



(72) DIETRICHSTEINER, Manfred, AT
(71) META HANDELSGESELLSCHAFT M.B.H., AU
(51) Int.Cl.⁶ A23L 2/38, A23L 1/305, A23L 1/302
(30) 1997/12/17 (A 2130/97) AT
(54) **LIQUIDE POTABLE**
(54) **DRINKING FLUID**

(57) The invention relates to a drinking fluid, comprising water freed of inorganic and organic minerals and preferably degased. In this drinking water at least one organic mineral and at least three different vitamins are dissolved. As an organic mineral it contains zinc in an amount between 5 mg/l and 25 mg/l, preferably 5 mg/l to 15 mg/l and as vitamins at least vitamin C in an amount from 20 .mu.g/l to 5 g/l, preferably 30 .mu.g/l to 5 g/l, vitamin E in an amount from 0.8 .mu.g/l to 27 .mu.g/l, preferably 0.87 .mu.g/l to 25 .mu.g/l and vitamin B₁ in an amount from 0.6 mg/l to 1.7 g/l, preferably 0.7 mg/l to 1.5 g/l.

ABSTRACT OF THE DISCLOSURE

The invention relates to a drinking fluid, comprising water freed of inorganic and organic minerals and preferably degased. In this drinking water at least one organic mineral and at least three different vitamins are dissolved. As an organic mineral it contains zinc in an amount between 5 mg/l and 25 mg/l, preferably 5 mg/l to 15 mg/l and as vitamins at least vitamin C in an amount from 20 µg/l to 5 g/l, preferably 30 µg/l to 5 g/l, vitamin E in an amount from 0.8 µg/l to 27 µg/l, preferably 0.87 µg/l to 25 µg/l and vitamin B₁ in an amount from 0.6 mg/l to 1.7 g/l, preferably 0.7 mg/l to 1.5 g/l.

- 1 -

DRINKING FLUIDBACKGROUND OF THE INVENTIONField of the Invention

The invention relates to a drinking fluid, comprising water liberated of inorganic and organic mineral substances and preferably degased, characterised in that at least one organic mineral and at least three different vitamins are dissolved therein, whereby zinc is contained as an organic mineral in an amount between 5 mg/l and 25 mg/l, preferably 5 mg/l to 15 mg/l and as vitamins at least vitamin C in an amount 20 µg/l to 5 g/l, preferably 30 µg/l to 5 g/l, vitamin E in an amount from 0.8 µg/l to 27 µg/l, preferably 0.87 µg/l to 25 µg/l and vitamin B₁ in an amount 0.6 mg/l to 1.7 g/l, preferably 0.7 mg/l to 1.5 g/l. and a method for producing said drinking fluid.

Description of the Prior Art

It is already known from DE 32 01 405 C2 to create a sodium and potassium free, mineralised drinking water formulation, which comprises an aqueous solution of distilled water in which four mineral substances in the form of strontium, magnesium, calcium and lithium are dissolved. By means of this composition of the drinking water formulation the growth of diseased coronary vessels should be reduced. The disadvantage is that the drinking water solution

- 2 -

is only suitable for a single specific use and the intake of active ingredients is low because of the inorganic nature of the salts in the body.

Drinking water found today in our environment is contaminated by nitrates, pesticides, halogen compounds etc. and this contamination cannot be corrected by waterworks or not to an adequate degree. Many bottled waters are also heavily contaminated as they are collected from springs.

SUMMARY OF THE INVENTION

The objective of the present invention is to create a drinking fluid, in which the supply of active or mineral substances to the body of a human being is possible by the amount of liquid consumed daily, in order thus to achieve and maintain a desirable state of health.

This objective is achieved in that at least one organic mineral and at least three different vitamins are dissolved therein, whereby zinc is contained as an organic mineral in an amount between 5 mg/l and 25 mg/l, preferably 5 mg/l to 15 mg/l and as vitamins at least vitamin C in an amount 20 µg/l to 5 g/l, preferably 30 µg/l to 5 g/l, vitamin E in an amount from 0.8 µg/l to 27 µg/l, preferably 0.87 µg/l to 25 µg/l and vitamin B₁ in an amount 0.6 mg/l to 1.7 g/l, preferably 0.7 mg/l to 1.5 g/l. An advantage is that mineral substances are

- 3 -

mainly supplied in the form of organic salts – in particular the cations necessary for the organism - so that bioavailability compared to ordinary mineral waters, in which minerals are present in an inorganic form, can be increased. A further advantage is that the supply of active or mineral ingredients is in liquid form, which is why extra casing material, as used in ordinary capsules, can be dispensed with. In addition, the inconvenient handling of combinations of active ingredients pressed into tablet form, which in some cases only dissolve very slowly in water, is avoided.

A further advantage is that an overdosage of active ingredients is not possible or only with difficulty, as this would require the intake of a considerable amount of the drinking fluid.

A development of the drinking fluid which contains vitamin A in an amount between 120 µg /l and 190 mg/l, preferably 125 µg/l to 188 mg/l and/or vitamin B₆ in an amount between 0.8 mg/l and 270 mg/l, preferably 1 mg/l to 250 mg/l and/or vitamin B₂ in an amount between 0.5 mg/l to 120 mg/l, preferably 0.8 mg/l to 100 mg/l is also advantageous, as hereby the energy and protein metabolism, the nitrogen metabolism and powers of vision are positively influenced.

In the embodiment that contains as organic minerals calcium in an amount between 5 mg/l and 650 mg/l, preferably 25 mg/l to 400 mg/l and

- 4 -

magnesium in an amount between 3.5 mg/l and 250 mg/l, preferably 3.8 mg/l to 150 mg/l and folic acid in an amount between 40 µg/l to 220 µg/l, preferably 50 µg/l to 200 µg/l. it is an advantage that the formation of bones and teeth, the function of the heart circulatory systems and the maturation of red blood cells are supported.

By means of the embodiment of the drinking fluid that contains choline in a concentration between 30 µg /l and 1.8 g/l, preferably 35 µg /l to 1.5 g/l and/or as an organic mineral selenium in an amount between 13 µg/l and 250 µg/l, preferably 15 µg /l to 125 µg /l and/or vitamin B₅ in an amount between 2.5 mg/l to 0.7 g/l, preferably 3 mg/l to 0.5 g/l and/or beta carotene in an amount from 30 µg /l to 0.90 mg/l, preferably 31 µg /l to 0.75 mg/l and/or cysteine in an amount from 20 mg/l to 1.6 g/l, preferably 25 mg/l to 1.5 g/l , biochemical processes, for example methylations, the negative effects of peroxides formed from fatty acids, the metabolism of the cells and blood viscosity can be influenced.

The embodiments of the drinking fluid that contains the vitamin B₁₂ in an amount from 13 µg /l to 8 mg/l, preferably 15 µg /l to 5 mg/l and/or D in an amount from 1.3 µg /l to 5 mg/l, preferably 1.5 µg /l to 2.5 mg/l and/or biotin in an amount from 40 µg /l to 0.18 mg/l, preferably 50 µg /l to 0.15 mg/l and/or the vitamin B₃ in a concentration of between 7 mg/l and 120 mg/l, preferably 9 mg/l to 100 mg/l and/or lysine and/or proline respectively in a concentration of

- 5 -

between 70 mg/l to 260 mg/l, preferably 80 mg/l to 250 mg/l, have an advantageous effect on DNA synthesis, the calcium or phosphorus balance, amino acid or fatty acid metabolism, the working of the heart muscle cells and the protection of the artery wall.

A further development of the drinking fluid in which carnitine is present in a concentration of between 20 mg/l and 280 mg/l, preferably 25 mg/l to 175 mg/l and/or arginine in a concentration of between 25 mg/l and 85 mg/l, preferably 27 mg/l to 82 mg/l and/or coenzyme Q10 in a concentration of between 3 mg/l and 58 mg/l, preferably 5 mg/l to 30 mg/l, is also advantageous, as hereby stress to the vessel walls can be reduced and the production and provision of energy improved.

By means of the embodiments of the drinking fluid, which as organic salts contains potassium and/or sodium in a concentration of 10 mg/l to 70 mg/l respectively, preferably 15 mg/l to 45 mg/l and/or phosphorus, for example as phosphate, in a concentration of between 2 mg/l and 550 mg/l, preferably 3 mg/l to 400 mg/l, and/or as organic minerals it contains manganese in a concentration of between 0.6 mg/l and 3.4 mg/l, preferably 0.75 mg/l to 3 mg/l and/or chromium in a concentration of between 6 µg/l and 0.12 mg/l, preferably between 7.5 µg/l and 0.1 mg/l and/or molybdenum in concentration of between 2.5 µg /l and 70 mg/l, preferably 3 µg/l to 5 mg/l, it is possible to make

- 6 -

available a sufficient amount of the mineral substances necessary for body reactions.

An embodiment of the drinking fluid, which contains inositol in a concentration of between 10 mg/l and 80 mg/l, preferably 15 mg/l to 75 mg/l and/or pycogenol in a concentration of between 4 mg/l and 18 mg/l, preferably 5 mg/l to 15 mg/l and/or as an organic mineral copper in a concentration of between 200 mg/l to 1200 mg/l, preferably 250 mg/l to 1000 mg/l, is also advantageous, as hereby catalytic metabolic functions are supported.

An embodiment of the drinking fluid, which contains iron in an amount between 0.5 mg/l to 14 mg/l, preferably 0.65 mg/l to 7 mg/l and/or iodine in an amount between 20 µg /l and 150 µg /l, preferably 25 µg /l to 75 µg /l, and/or flavonoids in an amount between 20 mg/l and 40 mg/l, preferably 25 mg/l, and/or vitamin K in an amount between 30 µg/l and 70 µg/l, preferably 50 µg/l, is also advantageous, as hereby blood clotting, haemoglobin formation and energy control mechanisms are positively influenced.

In the developments of the drinking fluid, which contains isoleucine in an amount from 1 mg/l to 1000 mg/l, preferably 10 mg/l to 300 mg/l and/or leucine in an amount from 1 mg/l to 1500 mg/l, preferably 11 mg/l to 300 mg/l and/or methionine in an amount from 1 mg/l to 1500 mg/l, preferably 14 mg/l to 300 mg/l, and/or phenylalanine in an amount from 1 mg/l to 1500 mg/l, preferably 13 mg/l to 300 mg/l and/or

- 7 -

threonine in an amount from 1 mg/l to 1000 mg/l, preferably 10 mg/l to 200 mg/l and/or tryptophane in an amount from 1 mg/l to 1000 mg/l, preferably 10 mg/l to 200 mg/l and/or valine in an amount from 1 mg/l to 1500 mg/l, preferably 11 mg/l to 300 mg/l, and/or asparagine in an amount from 1 µg/l to 10 g/l, preferably 100 mg/l to 1600 mg/l and/or serine in an amount from 1 µg/l to 10 g/l, preferably 100 mg/l to 1600 mg/l and/or glutamic acid in an amount from 1 µg /l to 10 g/l, preferably 100 mg/l to 1600 mg/l, and/or glycine in an amount from 1 µg /l to 10 g/l, preferably 100 mg/l to 1600 mg/l and/or alanine in an amount from 1 µg /l to 10 g/l, preferably 100 mg/l to 1600 mg/l and/or tyrosine in an amount from 1 µg /l to 10 g/l, preferably 100 mg/l to 1600 mg/l and/or histidine in an amount from 1 µg /l to 10 g/l, preferably 100 mg/l to 1600 mg/l, it is an advantage that important essential amino acids can be supplied to the body by the necessary daily intake of liquid. Thus in a simple manner a basic supply of the building blocks necessary for making for example hormones is possible. Examples are the hormones insulin and its antagonist glucagon produced in the islets of Langerhans. In addition, methionine is considered as a main source of sulphur for the human body and plays an important role in the transfer of methyl groups in protein biosynthesis and in detoxification processes. Glutamic acid however is a component of muscle protein and is of central importance in the whole amino acid metabolism, in that it acts as an amino group donor. Glycine plays an important role in haem biosynthesis via the δ -amino laevulinic acid and functions in inhibiting neurotransmitters. Tyrosine plays an important role in the melamine balance and is necessary for the production of adrenaline and

- 8 -

thyroid hormones. At the melanosomes of the melanocytes it is converted into two forms of melamine. If this metabolism is disturbed it causes an oversensitivity of the skin or eyes to light. Leucine is needed by the organism mainly for the production of serum albumins and serum globulins, isoleucine for the production of haemoglobin and serum proteins. Phenylalanine is the precursor of tyrosine, tyrosine is necessary for the hydrolysis of peptide bonds. Tryptophane is for the production of serotonin and melatonin, valine is in general irreplaceable in the making of protein. Asparagine is required in protein biosynthesis, alanine for the enzymatic metabolic processes of sugars and acids. Histidine is used for the synthesis of haemoglobin and in many enzyme proteins.

The embodiments of the drinking fluid, which contains as minerals chloride in an amount from 1 mg/l to 100 mg/l, preferably 1 mg/l to 20 mg/l and/or fluoride in an amount from 0.5 µg/l to 1.5 µg/l, preferably 0.5 µg/l to 1 µg/l, and/or as organic minerals boron in an amount from 0.01 µg/l to 300 µg/l and/or aluminium in an amount from 0.01 µg/l to 50 µg/l, and/or arsenic in an amount from 0.01 µg /l to 10 µg /l, preferably 0.01 µg /l to 2 µg /l and/or lithium in an amount from 1 µg /l to 200 mg/l, preferably 1 µg/l to 100 mg/l and/or vanadium in an amount from 1 µg/l to 5 mg/l, are also advantageous in that the human or in certain cases the animal body can be supplied with important minerals. Thus the supply of fluoride positively influences the

- 9 -

formation of bones and teeth or acts as a caries prophylactic. Lithium can be considered a prophylactic means for manic depressive states.

Arsenic, lithium and vanadium are essential trace elements. Arsenic is important for the whole protein metabolism, especially in the thyroid, lithium also encourages the elimination of uric acid. Vanadium is required by the metabolism, in adenosine triphosphatases, phosphatases and other enzymes of the energy metabolism. Boron and aluminium are elements which occur in very small amounts in the organism, and therefore should be supplemented in cases of deficiency.

The objective of the invention is however also achieved by removing all inorganic and organic minerals and preferably any dissolved from drinking water, whereupon vitamins and/or proteins and/or amino acids and/or minerals and/or trace elements are added to this pure water according to one or more of the preceding claims, and the thus obtained product is preferably treated to a final sterilisation by e.g. UV light radiation. Here in an advantageous manner an optimal water quality is ensured, in that the water is freed in one or more stages of all substances, and in one procedure the necessary available substances are added. The possible uses of such a drinking fluid are very wide ranging, but the main use is for daily consumption. The drinking fluid is also particularly suitable for special uses, e.g. various therapeutic and/or medicinal indications, in which the purified water acts as a carrier medium for the necessary substances.

- 10 -

An embodiment, in which the concentration of the substances added to the water at most reaches the saturation concentration of the individual components depending on the combination of substances, is also advantageous according to which the formation of a precipitate in the drinking fluid and thus possible associated transportation problems on the production of the drinking fluid can be avoided.

The advantageous embodiment, in which to remove dissolved CO₂ and for the homogenous distribution of the measured substances preferably nitrogen or compressed air is blown in, makes it possible on the one hand to avoid a peracidizing of the drinking fluid and on the other hand to homogenise the metered active ingredients easily.

An advantage of the embodiment, where the product properties are changed by physical methods, preferably by energising and/or changing the molecular structure, is that the excellent properties of the product can be increased further by additional means, such as energising.

Lastly it is an advantage, to dissolve CO₂ in the drinking fluid, preferably in a concentration which is above the maximum saturation concentration, and/or to add CO₂ after dissolving all of the added vitamins, amino acids, proteins, minerals and trace elements. In this way a drinking fluid

- 11 -

can be produced, which depending on the taste requirements of the user of the drinking fluid produces a greater or lesser bubbling sensation on drinking.

The invention is explained in more detail in the following description.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

First of all it should be noted that because of the large number of possible active and mineral substances only individual combinations of examples can be described. Also individual characteristics of the combinations of characteristics shown in the individual embodiments can also form individual solutions according to the invention.

Owing to the large number of possible active and mineral substances and the large number of combinations of substances formed therefrom for a drinking fluid according to the invention in Table 1 below all possible addable substances such as vitamins, proteins, amino acids, minerals and trace elements are listed.

Table 1: Substances that can be added

Vitamins:

Vitamin A	120 µg/l to 190 mg/l	preferably	125 µg/l to 188 mg/l
Vitamin D	1.3 µg/l to 5 mg/l	preferably	1.5 µg/l to 2.5 mg/l

- 12 -

Vitamin E	0.8 µg/l to 27 µg/l	preferably	0.87 µg/l to 25 µg/l
Vitamin K	30 µg/l to 70 µg/l	preferably	50 µg/l
Vitamin B ₁	0.6 mg/l to 1.7 g/l	preferably	0.7 mg/l to 1.5 g/l
Vitamin B ₂	0.5 mg/l to 120 mg/l	preferably	0.8 mg/l to 100 mg/l
Vitamin B ₃	7 mg/l to 120 mg/l	preferably	9 mg/l to 100 mg/l
Vitamin B ₅	2.5 mg/l to 0.7 g/l	preferably	3 mg/l to 0.5 g/l
Vitamin B ₆	0.8 mg/l to 270 mg/l	preferably	1 mg/l to 250 mg/l
Vitamin B ₁₂	13 µg/l to 8 mg/l	preferably	15 µg/l to 5 mg/l
Vitamin C	20 µg/l to 5 g/l	preferably	30 µg/l to 5 g/l
Flavonoids	20 mg/l to 40 mg/l	preferably	25 mg/l
Folic acid	40 µg/l to 220 µg/l	preferably	50 µg/l to 200 µg/l
Beta carotene	30 µg/l to 0.9 mg/l	preferably	31 µg/l to 0.75 mg/l

Proteins and amino acids:

Coenzyme Q-10	3 mg/l to 58 mg/l	preferably	5 mg/l to 30 mg/l
Inositol	10 mg/l to 80 mg/l	preferably	15 mg/l to 75 mg/l
Isoleucine	1 mg/l to 1000 mg/l	preferably	10 mg/l to 300 mg/l
Leucine	1 mg/l to 1500 mg/l	preferably	11 mg/l to 300 mg/l
Lysine	70 mg/l to 260 mg/l	preferably	80 mg/l to 250 mg/l
Methionine	1 mg/l to 1500 mg/l	preferably	14 mg/l to 300 mg/l
Phenylalanine	1 mg/l to 1500 mg/l	preferably	13 mg/l to 300 mg/l
Threonine	1 mg/l to 1000 mg/l	preferably	10 mg/l to 200 mg/l
Tryptophane	1 mg/l to 1000 mg/l	preferably	10 mg/l to 200 mg/l

- 13 -

Choline	30 µg/l to 1.8 g/l	preferably	35 µg/l to 1.5 g/l
Biotin	40 µg/l to 0.18 mg/l	preferably	50 µg/l to 0.15 mg/l
Valine	1 mg/l to 1500 mg/l	preferably	11 mg/l to 300 mg/l
Pycnogenol	4 mg/l to 18 mg/l	preferably	5 mg/l to 15 mg/l
Carnitine	20 mg/l to 280 mg/l	preferably	25 mg/l to 175 mg/l
Cysteine	20 mg/l to 1.6 g/l	preferably	25 mg/l to 1.5 g/l
Asparagine	1 µg/l to 10 g/l	preferably	100 mg/l to 1600 mg/l
Serine	1 µg/l to 10 g/l	preferably	100 mg/l to 1600 mg/l
Glutamic acid	1 µg/l to 10 g/l	preferably	100 mg/l to 1600 mg/l
Proline	70 mg/l to 260 mg/l	preferably	80 mg/l to 250 mg/l
Glycine	1 µg/l to 10 g/l	preferably	100 mg/l to 1600 mg/l
Alanine	1 µg/l to 10 g/l	preferably	100 mg/l to 1600 mg/l
Tyrosine	1 µg/l to 10 g/l	preferably	100 mg/l to 1600 mg/l
Histidine	1 µg/l to 10 g/l	preferably	100 mg/l to 1600 mg/l
Arginine	25 mg/l to 85 mg/l	preferably	27 mg/l to 82 mg/l

Minerals and trace elements:

Sodium	10 mg/l to 70 mg/l	preferably	15 mg/l to 45 mg/l
Potassium	10 mg/l to 70 mg/l	preferably	15 mg/l to 45 mg/l
Magnesium	3.5 mg/l to 250 mg/l	preferably	3.8 mg/l to 150 mg/l
Calcium	5 mg/l to 650 mg/l	preferably	25 mg/l to 400 mg/l
Iron	0.5 mg/l to 14 mg/l	preferably	0.65 mg/l to 7 mg/l

- 14 -

Zinc	5 mg/l to 25 mg/l	preferably	5 mg/l to 15 mg/l
Manganese	0.6 mg/l to 3.4 mg/l	preferably	0.75 mg/l to 3 mg/l
Copper	200 mg/l to 1200 mg/l	preferably	250 mg/l to 1000 mg/l
Phosphorus	2 mg/l to 550 mg/l	preferably	3 mg/l to 400 mg/l
Selenium	13 µg/l to 250 µg/l	preferably	15 µg/l to 125 µg/l
Chloride	1 mg/l to 100 mg/l	preferably	1 mg/l to 20 mg/l
Boron	0.01 µg/l to 300 µg/l		
Fluoride	0.5 µg/l to 1.5 µg/l	preferably	0.5 µg/l to 1 µg/l
Aluminium	0.01 µg/l to 50 µg/l		
Lithium	0.01 µg/l to 200 mg/l	preferably	1 µg/l to 100 mg/l
Iodide	20 µg/l to 150 µg/l	preferably	25 µg/l to 75 µg/l
Arsenic	0.01 µg/l to 10 µg/l	preferably	0.01 µg/l to 2 µg/l
Vanadium	1 µg/l to 5 mg/l		
Molybdenum	2.5 µg/l to 70 mg/l	preferably	3 µg/l to 5 mg/l
Chromium	6 µg/l to 0.12 mg/l	preferably	7.5 µg/l to 0.1 mg/l

Mineral substances and trace elements are preferably used in the form of organic salts. Therefore, it is possible for example to use salts of carbohydrates such as gluconate or also salts of lactic acid such as e.g. calcium lactate or salts of acetic acid such as e.g. alkali or alkaline earth acetates for the composition of the drinking water formulation. Phosphorus can be used in the form of organic phosphates. Of course it is also possible to provide the mineral substances and trace elements in the form of inorganic salts. This is mainly an

- 15 -

advantage for the addition of the listed anions required by the organism, such as e.g. chloride, fluoride.

The human body's requirement for protein is about 0.34 g/kg body weight per day. This basic requirement can be covered advantageously by drinking the drinking fluid according to the invention, which is provided with proteins.

The daily requirement of sulphur, mainly in the form of sulphides is 0.7 mg/kg body weight and can for example be covered by taking amino acids such as methionine.

It is of course also possible with the drinking fluid according to the invention also to improve the wellbeing of animals, for example pets. A corresponding adjustment of the amounts of active substances used can be made according to the individual species.

The production of a drinking fluid according to the invention can be performed in general so that all inorganic and organic minerals and preferably gases dissolved therein are removed from the drinking water. To this purified clean water the required active ingredients such as vitamins, proteins, amino acids, minerals and trace elements are added and the resulting obtained product is subjected to a final sterilisation, for example by UV light radiation.

- 16 -

Preferably, the concentration of the substances added to the water should reach at most the saturation concentration of the individual components depending on the combinations of substances.

To remove dissolved CO₂ or to homogenise the thus added active substances, preferably a gaseous medium such as nitrogen or compressed air can be blown through the drinking fluid according to the invention.

For the further activation of the drinking fluid according to the invention it is also possible to change the properties of the product by physical methods, for example by energising, changing the molecular structure or the like.

Of course, for drinking fluids according to the invention it is also possible, preferably after the dissolution of all added substances to add CO₂ deliberately, preferably in a concentration above the maximum saturation concentration, so that the end consumer of the drinking fluid can be given a special, bubbly and refreshing taste experience.

Example 1

Drinking fluid for optimal heart circulation

Contents:

Vitamins:

- 17 -

Vitamin C	450 mg/l to 1500 mg/l
Vitamin E	2.5 µg/l to 7.5 µg/l
Beta carotene	31.25 µg/l to 100 µg/l
Vitamin B ₁	5 mg/l to 20 mg/l
Vitamin B ₂	5 mg/l to 20 mg/l
Vitamin B ₃	32.5 mg/l to 100 mg/l
Vitamin B ₅	30 mg/l to 100 mg/l
Vitamin B ₆	7.5 mg/l to 25 mg/l
Vitamin B ₁₂	15 µg/l to 50 µg/l
Vitamin D	2.5 µg/l to 7.5 µg/l
Folic acid	65 µg/l to 200 µg/l
Biotin	0.05 mg/l to 0.15 mg/l

Minerals:

Calcium	25 mg/l to 75 mg/l
Magnesium	30 mg/l to 100 mg/l
Potassium	15 mg/l to 45 mg/l
Phosphorus	10 mg/l to 30 mg/l

Trace elements:

Zinc	5 mg/l to 15 mg/l
Manganese	1 mg/l to 3 mg/l
Copper	250 mg/l to 1000 mg/l

- 18 -

Selenium	15 µg/l to 50 µg/l
Chromium	7.5 µg/l to 25 µg/l
Molybdenum	3 µg/l to 10 µg/l

Amino acids and other important cell factors:

Lysine	80 mg/l to 250 mg/l
Proline	80 mg/l to 250 mg/l
Carnitine	25 mg/l to 75 mg/l
Arginine	27.5 mg/l to 82.5 mg/l
Cysteine	25 mg/l to 75 mg/l
Coenzyme Q-10	5 mg/l to 15 mg/l
Pycnogenol	5 mg/l to 15 mg/l

To produce this drinking fluid for supplying the circulation of the heart drinking water can be used as a base, which is purified by suitable methods, e.g. pressure filtration through a semipermeable membrane or distillation. After sterilisation by e.g. UV light radiation the active ingredients are added, whereby it should be ensured that minerals and trace elements are added in the form of organic salts. In this way for example calcium can be used in the form of lactate, magnesium and potassium as gluconate, manganese and zinc as acetate. Any CO₂ still dissolved in the water which has the property on ultra filtration through the filter membrane of diffusing, can be removed by blowing in nitrogen or compressed air for example, and at the said time the added salts

- 19 -

can be distributed homogeneously. Further positive properties can be given to the product, if the latter for example is energised by means of apparatus functioning according to physical methods or other types of molecular structural changes can be made. For the highest requirements it is also possible to subject the product to a second sterilisation by UV light radiation for example.

The sum of the individual properties of the added vitamins, minerals, trace elements, amino acids and other important cell factors acts positively on the human organism. Thus e.g. vitamin C is vital for the stability of the blood vessels, the heart muscle tissue and other body organs and is also an important wound healing means in our body and responsible for the repair of blood vessel walls. It is the most important antioxidant in our body and an important biocatalyst for many metabolic steps, such as for example the breakdown of cholesterol. In addition, vitamin C is an irreplaceable bioenergy donor of the cell metabolism for the most important energy carrier molecules in ADH, ADP-H and in FAD-H.

Vitamin E (tocopherol) is one of the most important fat soluble antioxidants in the body. It mainly protects the membranes (outer skin) of millions of body cells including the cells of the heart and the artery walls from oxidation damage. In addition, it contributes to the reduced adhesiveness of the blood platelets and advantageous flowing properties of the blood.

- 20 -

Beta carotene (provitamin A) is also an additional important fat-soluble antioxidant and contributes to optimum blood viscosity and to a reduced risk of clotting.

Vitamin B₁ (thiamine) is a cofactor for pyrophosphate, one of the most important biocatalysts of the metabolism and contributes to the optimum cell energy balance of the heart circulatory system and other organs.

Vitamin B₂ (riboflavin) is a structural feature of the FAD energy transport molecule in all cells.

Vitamin B₃ (nicotinic acid) is a component of the structure of the energy transport molecule NAD or related energy carriers and thereby partly responsible for supplying energy to the body. By means of the added vitamin C these used energy carriers are recharged with biological energy. It is particularly important as because of the high work output of the heart muscle cells an optimal supply of these cell fuels is necessary for the heart circulatory system.

Vitamin B₅ (pantothenic acid) is a structural component of the acetyl coenzyme -A- molecule, of the central metabolic molecule of each cell of our body. Vitamin B₅ is essential in order to prevent backflows in the cell metabolism, as the metabolic paths of carbohydrates, proteins and fats inside the cells cross one another at this molecule.

- 21 -

Vitamin B₆ (pyridoxal phosphate) as a structural component of the pyridoxal phosphate molecule is an important biocatalyst in the metabolism of amino acids and proteins in body cells, essential for the production of red blood cells, which transport oxygen to the cells of the heart circulatory system and other organs.

Vitamin B₁₂ (cobalamin) is also necessary for the production of red blood cells. It is also essential for the effective metabolism of proteins and certain fatty acids. A severe B₁₂ deficiency results in pernicious anaemia a severe form of anaemia.

Folic acid is also crucial for the transport of oxygen.

The last three vitamins are a good example of the way vitamins work together. It is also important to know which of these natural substances the body needs in what amount.

Biotin is an important biocatalyst for the metabolism of carbohydrates, fats and proteins.

Likewise inositol is a biocatalyst, responsible for the sugar, fat and protein metabolism. Inositol is also a component of the biological information exchange and assists with the processing of biological information in the cell,

- 22 -

such as e.g. the biological information contained in the hormones. The importance of inositol for the heart circulatory system is quickly evident, as hormones such as adrenaline, insulin and others play an important role in the regulation of the heart function.

As already known from several clinical investigations, the minerals like the vitamins play an important role in the human organism. In particular, the cations are vital components of biocatalysts which are essential in a plurality of metabolic steps. A deficiency or an excess of minerals results in certain cases in life-threatening conditions like a deficiency or an excess of vitamins. Calcium, magnesium and potassium are among the most important minerals.

Calcium has numerous functions in the heart circulatory system. It contributes to muscle contractability and is also responsible for the myocardial transfer. Calcium is important in order to ensure an optimum function of the nerve impulses responsible for a regular heart beat.

Magnesium, the natural calcium antagonist, was able in clinical studies to reduce high blood pressure. It can also contribute to the normalisation of a regular heart beat and plays a role in muscle contraction.

Potassium plays a particularly important role in muscle activity and in nerve transfer. It is also important like calcium to ensure an optimal function of the nerve impulses including the stimulation system of the heart.

- 23 -

Trace elements are essential biocatalysts, which are imperative for a large number of cell metabolic stages. They are only required by the body in very small amounts as already expressed by the term "trace element". A lack of these elements however results in deficiency symptoms. For example with a selenium deficiency cardio myopathy can be observed in Keshan disease.

Amino acids are important building blocks of proteins, which as enzymes of important biocatalysts, as hormones for metabolism regulation or as structural proteins, components of biomembranes or as transport proteins, are responsible for the transport of vital substances, such as e.g. oxygen by haemoglobin. Most amino acids in our body come from proteins which we take in through food. Amino acids which our body can make itself are termed "non essential". Amino acids that the body cannot produce itself and therefore have to be supplied through food are termed "essential" amino acids.

Lysine is an essential amino acid and an important component of collagen and stability molecules. Said amino acid is a significant factor in preventing deposits on the artery wall. In addition, it is a parent substance for the body's own production of carnitine.

Proline is an important building block of collagen molecules and contributes like lysine to the protection of the artery wall. Proline can unlike

- 24 -

lysine be made by the body itself, the amount of proline produced however is often too low, so that it seem sensible to compensate the requirement by food.

Arginine is the parent substance of vessel wall factors, which leads to a reduced stress of the vessel walls and thereby contributes to a normalisation of high blood pressure. Arginine reduces the adhesiveness of the blood platelets and contributes to an improvement of the flow properties of the blood.

Cysteine is an important parent substance for the production of glutathione an important "body's own" antioxidant. Glutathione together with other antioxidants is responsible for the protection of body tissue from free radicals.

Carnitine can be made in the body itself as a non-essential amino acid. However, the body's own production is too low as for proline. An optimal supply of carnitine is essential in order to ensure an effective fat metabolism, in particular of triglycerides. In addition, it is an important carrier molecule, which transports fatty acids to extract energy into the biological power houses of the cells (mitochondria). It also ensures the optimal function of the heart muscle cells, which because of their continual work have a high turnover of carnitine. As shown in clinical studies carnitine significantly improves the pumping power of the heart in patients with heart deficiencies. In addition, it is known that carnitine in patients with irregular heart beats (arrhythmia) contributes to a normalisation of the heart rhythm. In both cases carnitine

- 25 -

brings about an optimising of the cell energy and thereby an improved performance of millions of heart muscle cells.

Coenzyme Q-10 is also known as ubiquinone and plays an excellent role as a catalyst of the biological respiratory chain in the energy centre of the cells. It is particularly important for the provision of biological energy in the muscle cells including the heart muscle tissue, which because of its output has a high turnover of coenzyme Q-10. Here too clinical studies have shown that coenzyme Q-10 in patients with weak hearts can improve the pumping function of the heart.

Pycnogenol comprises a group of bioflavonoids, which are important as catalysts for various metabolic functions. In particular pycnogenol improves the stabilising effect of vitamin C on the binding tissue of the body including the blood vessel walls and pycnogenol also acts as an antioxidant.

Example 2

Water for increasing intelligence

Contents:

Flavonoids	25 mg/l
Biotin	50 µg/l
Choline	35 mg/l

- 26 -

Folic acid	50 µg/l
Inositol	15 mg/l
Niacin	25 mg/l
Pantôthenic acid	25 mg/l
Vitamin B ₆	6 mg/l
Vitamin B ₁	1.85 mg/l
Riboflavin	2.5 mg/l
Vitamin A	187.5 mg/l
Vitamin B ₁₂	5 mg/l
Vitamin C	50 mg/l
Vitamin D	1.5 µg/l
Vitamin E	0.88 µg/l
Vitamin K	50 µg/l
Calcium	50 mg/l
Chromium	0.1 mg/l
Magnesium	3.8 mg/l
Manganese	0.75 mg/l
Molybdenum	0.05 mg/l
Iodine	25 µg/l
Iron	0.65 mg/l
Zinc	5 mg/l

- 27 -

The production of this drinking fluid can be performed in the same way as the methods described in Example 1.

The advantage of this drinking fluid is that non-verbal intelligence, i.e. intelligence that is not influenced by schooling or the like can be increased by 10 % in a period of up to 8 months. This was proved in an experiment on English school children, who received a combination, which according to German and Austrian guidelines would be available only on prescription and would be inadmissible anyway in its variety. From preliminary investigations it emerged that the children eat a combination of foods (school dinners), which was common practice. If it is taken into consideration that the time period was comparatively short and the organs of children were in very good health, it is understandable why the director of the experiment was surprised by the result. The conclusion can be drawn from this result that the children against all expectations were malnourished. The suspicion that this is true for the whole population seems justified. The above combination of micronutirents and macronutirents takes into account this fact. With this drinking fluid without additional measures being necessary such as for example the daily intake of tablets or capsules, the intelligence and as a result the productivity of the population can be increased in a simple manner.

Example 3

- 28 -

Water against the causes of oxidative stress**Contents:**

Selenium	125 mg/l
Vitamin A	125 µg/l to 250 µg/l
Vitamin E	12.5 µg/l to 25 µg/l
Zinc	25 mg/l
Vitamin B ₂	50 mg/l to 100 mg/l
Vitamin C	1.5 g/l to 5 g/l
Cysteine	0.5 g/l to 1.5 g/l
Vitamin B ₁	150 mg/l to 1.5 g/l
Vitamin B ₅	125 mg/l to 500 mg/l
Vitamin B ₆	125 mg/l to 250 mg/l
Choline	0.5 g/l to 1.5 g/l
Beta carotene	125 µg/l to 750 µg/l

In addition to inadequate nutrition and environmental influences also a large number of medicines increase a radical-forming oxidation process. It has previously not been possible to even halfway copy the immune system of the body, which in normal conditions operates highly effectively. Antibiotics against infections and chemotherapies against cancer never reach the potency of the oxygen. There are and remain substances foreign to the body (xenobiotics) and thus there is an incomplete replacement of natural immunity. They do not

- 29 -

differentiate between friend and foe and thus also damage healthy structures. The doctor thus achieves a main effect at the cost of many side effects.

Medicines can thus worsen the courses of illnesses. The aim of any therapy should be to balance out the redox potential to the value 0. As according to Hypocrates health is the best means against illness a precautionary measure is also to interrupt a possibly already long continuing oxidative stress so that the body can regain its self-regulating abilities. It is possible in many cases, by taking antioxidants or highly dosed nutrients to improve chronic damage, such as e.g. allergies or even remove them altogether. In any case conventional medical therapies should be accompanied to a much greater extent than before by supplements.

In the case of private precautions the emphasis is not on the complete avoidance of illnesses but on a better immunity against unavoidable attacks on health. This is achieved by drinking this water daily.

Example 4

Drinking fluid to cover the daily requirement of vitamins, proteins, amino acids, minerals and trace elements.

Composition:

- 30 -

Vitamin A	400 mg/l
Vitamin D	2.5 mg/l
Vitamin E	5 µg/l
Vitamin C	30 µg/l
Vitamin B ₁	0.7 mg/l
Vitamin B ₂	0.8 mg/l
Niacin	9 mg/l
Vitamin B ₆	1 mg/l
Biotin	75 µg/l
Vitamin B ₁₂	0.5 µg/l
Folacin	100 µg/l
Pantothenic acid	3 mg/l
Calcium	400 mg/l
Phosphorus	400 mg/l
Iron	7 mg/l
Magnesium	150 mg/l
Zinc	7.5 mg/l
Iodine	75 µg/l

Effect: Vitamin A supports vision. In addition, the normal structure of the epithelial tissue is dependent on vitamin A. Vitamin A also ensures the stability of the lysosomes and contributes to glycoprotein synthesis. A

- 31 -

deficiency causes night blindness, perifollicular hyperkeratosis, xerophthalmia, keratomalacia and increased morbidity and mortality in childhood.

Vitamin E is an intracellular antioxidant and catcher of free radicals in biological membranes. An absence or excess in the body leads to neurological disturbances and xeroid deposits in the muscle.

Vitamin B₁ is a coenzyme for the decarboxylation of α -keto acids and the transketolase reaction. A known syndrome with thiamine deficiency is beriberi with peripheral neurological, cerebral and cardiovascular deficiency symptoms. A primary thiamine deficiency occurs as a result of insufficient intake, especially in the case of exclusive nutrition with machine shelled and polished rice. A secondary thiamine deficiency occurs with increased need, e.g. pregnancy, breastfeeding, feverish illnesses and with thyroid hyperactivity with restricted absorption, e.g. prolonged diarrhoea, with restricted utilisation, e.g. severe liver damage.

Riboflavin (vitamin B₂) functions both as a flavin mononucleotide and flavin adenine dinucleotide, as an essential coenzyme in many redox reactions in the carbohydrate metabolism. It is involved in the make up and in the maintenance of mucous membranes. Riboflavin deficiency results in damage to the mouth area, the eyes, the skin and the genital region.

- 32 -

Vitamin C is essential for the formation of collagen and obtains the substances of mesenchymatose origin (binding tissue, osteoid substance of the bone, dentine of the teeth). It promotes the healing of wounds and the recovery of burns. As a strong reducing agent it can reversibly transfer hydrogen or electrons. Thus it forms in its reduced form, dehydroascorbic acid, a cellular redox system. Vitamin C is involved in the phenylalanine and tyrosine metabolism and activates as a reducing agent the enzymes, which hydroxylise the proline and the lysine of the procollagen after translation to hydroxyproline and hydroxylysine. Vitamin C also causes folic acid which is coupled with components of nutrients to be released from these conjugations and supports in addition the resorption of iron.

Vitamin B₆ is involved in the metabolism of nitrogen e.g. on the transamination of the porphyrine and haem synthesis, the tryptophane conversion to niacin and the linoleic acid metabolism. Deficiencies relate to the metabolism of blood, the skin and the central nervous system.

Vitamin D is important for the resorption of calcium and phosphorus, for the resorption, mineralisation and collagen maturation of bone and for the tubular reresorption of phosphorus. A known bone disease which is caused by vitamin D deficiency is known in children as rickets and in adults as osteomalacia

- 33 -

Vitamin B₁₂ contributes to the maturation of red blood cells, neural functions, DNA synthesis in connection with the folic acid coenzymes and to methionine and acetate synthesis.

In addition to the daily supply of corresponding doses of vitamins, as already described above, the daily intake of minerals is particularly important. For example, calcium and phosphorus are particularly important for the formation of bones and teeth. Phosphorus contributes in addition to energy storage in the form of phosphates, especially adenosine triphosphate, which on consuming energy is reduced to adenosine diphosphate. A deficiency of phosphorus also causes weakness, disruption to the blood cells and irritability.

Iron in turn contributes considerably to the oxygen supply of the human body. It is complexly bonded in haemoglobin, especially in red blood pigment haem and performs the transport of oxygen from the lungs into the cells or removes the products of combustion in particular CO₂ from the cells into the lungs. A very low level of iron results in reduced performance or learning difficulties and anaemia.

Example 5

Drinking fluid for supplying pregnant and breastfeeding mothers

Contents:

- 34 -

Vitamin C	35 mg/l to 47 mg/l
Vitamin E	5 µg/l to 6 µg/l
Vitamin B ₁	0.6 mg/l to 0.8 mg/l
Zinc	8 mg/l to 9.5 mg/l

The adequate nutrition of pregnant or breastfeeding mothers and consequently of the unborn or new born child is of particular importance for maintaining health. A drinking fluid with the above contents can contribute in an advantageous manner to covering the increased need for vitamins and minerals.

A primary vitamin E deficiency often results in premature babies, in particular if the amount of unsaturated fatty acids in the baby's food is very high. Protein calorie undernourished children often have a low vitamin E serum deficiency. A low vitamin E serum level and haemolysis increased by antioxidation products in premature babies who are fed with foods containing vegetable oil, are found in connection with oedemas and flaky dermatitis. In adults a deficiency in vitamin E results in a reduced lifetime of red blood cells. Said deficiencies can be avoided by the daily intake of vitamin E.

The effects of vitamin C and vitamin B₁ and the effects of a deficiency of these vitamins has already been discussed in the above examples.

- 35 -

An adequate supply of zinc is particularly important as the zinc content of the body is between 1 g and 2.5 g, whereby the greatest amount is in bones, teeth, hair, skin liver and muscles. The complexing of the zinc supplied with food by means of eating only fibre and phylate rich bread, geophagy and a parasite attack can lead to a reduced resorption and thereby to deficiencies. As known from clinical studies children who have too little zinc in the body show a lack of appetite, are too small and have a reduced sense of taste. A zinc deficiency in the mother can cause anencephaly in children.

Finally, it should be noted that the described drinking fluid with its special combinations of active ingredients are only examples of the solution according to the invention. Individual components of the drinking fluid and different combinations of characteristics to the above examples can form independent solutions according to the invention.

- 36 -

WHAT IS CLAIMED IS:

1. Drinking fluid, comprising water liberated of inorganic and organic mineral substances and preferably degased, characterised in that at least one organic mineral and at least three different vitamins are dissolved therein, whereby zinc is contained as an organic mineral in an amount between 5 mg/l and 25 mg/l, preferably 5 mg/l to 15 mg/l and as vitamins at least vitamin C in an amount 20 µg/l to 5 g/l, preferably 30 µg/l to 5 g/l, vitamin E in an amount from 0.8 µg/l to 27 µg/l, preferably 0.87 µg/l to 25 µg/l and vitamin B₁ in an amount 0.6 mg/l to 1.7 g/l, preferably 0.7 mg/l to 1.5 g/l.

2. Drinking fluid according to claim 1, characterised in that it contains vitamin A in an amount between 120 µg /l and 190 mg/l, preferably 125 µg/l to 188 mg/l and/or vitamin B₆ in an amount between 0.8 mg/l and 270 mg/l, preferably 1 mg/l to 250 mg/l and/or vitamin B₂ in an amount between 0.5 mg/l to 120 mg/l, preferably 0.8 mg/l to 100 mg/l.

3. Drinking fluid according to claim 1 and/or 2, characterised in that as organic minerals it contains calcium in an amount between 5 mg/l and 650 mg/l, preferably 25 mg/l to 400 mg/l and magnesium in an amount between 3.5 mg/l and 250 mg/l, preferably 3.8 mg/l to 150 mg/l and folic acid in an amount between 40 µg/l to 220 µg/l, preferably 50 µg/l to 200 µg/l.

- 37 -

4. Drinking fluid according to one or more of the preceding claims, characterised in that it contains choline in a concentration between 30 µg /l and 1.8 g/l, preferably 35 µg /l to 1.5 g/l.

5. Drinking fluid according to one or more of the preceding claims, characterised in that as an organic mineral it contains selenium in an amount between 13 µg/l and 250 µg/l, preferably 15 µg /l to 125 µg /l and/or vitamin B₅ in an amount between 2.5 mg/l to 0.7 g/l, preferably 3 mg/l to 0.5 g/l and/or beta carotene in an amount from 30 µg /l to 0.90 mg/l, preferably 31 µg /l to 0.75 mg/l and/or cysteine in an amount from 20 mg/l to 1.6 g/l, preferably 25 mg/l to 1.5 g/l.

6. Drinking fluid according to one or more of the preceding claims, characterised in that it contains the vitamin B₁₂ in an amount from 13 µg /l to 8 mg/l, preferably 15 µg /l to 5 mg/l and/or D in an amount from 1.3 µg /l to 5 mg/l, preferably 1.5 µg /l to 2.5 mg/l and/or biotin in an amount from 40 µg /l to 0.18 mg/l, preferably 50 µg /l to 0.15 mg/l.

7. Drinking fluid according to one or more of the preceding claims, characterised in that it contains the vitamin B₃ in a concentration of between 7 mg/l and 120 mg/l, preferably 9 mg/l to 100 mg/l and/or lysine and/or proline respectively in a concentration of between 70 mg/l to 260 mg/l, preferably 80 mg/l to 250 mg/l.

- 38 -

8. Drinking fluid according to one or more of the preceding claims, characterised in that carnitine is present in a concentration of between 20 mg/l and 280 mg/l, preferably 25 mg/l to 175 mg/l and/or arginine in a concentration of between 25 mg/l and 85 mg/l, preferably 27 mg/l to 82 mg/l and/or coenzyme Q10 in a concentration of between 3 mg/l and 58 mg/l, preferably 5 mg/l to 30 mg/l.

9. Drinking fluid according to one or more of the preceding claims, characterised in that as organic salts it contains potassium and/or sodium in a concentration of 10 mg/l to 70 mg/l respectively, preferably 15 mg/l to 45 mg/l and/or phosphorus, for example as phosphate, in a concentration of between 2 mg/l and 550 mg/l, preferably 3 mg/l to 400 mg/l.

10. Drinking fluid according to one or more of the preceding claims, characterised in that as organic minerals it contains manganese in a concentration of between 0.6 mg/l and 3.4 mg/l, preferably 0.75 mg/l to 3 mg/l and/or chromium in a concentration of between 6 µg/l and 0.12 mg/l, preferably between 7.5 µg/l and 0.1 mg/l and/or molybdenum in concentration of between 2.5 µg /l and 70 mg/l, preferably 3 µg/l to 5 mg/l.

11. Drinking fluid according to one or more of the preceding claims, characterised in that it contains inositol in a concentration of between 10 mg/l

- 39 -

and 80 mg/l, preferably 15 mg/l to 75 mg/l and/or pycogenol in a concentration of between 4 mg/l and 18 mg/l, preferably 5 mg/l to 15 mg/l and/or as an organic mineral copper in a concentration of between 200 mg/l to 1200 mg/l, preferably 250 mg/l to 1000 mg/l.

12. Drinking fluid according to one or more of the preceding claims, characterised in that it contains iron in an amount between 0.5 mg/l to 14 mg/l, preferably 0.65 mg/l to 7 mg/l and/or iodine in an amount between 20 µg /l and 150 µg /l, preferably 25 µg /l to 75 µg /l.

13. Drinking fluid according to one or more of the preceding claims, characterised in that it contains flavonoids in an amount between 20 mg/l and 40 mg/l, preferably 25 mg/l, and/or vitamin K in an amount between 30 µg/l and 70 µg/l, preferably 50 µg/l.

14. Drinking fluid according to one or more of the preceding claims, characterised in that it contains isoleucine in an amount from 1 mg/l to 1000 mg/l, preferably 10 mg/l to 300 mg/l and/or leucine in an amount from 1 mg/l to 1500 mg/l, preferably 11 mg/l to 300 mg/l and/or methionine in an amount from 1 mg/l to 1500 mg/l, preferably 14 mg/l to 300 mg/l.

15. Drinking fluid according to one or more of the preceding claims, characterised in that it contains phenylalanine in an amount from 1 mg/l to 1500

- 40 -

mg/l, preferably 13 mg/l to 300 mg/l and/or threonine in an amount from 1 mg/l to 1000 mg/l, preferably 10 mg/l to 200 mg/l and/or tryptophane in an amount from 1 mg/l to 1000 mg/l, preferably 10 mg/l to 200 mg/l and/or valine in an amount from 1 mg/l to 1500 mg/l, preferably 11 mg/l to 300 mg/l.

16. Drinking fluid according to one or more of the preceding claims, characterised in that it contains asparagine in an amount from 1 µg/l to 10 g/l, preferably 100 mg/l to 1600 mg/l and/or serine in an amount from 1 µg/l to 10 g/l, preferably 100 mg/l to 1600 mg/l and/or glutamic acid in an amount from 1 µg/l to 10 g/l, preferably 100 mg/l to 1600 mg/l.

17. Drinking fluid according to one or more of the preceding claims, characterised in that it contains glycine in an amount from 1 µg/l to 10 g/l, preferably 100 mg/l to 1600 mg/l and/or alanine in an amount from 1 µg /l to 10 g/l, preferably 100 mg/l to 1600 mg/l and/or tyrosine in an amount from 1 µg/l to 10 g/l, preferably 100 mg/l to 1600 mg/l and/or histidine in an amount from 1 µg/l to 10 g/l, preferably 100 mg/l to 1600 mg/l.

18. Drinking fluid according to one or more of the preceding claims, characterised in that as minerals it contains chloride in an amount from 1 mg/l to 100 mg/l, preferably 1 mg/l to 20 mg/l and/or fluoride in an amount from 0.5 µg/l to 1.5 µg/l, preferably 0.5 µg/l to 1 µg/l.

- 41 -

19. Drinking fluid according to one or more of the preceding claims, characterised in that as organic minerals it contains boron in an amount from 0.01 $\mu\text{g/l}$ to 300 $\mu\text{g/l}$ and/or aluminium in an amount from 0.01 $\mu\text{g/l}$ to 50 $\mu\text{g/l}$.

20. Drinking fluid according to one or more of the preceding claims, characterised in that as organic minerals it contains arsenic in an amount from 0.01 $\mu\text{g/l}$ to 10 $\mu\text{g/l}$, preferably 0.01 $\mu\text{g/l}$ to 2 $\mu\text{g/l}$ and/or lithium in an amount from 1 $\mu\text{g/l}$ to 200 mg/l , preferably 1 $\mu\text{g/l}$ to 100 mg/l and/or vanadium in an amount from 1 $\mu\text{g/l}$ to 5 mg/l .

21. Method for producing a drinking fluid, characterised in that all inorganic and organic minerals and preferably any dissolved gases are removed from drinking water, whereupon vitamins and/or proteins and/or amino acids and/or minerals and/or trace elements are added to this pure water according to one or more of the preceding claims, and the thus obtained product is preferably treated to a final sterilisation by e.g. UV light radiation.

22. Method according to claim 21, characterised in that the concentration of the substances added to the water at most reaches the saturation concentration of the individual components depending on the combination of substances.

- 42 -

23. Method according to claim 21 and/or 22, characterised in that to remove dissolved CO₂ and for the homogenous distribution of the measured substances preferably nitrogen or compressed air is blown in.

24. Method according to one or more of claims 21 to 23, characterised in the product properties are changed by physical methods, preferably by energising and/or changing the molecular structure.

25. Method according to one or more of claims 21 to 24, characterised in that CO₂ is dissolved in the drinking fluid, preferably in a concentration which is above the maximum saturation concentration.

26. Method according to one or more of claims 21 to 25, characterised in that CO₂ is added after dissolving all of the added vitamins, amino acids, proteins, minerals and trace elements.