

STRESS

VIOLENCE





Question:

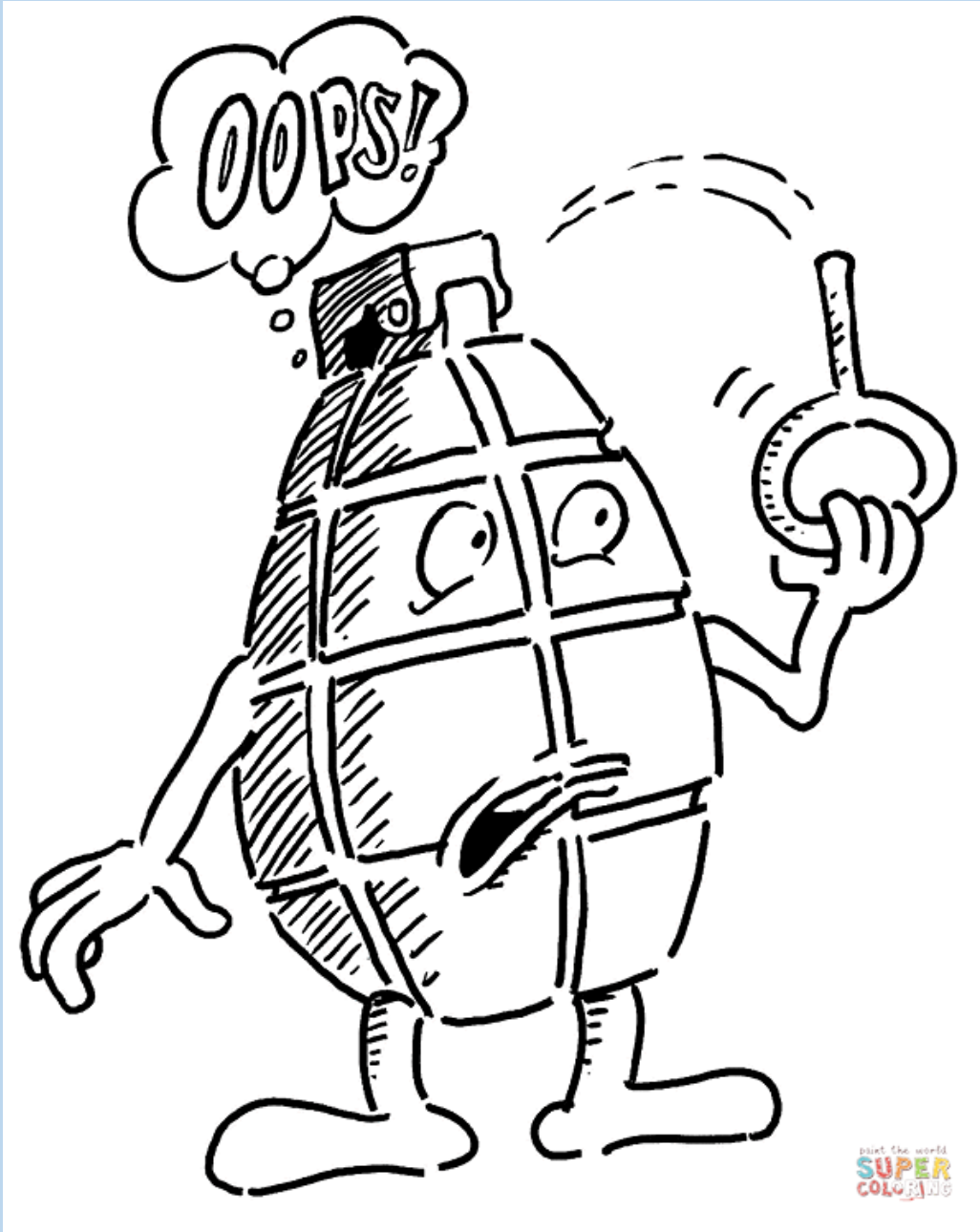
Do you remember having made a dosage of more than 4 vitamins and minerals once in your life?

To help you, here are the main vitamins and minerals useful for our vital functions:

Water-soluble vitamins: **C (Ascorbic Acid), B1(Thiamine), B2 (Riboflavin), B3 (Niacin), B5 (Pantothenic Acid), B6 (Pyridoxine), B7 (Biotin), B9 (Folate), B12 (Cobalamin),**

Fat-soluble vitamins: **A (complex), D (complex), E (Tocopherol), K(Quinone),**

Minerals: **Calcium, Phosphorus, Magnesium, Sodium, Chloride, Potassium, Sulfur, Iron, Manganese, Copper, Zinc, Iodine, Fluoride, Selenium.**

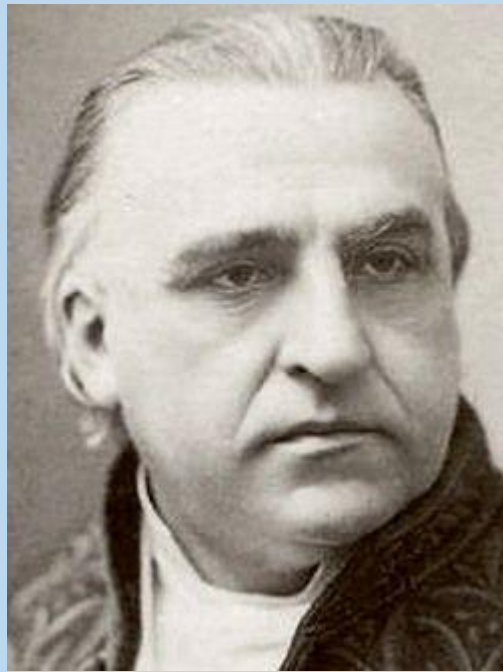






2nd Question:
Do you know this man?





Jean Martin CHARCOT (1825-1893) is the founder of modern neurology. His observations are still useful today in psychiatry, neurology and psychoanalysis. Sigmund FREUD and Pierre JANET were among his students.



painting by Luis Jimenez y Aranda, "Charcot at the Salpêtrière" (?), 1889,
in the Provincial Museum of Art, Seville.

- He was also the precursor of diets to treat schizophrenia and proved the relationship between diet and mental health.
- Abandoned for the benefit of allopathy, specific diets have become useful again since 20 years for the treatment of resistant diseases (especially ketogenic diet which is a low-carb, high-fat diet).
- But for a century and the discovery of different vitamins and minerals and their usefulness, we better understand the interaction between food and human health.



But is diet in Donbass related to mental health and violence?



The reasons for unbalanced food in Donbass

- Economic situation,
- IDP's,
- Access to well balanced Diet (especially in NGCA),
- General health situation,
- Stress, fear and fatigue due to the conflict,
- Access to normal healthcare,
- Difficult medical monitoring in prevention,
- Expensive treatments,
- Or heavy side effects,
- Other pathologies (HIV, TB, HEP,...),
- Pollution and hygienic conditions...



VITAMINS

- **Vitamin B1 (thiamine):** Helps convert nutrients into energy
- **Vitamin B2 (riboflavin):** Necessary for energy production, cell function and fat metabolism
- **Vitamin B3 (niacin):** Drives the production of energy from food
- **Vitamin B5 (pantothenic acid):** Necessary for fatty acid synthesis
- **Vitamin B6 (pyridoxine): Helps your body release sugar from stored carbohydrates for energy, create red blood cells (2)**
- **Vitamin B7 (biotin):** Plays a role in the metabolism of fatty acids, amino acids and glucose
- **Vitamin B9 (folate): Important for proper cell division (2)**
- **Vitamin B12 (cobalamin): Necessary for red blood cell formation and proper nervous system and brain function (2)**
- **Vitamin C (ascorbic acid): Required for the creation of neurotransmitters and collagen, the main protein in your skin (1)**
- **Vitamin A: Necessary for proper vision and organ function (1)**
- **Vitamin D: Promotes proper immune function and assists in calcium absorption and bone growth (2)**
- **Vitamin E: Assists immune function and acts as an antioxidant that protects cells from damage (1)**
- **Vitamin K: Required for blood clotting and proper bone development (3)**

(1) Fear and Stress (2) Depression, violence and pathological seizures (3) Extreme violence

MINERALS

- **Calcium: Necessary for proper structure and function of bones and teeth. Assists in muscle function and blood vessel contraction(1), (3)**
- **Phosphorus:** Part of bone and cell membrane structure
- **Magnesium: Assists with over 300 enzyme reactions, including regulation of blood pressure (1)**
- **Sodium:** Electrolyte that aids fluid balance and maintenance of blood pressure
- **Chloride:** Often found in combination with sodium. Helps maintain fluid balance and is used to make digestive juices
- **Potassium: Electrolyte that maintains fluid status in cells and helps with nerve transmission and muscle function (3)**
- **Sulfur:** Part of every living tissue and contained in the amino acids methionine and cysteine
- **Iron: Helps provide oxygen to muscles and assists in the creation of certain hormones (2)**
- **Manganese:** Assists in carbohydrate, amino acid and cholesterol metabolism
- **Copper: Required for connective tissue formation, as well as normal brain and nervous system function (3)**
- **Zinc: Necessary for normal growth, immune function and wound healing (1)**
- **Iodine: Assists in thyroid regulation (4)**
- **Fluoride:** Necessary for the development of bones and teeth
- **Selenium: Important for thyroid health, reproduction and defense against oxidative damage (4)**

(1) Depression (2) Stress, violence, depression (3) degradation of pre existing psychiatric pathologies and extreme violence (4) Misbalanced hormones with heavy consequences on libido

Where can we find these vitamins and minerals in food ?

B-1: ham, soymilk, watermelon, acorn squash

B-2: milk, yogurt, cheese, whole and enriched grains and cereals.

B-3: meat, poultry, fish, fortified and whole grains, mushrooms, potatoes

B-5: chicken, whole grains, broccoli, avocados, mushrooms

B-6: meat, fish, poultry, legumes, tofu and other soy products, bananas

B-7: Whole grains, eggs, soybeans, fish

B-9: Fortified grains and cereals, asparagus, spinach, broccoli, legumes (black-eyed peas and chickpeas), orange juice

B-12: Meat, poultry, fish, milk, cheese, fortified soymilk and cereals

Vitamin C: Citrus fruit, potatoes, broccoli, bell peppers, spinach, strawberries, tomatoes, Brussels sprouts

Vitamin A: beef, liver, eggs, shrimp, fish, fortified milk, sweet potatoes, carrots, pumpkins, spinach, mangoes

Vitamin D: Fortified milk and cereals, fatty fish

Vitamin E: vegetables oils, leafy green vegetables, whole grains, nuts

Vitamin K: Cabbage, eggs, milk, spinach, broccoli, kale

Minerals

- **Calcium: yogurt, cheese, milk, salmon, leafy green vegetables**
- **Chloride: salt**
- **Magnesium: Spinach, broccoli, legumes, seeds, whole-wheat bread**
- **Potassium: meat, milk, fruits, vegetables, grains, legumes**
- **Sodium: salt, soy sauce, vegetables**
- **Chromium: meat, poultry, fish, nuts, cheese**
- **Copper: shellfish, nuts, seeds, whole-grain products, beans, prunes**
- **Fluoride: fish, teas**
- **Iodine: Iodized salt, seafood**
- **Iron: red meat, poultry, eggs, fruits, green vegetables, fortified bread**
- **Manganese: nuts, legumes, whole grains, tea**
- **Selenium: Organ meat, seafood, walnuts**
- **Zinc: meat, shellfish, legumes, whole grains**

The direct consequences for mental health are an increase of :

fear and stress,

pathological fatigue,

seizures in case of psychiatric or neurological illness,

violence,

suicidal tendencies,

decreased libido,

or, conversely, exacerbation of libido that can go as far as

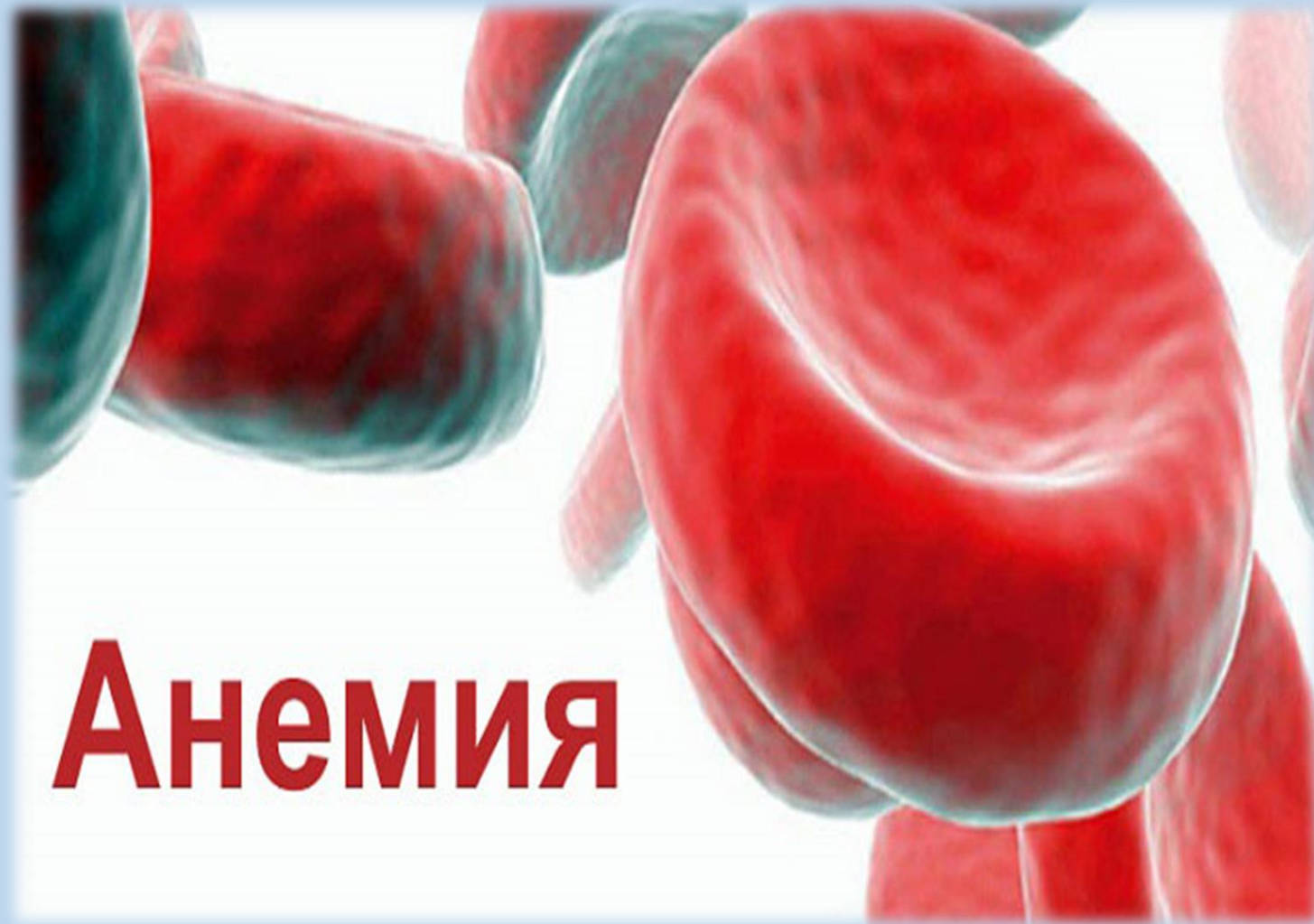
obsession and rape ...

The pathological consequences particularly affect:

- Patients diagnosed with chronic, psychiatric or neurological diseases,
- Women, especially pregnant women and women over 50,
- Children under 7,
- and the elderly.



EXAMPLE OF THE EFFECTS OF ANEMIA



Anemia is a pathological condition that is characterized by a decrease in the number of red blood cells or a decrease in the hemoglobin content per unit volume of blood, as well as the appearance of their abnormal forms, a violation of vitamin balance, a change in the number of microelements and enzymes.

Daily need of Iron



8 mg per day

Daily need of Iron



up to 18 mg per day

Daily need of Iron



15 mg per day

Daily need of Iron



not less than
30 mg per day

62% pregnant women registered in the antenatal clinics in GCA/NGCA suffer from anemia when the test is available. In 90% of pregnant women, anemia is caused by iron deficiency, and in 50% it is associated with a deficiency of folic acid and iron.

The main causes of anemia are: for 88% unbalanced or inadequate nutrition, and for 12% chronic diseases and much more.

It is important what consequences anemia may have for the life and health of a pregnant woman, as well as for the fetus. Miscarriage, bleeding during different periods of gestation, placental pathology, fetal growth retardation syndrome, low birth weight babies and other pathological symptom complexes.

STRESS



One of the other consequences of these deficits are stress, violence, depression and significant drop in libido during and after pregnancy.

CONSEQUENCE OF STRESS DURING THE LACTATION



Oxytocin is a neuro hormone that is essential for a healthy lactation.

The secretion of oxytocin can be inhibited by stress. There is then reduction of the flow of ejection of the milk, even complete inhibition of the lactation*.



The first step in the treatment of anemia is the correction of the diet: increasing the consumption of meat (as the main source of iron), and products that improve the absorption of this trace element (green vegetables, fruits, berries).



But a diet rich in iron cannot normalize hemoglobin levels in the blood, because a small percentage of iron is absorbed from food (20% from meat and 0.2% from plant foods).



Therefore, the gold standard in the treatment of anemia is the appointment of oral iron supplements.

But the needs of Pregnant and Lactating Women are multiple

Table 1 Minimum nutrient requirements for healthy women as well as pregnant and lactating women.

Nutrient	Recommended daily allowance (RDA) (healthy adults)	Pregnancy (add to RDA)	Lactation (add to RDA)	Tolerable upper intake level (UL)
Intake				
<i>Proteins</i>	50 g	+10 g	+15 g (0–6 months) +12 g (6–12 months)	ND
<i>Fat-soluble vitamins</i>				<i>(do not exceed tolerable upper intake levels during lactation)</i>
Vitamin A	700 µg	+70 µg	+600 µg	3000 µg
Vitamin D	5 µg	0 µg	0 µg	50 µg
Vitamin E	15 mg	0 mg	+4 mg	1000 mg
Vitamin K	90 µg	0 µg	0 µg	ND
<i>Water-soluble vitamins</i>				
Biotin	30 µg	0 µg	+5 µg	ND
Folic acid	400 µg	+200 µg	+100 µg	1000 µg
Niacin	14 mg	+4 mg	+3 mg	35 mg
Pantothenic acid	5 mg	+1 mg	+2 mg	ND
Riboflavin/vitamin B ₂	1.1 mg	+0.3 mg	+0.5 mg	ND
Thiamine/vitamin B ₁	1.1 mg	+0.3 mg	+0.3 mg	ND
Vitamin B ₆	1.3 mg	+0.6 mg	+0.7 mg	25 mg
Vitamin B ₁₂	2.4 µg	+0.2 µg	+0.4 µg	ND
Vitamin C	75 mg	+10 mg	+45 mg	2000 mg
<i>Minerals</i>				
Calcium	1,000 mg	0 mg	0 mg	2500 mg
Phosphorus	700 mg	0 mg	0 mg	3500 mg
Magnesium	310 mg (19–30 years) 320 mg (31–50 years)	+40 mg	0 mg	350 mg
<i>Dietary elements</i>				
Chromium	25 µg	+5 µg	+20 µg	ND
Copper	900 µg	+100 µg	+400 µg	10,000 µg
Fluoride	3 mg	0 mg	0 mg	10 mg
Iodine	150 µg	+70 µg	+140 µg	1100 µg
Iron	18 mg	+9 mg	±9 mg	45 mg
Manganese	1.8 mg	+0.2 mg	+0.8 mg	11 mg
Molybdenum	45 µg	+5 µg	+5 µg	2000 µg
Selenium	55 µg	+5 µg	+15 µg	400 µg
Zinc	8 mg	+3 mg	+4 mg	40 mg

ND, not determined due to a lack of studies in these population subsets; RDA, recommended dietary allowance.

The intake must come from food sources to avoid potential overdoses.

Graphic of the necessary supplements during pregnancy and breastfeeding





PROGRAM TO FIGHT ANEMIA IN EASTERN UKRAINE

Distribution of treatments of Multivitamin and Nutrient medical treatments to every pregnant and lactating women in Eastern Ukraine



PRESENTATION OF THE FIRST RESULTS



INSTALLATION OF THE PROGRAM in 2018

32 MW in GCA Luhansk

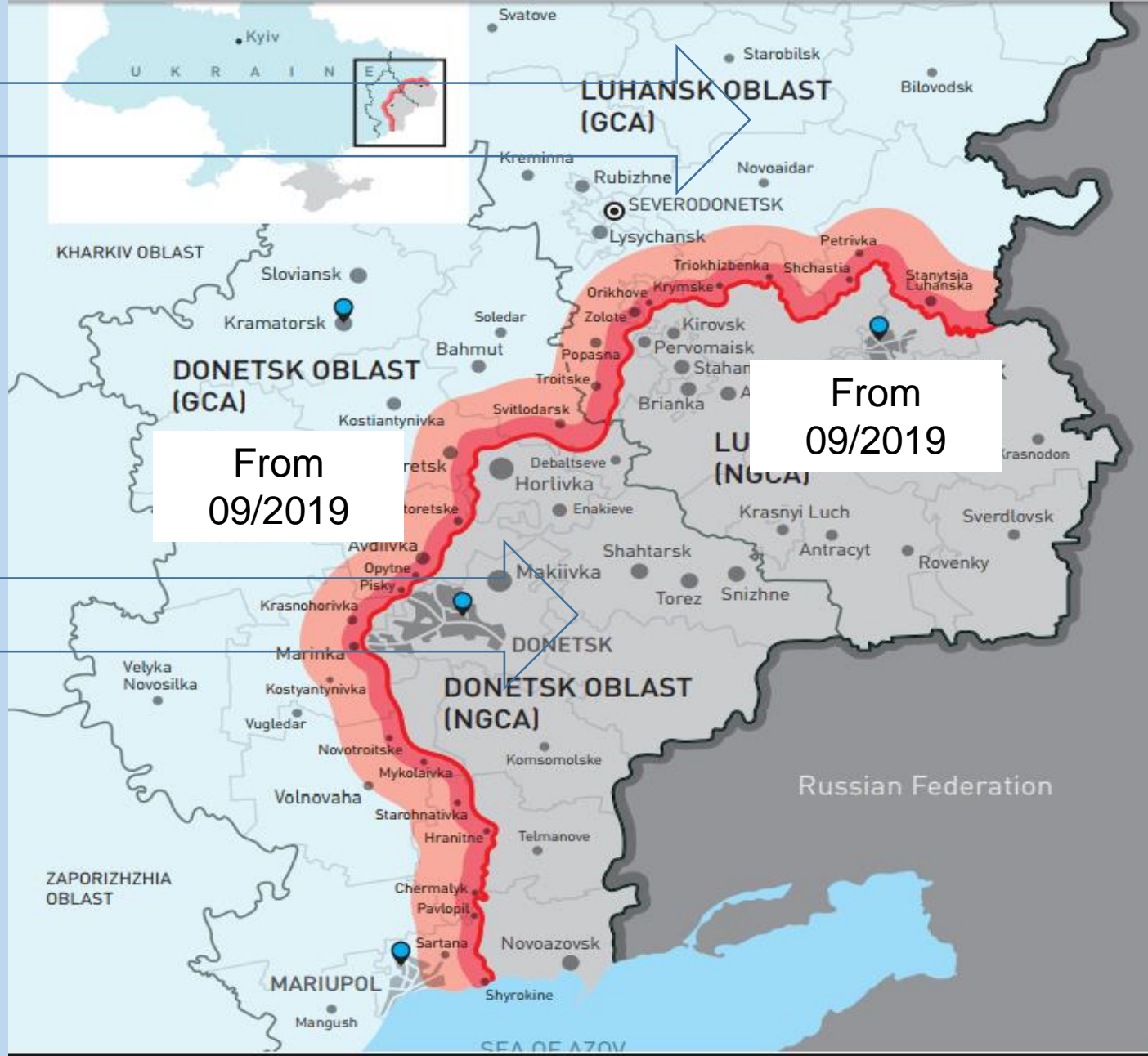
TARGET : 9600 PLW
Reached in 04/2019

7215

54 MW in NGCA Donetsk

TARGET : 12000 PLW
Reached in 04/2019

8400



GCA : Government
Controlled Area
NGCA: Non
Government
Controlled Area

MW: Maternity wards
PLW: Pregnant and
Lactating Women

At the same time distribution of vitamin A to 150,000 children from 6 months to 5 years by pediatricians

Deficit of vitamin A can cause : **FEAR, STRESS, VIOLENCE** and **Eye and vision problems**

Poor vision in the dark (night blindness).

Thinning and ulceration of the cornea on the surface of the eyes (keratomalacia).

Dryness of the conjunctiva and cornea on the surface of the eye (xerophthalmia).

Oval, triangular or irregular foamy patches on the white of the eyes (called Bitot's spots).

Perforation of the cornea.

Severe sight impairment (due to damage to the retina) at the back of the eye.

Skin and hair problems

Dry skin

Dry hair

Itching (pruritus)

And also :

[Coeliac disease](#), [Crohn's disease](#), Giardiasis, an infection of the gut (bowel), [Cystic fibrosis](#), Diseases affecting the pancreas, [Liver cirrhosis](#), Obstruction of the flow of bile...

The pediatricians have identified a significant vitamin A deficiency for children in the conflict zone since 2015.





SPECIFIC MEETINGS WITH THE SPECIALISTS (GYNECOLOGISTS AND PEDIATRICIANS) TO PRESENT THE PROGRAM





DISTRIBUTION TO THE HOSPITALS





DISTRIBUTION TO WOMEN BY GROUP





OR DURING CONSULTATIONS

