

"Biological environment of the body" and health

E. Scott-Morley
(Great Britain)

In the mid-19th century, there was a fierce debate between the famous French professor of medicine Antoine Bécham and the chemist Louis Pasteur about the nature of microbes and infections. Antoine Béchamps was the third French professor to make the statement: "la microbe ce n'est rien; le terrain c'est tout. " ("MICROBES DO NOT MEAN ANYTHING, EVERYTHING DEPENDS ON THE" BIOLOGICAL ENVIRONMENT OF THE BODY ").

The concept of the "biological environment of an organism" is not new, but it was only 50 years ago that we had the opportunity to assess its potential using objective and reproducible measurement methods. This is largely the merit of another Frenchman - Louis-Claude Vincent.

This concept was further developed and applied in practice by the pioneering work of Professor Louis-Claude Vincent of the Sorbonne. Vincent began his career as a hydrologist in Lebanon. He noted that in the area where he worked, despite the prevalence of diseases such as cholera and typhoid, there were practically no cases of cancer or heart disease. As a hydrologist, he wondered if this could be due to water quality.

Around 1935, Vincent became interested in measuring parameter values that might reflect human health. If we remember how high the percentage of water in the human body is, then it will no longer be surprising that the hydrologist became interested in medicine and health.

After spending in 1948, Vincent presented his foliage research, first "Bioelectronimeter".

Quite independently, and without even knowing about Vincent's work, the Hungarian scientist Janos Kemen published an article confirming Vincent's work. Kemen was professor of biophysics and mathematics at the Polytechnic Institute in Budapest. His work "A report on the topic Physical and mathematical explanations of the response capabilities of a living organism" was published in the collection of the Academy of Sciences in Berlin in February 1953.

This work was also published in the journal "General Scientific Review" in Paris (numbers 7 and 8, 1953). Kemen showed that Vincent's three biological factors correspond exactly to the three biocybernetic factors that he derived mathematically.

Fundamentals of Chemistry

PH solution acidity

Ions arise during the dissociation of water:

$H_2O \rightleftharpoons H^{++} O^{-}$

Dissociation rate of water = 1×10^{-14} mol / liter (at 22°C and 1 ATM)

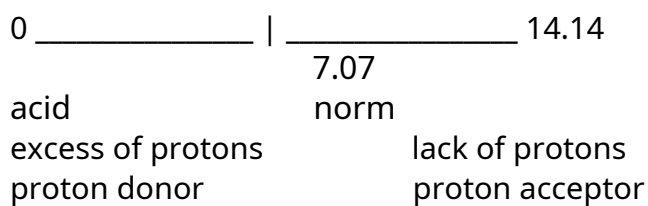
When water dissociates, H + and OH- ions are formed.

This fact is the basis of the concept of acidity. The definition of acidity, as an indicator of pH, was given by the Swedish physiologist Sorenson in 1909.

$$pH = - \log [H +] = \text{colog} [H +] = \log 1 / [H +]$$

By this definition, the concentration of H + can range from 0 to 14.14.

Hydrogen ions are protons



Equality shows that pH increases with decreasing H +.

Thus, with increasing pH (more alkaline environment), the number of protons decreases.

Concentration acid helps support definite biological balance in the body. For the normal functioning of cells and the course of chemical reactions in the body, the value of acidity is very clearly defined and must be constantly maintained at a given level.

Acidity index values for various body fluids.

Cloth or liquid	pH
Saliva	
Gastric juice	6.0-7.0
	1.0-3.5
Pancreatic secretions	8.0-8.3
Bile	7.8
Discharge of the small intestine	7.5-8.0
Urine	4.5-8.0
Arterial blood	7.4-7.45
Capillary blood	7.35-7.4
Deoxygenated blood	7.3-7.35

Microbes and acidity
(optimal values for the crop)

Organism	pH
Coughing fits	6.2
Leprosy	6.5
Tuberculosis	6.8
Streptococcus	6.9-7.1

Tetanus	6.9
Staphylococcus	7.3

- Typhoid fever (salmonella) 7.3
- Plague 7.5
- Typhoid fever 7.5
- Coli bacteria 7.6
- Pneumonia 7.6
- Diphtheria 8.0
- Cholera 8.8

Redox potential rH2

rH2 is the pressure of hydrogen molecules that acts on the cathode. It is determined by the Nernst formula:

$$E = E_0 + 2.3 \frac{RT \log (\text{oxidants})}{F (\text{reducing agents})}$$

where: E is the redox potential in millivolts, E₀ is the standard potential when all reactions are equal, R is the gas constant, T is the temperature in Kelvin, F is the Faraday constant.

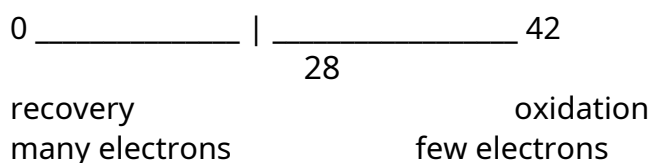
In contrast to pH, the role of the redox potential in modern medicine is just beginning to come to the fore, despite the fact that research in this scientific direction has been carried out since 1928. Already several reputable scientists have stated that redox potential may play a more significant role than pH in understanding the process of biological action and interaction. The above

the formula for calculating the redox potential looks daunting.

For a biological system, the formula takes the form:

$$E = E_0 + 2.3 \frac{RT \log (H_+)}{F rH_2}$$

rH range₂ varies from 0 to 42, where 0 corresponds to the maximum molecular hydrogen pressure of 1 bar, and 42 to the minimum pressure of hydrogen molecules in 1 x 10⁻⁴² bar.



A value of 0 corresponds to the maximum hydrogen pressure and, accordingly, the largest number of electrons.

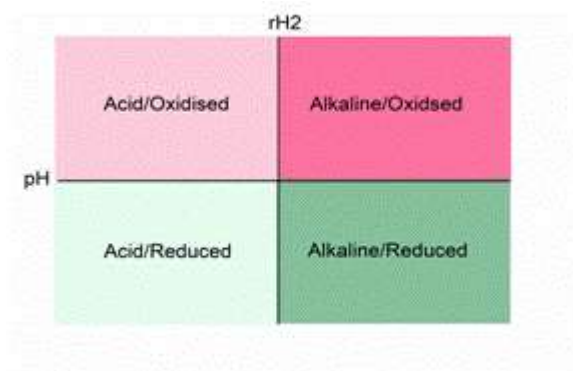
A value of 28 is the neutral point. At 42 there are no free electrons, and the oxidation is maximum.

Oxidative stress information can help with analysis

features functioning cells and mitochondria, which are directly related to a large number of different pathological conditions.

Four quadrants (rice. one)

Let us draw the coordinate axes, plot the pH values along the horizontal axis, rH2 along the vertical. At the intersection of the axes, we postpone the values of 7.3 for pH and 22 for rH2. As a result, four quadrants were formed. They are associated with four different pathological conditions. The body is in optimal condition if the blood values are slightly shifted to the zone marked as acid / reduced. Virtually all degenerative and viral diseases that we encounter in modern life are associated with the alkaline / oxidised quadrant.

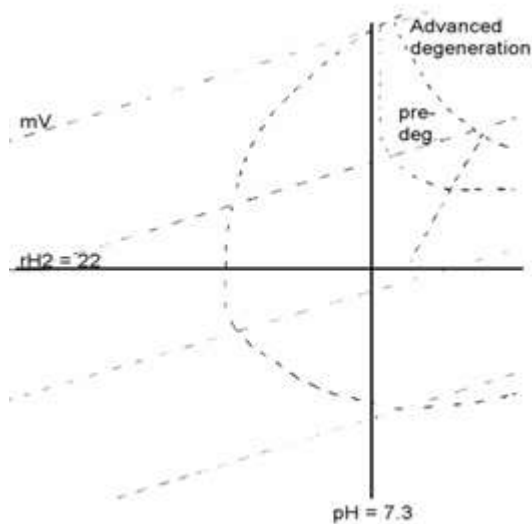


Rice. one

Ideal values

PH liquid	rH2
Blood 7.3	22
Saliva 6.4	22
Urine 6.8	24

Base Chart



Rice. 2

Here is a general view of the form for displaying the readings (Fig. 2). The outer dashed line represents the border of life. If the blood values are outside this area, then the body is dead! Two dashed curves are shown in the upper right square. The lower curve is the border of the pre-degenerative state, including precancerous. This does not mean that the patient has cancer or that cancer will soon develop, but it is an indicator that the biological condition in which the cancer develops has already occurred.

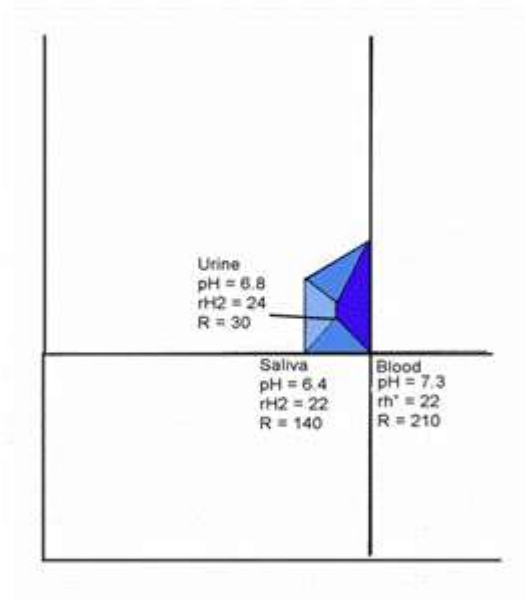
The upper curve indicates severe degeneration. If the value for blood falls into this area, then death is already inevitable.

Specific electrical resistance

Now we need to consider another basic measurement - the resistivity of a liquid. In biological systems conductivity depends on the amount of ions that are formed during the dissolution of mineral salts. Or simplified, if a large amount of mineral salts are present in the liquid, this provides a low resistivity and high conductivity. Conversely, if there are few mineral salts, then the resistance is high and the conductivity is low.

Good health schedule

Based on the values of the various indicators described above, we can build a graph of absolute health (Fig. 3). It resembles the roof of a house when viewed from above.



Rice. 3

Resistivity values for blood, saliva and urine are shown as vectors. Note the following ideal values:

Blood pH - 7.3, rH2 - 22, R - 210 Ohm.

Saliva pH - 6.4, rH2 - 22, R - 140 Ohm.

Urine pH - 6.8, rH2 - 24 (see above), R - 30 Ohm.

Note that these are ideal values. Obviously, there is a range of acceptable values for each fluid, but ideal values are those values at which the optimal chemical and physiological state of the body is achieved.

Also noteworthy is the low value for urine resistivity. This value indicates that there is an optimal release of unnecessary substances. High resistivity values indicate poor precipitation.

High rH2 values indicate oxidation, which implies increased amounts of free radicals.

Some definitions

Factor "C" reflects the tendency towards cancer or the development of a cancerous condition.

Factor "Vi" (The Vitality Factor) - Factor of vitality. Now it is called a protective factor.

Factor "PE" (Active Potential) - Active potential. Now it is called energy potential.

Factor "Fq" (The Global Factor) - Global factor. Now it is called integral bioelectronic value.

Weighted factors

So far, we have considered the values of the indicators for each fluid independently of each other. We will now compare different liquids with each other.

This assessment will take into account all nine indicators. As a result

of long-term research, Professor Vincent deduced a formula that included the values of all nine indicators, the result is a key number - the factor of vitality.

This factor takes into account the deviation from the ideal value in the area of the cancer zone. The calculation of the factor of vitality helps to determine the body's defenses against cancer.

First, let's determine the weighted factor for the pH value.

$$\begin{aligned}
 &(\text{pH blood} \times 100) - 730 = \dots \times 1 = (\text{pH saliva} \\
 &\times 100) - 650 = \dots \times 0.5 = \dots (680 - (\text{pH urine} \\
 &\times 100)) = \dots \times 0.2 = \dots
 \end{aligned}$$

Total

$$\text{Total} \times 1.5 = \text{pH weighted}$$

Now let's take the value of the weighted factor for rH2

$$\begin{aligned}
 &(\text{rH2 blood} \times 10) - 220 = \dots \times 1 = \dots \\
 &(\text{rH2 saliva} \times 10) - 220 = \dots \times 0.5 = \dots 240 \\
 &- (\text{rH2 urine} \times 10) = \dots \times 0.2 = \dots
 \end{aligned}$$

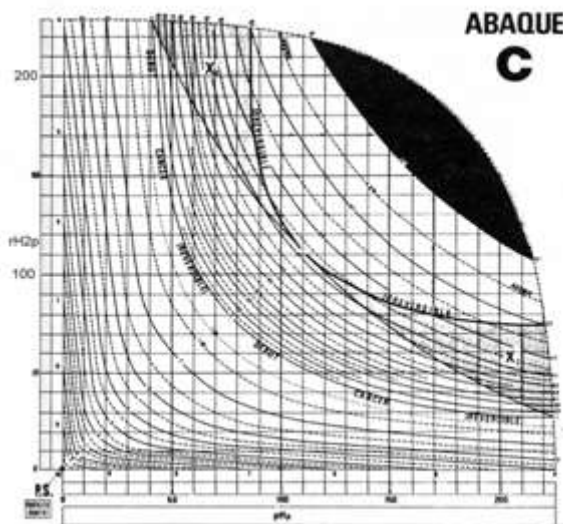
Total

$$\text{Total} \times 1.5 = \text{rH2 weighted}$$

And finally, the value of the weighted factor for the conductivity. $R \text{ blood} \times 10 = \dots\} = T1$

$$\begin{aligned}
 &R \text{ saliva} \times 0.77 = \dots\} R \text{ urine} \times 2 \\
 &= \dots\} \text{Total} = T2 \\
 &R \text{ weighted} = T1 / T2
 \end{aligned}$$

In fig. 4 shows weighted pH and rH2 values.



Rice. 4

In the lower left corner, the weighted pH and rH2 values are 0. This is the ideal value for "absolute health". This value is assigned index 10.

If you move diagonally from the lower left corner to the upper right corner, you can see that the diagonal has crossed the curve. All values that fall into the area under this curve will be less than 10. Then the diagonal crosses several more curves. The distance between these curves, as they approach the upper right corner, gradually increase, forming a logarithmic scale.

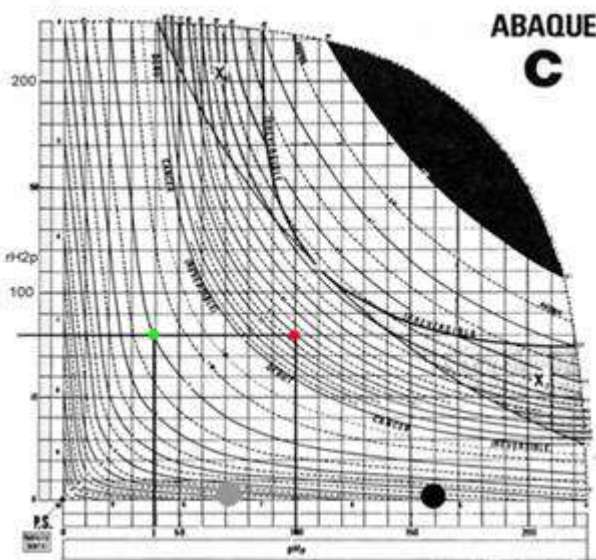
Curve 1 is the beginning of the zone of reversible cancer, curve 0.38 is the beginning of irreversible cancer.

So far, we have considered weighted values for pH and rH2 for each of the three liquids. The weighted value for resistivity should also be taken into account to determine the factor "vitality".

Let's consider two examples (fig. 5):

In the first case, the weighted values for pH and rH2 are equal, respectively: pH w = 40 and rH2 w = 80.

The point with these coordinates is highlighted in gray on the graph. Obviously, she is far from the cancer zone.



Rice. five

In the second case, the rH2 value is the same, but the pH value is 100. The resulting point is highlighted in black, and it is in the precancerous state.

Interpretation of results

From the study of statistical data, the following tendencies were revealed:
 values 10–1.0 - very low probability of cancer;
 values 0.99–0.35 - precancerous condition;
 values 0.35–0.11 = irreversible cancer.

"Protective factor" or "Vitality factor"

$$FA (Vi) = C \text{ factor} \times R \text{ weighted}$$

This factor characterizes the body's defenses against cancer.

Values:

100-20 the risk of cancer is low. Annual surveys.

20-10 there is little cancer risk. Quarterly survey.

10-5.5 a warning. Preventive treatment. Monthly examination.

5.5-1 danger. Active treatment. Continuous monitoring <1 major hazard.

Energy indicator

$V = \text{Red-Ox potential} = 30 (\text{rH}_2 - 2\text{pH}) = \text{mV}$

Ohm's law: $V / R = I \text{ mA}$

Energy in μW $W = V \times I$

We get $W = [30 (\text{rH}_2 - 2\text{pH}) R$

Ideal values

	pH	rH2	R	V (mV)	I (mA)	W (μW)
Blood	7.3	22	210	222	1.06	235
Saliva	6.5	22	140	270	1.93	520
Urine	6.8	24	thirty	312	10.4	3244

Interesting to compare energy values for blood saliva with the values of the same indicators for urine. All three urine energy values should be higher than the other two fluids. The R value is especially different. Urine should contain four times more energy than blood and saliva combined. One of the functions of urine is to rid the body of excess energy.

Ideal values of indicators and values of indicators for cancer

	pH	rH2	R	V (mV)	I (mA)	W (μW)
Blood	7.3	22	210	222	1.06	235
Crayfish	7.6	28	140	384	2.74	1053
Saliva	6.5	22	140	270	1.93	520
	7.2	29	230	440	1.93	849
Urine	6.8	24	thirty	312	10.4	3244
	5.1	nineteen	90	264	2.93	774

After analyzing these typical values, it is easy to see that the values of all indicators in cancer for blood and saliva have increased.

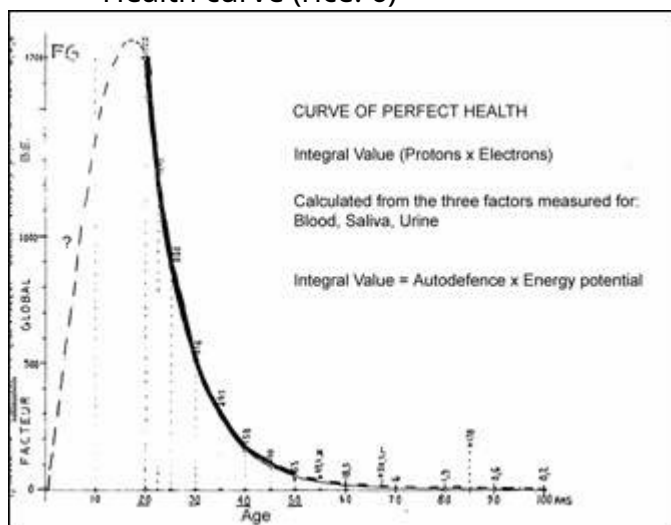
It should be noted that the value of the energy index for blood has increased five times compared to the ideal value. While the same indicator for urine is only a quarter of the ideal

values. Energy cannot leave the body and oversaturated it. Since the energy must somehow dissipate, the body's response will be an increase in temperature and / or cell division. Most cancers are characterized by a rise in temperature and cell proliferation.

This fact, apparently, has not yet been investigated, although the above values are obtained by simple physical measurements and direct mathematical calculations.

Bioelectronic index
 Biological index = "Protective factor" x "Energy potential"
 Biological index ("Global factor") gives meaning, characterizing the general condition of the body, depending on age.

Health curve (rice. 6)

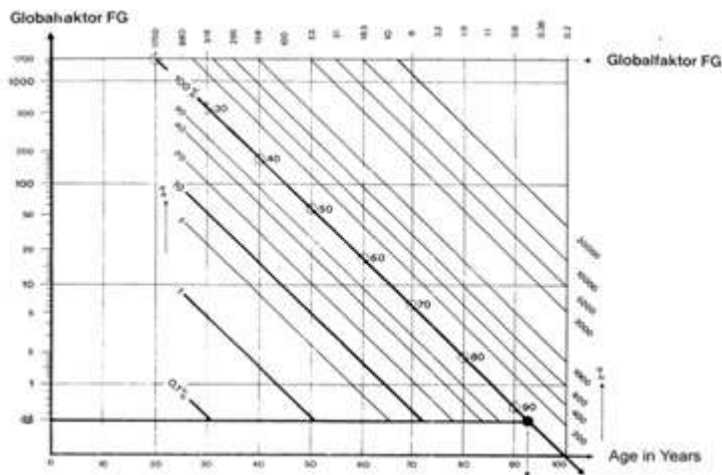


Rice. 6

By about 20 years of age, the health of the human body should reach its maximum potential. At the same time, the biological index is about 1700. Then it quickly decreases and by the age of 30 it is only 512. By the age of 80 it decreases to 1.9.

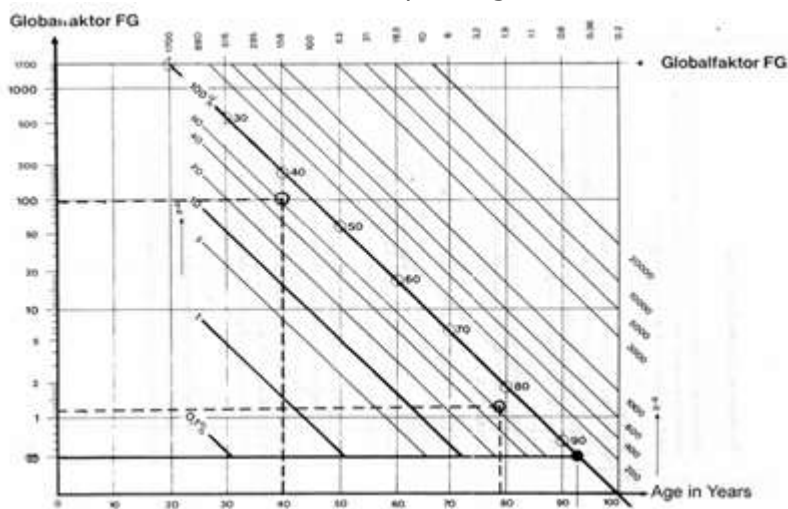
Global factor and biological age

In the previous graph, the values for age and biological index were plotted on a linear scale, and an exponential curve formed in the range from 20 to 100 years. The graph of the same curve can be constructed by postponing the values of the biological index on a logarithmic scale (Fig. 7), while it will take the form of a straight line, such a graph has a number of advantages.



Rice. 7

Let's consider two examples (fig. 8).

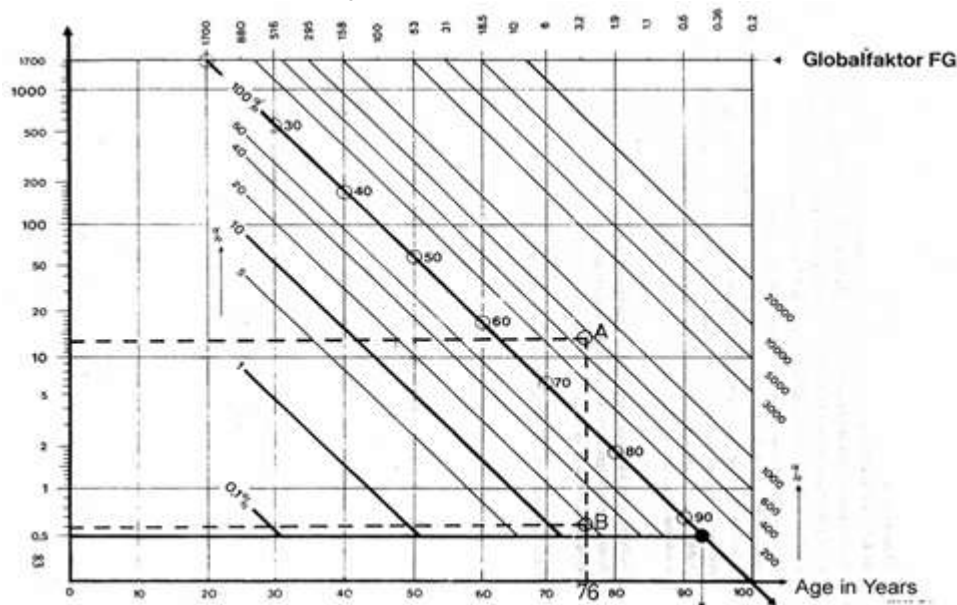


Rice. eight

In the first case, the patient's age is 78 years, GF (global factor) - 1.2, which is about 60%. This suggests that the patient is quite healthy for his age.

The age of the second patient is 40 years old, and his GF (global factor) is 100, which is also about 60%, which also speaks of reasonably good health.

In general, it can be said that the condition is satisfactory if the values fall in the range above the 20% line. If the values are less than 10%, then there is a likelihood of malignant tumors and a clinical examination to determine the possible causes of this deviation.



Rice. nine

Let me give a final example, in which we consider the values of indicators for two 76-year-old patients (Fig. 9). Patient A has a GF of 13.3, which corresponds to 450% of the ideal. This is great, and suggests that the patient's body is functioning with the energy of a 63 year old person.

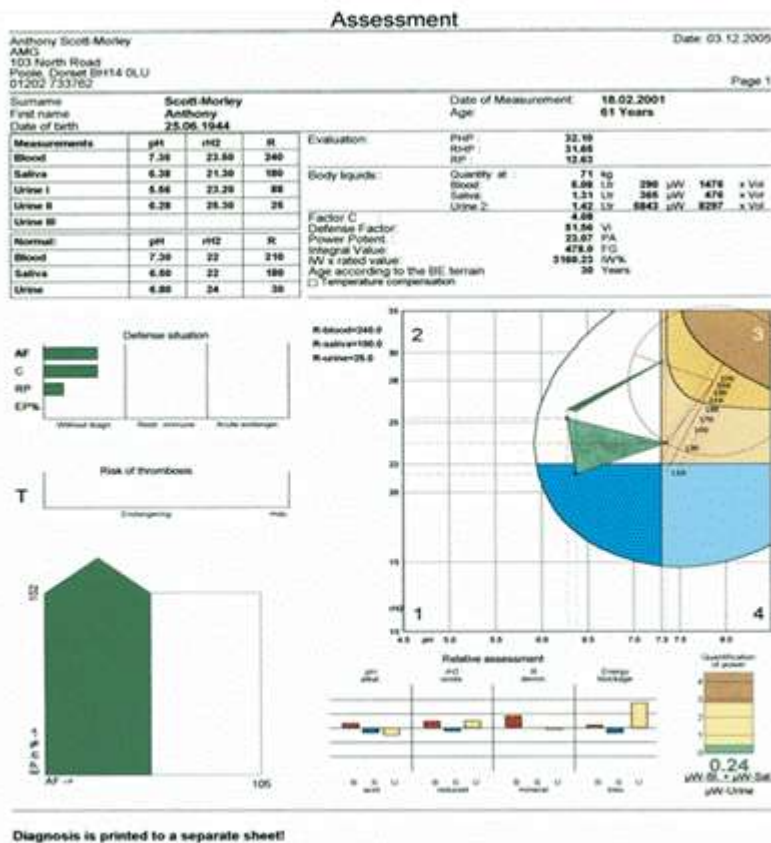
Patient B has a GF of 0.6, which is only 17%.

Patient A feels well, goes for walks, chops wood, and is generally very active. He began treatment due to the fact that he developed a slight tremor and also has complaints about the functioning of the bladder. The results confirmed that there were practically no serious reasons for concern about his health.

Patient B has a whole list of abdominal complaints, he has already undergone abdominal surgery. On the whole, the picture is disappointing. Studies have shown the presence of a small cancerous tumor in the stomach, but the patient did not want to undergo another operation and refused to undergo surgery.

Patient A was alive five years after this examination. Patient B passed away within 5 months.

Practical example

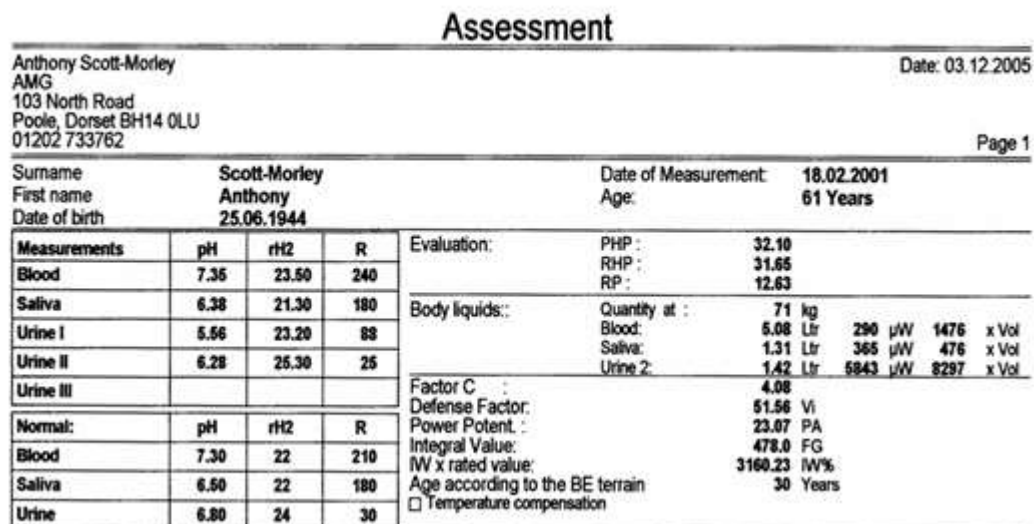


Rice. 10

Here is an example of an analytical report made on a modern computer. The screen displays all the initial data, as well as the values obtained as a result of calculations.

The blood counts are seen to be good, with the exception of the R value. This suggests a possible mineral deficiency that can be restored by consuming organic foods such as fruits and vegetables grown in healthy soil. It should be noted that as a result of intensive farming, the amount of nutrients in the soil is greatly reduced.

Nutritional supplements may also be helpful.



Rice. eleven

These findings may also indicate polyglobulia and polycythemia (erythrocytosis). One possible cause is overproduction of red blood cells. Excessive donation may be another reason. For a more accurate determination of the causes, a blood test is required.

All other indicators are within normal limits.

These values were obtained for a patient who was 56 years old at the time. It should be noted that the biological age is 30 years.

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