AEROBIC ENDURANCE

RELATED CONDITIONS

- Aerobic deficiency syndrome
- Hypoglycemia
- Malnutrition
- Sedentary lifestyle
- Poor training habits
- Carbohydrate sensitivity
- B-vitamin deficiency
- Essential fatty acid deficiency
- Hypoadrenia
- Chronic fatigue

PHYSIOLOGIC CONSIDERATIONS

In aerobic metabolism, the body’s primary fuel source is fat. When there is a fatty acid deficiency or imbalance, the body turns to available sugar and glycogen stores to fuel itself. Glucose (sugar) is an excellent fuel source for short bursts of energy, but it is unable to sustain the body and provide all of its energy needs. Normal levels of glucose and glycogen can fuel a body for a few hours to a day, but not much longer. Fats, on the other hand, fuel the body for long periods of time. They are a relatively inexhaustible source of energy compared to carbohydrates.

A large part of enhancing aerobic efficiency is through blood sugar normalization via diet and supplementation where deficiencies are present. An increase of essential unsaturated fatty acids, usually Omega-3s, is necessary. During aerobic exercise the entire vascular system is trained. Arteries and capillaries contract and expand with each heartbeat. New capillaries are stimulated to grow in the muscles, heart, and lungs. A body that performs regular aerobic exercise will easily burn fat as the primary fuel source throughout the day and the evening. When the body begins to burn fat effectively, there is more energy available to the system, while reducing stress, fatigue, and food cravings.

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M-2 AEROBIC ENDURANCE

PREDISPOSING FACTORS TO POOR AEROBIC CAPACITY

- Poor diet, hypoglycemia
- Anemia
- Vitamin B deficiency
- Essential fatty acid deficiency
- Protein deficiency
- Sedentary lifestyle
- Vitamin or mineral deficiency
- Hypoadrenia
- Hypothyroid
- Poor training and exercise habits

RECOMMENDATIONS

Review the client’s seven-day diet history. Look for an over-reliance on starches, grains, sugars, and stimulants, such as caffeine, soda, sweets, etc. Review the client’s exercise program and encourage those who are sedentary to begin an easy, enjoyable activity at least three times per week for 30 minutes or longer in the aerobic range.

The formula for the maximum heart rate for the aerobic exercise range is calculated to be 180 minus age. For those who are ill or on medications, it is recommended to take an additional 10 points off the maximum number. The minimum rate for the aerobic range is calculated by subtracting 10 points off the maximum rate. For example, a healthy 40 year old that is not on medications would have a maximum heart rate of 180 – 40 = 140. For this person the heart rate for aerobic exercise is between 130 and 140 beats per minute. When someone has been aerobically fit for a year, is healthy, and not on medications, the range may be increased by 10 points. For example, a healthy and aerobically fit person who is 50 years old would have a range of 180 – 50 = 130 + 10 equals 140 beats per minute maximum. This healthy aerobically fit person’s aerobic range would be 130 to 140 beats per minute.

When exercising in this range one should feel mildly relaxed or even energized, never exhausted.

To ensure that exercise is in the aerobic range, it is highly recommended to use a heart rate monitor. The monitor should cost under $100 and is the most important piece of training equipment after shoes. The monitor is used during exercise to determine aerobic range, which also translates into the optimum range for burning fats. Training in the aerobic range enhances the fat-burning metabolic pathways for energy extraction that will continue throughout the day.

Exercise at least three times a week is the minimum requirement for notable benefits. During aerobic metabolism, the heart rate is moderate and the breathing is deep and regular. Individuals may just “break a sweat.” For those without a heart rate monitor, suggest the “talk test.” When they are able to converse easily while exercising they have reached a suitable aerobic exercise pace.
PRIMARY SUPPLEMENTAL SUPPORT

Presuming that underlying condition such as anemia, B vitamin, or essential fatty acid deficiencies have been addressed, consider the following:

STAMINA CAPS (MULTIPLE VITAMIN TO SUPPORT PHYSICAL STAMINA)

Thiamin and pantothenic acid are both essential nutrients in energy extraction. Carnitine is useful to the body’s fat-burning mitochondria because it delivers fatty acids to the mitochondria for energy production. Octacosanol contains sterols, phosphatides, serines, and long-chain alcohols, and increases the efficient conversion of food and storage fuels into biological energy. It also increases oxygen utilization and improves glycogen storage in the muscles. Octacosanol increases muscle strength and endurance with quicker reaction time and improved recovery times. Coenzyme Q₁₀ is also known to improve mitochondria function and energy production in muscles.

**Recommendation**: 2 to 4 capsules one to four times daily. Increase dose before intense training, competition, or other need for increased energy. Take one to two hours before an athletic event or training.

BIO-CARDIOZYME FORTE (MULTIPLE NUTRIENTS PACK SUPPORTING CARDIOVASCULAR HEALTH)

*Bio-Cardiozyme Forte* formula effectively strengthens the heart and entire cardiovascular system. It can be taken in much higher doses such as 6 to 20 or more tablets daily when under extraordinary demands such as high-altitude hiking, marathon running, or any endurance sports.

**Recommendation**: 3 to 6 tablets daily as a multivitamin. Best taken with meals.

BIOMEGA-3 (EPA AND DHA FROM FISH OIL)

We need various types of essential and semi-essential fats in our diets. The omega-3’s are extremely hard to find in adequate amounts on a daily basis and must be supplemented.

**Recommendation**: 2 to 3 capsules twice daily, best taken with meals.
**BioProtect**

**BioProtect** is an antioxidant used as protection from the oxidative stress of intense training.

**Recommendation:** 3 capsules daily. Increase to 6 or 8 daily during increased oxidative stress, such as intense training, recovery from injury or illness, or other factors where antioxidants are indicated.

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**E-Mulsion 200**

**E-Mulsion 200** (Emulsified Vitamin E Capsule)

Wear and tear from exercise and rebuilding tissue may increase oxidative damage. Increased fat-soluble antioxidants, such as **E-Mulsion 200**, are also indicated when increasing fat intake.

**Recommendation:** 2 capsules daily, may increase up to 4 with increased training or while recovering from injury or illness.

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### Secondary Supplemental Support

**Cytozyme-AD**

**Cytozyme-AD** (Adrenal Tissue—Neonatal Bovine)

Adrenal glandular support is useful for athletes who over-train and do not get proper rest. **Cytozyme-AD** is a performance enhancer and should be used to rebuild the adrenal glands and the stress response.

**Note:** Caution should be used because some athletes feel so good on this product that they may continue to over-train.

**Recommendation:** 1 to 2 tablets one to three times daily. Best with meals. May take 1 to 6 tablets one hour before an athletic event.

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**GamOctaPro**

**GamOctaPro** (Hydrolyzed Soy Protein with Gamma Oryzanol)

**GamOctaPro** is a source of high-quality protein. It is useful for maintaining and building lean body mass. Excellent for athletes, post-menopausal women, younger and older adults, those recovering from illness or injury, intense trainers, and those who are concerned with maintaining lean body and muscle mass.

**Recommendation:** 1 to 2 tablespoons in smoothie or shake with water, juice, or milk and fruit to taste. Only allow a small amount of sugar from the juice or fruit—less than 10 grams. Water may be added to the juice to lower the sugar concentration.
**BIOCTASOL FORTE**

(OCTACOSANOL)

Extra octacosanol has been clinically proven to increase oxygen utilization during exercise. It improves glycogen storage in the body’s muscles, increases stamina and endurance, reduces high-altitude stress, improves reaction time, and helps to lower blood cholesterol levels. Octacosanol also benefits those who get muscle pain after exercise.

**Note:** Octacosanol is an ingredient in *Stamina Caps* and *GamOctaPro*.

**Recommendation:** 1 to 2 tablets one to three times daily, best taken one to two hours before exercise.

---

**AMINO SPORT**

(BROAD SPECTRUM AMINO ACIDS)

Three capsules contain a 1,200mg proprietary blend of whey protein and amino acids to support lean body mass. Included in the blend are the branch chain amino acids essential in the repair and building of muscle and connective tissue, and anabolic amino acids found to stimulate the release of human growth hormone. This is a premier amino acid product for athletes.

**Recommendation:** 1 to 3 capsules with each meal and 2 to 3 capsules after exercise and before bed.

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**COQ-ZYME FORTE**

(EMULSIFIED COENZYMЕ Q-10)

*CoQ-Zyme Forte* supports energy production in the mitochondria. Use where increased heart and skeletal muscle strength and fat-burning capacity is desired.

**Recommendation:** 2 to 4 tablets one to two times daily.

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**L-CARNITINE HCL**

(L-CARNITINE)

This amino acid is essential for burning fat. L-Carnitine is responsible for moving fatty acids from the cytoplasm of the cell into the mitochondria where energy is extracted.

**Recommendation:** 1 to 2 capsules one to three times daily.
ANAEROBIC ENHANCEMENT

RELATED CONDITIONS

- Anabolic conditioning
- Muscle growth and repair
- Strength and fitness training
- Bodybuilding
- Recovery from illness
- Wasting disease and emaciation

CLINICAL CONSIDERATIONS

Anaerobic metabolism occurs during forceful quick contractions of muscles for short duration (sixty seconds or less). Activities such as weight lifting, sprinting, or any strenuous contraction of muscles involve anaerobic metabolism. The “fast twitch” or white fiber striated muscles are considered to be preferentially involved in anaerobic metabolism. The primary fuel for anaerobic metabolism is glucose and glycogen stored in the muscles. Some may argue that it is useful to provide plenty of glucose before, during, and after exercise. However, it has been shown that greater increases in growth hormone, and therefore, muscle growth, occur after exercise when blood sugar levels are normal and not supplemented with sugary snacks and beverages, such as sport drinks.

PROTOCOL AT A GLANCE

Primary Supplemental Support
- Bio-Anabolic Packs
- GamOctaPro
- Biomega-3
- E-Mulsion 200
- BioProtect

Secondary Supplemental Support
- Gammanol Forte w/FRAC
- Bioctasol Forte
- b-Vital
- Equi-Fem
- Cytozyme-F
- Cytozyme-M
- Cytozyme Orchic
- Palmetto-Plus
- Cytozyme-PT/HPT
- Cytozyme-LV
- Cytozyme-AD
- Cytozyme-H
**PRIMARY SUPPLEMENTAL SUPPORT**

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bio-Anabolic Packs</strong></td>
<td><em>(Multiple Vitamins Supporting Anabolic Function)</em></td>
<td><strong>Bio-Anabolic Packs</strong> support muscle growth and repair. This product is best used with a training program. <strong>Recommendation</strong>: Take 1 or 2 packets daily</td>
</tr>
<tr>
<td><strong>GamOctaPro</strong></td>
<td><em>(Hydrolyzed Soy Protein with Gamma Oryzanol)</em></td>
<td><strong>Recommendation</strong>: Take 1 or 2 times daily</td>
</tr>
<tr>
<td><strong>Biomega-3</strong></td>
<td><em>(EPA and DHA from Fish Oil)</em></td>
<td><strong>Recommendation</strong>: 2 to 3 capsules twice daily, best taken with meals</td>
</tr>
<tr>
<td><strong>E-Mulsion 200</strong></td>
<td><em>(Emulsified Vitamin E Capsule)</em></td>
<td><strong>Recommendation</strong>: 2 capsules daily. May increase up to 4 with increased training or while recovering from injury or illness.</td>
</tr>
</tbody>
</table>
**BIOPROTECT**

(BROAD SPECTRUM ANTIOXIDANTS)

*BioProtect* is a broad-spectrum antioxidant used as protection against oxidative stress caused by intense training.

**Recommendation:** 2 to 4 capsules daily. Increase to 6 or 8 capsules daily during increased oxidative stress, such as intense training and while recovering from injury.

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**SECONDARY SUPPLEMENTAL SUPPORT**

**GAMMANOL FORTE w/FRAC**

(GAMMA ORYZANOL—FORTIFIED)

*Gammanol Forte with FRAC* consistently raises growth hormone levels and increases muscle growth and repair when used with weight or resistance training.

**Recommendation:** 2 to 4 tablets one to four times daily. Take one hour before or after exercise or at bedtime.

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**BIOCTASOL FORTE**

(OCTACOSANOL)

Extra octacosanol has been clinically proven to increase oxygen utilization during exercise. It improves glycogen storage in the muscles, increases stamina and endurance, reduces high-altitude stress, improves reaction time, and helps to lower blood cholesterol levels. Octacosanol also benefits those who get muscle pain after exercise.

**Recommendation:** 1 to 2 tablets taken one to three times daily. Best taken one to two hours before exercise.

---

**B-VITAL**

(PERUVIAN MACA AND VELVET DEER ANTLER)

*B-Vital* increases growth hormone and testosterone levels in men and women. Women may want to include a female supplement such as *Equi-Fem* or *Cytozyme-F* to balance the androgen hormones that may be stimulated.

**Recommendation:** 2 capsules daily, may take two additional capsules one or two hours before exercise.
<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EQUI-FEM</strong></td>
<td>(MULTINUTRIENTS SUPPORTING FEMALE ENDOCRINE HEALTH) Broad-spectrum multivitamin, mineral, and botanical product used to support and regulate female hormones. It is useful for menstrual problems, menopausal symptoms, and as a feminizing product, for example where women develop excess facial or body hair.</td>
<td>1 to 2 tablets one or two times daily</td>
</tr>
<tr>
<td><strong>CYTOZYME-F</strong></td>
<td>(MULTIGLANDULAR SUPPORTING FEMALE ENDOCRINE HEALTH—NEONATAL BOVINE) Used to support female hormone balance.</td>
<td>1 to 3 tablets one to two times daily</td>
</tr>
<tr>
<td><strong>CYTOZYME-M</strong></td>
<td>(MULTIGLANDULAR SUPPORTING MALE ENDOCRINE HEALTH—NEONATAL BOVINE) Used to support male hormone balance.</td>
<td>1 to 3 tablets one to two times daily</td>
</tr>
<tr>
<td><strong>CYTOZYME–ORCHIC</strong></td>
<td>(ORCHIC TISSUE—ADULT BOVINE) Used to support male hormone balance.</td>
<td>1 to 3 tablets daily</td>
</tr>
<tr>
<td><strong>PALMETTO-PLUS</strong></td>
<td>(SAW PALMETTO AND OTHER NUTRIENTS TO SUPPORT PROSTATE) Supports prostate health for men. This formula decongests a swollen prostate and moves lymphatic congestion from the pelvic region.</td>
<td>3 to 6 tablets daily</td>
</tr>
</tbody>
</table>

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Other supplements to consider—suitable for both genders:

**CYTOZYME-PT/HPT** *(PITUITARY/HYPOTHALAMUS TISSUE—NEONATAL BOVINE)*

Each tablet contains a neonatal bovine pituitary/hypothalamus complex. These glands are the master glands that regulate the endocrine system where many hormones derive. These glands regulate the other hormonal glands, manage growth, and repair tissues.

**Recommendation:** 1 to 4 tablets daily

**CYTOZYME-LV** *(LIVER TISSUE—NEONATAL BOVINE)*

Neonatal liver concentrate is a highly nutritious and effective liver source.

**Recommendation:** 1 to 8 tablets daily

**CYTOZYME-AD** *(ADRENAL TISSUE—NEONATAL BOVINE)*

*Cytozyme-AD* is glandular tissue support useful for athletes who may train themselves to the point of exhaustion, who may not get sufficient rest or perhaps use stimulants for short term gains in performance. Many athletes are highly motivated to improve their fitness level while actually over training and thereby degrading their overall health. Over-training most often shows itself as adrenal exhaustion.

**Recommendation:** 1 to 6 tablets daily. Begin with 1 or 2 tablets with each meal, may increase up to 3 per meal when required

**CYTOZYME-H** *(HEART TISSUE—NEONATAL BOVINE)*

Neonatal heart tissue may be used to strengthen not only the heart, but all muscle tissues. Heart tissue along with inositol will lower blood sugar in diabetics by pushing sugar and other anabolic products into cells. Heart tissue has been shown to strengthen all muscles of the body supporting growth, repair, and energy utilization.

**Recommendation:** 1 to 8 tablets daily
BONE HEALING

RELATED CONDITIONS

- Healing bone fractures
- Stress fracture
- Thinning bones
- Osteoporosis

PHYSIOLOGIC CONSIDERATIONS

Bone consists of about 50% water and 50% solid matter; about half of the solid matter is cartilage, composed primarily of protein. The cartilaginous portion is then hardened by deposits of inorganic salts as carbonate and phosphate. The inner portion of the long bones, the bone marrow, is where red and white blood cells originate.

Bone healing occurs through the effects of local tissue inflammation, physical approximation of the fractured parts, hormonal regulation and the nutritional status of the client.

In support of bone healing, attention should be given to foundational issues regarding diet and where necessary supplementation. Additional assessment of the body’s ability to digest and assimilate needed nutrients, balance of minerals, fatty acids, proteins must be included. Finally, good hormonal regulation is imperative for timely bone healing.

Hormones are necessary for increasing bone density by affecting osteoblast function and bone healing and should be evaluated. Hormones, which support bone growth, include estrogen, testosterone, human growth hormone and normal thyroid hormonal levels.

Adrenal hormones, parathyroid hormone, and excess thyroid hormones are all known to increase osteoclast function, thereby decreasing bone density and mineralization.

PROTOCOL AT A GLANCE

Primary Supplemental Support
- Osteo-B Plus
- Bio-D-Mulsion
- Bio-K-Mulsion
- GamOctaPro
- Biomega-3
- Gammanol Forte w/FRAC
- Ca/Mg-Zyme

Secondary Supplemental Support
- Thyrostim
- Equi-Fem
- Cytozyme-F
- Palmetto-Plus
- Cytozyme-M
**PRIMARY SUPPLEMENTAL SUPPORT**

**OSTEO-B PLUS**  
(MULTIPLE NUTRIENTS TO SUPPORT BONE HEALTH)  

*Osteo-B Plus* supplies a broad range of high-quality nutrients including calcium, magnesium, manganese, vitamins D and K, boron, purified chondroitin sulfate, and additional micronutrients. *Osteo-B Plus* was developed to support maintenance and healing of bones, joints, cartilage, and teeth.  

**Recommendation:** 3 tablets twice daily

**GAMOctaPro**  
(HYDROLYZED SOY PROTEIN WITH GAMMA ORYZANOL)  

*GamOctaPro* provides high-quality protein for bone, joint, and muscle repair. FRAC and gamma-oryzanol increase growth hormone and tissue repair. Octacosanol increases tissue energy metabolism.  

**Recommendation:** 2 tablespoons daily with juice or water. Blend with water, crushed ice, juice or fruit to taste.

**BIO-D-Mulsion**  
(EMULSIFIED VITAMIN D DROPS)  

*Bio-D-Mulsion* increases calcium absorption and mobilization. It is especially useful for those who live in regions with less sunshine or not exposed to regular sunlight.  

**Recommendation:** 1 drop twice daily

**BIO-K-Mulsion**  
(EMULSIFIED VITAMIN D DROPS)  

Vitamin K has a number of functions beyond what is commonly considered for clotting. Vitamin K stimulates osteoblast function in laying down cartilage and minerals for bone regrowth. This is especially important where leafy green vegetable consumption is decreased.  

**Recommendation:** 1 drop twice daily
**BIOMEGA-3**

(EPA AND DHA FROM FISH OIL)

Essential fatty acids are necessary for calcium mobilization, cell membrane function, inflammation control, thyroid and overall endocrine health, and immune and cardiovascular functioning.

**Recommendation:** 2 to 3 capsules twice daily

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**GAMMANOL FORTE WITH FRAC**

(GAMMA ORYZANOL—FORTIFIED)

FRAC and gamma-oryzanol increase growth hormone and promote lean body mass. *Gammanol Forte with Frac* also promotes bone growth and repair for individuals with thinning bones, osteoporosis, or anyone concerned about lean body mass, bones, connective tissue, muscles and organs, into middle and old age. Used by athletes of all ages for growth and repair.

**Recommendation:** 1 to 4 tablets one to four times daily

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**CA/MG-ZYME**

(CALCIUM AND MAGNESIUM)

*Ca/Mg-Zyme* is used when additional calcium and magnesium are required in the 5:1 ratio. Three tablets contain 300 mg of calcium citrate, 60 mg of magnesium aspartate with catalase and superoxide dismutase.

**Recommendation:** Take 2 to 4 tablets twice daily

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**SECONDARY SUPPLEMENTAL SUPPORT**

*Ensure hormone balance and support where necessary:*

**THYROSTIM**

(MULTIPLE NUTRIENTS TO SUPPORT THYROID FUNCTION WITH PITUITARY GLANDULAR)

Thyroid hormone balance is critical in bone maintenance and healing. Use when support for thyroid is indicated.

**Recommendation:** 1 to 3 tablets once or twice daily
**EQUI-FEM**

(MULTIPLE NUTRIENTS TO SUPPORT FEMALE ENDOCRINE HEALTH)

Female hormone support is important for bone growth. It is especially important to include this product for female clients when the sex hormones are out of balance.

**Recommendation:** 2 to 3 capsules twice daily

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**CYTOZYME-F**

(MULTI-GLANDULAR TO SUPPORT FEMALE ENDOCRINE HEALTH—NEONATAL BOVINE)

Cytozyme-F is powerful female hormone support when glandular therapy is indicated. It includes ovarian, adrenal, thymus and spleen in a balanced glandular formula.

**Note:** All are extracted from neonatal bovine except the ovarian, which is from adult bovine.

**Recommendation:** 1 to 3 tablets twice daily

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**PALMETTO-PLUS**

(SAW PALMETTO AND OTHER NUTRIENTS TO SUPPORT PROSTATE)

For male hormone imbalance, use this product for the client who has poor prostate function while supporting healthy bone growth.

**Recommendation:** 1 to 3 capsules one to two times daily

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**CYTOZYME-M**

(MULTIPLE-GLANDULAR TO SUPPORT MALE ENDOCRINE HEALTH—NEONATAL BOVINE)

*Cytozyme-M* supports male hormone function for growth and repair. This is a powerful male hormone support when glandular therapy is indicated. Includes orchic, adrenal, thymus and spleen in a balanced glandular formula.

**Note:** All are extracted from neonatal bovine except the orchic, which is from adult bovine.

**Recommendation:** 1 to 3 tablets twice daily
Notes
Bone Spurs

Related Conditions

- Osteophyte formation
- Lipping and spurring of bone as seen on x-rays
- Joint stiffness
- Calcification of joint spaces, tendons, and ligaments

Physiologic Considerations

Whether on the calcaneus, a vertebra, shoulder, hip or elbow, a bone spur is the result of flawed mineral management and biomechanical misalignment. “Wolf’s Law” states that bone will grow and remodel according to the stress placed upon it. When mechanical stress occurs through faulty alignment, a ligament or tendon will pull on its bony attachment, stress at this bony attachment over time will develop a bone spur. Under ideal conditions, some bone remodeling will occur, in sub-optimal conditions, such as when the tissue pH is too alkaline or where mineral imbalances exist, minerals will deposit onto the stressed tissue increasing the bony outgrowth producing a bone spur.

Nutritionally, we seek to normalize systemic pH and balance minerals, especially calcium and the ratio of calcium to other minerals. In this way, calcium can be redistributed back into solution, pulling it from tissues, such as joints, eyes, artery walls, soft tissue, gallbladder and kidneys.

Predisposing Factors

Often a mineral or other nutritional imbalance is to blame. Magnesium, sodium, potassium, and phosphorus must be balanced with calcium. When these minerals are in a lower concentration than calcium it may cause the soluble calcium to “precipitate” out of solution and end up in joints, etc.

Another factor to consider is that an overly alkaline systemic pH causes calcium and other alkaline minerals to move from a soluble state and cause bone spurs. Note that the calcium ends up in joints and not the bone matrix. On x-rays, it will appear that an individual has osteoporosis and osteoarthritis simultaneously. They have extra calcium around the joint space, and yet the bones

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themselves exhibit reduced calcium and mineralization. There is an abundance of calcium; it is just in the wrong place.

Consider the effects of essential fatty acids on bone health and mineral management issues. Fats are critical for hormonal balance, particularly the thyroid gland and steroid hormone production. Another critical effect regards essential fatty acids and their ability to disperse calcium and other minerals into tissues.

## PRIMARY SUPPLEMENTAL SUPPORT

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<tr>
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<tbody>
<tr>
<td><strong>Mg-Zyme</strong></td>
<td>(Magnesium)</td>
</tr>
<tr>
<td>Serum levels of magnesium and calcium exist in a ratio of 5 parts calcium to 2 parts magnesium. Where there is more calcium than magnesium, the calcium will not hold in solution, it will precipitate out and settle into joints. In these cases, it is imperative to supplement with magnesium.</td>
<td></td>
</tr>
<tr>
<td><strong>Recommendation:</strong> 2 to 3 tablets twice daily</td>
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</tr>
<tr>
<td><strong>K-Zyme</strong></td>
<td>(Potassium)</td>
</tr>
<tr>
<td><em>K-Zyme</em> contains a balanced potassium-calcium ratio.</td>
<td></td>
</tr>
<tr>
<td><strong>Recommendation:</strong> 2 to 3 tablets twice daily</td>
<td></td>
</tr>
<tr>
<td><strong>Biomega-3</strong></td>
<td>(EPA and DHA from Fish Oil)</td>
</tr>
<tr>
<td>Essential fatty acids are necessary to mobilize calcium from soft tissue deposits, maintain cell membrane fluidity, and support thyroid and parathyroid function (both important for calcium management).</td>
<td></td>
</tr>
<tr>
<td><strong>Recommendation:</strong> 1 to 4 capsules once or twice daily. Best taken with meals.</td>
<td></td>
</tr>
<tr>
<td><strong>Liquid Iodine</strong></td>
<td>(Potassium Iodide)</td>
</tr>
<tr>
<td>Iodine enhances calcium dispersion by stimulating the thyroid gland.</td>
<td></td>
</tr>
<tr>
<td><strong>Recommendation:</strong> 10 to 20 drops in water once or twice daily</td>
<td></td>
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</tbody>
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**Super Phosphozyme Liquid** (Natural Phosphorous Liquid)

*Super Phosphozyme Liquid* may be the most efficient way to quickly mobilize calcium from joints and artery walls. Phosphorus and calcium must also maintain relative (10:2) concentrations for good mineralization. Where phosphorus is deficient, calcium trickles out of solution ending up in joints and as deposits in arteries and kidneys etc.

**Recommendation**: 1 dropper full in a small glass of water one to three times daily.

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**Secondary Supplemental Support**

**Thyrostim** (Multiple Nutrients to Support Thyroid Function with Pituitary Glandular)

*Thyrostim* is comprehensive nutritional support for thyroid function. It does not contain thyroid glandular tissue or herbal thyroid stimulants. For these reasons, it is a safe nutritional supplement for any thyroid condition unless there is sensitivity to iodine or copper.

**Recommendation**: 1 or 2 tablets two times daily with meals.

**Bio-CMP** (Alkaline Ash Minerals—Calcium, Magnesium and Potassium)

*Bio-CMP* is a balanced source of calcium and magnesium with extra potassium.

**Recommendation**: 2 to 4 tablets two to four times daily. Best taken away from meals.
Notes
**CARPEL TUNNEL**

### RELATED CONDITIONS

- Multiple or various nerve entrapment syndromes
- Tarsal tunnel
- Ulna tunnel
- Tennis elbow
- Over use syndromes
- Repetitive motion injuries

### PRIMARY SUPPLEMENTAL SUPPORT

**B₆ PHOSPHATE**

(PYRODOXAL-5-PHOSPHATE)

B₆ is known for its effect with carpal tunnel syndrome and its ability to decrease swelling caused by fluid in the extremities. It has been suggested that vitamin B₆ affects the adrenal gland’s ability to maintain fluid homeostasis through mineral balance.

**Recommendation:** 2 to 3 tablets taken twice daily

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**PROTOCOL AT A GLANCE**

**Primary Supplemental Support**

- B₆ Phosphate
- ChondroSamine Plus
- Bio-GGG-B

**Secondary Supplemental Support**

- Renal Plus
- Cytozyme-AD

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**CLINICAL CONSIDERATIONS**

Loose ligaments, tissue swelling, inflammation, joint malposition, and muscle imbalance are common with this condition. Consider a postural or ergonomic fault, keyboard usage, etc. Splints are often helpful. Chiropractic care is indicated here.
CHONDROSMAMINE PLUS

(GLUCOSAMINE, CHONDROITIN, AND OTHER JOINT NUTRIENTS)

*ChondroSamine Plus* contains ingredients that effectively heal fibrous and elastic connective tissue, such as tendons, ligaments, and discs.

**Recommendation**: 2 to 3 tablets twice daily

BIO-GGG-B

(RIBOFLAVIN AND ASSOCIATED B VITAMINS)

*Bio-GGG-B* is rich in B vitamins and other components important to support fat metabolism and modulate homocystine levels. The enzymatic and phosphorelated forms of thiamin, riboflavin, and pyridoxine are included along with choline, inositol, PABA, trimethylglycine and others. There are some indications that carpel tunnel and other nerve entrapment conditions may be related to homocystine levels. This supplement naturally has more of the nutrients necessary for correcting high homocystine levels.

**Recommendation**: 2 to 4 tablets one to three times daily

SECONDARY SUPPLEMENTAL SUPPORT

RENAL PLUS

(MULTIPLE NUTRIENTS TO SUPPORT RENAL FUNCTION)

*Renal Plus* effectively reduces swelling in the carpel tunnel and elsewhere in the body.

**Recommendation**: 3 to 4 tablets three to four times daily as a diuretic

CYTOZYME-AD

(ADRENAL TISSUE—NEONATAL BOVINE)

Decreases lax ligaments throughout the body and helps maintain manipulative correction.

**Recommendation**: 1 to 2 tablets with meals one to three times daily

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Notes
DEGENERATIVE DISC

RELATED CONDITIONS

- Disc injury
- Bulge, rupture, prolapse, or annular tear
- Loss of joint space as seen on x-ray

PHYSIOLOGIC CONSIDERATIONS

Spinal discs contain fibrous and elastic connective tissues (annular fibers) arranged in circles around a soft fluid center (nucleus pulposis). Repair and healing of the disc is problematic since there is no ready blood delivery system (avascular) which could provide the raw materials necessary for rebuilding. The raw materials and nutrients are distributed to the area through simple diffusion. Healing, therefore, depends on the client’s baseline nutritional status.

The annular fibers are heavily innervated for pain sensation. Rips and tears to this tissue may contribute to the painful “slipped” disc. Often, the soft center (the nucleus pulposis) will push through tears in the annular fibers causing a disc bulge. The bulge can be large enough to press on the nerve canal, which causes pain in the extremities.

Healing the disc nutritionally includes providing components for repair of the elastic and fibrous connective tissue. The mucopolysaccharides, or glucosaminoglycans (GAGs), provide tensile strength and elasticity to connective tissues.

PREDISPOSING FACTORS

- Traumatic injury (usually includes bending, twisting and lifting)
- Acceleration/deceleration injury (as in a whiplash) to the cervical spine
- Poor posture
- Poor body conditioning
- Muscle imbalance
- Weak abdominal muscles

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Poor baseline nutritional status
Dehydration
Previous injury
Obesity
Pendulous abdomen

**CLINICAL NOTES**

Nutritional support for degenerated discs or any musculoskeletal condition will best succeed when used in conjunction with chiropractic care.

**PRIMARY SUPPLEMENTAL SUPPORT**

*For an acute condition, review the section on inflammation.*

<table>
<thead>
<tr>
<th>CHONDROSAMINE PLUS</th>
<th>(GLUCOSAMINE, CHONDROITIN, AND OTHER JOINT NUTRIENTS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>ChondroSamine Plus</em> is designed to heal fibrous and elastic connective tissue. Glucosamine stimulates the chondrocytes to increase production of the GAGs (glucosamionglycans). Purified chondroitin sulfate is one of the main macro-constituents of the GAGs. The purified form of chondroitin sulfate has demonstrated more than a 95% absorption rate, while absorption for the non-purified form is less than 20%. Sulfur-containing MSM (methylsulfonylmethane) is well known as a vital constituent in the regeneration and stabilization of connective tissues.</td>
<td></td>
</tr>
</tbody>
</table>

**Recommendation**: 2 to 3 capsules two to four times daily with or between meals

<table>
<thead>
<tr>
<th>BIOMEGA-3</th>
<th>(EPA AND DHA FROM FISH OIL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omega-3 fatty acids provide joint lubrication, mineral distribution to tissues, and support the anti-inflammatory eicosanoids.</td>
<td></td>
</tr>
</tbody>
</table>

**Recommendation**: 2 to 4 capsules two to three times daily with meals
**Bio-CMP**

(ALKALINE ASH MINERALS—CALCIUM, MAGNESIUM AND POTASSIUM)

*Bio-CMP* is a balanced source of calcium and magnesium with extra potassium. It calms the muscles, and reduces muscle spasms and pain.

**Recommendation:** 2 to 4 tablets two to four times daily. Best taken on an empty stomach.

---

**SECONDARY SUPPLEMENTAL SUPPORT**

**Cytozyme-AD**

(ADRENAL TISSUE—NEONATAL BOVINE)

Healthy adrenal function will tighten lose ligaments and provide all the important anti inflammatory glucocorticoids to control pain and inflammation.

**Recommendation:** 1 to 3 tablets one to three times daily. Best taken with meals.

**Bio-FCTS**

(BROAD SPECTRUM BIOFLAVONOIDS, VITAMIN C, THYMUS AND SPLEEN)

The bioflavonoids along with a good dose of quercetin in *Bio-FCTS* inhibit the release of pro-inflammatory eicosanoids and reduce the function of phospholipase A2, lipoxygenase, and cyclooxygenase, all of which are part of the pro-inflammatory prostaglandins.

**Recommendation:** 2 to 4 capsules two to four times daily.

**V.H.P.**

(VALERIAN, HOPS AND PASSION FLOWER)

*V.H.P.* is an herbal tranquilizer that will reduce pain and the stress associated with being in pain and encourages rest.

**Recommendation:** 1 to 4 capsules before bedtime for sleep, or during the day when rest is sought.
Notes
OSTEOARTHRITIS

RELATED CONDITIONS

- Degenerative arthritis
- Arthritis caused by wear and tear
- Chronic joint stiffness

PHYSIOLOGIC CONSIDERATIONS

Nutritional researchers in the early and mid-twentieth century called this form of arthritis the “cooked food disease.” Osteoarthritis does not exist in indigenous peoples eating their natural diets. The western diet of simple sugars, starches, and adulterated oils, denatured, processed, and industrialized foods has been found to cause arthritis in humans and test animals.

Cartilage, an avascular tissue, is slow to heal and most sensitive to poor nutritional status.

PREDISPOSING FACTORS

- Cooked and processed foods
- Over use syndrome
- Sedentary lifestyle
- Corticosteroid use
- Over use of NSAIDs
- History of trauma
- Hormone imbalance
- Mineral imbalance
- Protein deficiency

RECOMMENDATIONS

- Increase dietary intake of quality proteins, fats, and greens.
• Vegetable juicing is recommended.
• Recovery program must include some form of aerobic exercise and stretching.

**CLINICAL CONSIDERATIONS**

The client with osteoarthritis presents with stiff joints and decreased range of motion, which worsens with age. The condition may be in one or more joints.

**PRIMARY SUPPLEMENTAL SUPPORT**

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<td>These essential fatty acids nourish the thyroid, support cell membrane fluidity, and manage calcium balance in the body. Fats provide lubrication for joints and help maintain flexibility and elasticity in muscles and connective tissues.</td>
</tr>
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<td></td>
<td><strong>Recommendation</strong>: 2 to 3 capsules once or twice daily with meals</td>
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<tr>
<th>MG-ZYME</th>
<th>(MAGNESIUM)</th>
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<tbody>
<tr>
<td></td>
<td>Magnesium moves calcium from deposits.</td>
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<td><strong>Recommendation</strong>: 2 to 4 tablets one to two times daily</td>
</tr>
</tbody>
</table>

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**SUPER PHOSPHOZYME LIQUID**

*(NATURAL PHOSPHOROUS LIQUID)*

This may be the most efficient way to mobilize calcium from joints and inside the artery wall.

**Note:** When using this product for an extended time, take with calcium and magnesium to avoid calcium imbalance, restlessness, joint erosion, and loose teeth. All are signs of excess phosphorus relative to calcium and magnesium.

**Recommendation:** 1 dropper in a small glass of water one to three times daily

**LIQUID IODINE**

*(POTASSIUM IODIDE)*

Iodine supports the thyroid and assists in the management of calcium and other minerals. Iodine also controls mineral deposits around joints and in arteries.

**Recommendation:** 10 to 20 drops in water once daily

**Bio-CMP**

*(ALKALINE ASH MINERALS—CALCIUM, MAGNESIUM AND POTASSIUM)*

*Bio-CMP* is a balanced source of calcium and magnesium with extra potassium. It calms the muscles, and reduces muscle spasms and pain.

**Recommendation:** 3 to 4 tablets two to four times daily on an empty stomach

---

**SECONDARY SUPPLEMENTAL SUPPORT**

**HCl-Plus**

*(BETAINe HCL AND PEPSIN)*

HCl-Plus acidifies tissues where minerals are deposited.

**Recommendation:** 2 to 4 tablets two or three times daily with meals
Osteo-B Plus

(MULTIPLE NUTRIENTS TO SUPPORT BONE HEALTH)

Osteo-B Plus is broad-spectrum support for bone and teeth. It is used for osteoporosis, bone healing, loose teeth and joints. Saccharum Officinarum contains the “Woezen” factor, the anti-stiffness factor that is especially useful for people with stiff and aching joints.

Recommendation: 2 to 4 tablets twice daily
Notes
Osteoporosis is most commonly found in elderly women, however, in recent years it has been found increasingly in elderly men. In fact, it is no longer unusual to find osteoporosis in younger people. Occasionally, people in their 40’s and 30’s are being diagnosed with this condition once thought to be reserved for the elderly. Prevention is the best treatment and should begin in childhood with a high-quality diet.

There are no symptoms in the early stages of osteoporosis. The thinning bones can be seen on x-ray only after nearly 40% of the bone has already demineralized. In advanced years, osteoporosis becomes a dangerous condition.

Elderly people may fall and break bones—most dangerous is to break a hip. Sometimes the fall causes the hip to break, the hip fractures first, causing a fall. The client with a hip fracture is generally confined to bed for a period of time. As a result of prolonged bed rest, any exposure to virus or influenza may progress into severe upper respiratory conditions or pneumonia. It is not uncommon for someone to break a hip and develop a fatal case of pneumonia after being confined to bed for a prolonged period time. We have seen steady, slow, reversal of osteoporosis by improving digestion, supplementing with good bone mineralization products, increasing essential fatty acids, vitamins K and D, minerals, good proteins, in the diet and eliminating artificial and processed foods.

Additionally a weight bearing exercise to client’s tolerance is imperative.
M-38  OSTEOPOROSIS

PREDISPOSING FACTORS

- Poor diet
- Excessive use of alcohol or tobacco
- Hormone dysfunction
- Sedentary lifestyle
- Drug abuse
- Prolonged bed rest or a sedentary lifestyle
- Anorexia

RECOMMENDATIONS

- Eliminate processed and packaged foods.
- Eliminate alcohol, caffeine, soda, tobacco, and sugar.
- Improve digestive function.
- Identify and eliminate allergens.
- Review medications.
- Increase fresh, leafy greens.
- Consider fresh vegetable juicing.
- Consume plenty of high-quality protein.
- Increase high-quality fats and oils.

PRIMARY SUPPLEMENTAL SUPPORT

OSTEO-B PLUS  

(MULTIPLE NUTRIENTS TO SUPPORT BONE HEALTH)

Osteo-B Plus is broad-spectrum support for bone and teeth. It is used for osteoporosis, bone healing, and loose teeth and joints. Saccharum Officinarum contains the “Woezen” factor, the anti-stiffness factor especially useful for people with stiff and aching joints.

Recommendation: 2 to 4 tablets twice daily
**GAMOctaPro**

(HYDROLYZED SOY PROTEIN WITH GAMMA ORYZANOL)

Additional protein is necessary for bone regeneration; nearly 50% of bone is made of protein in which minerals are embedded giving bones strength, elasticity, and rigidity.

Gamma Oryzanol is a naturally occurring mixture of plant chemicals including esters of frulic acid. Evidence suggests that these natural phytochemicals increase release of endorphins and promote the production of growth hormone increasing repair and growth of muscle, bone, and connective tissue.

Octacosanol from the unrefined portion of wheat germ oil contains sterols, phosphatides, stearins, long-chain alcohols, and waxes. These constituents facilitate the efficient conversion of food and stored fuels into biological energy. This results in increased muscle strength, endurance, vigor, and quicker reaction time, and faster recovery.

**Recommendation**: Use 2 tablespoons daily. Blend with juice, fruit or water and ice to taste.

---

**CA/MG-ZYME**

(CALCIUM AND MAGNESIUM)

Use where additional calcium and magnesium needed.

**Recommendation**: Take 3 to 4 tablets twice daily

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**BIO-K-Mulsion**

(EMULSIFIED VITAMIN D DROPS)

Vitamin K has a number of functions beyond what is commonly considered for clotting. It stimulates osteoblast function in the facilitation of cartilage and minerals used for bone regrowth. This is especially important when vegetable consumption is decreased, especially leafy greens.

**Recommendation**: 1 drop twice daily

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**BIO-D-Mulsion**

(EMULSIFIED VITAMIN D DROPS)

*Bio-D-Mulsion* increases calcium absorption and mobilization. It is especially useful for those who live in regions with less sunshine or for those who are not exposed to regular sunlight.

**Recommendation**: 1 drop twice daily

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# Secondary Supplemental Support

## Whey Protein Isolate

(WHEY PROTEIN ISOLATE)

*Whey Protein Isolate* is a high-quality protein source. The bone matrix is nearly 50% protein; therefore, a protein deficiency may contribute to osteoporosis.

**Recommendation:** 2 level scoops once or twice daily, mix with water, diluted fruit juice or crushed ice and fruit to taste

## Gammanol Forte with FRAC

(GAMMA ORYZANOL—FORTIFIED)

As a high-quality protein, *Gammanol Forte with FRAC* helps to heal fractures. FRAC and Gamma Oryzanol increase growth hormone and promote lean body mass. *Gammanol Forte with FRAC* also promotes bone growth and repair, and is especially beneficial for individuals with thinning bones, osteoporosis, or anyone with concerns about lean body mass, connective tissue, muscles, and organs. It is also used by athletes for growth and repair.

**Recommendation:** 2 to 4 tablets one to four times daily

Ensure hormone balance and support where necessary:

## Thyrostim

(MULTIPLE NUTRIENTS TO SUPPORT THYROID FUNCTION WITH PITUITARY GLANDULAR)

*Thyrostim* maintains thyroid function to help manage bone health and mineral balance.

**Recommendation:** 2 to 3 tablets one to two times daily with meals
<table>
<thead>
<tr>
<th>Supplement</th>
<th>Description</th>
<th>Usage</th>
</tr>
</thead>
</table>
| **Equi-Fem** | (Multiple nutrients to support female endocrine health) A broad spectrum botanical and glandular support for female hormonal balance. For those women who take synthetic hormones, consider replacing *Equi-Fem* with *PMT*.  

*Note:* *PMT* has the same formula as *Equi-Fem* without the glandular component.  

**Recommendation:** Take 1 to 3 capsules twice daily |
| **Cytozyme-F** | (Multi-glandular to support female endocrine health—Neonatal bovine) *Cytozyme-F* is a powerful female hormonal support when glandular therapy is indicated. Includes ovarian, adrenal, thymus and spleen tissue in a balanced glandular formula.  

*Note:* All are neonatal bovine except the ovarian, which is adult bovine.  

**Recommendation:** 1 to 3 tablets twice daily |
| **Palmetto-Plus** | (Saw palmetto and other nutrients to support prostate) For male hormone balance.  

**Recommendation:** 1 to 3 capsules one to two times daily |
| **Cytozyme-M** | (Multiple-glandular to support male endocrine health—Neonatal bovine) Used to support male hormone function for growth and repair.  

**Recommendation:** 1 to 3 tablets twice daily |
Notes
# Athletic Nutrition

## Related Conditions

- Aerobic endurance training
- Weight training
- Intense weight training (male)
- Intense weight training (female)
- Olympic and powerlifting (men)
- Olympic and powerlifting (female)
- Skill sports, court, track and field
- Musculoskeletal Rehabilitation Support
- Shin Splints

Specific nutrients to enhance the athletes cardiovascular and the musculoskeletal function. Consider the following protocols:

## Supplemental Support

### Aerobic Endurance Training

<table>
<thead>
<tr>
<th>Supplement</th>
<th>Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amino Quick-Sorb</td>
<td>2-3 squirts before or during exercise</td>
</tr>
<tr>
<td>Stamina Caps</td>
<td>3-6 capsules before exercise</td>
</tr>
<tr>
<td>Bio-Multi Plus</td>
<td>1 tablet per meal</td>
</tr>
<tr>
<td>BioProtect</td>
<td>2 tablets at breakfast, 2 tablets before and</td>
</tr>
<tr>
<td></td>
<td>after exercise</td>
</tr>
<tr>
<td>ChondroSamine Plus</td>
<td>1-2 capsules per meal</td>
</tr>
</tbody>
</table>

### Weight Training

<table>
<thead>
<tr>
<th>Supplement</th>
<th>Protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio-Anabolic Packs</td>
<td>1 pack before exercise</td>
</tr>
<tr>
<td>Gammanol Forte</td>
<td>2 tablets before and after exercise, 2 tablets</td>
</tr>
<tr>
<td></td>
<td>before bedtime</td>
</tr>
<tr>
<td>Amino Sport</td>
<td>2 capsules before and after exercise</td>
</tr>
<tr>
<td>Bio-Multi Plus</td>
<td>1 tablet per meal</td>
</tr>
</tbody>
</table>

### Intense Weight Training (Male)
### Osteoporosis

<table>
<thead>
<tr>
<th>Supplement</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio-Anabolic Packs</td>
<td>1 pack before exercise</td>
</tr>
<tr>
<td>Amino sport</td>
<td>3-5 capsules before and after exercise</td>
</tr>
<tr>
<td>Gammanol Forte</td>
<td>3-4 tablets before and after exercise, 3 to 4 tablets at bedtime</td>
</tr>
<tr>
<td>Cytozyme-Orchic</td>
<td>1 tablet twice daily with meals</td>
</tr>
<tr>
<td>B-VITAL</td>
<td>2 capsules twice daily with meals</td>
</tr>
<tr>
<td>Bio-Multi Plus</td>
<td>1-2 tablets per meal</td>
</tr>
<tr>
<td>ChondroSamine Plus</td>
<td>2 capsules per meal</td>
</tr>
</tbody>
</table>

### Intense Weight Training (Female)

<table>
<thead>
<tr>
<th>Supplement</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio-Anabolic Pak</td>
<td>1 pack before exercise</td>
</tr>
<tr>
<td>Amino sport</td>
<td>1-3 tablets before exercise and after exercise</td>
</tr>
<tr>
<td>Gammanol Forte</td>
<td>1-3 capsules before and after exercise, one to three capsules at bedtime</td>
</tr>
<tr>
<td>Equi-Fem</td>
<td>1-2 tablets per meal</td>
</tr>
<tr>
<td>ChondroSamine Plus</td>
<td>1-2 capsules per meal</td>
</tr>
</tbody>
</table>

*For intense training add:*

<table>
<thead>
<tr>
<th>Supplement</th>
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<tbody>
<tr>
<td>B-VITAL</td>
<td>1 capsule twice daily with meals</td>
</tr>
<tr>
<td>Equi-Fem</td>
<td>additional 2 with b-VITAL</td>
</tr>
</tbody>
</table>

### Olympic and Powerlifting (Men)

<table>
<thead>
<tr>
<th>Supplement</th>
<th>Dosage</th>
</tr>
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<tbody>
<tr>
<td>Bio-Multi Plus</td>
<td>1-2 tablets per meal</td>
</tr>
<tr>
<td>Amino Sport</td>
<td>3-4 capsules before and after exercise, 3 to 4 capsules at bedtime</td>
</tr>
<tr>
<td>Neonatal Multi-Gland</td>
<td>2 tablets per meal</td>
</tr>
<tr>
<td>Gammanol Forte</td>
<td>3-4 tablets before exercise and after exercise, 3-4 tablets at bedtime</td>
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<td>Cytozyme-Orchic</td>
<td>1 tablets twice daily with meals</td>
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<tr>
<td>ChondroSamine Plus</td>
<td>3 capsules per meal</td>
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<tr>
<td>B-VITAL</td>
<td>2 capsules twice daily with meals</td>
</tr>
<tr>
<td>Stamina Caps</td>
<td>3-6 capsules before exercise</td>
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### Olympic and Powerlifting (Women)

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<tbody>
<tr>
<td>Equi-Fem</td>
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<td>Amino Sport</td>
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<td>Neonatal Multi-Gland</td>
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<td>B-VITAL</td>
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<tr>
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### Skill Sports, Court, Track and Field

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<tbody>
<tr>
<td>Bio-Anabolic Packs</td>
<td>1 pack before exercise</td>
</tr>
<tr>
<td>ChondroSamine Plus</td>
<td>1-2 capsules per meal</td>
</tr>
</tbody>
</table>
Stamina Caps 3-6 capsules before exercise
Intenzyme Forte 5 tablets before exercise, 5 tablets after exercise
Bio-Multi Plus 1 tablet per meal
Amino Quick-Sorb 2-3 squirts before exercise

**MUSCULOSKELETAL REHABILITATION SUPPORT**

- Rehab Support Pack 1 pack per meal
- ChondroSamine Plus 1-2 capsules per meal
- Intenzyme Forte 5 tablets four times daily (three hours after meals)
- BioProtect 1-2 capsules per meal
- Biomega-3 1 capsule per meal

**SHIN SPLINTS**

- Cytozyme-AD 2-3 tablets with breakfast and lunch, two to three before exercise
- ChondroSamine Plus 1-2 capsules per meal

**Notes**