

THE ROLE OF CHEMISTRY IN THE SOLUTION OF THE FOOD PROBLEM





Communication of a living organism with nature is a relationship of nutrition!

GROWTH OF THE EARTH'S POPULATION

YEAR	QUANTITY OF PEOPLE
THE BEGINNING OF THE ERA	175 mln.
1000 YEAR	275 mln.
1800 YEAR	900 mln.
1900 YEAR	1,6 billion.
12.10 1999	6 billion.
2003 YEAR	6,3 billion.
2006 YEAR	6,5 billion.
2010 YEAR	6,82 billion.
2050 YEAR	9,2 billion.



Already, about one billion people in the world go to bed hungry every night.



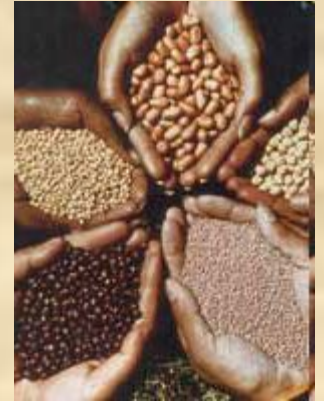
Already, somewhere in the world, someone dies of hunger every 3.6 seconds, and many of them are children

Already one third of all children suffer from malnutrition



HOW TO PROVIDE FOOD POPULATION BY EARTH?

- To increase the production of natural plant and animal food;
- Application of fertilizers, growth stimulants, artificial feed for farm animals,
- Application of protective equipment for animals and plants
- The introduction into practice of nutrition of new products extracted in the ocean.





N sodium, **P** phosphorus, **K** potassium –
elements of life



Environmentalists are concerned about



Overgrowth of ponds

The death of aquatic organisms

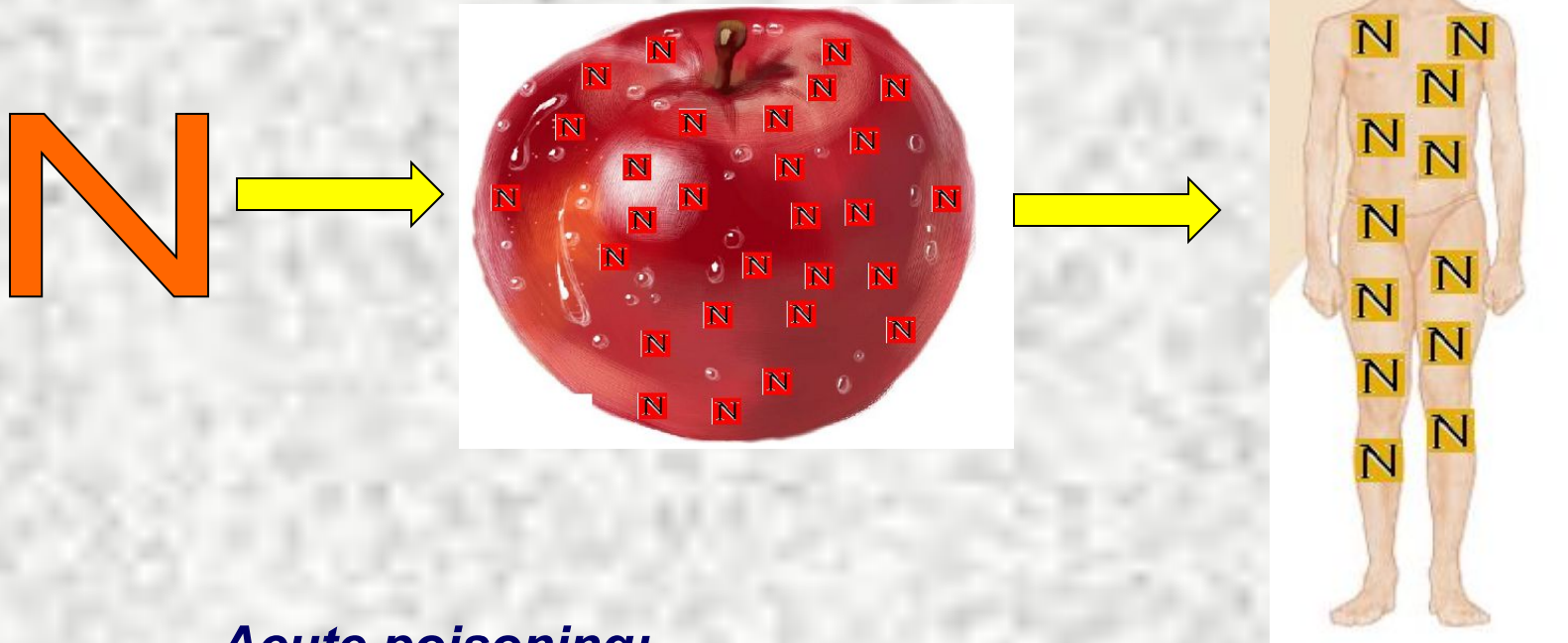


INTENSIVE WAY TO SOLVE THE PROBLEM

- ❖ **increasing the biological productivity of the area;**
 - ❖ **the use of new, high-yielding varieties;**
 - ❖ **new methods of soil cultivation.**



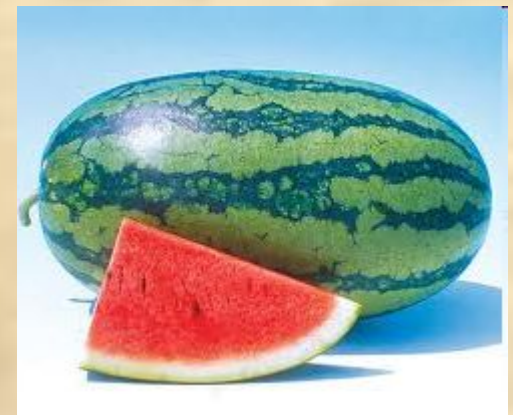
NITRATES IN THE HUMAN BODY



***Acute poisoning;
Allergic edema of the lungs;
Shortness of breath;
Pain in region of heart;
Cough, vomiting***



***THE
ACCUMULATION
OF NITRATES IN
VEGETABLES***



RECOMMENDATIONS HOW TO REDUCE NITRATES IN VEGETABLES

- ❑ WASH WELL THE VEGETABLES**
- ❑ PUT THE GREENS IN THE WATER TO SUNLIGHT**
- ❑ MECHANICAL CLEANING**
- ❑ BEETS, ZUCCHINI, CABBAGE, PUMPKIN AND OTHER
VEGETABLES SLICE AND COVER WITH WATER**
- ❑ KEEP VEGETABLES AND FRUITS IN THE FRIDGE**



Conclusions

□ *The role of chemistry is very great at solving food problems*



A photograph of a vast, lush green rice field. The rice stalks are tall and dense, with many panicles (seed heads) visible, some showing early signs of ripening. The field extends to the horizon under a bright sky. The text "Thank you for your attention!!" is overlaid in the center in a purple font.

Thank you for your attention!!