2,800,000 horses were lost.

Until now, the worst nutritional condition was in the period immediately after liberation, when transport was in its poorest state of disorganization and at the same time had to carry military traffic. Large numbers of refugees and repatriates were moving about and the machinery of distribution was not yet reorganized. Agriculture was being slowly restarted almost entirely by hand and in the most adverse conditions. On the heels of the victorious Red Army, the evacuated Kolkhozniks (collective farmers) were returning to their wrecked farms with

<sup>&</sup>lt;sup>1</sup> A report prepared in March, 1947, for the United Nations.

<sup>&</sup>lt;sup>2</sup> Chief Medical Officer, UNRRA Mission to the Ukraine.

culties of procurement, a change for the worse became apparent. At the same time the effects of the bad harvest began to make themselves felt.

The Poor Harvest of 1946. The soil was prepared and the crops sown under the greatest difficulties due to lack of equipment, draught-power (animal or mechanical), and man-power, which latter was at least 60-70 per cent woman-power. Despite these enormous drawbacks, over 80 per cent of the 1940 acreage was planted. This must be accounted a very notable feat. In addition, by the end of 1946, largely due to the efforts of the rural population itself, with some material assistance from the Government, no less than 517,000 rural houses, 117,000 productive buildings, and 14,000 cultural buildings, had been built or

Table 2. Official Government figures on fat consumption. (Population: urban 13,000,000; rural 27,000,000.)

		Prewar	1945	1946	1947
		THOUSANDS OF TONS			
1.	Total Consumption Per Annum  (a) Animal Fats (Including UNRRA and Lend Lease)  (b) Vegetable Oils (Including UNRRA	_	87.2	123.4	76.2
	and Lend Lease)	_	<b>7</b> 9.1	69.0	85.0
	Total	_	166.3	192.4	161.2
		KILOGRAMS PER HEAD			
	<ul><li>(a) Animal Fats</li><li>(b) Vegetable Oils</li></ul>	_	2.19 1.98	3.08 1.72	1.90 2.13
	All Fats	23	4.17	4.80	4.03
	Per Head Per Day in Grams	63.0	11.4	13.4	11.0
		KILOGRAMS PER HEAD PER ANNUM			
2.	Fat Consumption by Urban and Rural Population Animal Fats				
	Rural Urban		2.0 2.73	3.06 3.13	1.89 1.93
	Vegetable Fats Rural Urban		1.86 2.41	1. <b>7</b> 0 1. <b>7</b> 8	2.11 2.16

rebuilt in the Ukraine (Pravda, Ukraine 12/13/46). Obviously, there has been no lack of effort.

But, in the very summer when a reasonably good crop, for which these courageous people had every right to hope, would have made all the difference between turning the corner from the horrors of war devastation to a steady and deserved improvement in their lot, the greatest drought since 1891 destroyed their prospects. It affected a vast area from Moldavia to the Urals, south to the Kuban and north to Moscow. This was a much more severe drought than the well-publicized ones of 1898 and 1921 and the "black earth" was parched. The crops, burnt by the hot summer sun, had little to draw upon because the snowfall in the winter of 1945-1946 had been poor. So, the high hopes withered with the wheat. Hopes were then pinned on the potato crop from Collective Farms and, a wartime phenomenon in the U.S.S.R., the allotments around the towns and cities. But here too, disaster came in the shape of a hot wind out of Asia which dried the plants and the tubers were tiny.

During all this time the livestock was being slowly and laboriously built up from gifts from the rest of the Union, by levies on Germany, and by natural increment. Meat was very scarce since no one was willing to slaughter such assets. Cows used for draught purposes gave very little milk.

There is an agricultural dilemma in the Ukraine which a good harvest would have gone far to break. Although extensive and continual demobilizations have been taking place, there is a great shortage of labor on the under-powered farms. If manpower is taken from the farms to help produce the machinery necessary to liberate more men from the land, there may not be enough men left on the land to produce sufficient food to nourish the factory workers. The poor harvest has aggravated this vicious circle.

The crop cannot, at the most optimistic estimate, be put at much more than 40 per cent of 1940 in cereals and vegetables per acre sown. There is no fodder for the jealously guarded animals (shelter for them is also scarce since the people are aries were quite well able to supplement their dietary in the markets or Gastronoms. Every effort is made to cater for them while working. They receive six weeks' to two months' leave with pay, have nurseries for infants, etc.

Supplementary rations per month for expectant and nursing

Table 4. Ration scales in force up to September 30, 1946, for various categories<sup>1</sup> in the population.

Сомморіту	I Worker in Heavy Industry		III Employe	IV DEPENDENT (SEE DEFI- NITION)	V Children up to 14	
	kilograms per month (30 days)					
Bread	36.0	18.0	12.0	9.0	12.0	
Cereals	2.0	1.2	0.8	0.6	0.8	
Meat or Fish	3.2	1.8	1.2	0.5	0.4	
Fats	0.9	0.4	0.3	0.2	0.3	
Sugar	0.5	0.4	0.3	0.2	0.3	
Potatoes	5.0	Nil	Nil	Nil	Nil	
Vegetables	3.0	Nil	Nil	Nil	2.0	
Butter (or Substitute)	Nil	Nil	Nil	Nil	60 gms.	
Fresh Milk (or Substi-						
tute)	Nil	Nil	Nil	Nil	9.0	
Vitamin Juices	Nil	Nil	Nil	Nil	Sufficient	
		DAILY C	ALORIES FRO	M RATIONS		
TOTAL	3,888	1,916	1,294	913	1,415	
Protein	487	246	164	98	177	
Fat	622	308	216	133	264	
Carbohydrate	2,779	1,362	914	682	974	

<sup>1</sup> Definitions of categories:

I. Heavy Industry: Moulders, smelters, riveters, certain stakhanovites and underground workers such as miners. The latter often receive a heavy meal before going on shift.

II. Light Industry: Railwaymen, machine tool operatives.

III. Employes: Office workers, caretakers, timekeepers, etc.

IV. Dependents: At this time meant men over 45 not working, women over 45 with no children under 14 and not working; i.e., all men under 45 and "childless" women under 45 had to work to have a card.

V. Children up to 14: This does not include extra rations, which may be received in children's institutions, e.g., day nurseries.

VI. Expectant and Nursing Mothers: From third month of pregnancy until child is one year old. Certificates are issued by the "Woman's Consultations" (Maternal Welfare Centers) and "Children's Consultations" (Child Welfare Centers), just as in Britain, but they usually can be obtained only at such centers and nowhere else. (See text).

mothers include: cereals 1.2 kg.; butter (or substitute fat) 0.8 kg.; sugar 0.6 kg.; vegetables 2.0 kg.; milk (or dried milk to make) 12.0 liters. From rations only, the total daily calories according to category are:

It should be noted that over 95 per cent of all infants are breast fed by their mothers, who are encouraged to nurse them up to the age of at least one year. It will also be seen that the provision of milk products fell well below the rather low League of Nations standards. They received ample supplies of fruit juices (UNRRA) until about the end of October. Children often

Table 5. Price changes in the Ukraine in October, 1946. All values are expressed in kilograms (1 kg. = 2.2 lb.) and only those items which changed are shown.

	Ration Prices <sup>1</sup>			
Item	New	Old	Per Cent Increase	
Bread (Black with Rye)	3.2	0.9	255	
Bread (Whole Wheat)	6.0	1.8	240	
Meat Tushonka	32.0	16.6	87	
Pork Meat in Gravy	35.3	20.5	72	
Meat and Vegetables	15.3	10.0	53	
Pork and Rice	30.7	15.7	90	
Meat and Corn	17.7	10.0	77	
Herrings in Tomato	25.0	11.5	117	
Herrings in Natural Oil	37.5	17.2	118	
Cod Smoked	18.0	9.8	84	
Lard	36.0	18.0	100	

<sup>&</sup>lt;sup>1</sup>At the same time commercial store prices decreased although not to the same extent.

received up to 60-80 grams of butter per month in schools, etc.

It cannot be said that with the exception of bread these scales were over-liberal. The bread was about 85 per cent extraction damp. Some "white" bread about 78 per cent extraction was available at extra cost. The percentage of rye in the bread varied by district. It was wholesome and nourishing. The Soviet citizen is a prodigious consumer of bread.

On October 1, 1946, in consequence of the bad harvest, the Government took steps to conserve what it could. The distribution was restricted by the following means:

In mid-January it was officially admitted that the position was extremely serious, supplies of meats, fish, fats, etc., were at vanishing point and the large-scale slaughter of animals which had taken place in the fall had had its full effects. The price of meat was 68 roubles per kg. in July, 40 in October, and 60–70 in November and December with very small supplies.

It is my opinion that the dietary available to the average ration-card holder became very inadequate from about mid-October. It was often nearly adequate in calories but gravely lacking in meat and fats, and by the end of the year the vulnerable groups were not receiving even the previous by no means adequate ration. This opinion is borne out by the fact that clinical malnutrition had made its appearance in the smaller villages, with protein dropsy and various avitaminoses being exhibited by the villagers. The townspeople now showed increased incidence of respiratory and nasopharyngeal conditions, skin infections, and a considerable lack of their former liveliness, energy, and cheerfulness. It is not admitted here that clinical malnutrition has appeared in the urban population, but I am of opinion that this may be largely a question of definition and that, if it has not, it cannot now be long delayed. It is fairly evident that little worse can befall the populace unless the bread ration cannot be met, since at present this is about all the consumer receives.

On February first, further restrictions were made in the definitions of dependency; a rigid comb-out of persons in all categories was made to do away with false classifications, etc. Female dependents must now be over 55 and dependents' rations have been cut to about what they could receive anyway, viz., 7.5 kgs. bread per month. It is thought by the Government that they can maintain their bread distribution until vegetables will be available, which they say is in May. I think that before vegetables will be available in sufficient quantity to make any significant contribution to the picture, June will be over. Practically all UNRRA products are consumed and little more can be expected from this quarter. It is my opinion

that the distribution of UNRRA foodstuffs has been the fairest, most intelligent, and most equitable of any UNRRA recipient country.

## THE MARKETS AND OTHER SOURCES OF FOOD

I will try to give a picture of the sources of food outside the ration scales. In the first place it should be noted that all fats, whether bought in markets or direct from farms, are included in Table 2. This is a truly appalling level of consumption of fats especially in a country with such severe winter conditions, where poor supplies of clothing, fuel, and shelter are the rule and where hard work is the order of the day so that they may build up something from the wreckage produced by war.

The food available to the average consumer outside the rationing system cannot be accounted as very important. The prices in commercial stores, which do not have a large turnover, are high, usually four to ten times those in ration stores, and they deal usually in the more luxury articles of trade such as smoked fish, confectionery, etc. Sugar, cereals, and the like long ago disappeared from the shelves of these stores.

Open Markets. These are free and derive their supplies from the surplus produce (over that contracted for State Trade Agencies) of Kolkhozes, from individual produce of allotment

7	June 1946	July 1946	January 1947		
Food	ROUBLES				
Bread, Kilo	22.5	23.0	50.0-55.0		
Meat, Kilo	$60.0^{1}$	70.0-100.0	60.0		
Fish, Kilo		_	63.0		
Milk, Liter	16.0	15.0	16.0		
Butter, Kilo	190.0	190.0	230.0		
Eggs, Dozen	42.0	48.0			
Cereals (Various), Kilo	_	50.0 <sup>1</sup>	l –		
Sugar		100.0	_		
Vegetable Oil	•	200.0	200.0		

Table 7. Food prices at open markets in the Ukraine.

<sup>—</sup> Very little or none on sale. Supplies vary greatly but are never very arge.

<sup>&</sup>lt;sup>1</sup> Approximate price.