# Osteoporosis

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#### More than just the care of the physical body is needed

#### IRST THE GOOD NEWS.

With a combination of weight-bearing eurythmy exercises, healthful foods, anthroposophic remedies, stress reduction meditations. and a positive life-style changes, osteoporosis could be prevented and/or considerably slowed down in our clinic.

As an example: our 67-year old patient Mary (name changed) could not believe that improvement would be possible without the use of potentially very toxic conventional medications, until she came to our clinic. After having gotten worse for years (her bone mass loss was more than 3%), she increasingly feared that bone fractures were inevitable. And yet she saw a constant increase in bone mass and overall health improvement year after year by following our treatment program. In the seven years that we have been able to follow her she has added more than 2% bone mass instead of continuing to loose bone mass, as would be typical.

#### NOW THE DETAILS OF THIS GOOD NEWS.

Osteoporosis is a medical condition in which the bones become brittle and fragile. The cause is typically attributed to hormonal changes, mostly those accompanying aging, or deficiency of calcium or vitamin D. We will see later why this is a woefully

incomplete view, since all mental/spiritual factors that might be potentially contributing are left out. The National Osteoporosis Foundation defines the word osteoporosis to mean "porous bone." When viewed under a microscope, healthy bone should look like a dense honeycomb. However, when osteoporosis occurs, the holes and spaces in the honeycomb are much larger than in healthy bone. Osteoporotic bones that have lost density or mass consist of an abnormal tissue structure. Then as the bones become less dense, they weaken and are more likely to break.

Osteoporosis is a worldwide concern for both men and women, but predominantly for women; and the numbers of affected individuals clearly seem to be rising.

#### HERE ARE SOME HELPFUL STATISTICS.

Worldwide, 200 million women have osteoporosis, and one in three women over age 50 will experience osteoporotic fractures.<sup>2</sup> In fact, worldwide, an osteoporotic fracture occurs every three seconds.<sup>3</sup> By 2050, the worldwide incidence of hip fracture is expected to rise by 240% in women, compared to rates in 1990.<sup>4</sup> In the United States it is estimated that by 2020 more than 61 million people will be affected. More than 80% of all people affected by osteoporosis are women.<sup>5</sup>







66 WHEN VIEWED UNDER A MICROSCOPE, HEALTHY BONE SHOULD LOOK LIKE A DENSE HONEYCOMB.

#### SYMPTOMS AND RISK FACTORS

Usually the patient does not notice symptoms such as pain accompanying progressive bone mass loss. By the time pain in the spine and loss of height are registered, the disease is already far advanced. Consequently, both for the purpose of uncovering osteoporosis and for monitoring progress, bone density tests are recommended to be done in advance. In the so-called bone mineral density test, osteoporosis is assessed by what's known as the statistical T-score, which is just a comparison between the average normal bone density and the bone density of the specific person being tested. A normal T-score is -1.0 SD or higher (meaning from one standard deviation below the average of the population to above the average of the entire population). An osteoporosis T-Score is -2.5 SD or lower.6 Values based on population averages are always problematic. Note that if the entire population develops lower bone density, a lower number can suddenly become normal.

There is a range of FDA-approved drug treatments available for osteoporosis. Different studies have shown that, (depending on the drug and the patient population), these treatments reduce the risk of vertebral fracture by between 30 to 70%; non-vertebral fractures by between 15 to 20%; and hip fractures up to 40%.<sup>7</sup>

However, the side effects of these drugs can be devastating. For example, prolonged treatment with Fosamax, a drug from the bisphosphonates drug class, could result in atypical femur fractures themselves (!); resorption and destruction of the jaw bone; and esophageal cancer. Experts recommend that the patient's need for bisphosphonate treatment should be reviewed every three to five years. More details about drug treatments would go beyond the scope of this article. The necessity, the kind, and the duration of such interventions should be evaluated together with a knowledgeable health professional.

#### **MORE COMPLETE VIEW**

Commonly, osteoporosis is viewed as being caused by physical changes in the body, most often resulting from calcium or hormonal deficits. But is that the whole picture? Think of the astronauts who, after even a short flight in outer space with zero gravity, develop severe osteoporosis. Have they developed instant deficiencies?

Or keep in mind the following. Women with depression or anxiety, or those exhibiting high sensory sensitivity, are more likely to show signs of osteoporosis. Moreover, chronic psychological stress is known to contribute to the problem discussed here.<sup>9</sup>

We can better understand this mind-body connection with the help of a more complete view of the human being, such as has been worked out by anthroposophic medicine based on Rudolf Steiner's research.<sup>10, 11, 12</sup>

In essence, there are three quintessential activities that are typical for the human being: they are differentiated and conscious thinking, feeling, and willing. While the conventional physiological view connects all three with the nervous system, anthroposophic research has found that a more refined observation shows that while thinking is associated predominantly with the nervous system, the feeling life is based on the heart-lung rhythms. and the will works mostly with the metabolism. For great significance in the context of our theme is the further understanding that the thinking processes are related to the life processes (the etheric body); our feelings are a manifestation of the would (the so-called astral body); and, now crucial, willing is an expression of the Ego itself, the self-experience of the human being. This view makes the problem of osteoporosis understandable in both its psychological and physiological manifestations.

To repeat: it is the Ego that wills. It is essentially our individuality that causes a movement that "works"; that is active in the world itself. It is

important here to understand that a large part of this Ego activity is directed toward overcoming gravity. Hence the uprightness of the human being is not just an abstract expression of the human individuality, but rather it is a concrete expression of the Ego "willing, working" to assert itself in the outer, gravity-related world. That is, the Ego works against resistance. This movement against gravity, this penetration into the depth of our bones contributes, on the one hand, to an inner, conscious awakening; and on the other hand, it directs a movement toward depositing more substance into the will-area of the body making stronger muscles, and making denser bones with more calcium. Only such an

as a feeling of being irritable, overwhelmed, depressed, scared; experiencing stress and nervousness with the senses being overly impressionable. These are all conditions that have been shown to be associated also with a lessened bone mass. Attitudinal changes in the spiritual life of the Ego, withdrawal tendencies (or push-back from outer factors), and other factors may result then secondarily in changes in the substances in the depths of the metabolism. These connections between the more spiritual aspects of the individuality and the physical changes in the metabolism and bones have been made also from the opposite direction: studies have shown that people with the most osteoporosis have an



# 66 if the ego "forgets" to incarnate FULLY INTO THE WILL, ALL THE WAY DOWN TO ITS BONES, IT CAN AWAKENED AGAIN BY GIVING THEM MORE WEIGHT TO CARRY.

explanation, which goes beyond consideration of purely physical substance, and sees in the Will of the human Ego, the core of the individuality, the reason for the physical processes accounts for all the osteoporosis phenomena.

When the Ego is less engaged in the Will, the result will be a withdrawal from the world. On the psychological level this withdrawal manifests

accompanying statistically significantly lower cognitive performance than people with less loss of bone mass.9

The normal progression of the human biography confirms these ideas as well. In the beginning of life, the young person wants to incarnate; to go more deeply into the world, into matter. After all, this is the purpose of having come out of spiritual cosmic realms—to live and learn on earth. In the encounter with the earth-element, resistance is experienced; and in order to stand "with both feet on the ground," to be upright, the bones become more solid, made denser by various substances that will be mentioned later. Toward the opposite end of life an excarnating tendency begins, a subtle loosening from the earth's concerns; and this brings a withdrawal from the Will, from the metabolism, from the work in the outer world; and with that a decrease in bone density appears.

The conventional recommendations for preventing and limiting the bone loss of osteoporosis now become understandable.

Let's use slightly poetic language here. If

for whatever reason the Ego "forgets" to incarnate fully into the Will, all the way down to its bones, it can be awakened again by giving them more weight to carry. Hence the weight-bearing exercises; hence the weights given to astronauts to avoid bone loss. Note that conscious weight bearing is not synonymous with obesity, which is actually precisely the opposite. In obesity the Ego has also lost control of its body and instead of burning through the physical mass in the performance of its work the Ego abandons substances, so to speak. Hence there is more osteoporosis in overweight individuals.

Other well-known recommendations such Vitamin D, hormonal adjustments, and diet will be covered below.

However, anthroposophic medicine has other important contributions to make in the form of movement exercises, diet, and especially remedies that are less well-known; these will be discussed below. All anthroposophic interventions are specifically designed to help the Ego better take hold of the Will and prevent or reverse an inappropriately early "excarnation process." (Incidentally, many times the Ego is more than willing to be well-incarnated and do its work on earth; but the resistances created by life, either directly on the psyche or indirectly and secondarily through the physiology of the body, are so strong that additional help is needed to assist the Ego in its path through life.)



(How to choose between the multitude of these and other remedies can be confusing. Although none of them are toxic it is still best to discuss options with an anthroposophically trained doctor.)

#### **MYRRH**

When discussing the biblical gifts of the three Magi to the Jesus child, Rudolf Steiner pointed out that the significance of these substances lies in the fact that each one of them rules (that is, governs, heals,

#### TRACE MINERALS

(FOR EXAMPLE, SILICEA, CELESTITE, 5M) In addition to the purely movement manifestation of the Will, the Ego also manifests its will in the creation of the totality of the human form. It does this with the help of a number of substances, mainly trace minerals, such as silica (quartz).

This explains the interesting difference between childhood rickets and adult osteoporosis. It is noteworthy that small children who are



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or strengthens) one of the systems of the human being that we have discussed above: gold rules the nerve/sense system; frankincense (boswellia) the rhythmical heart-lung system; and myrrh rules the metabolic/Will system.13

Bitters in general draw the attention of the Ego to the digestive realm, but myrrh in particular goes deeper to include the entirety of the Will; and thus it goes all the way into the bones and the movement forces. We use myrrh tinctures in a multitude of other problematic situations (for detox, high cholesterol, and so forth) but also specifically in the cases discussed here. Generally several drops in water twice daily are recommended.

lacking calcium develop bowed, rounded legs, not broken, fractured legs as the adults do. Why this difference? Obviously the answer cannot come from a calcium problem, which is similar (lacking) in both conditions. The difference is in the silica metabolism. This substance is present abundantly in the child and gives the bones flexibility. The Ego, being on its way to descend more deeply into the body, uses the silica to help the formative forces (the life- or so-called ether forces), to maintain the developing form of the child. When calcium is missing the form is softer, more malleable, but can stay intact as a whole. In the adult, who is at the time in life when the Ego is beginning to pull out of the world (that

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is, aging: excarnation instead of incarnation), the silica forces are used for other purposes: not to create, or even maintain, the form. The whole silica structure becomes brittle; and then, combined with the lacking calcium strength (Ego not going deeply enough into the bones), the result is an increased fracture risk when the bone is not able to withstand an outer challenge. As we can see, here is another mystery of the

If silica needs to be given in a gentler, more organic manner instead of the mineral form (concentrated or potentized), several cups daily of a tea from the herb horsetail (equisetum arvense) can be advised. There the mineral is already bound to the plant substance and thus helps the Ego through the etheric life forces.

The Ego maintains the form of the body also by means of many other trace minerals. One such is

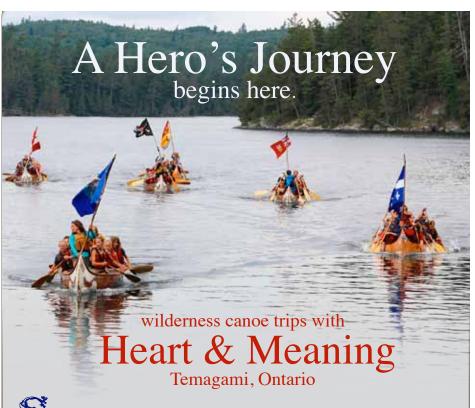


66 Thus, vitamin d is a hormone, BY DEFINITION: A REGULATORY SUBSTANCE TRANSPORTED THROUGH BODY FLUIDS AND AFFECTING TISSUFS DISTANT FROM THE ORIGIN OF ITS PRODUCTION.

osteoporosis event, which is that calcium is not the only problem. The silica mineral is also involved. Anthroposophic doctors have used this knowledge and given treatments with silica in potentized form for osteoporosis for many years.<sup>12</sup> More recent studies have in fact confirmed that highly potentized quartz helps to close wounds and strengthens the resilience of tissues considerably.14 Given in a 6x or 30x potency strength (depending on the situation) several doses two to three times daily are recommended.

the trace mineral strontium. This mineral enters the bones like calcium and makes them more resilient. Commercially, several concentrated strontium preparations are available as nutritional supplements. The problem is that if it is consumed in overabundance, this mineral can actually be toxic.<sup>15</sup>

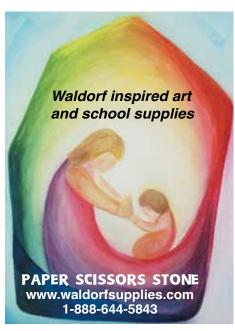
Instead, we use the potentized form of celestite (also called Celestine) which is a beautiful, blueishcolored, natural crystal that contains strontium.<sup>16</sup> In this way the Ego is merely given assistance, strengthened, on its path toward bone solidity,

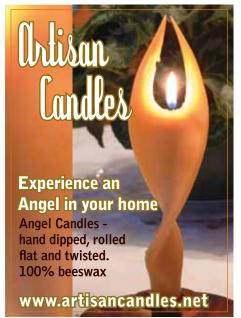


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instead of being overwhelmed. We used this specific remedy as the main therapeutic vehicle in the example cited above. Of the potentized 6x form we recommend two doses two to three times daily.

Another favorite remedy based on trace minerals is a combination that goes back to a geological picture given by R. Steiner. He described that that the Ego comes into the various layers of the human organism through slate, sulfur, porphyry, apatite, and salt. We have called it "5M" and suggest two to three times daily, 20 drops. This is a fundamental way to help the descent of the Ego into the Will.<sup>17</sup> Among the trace minerals, phosphorus has a crucial importance in strengthening the Ego forces. Phosphorus is known to be part of the bones; hence it is obviously significant to our considerations. Moreover, it is also essential in the production of energy (ATP, and so forth), which is almost synonymous with the Will and metabolic forces. Ingested in quantities that are more than the Ego can tolerate, it causes overactivity in the Will; note the agitation of children who drink phosphates-containing drinks, and so forth.

Given medicinally as a highly potentized (meaning very diluted) substance, it works only to actually invigorate the Ego to go all the way into the Will and the bones.10

In nature phosphorus is known as the light and fire that can shine even under water. Phosphorus is used to light matches; here again, it creates light and fire. We can see that the modality to strengthen the Ego here goes through the elements of light and fire, but only to the degree needed. A more detailed explanation adding why sulfur is also necessary sometimes, will be given in later articles.

We recommend several doses daily of the phosphorus in 6x or 30x potency (as needed) 2-3 times daily.

#### **VITAMIN D**

In this context we need to discuss, even if only briefly, the role of Vitamin D. Considerable benefits are attributed to the consumption of Vitamin D.

But why can it help in so many organs and so many different ways? Examples are the increase of calcium in the bones: decrease of cancer incidence; decrease of flu susceptibility; and improvement of mental status. What is its basic importance? It is a substance that binds the light forces that are needed by the Ego into the human organism. The problem is, however, that contrasted with the above-mentioned phosphorus, this is a "cold" light with none of the fire of phosphorus. When administered even in even small amounts (several hundred units daily) not to mention in the customary higher doses, vitamin D "overdoes" it, tying the Ego too strongly to the physical body. This over-shooting can result in kidney stones and other problems. (Patients come to us routinely with intakes of 7,000-10,000 IU daily.)

Incidentally, this so-called vitamin D is not even a vitamin. Vitamins cannot be produced in the body; they need to be ingested constantly with the food in order to be available to the body. On the other hand, with the help of LIGHT this so-called vitamin can be manufactured in the human physiology. Thus it is, more than anything else, a hormone, by definition: a regulatory substance transported through body fluids and affecting tissues distant from the origin of its production. As such it should be treated with more care. (But in this article we will continue to call it a vitamin.)

Nevertheless, vitamin D does have a role to play in both osteoporosis and other conditions. When the absence of outer natural light is evident, or when the Ego is in such a weakened condition that a substitution of its forces is necessary (instead of just "invigorating" the Ego), then of course the administration of this "vitamin" is warranted.

#### CALCIUM

Clearly while the Ego intention is needed to go "willingly" all the way into the bones, calcium as such is also indispensable for the maintaining of bone health. (This is comparable to the necessity for eating actual food in addition to the desire to eat.) The problem, however, is to introduce the calcium substance in such a way to the organism that it follows the living, etheric pathways all the way into the places where it is intended to go, all

far as recommending that this formula, which he called a "reservoir of health" be placed on every dinner table, along with like salt and other condiments. (Of course we assume here the correct manufacturing technique.)

#### STRESS REDUCTION

Any type of stress, whether physiological or mental, constitutes a preoccupation for the Ego. It pulls its activity toward the nervous system and away from the metabolism, the Will. It focuses the



# 46 THE SILICA MINERAL IS ALSO INVOLVED. ANTHROPOSOPHIC DOCTORS HAVE USED THIS KNOW-LEDGE AND GIVEN TREATMENTS WITH SILICA IN POTENTIZED FORM FOR OSTEOPOROSIS FOR MANY YEARS.

the way from the intestinal absorption to the bones (and the teeth). In the worst case scenario, the calcium would go into blood vessels and contribute to hardening the arteries. Less dangerous, but still not helpful, would be an increased blood plasma calcium level with no proper utilization.

Rudolf Steiner presented a solution to this difficulty by suggesting a formula in which a combination is made of calcium carbonate with potentized calcium phosphate.18, 19 He went so

individuality toward the "inside" away from the "outside"; away from its interaction with the world where deeds are needed, where we need to be with both feet on the ground. As we have already said, one of the consequences is osteoporosis.

Physiologically, we know that stress induces the outpouring of the hormone cortisol with its effects on bone thinning, general tissue destruction, and more. In addition to a variety of spiritual stress reduction exercises and meditations, various herbal remedies can be used. Among many available options, we prefer concentrated lemon balm supplements. Lately cannabinoids used judiciously have been shown to complement the endocannabinoid that naturally occur in the body; and they then help bone health.<sup>20</sup>

#### **BIO-IDENTICAL HORMONES**

The pathway of the Ego toward a deeper Will, in a sense toward the earth, is expressed in the production of estrogen. In the post-menopausal part of life, estrogen production is decreased since the individuality is withdrawing from the more earthly concerns, and directed more toward the spiritual life. This estrogen decrease manifests in osteoporosis. Estrogenic hormones are indeed used in the management of osteoporosis. Nevertheless, estrogen administration can lead, among other negative side effects, to the formation of blood clots and more. These can be clear signs of a turning toward the "earthly," but in an overemphasized way. Here so called bio-identical hormones can help. These are estrogen forms that are identical to the ones in the human body and less likely to cause problems than synthetics. One such hormone that has been shown to help in osteoporosis (although not recognized by the FDA as being effective), is 17-beta-estradiol. This is the most physiologically active of the bio-identical estrogens. When needed, we prescribe only these kinds of hormones in our clinic.<sup>21</sup>

Finally, can we say that the care of osteoporosis deserves a careful look also at the very essence of the human individuality, and not just at the physical phenomena? We think so.

Andrea and Ross Rentea have been practicing anthroposophic medicine in a family practice setting for more than 35 years. They are certified in Anthroposophic Medicine and are members of the Anthroposophical Society and the Physicians' Association for Anthroposophical Medicine (PAAM). Together with colleague Mark Kamsler MD they co-founded the True Botanica Company in 2004. truebotanica.com The company produces anthroposophically-oriented nutritional supplements and special potentized anthroposophic

remedies. Several years ago they also co-founded the Kolisko Institute for Anthroposophical Medicine. **koliskoinstitute.org** One of the research projects resulted in a special method to validate the quality of the potentization process. (Kolisko Validation)<sup>22</sup> This process will greatly contribute in the future to support the efficacy of anthroposophic medicines.

**The remedies** mentioned in this article are produced at the True Botanica Company. Their quality is uniquely demonstrated through the Kolisko Validation process. All profits from the sale of these products go toward furthering the research in anthroposophic medicine.

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