# STEM CELL WORX





#### **GENERAL INFORMATION**

#### 1. What is an adult stem cell?

Stem Cells are the master cells and building blocks of the entire body.

Adult stem cells are the body's own natural repair and renewal kit. Adult stem cells are with us from the day we are born. They are undifferentiated cells found throughout the body that divide to replenish dying cells and regenerate damaged tissue and muscle. These cells are found in a variety of tissues and organs throughout the body.

The bone marrow is an abundant source of adult stem cells. Once mobilized, these adult stem cells enter the bloodstream where they migrate to areas most in need of repair and renewal. They then regenerate tissue and muscle, and support ongoing healthy cellular regeneration and maintenance throughout your entire lifetime.

Unlike embryonic stem cells, the use of adult stem cells in research and therapy is **not** controversial because the production of adult stem cells does **not** require the destruction of an embryo. Adult stem cells have a huge advantage as there is virtually no risk of rejection as these stem cells reside in our bodies from the day we are born. Currently, adult stem cell treatments are being used to help patients recover from over 150 debilitating chronic conditions previously thought to be untreatable.

#### STEM CELL WORX INTRAORAL SPRAY INFORMATION

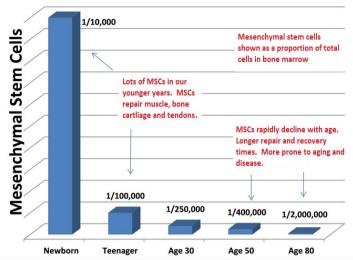
#### 2. What is Stem Cell Worx Intraoral Spray?

The Stem Cell Worx Intraoral Spray is a natural dietary supplement that is taken intra-orally by spraying under the tongue. Spray under the tongue, hold for 5-10 seconds, then swallow. This product conforms with all Good Manufacturing Practices (GMP) for dietary health supplements that are mandated by the FDA. This supplement is manufactured in the U.S.A. by a long established, GMP approved Laboratory that specializes in liquid health supplements. Stem Cell Worx's Corporate Office is located in Nevada, United States of America.

#### 3. What will the Stem Cell Worx Intraoral do for my own adult stem cells?

The synergistic effect of the pure, natural ingredients within Stem Cell Worx all utilize specific pathways that are absolutely necessary to stimulate adult stem cells from tissue (in particular from the bone marrow) into the bloodstream. Combined with its rapid intraoral delivery (providing an absorption rate of as much as 95%) is what makes the Stem Cell Worx formulation so effective and powerful. All product claims are backed by clinical data. Refer to the Clinical Data section within this report. Having healthy adult stem cells in circulation and a strong, robust immune system is the core essence to good health and longevity.

Scientists now acknowledge that adult stem cells and aging are linked. A baby has stem cell activation of 100%, however by the time we reach 65 years of age, we only have an average of 10% of stem cells releasing from our bone marrow and active in our bloodstream, that we must then rely on to combat disease and stay healthy. Scientific research show adult stem cells decline rapidly as we age, along with their release rates, as per the graph on the following page.



### 4. What are the key benefits of Stem Cell Worx Intraoral Spray and having healthy, active adult stem cells circulating in the bloodstream?

Having your body's own natural repair and renewal system working continuously to enrich, nourish and release your own adult stem cells from bone marrow and a variety of other tissues and organs into your bloodstream supports optimal cellular repair and regeneration and provides many accumulative health benefits including:

- abundant energy\*
- super charges the immune system\*
- reduces inflammation and relieves joint and muscle pain\*
- speeds up the metabolism, builds muscle, burns fat and promotes natural weight loss\*
- improves mental clarity and focus\*
- provides rapid repair after your exercise regime\*
- enhances repair and recovery after surgery, illness or injury\*

#### 5. What are the key ingredients in the Stem Cell Worx Intraoral Spray?

- Bovine Colostrum (a very high grade colostrum that contains over 30% of the antibody IgG and over 54% protein)
- Trans-Resveratrol (a 98% 99% purity from Japanese Knotweed)
- Fucoidan (a 95% purity).

All ingredients are sourced from countries that produce the highest grade of ingredient available, from the best source. The specialized manufacturing process used by the U.S.A. Laboratory does not compromise the nutritional value of the ingredients. The bovine colostrum in Stem Cell Worx contains twenty one times more natural growth and immune factors than human colostrum.

### 6. Why is Stem Cell Worx taken intra-orally (sometimes referred to as sublingual or buccal delivery) instead of in pill or capsule form?

Intraoral spray delivery provides an absorption rate of 95% of its nutrients, compared to pills and capsules that only provide a 10% to 20% absorption rate at best. This means your body is retaining at least 80% more nutrients when administrated by intraoral spray. [Physicians Desk Reference: NPPDR#18]. Also refer to independent clinical data at the end of this document]. This method of delivery (spray under the tongue, hold for 5-10 seconds, then swallow) ensures nutrients get directly into your bloodstream via the sub-mucosal membrane that sits under the tongue. Intraoral is the most cost effective way to take your health supplements as a lower dosage of nutrients is needed due to this being a very concentrated source of delivery. This method of delivery also avoids the "first pass" effect which is a major issue associated with pills and capsules. Furthermore, as one gets older, one's ability to absorb nutrients through the gastro-intestinal track reduces therefore the way in which we take our health supplements becomes extremely important.

#### 7. How many days supply is in one bottle of Stem Cell Intraoral Spray?

One bottle of Stem Cell Worx Intraoral Spray contains a 40 day supply based on the standard, recommended dosage for adults of 12 sprays per day (generally taken as 6 sprays at once, first thing in the morning and the remaining 6 sprays late afternoon or early evening). Best taken 30 minutes either side of eating food. The sprayer on the bottle is **not** to be pressed all the way down. Press lightly, then release (approximately quarter of inch down ) to get the correct dosage.

#### 8. How do I take my sprays?

Spray under the tongue, hold for 5-10 seconds then swallow. The sprays should be short and sharp. Press the sprayer approximately quarter of an inch down to get the correct dosage. The sprayer should **not** be pushed all the way down.

#### 9. How many sprays should I take and when?

For adults, the standard, recommended dose is 12 sprays per day. Take 6 sprays (at the same time) first thing in the morning. Take the remaining 6 sprays late afternoon or early evening (preferably before 7.30pm). It is best this health supplement is taken 30 minutes either side of eating food as this provides even quicker absorption. Do not take too late in the evening as you may experience a surge of energy before going to bed.

#### Exceptions for Athletes, Recreational Sports People and Those Who Weigh Over 200lbs

If you are an athlete or recreational sports person who exercises regularly you can take an additional 3 sprays just before you train and an additional 3 sprays immediately after your exercise regime, in addition to the standard 12 sprays per day. Your body's receptors will be fully open while you exercise and immediately afterwards therefore this is an extremely good time for your body to absorb healthy nutrients and achieve faster repair and recovery. Those over 200lbs may also benefit from 4-6 additional sprays per day due to having a larger blood supply.

#### 10. Can I take Stem Cell Worx Intraoral Spray with prescription medications?

Yes, Stem Cell Worx Intraoral Spray is a dietary supplement that contains all natural ingredients. These ingredients are retained in their most purist state throughout the manufacturing process. Stem Cell Worx Intraoral Spray contains no artificial flavoring or artificial sweeteners of any kind. The mild vanilla flavoring within this supplement is natural and comes from natural vanilla pods. This supplement is safe to take with most prescription medications. However, it is recommended you check with your Physician if you are on prescription blood thinners, anti-depressants or have recently undergone major surgery or had a major health setback.

If you are receiving cancer treatment (i.e. chemotherapy or radiotherapy) or taking cancer prescription drugs always check with your Doctor. For more information regarding this, please refer to the answer to question 11.

#### 11. Who should not take Stem Cell Worx Intraoral Spray?

If you are pregnant or expecting to get pregnant you should not take the Stem Cell Worx Intraoral Spray. This is a standard precaution with most dietary health supplements for expectant mothers.

If you are on prescribed blood thinning medication, check with your Doctor first as trans-resveratrol and fucoidan (two key ingredients in this supplement) have natural blood thinning abilities.

If you are receiving cancer treatment (chemotherapy or radiotherapy) or taking cancer prescription drugs always check with your Oncologist or Physician. If you are in remission, we recommend you wait at least two months after your treatment has finished before starting on the supplement as it may interfere with your blood count readings.

Children under 18 years of age should always check with their Physician before taking this supplement.

If you are on anti-depressants, have suffered a major heart attack or are recovering from a major illness or disease it is recommended you check with your Physician before taking this supplement. Once Physician approval has been provided, these individuals should take half the dosage of sprays per day (i.e. just 3 sprays in the morning and 3 sprays in the afternoon and build up to the standard dosage of 12 sprays per day over a 2-3 week period). The sprayer on the bottle is designed to be pressed just lightly, then release. The sprays should be short and sharp. The sprayer should not be pressed all the way down.

#### 12. Is Stem Cell Worx Intraoral Spray value for money?

Yes, if you had to purchase the key ingredients within Stem Cell Worx individually in dietary health supplement form, you would be paying over \$120.00 USD in total, and this would for the supplements in powder or capsule form, in a much lower purity. Always check the labels of your health supplements. Avoid supplements that don't show the percentage of purity of ingredients and be very careful purchasing those that say proprietary blend as often no percentage of ingredients is provided.

#### 13. Are there side effects when taking Stem Cell Worx?

Occasionally, a person may experience detox when they first take the supplement. This can occur in the first 1-4 days and can result in a feeling of extreme tiredness, some achy muscles or flu type symptoms. These symptoms are termed "die off" or often referred too as a Herxheimer reaction. This detox is associated with high grade bovine colostrum. This is a good thing as the body is ridding itself of toxins. If you experience these symptoms continue to take the supplement for at least 5 days and these symptoms should completely clear, resulting in a feeling of much improved health and well-being afterwards.

#### 14. Where is the Stem Cell Worx Intraoral Spray manufactured?

Stem Cell Worx Intraoral Spray is manufactured in the U.S.A. by a leading, long established laboratory that specializes in liquid health supplements.

The laboratory meets National Science Foundation Certification and conforms with all FDA mandated Good Manufacturing Practices (GMP) for dietary supplements. The Laboratory is also a member of The Natural Products Association.

All orders are shipped from the U.S.A.

#### 15. I am lactose intolerant. Can I take Stem Cell Worx Intraoral Spray?

Yes, high grade bovine colostrum contains almost no lactose. Those who are lactose intolerant have no problems taking a high quality bovine colostrum, especially when it contains over 30% of the antibody IgG, as used in the Stem Cell Worx Intraoral Spray. If anyone has any concerns start off with just 6-8 sprays per day and build up to the required 12 sprays per day for adults over a 2 week period.

#### 16. Is there clinical data and scientific evidence to support this formulation and product claims?

Yes, absolutely. Please refer to appendix one of this document that provides detailed clinical and scientific data.

#### 17. Are there stem cells in the bottle?

No, there are absolutely no stem cells in the bottle. The stem cells reside in your own body already; in your bone marrow, blood vessels, muscle and tissue. This is a natural dietary health supplement that contains three powerful natural ingredients that naturally activate your own healthy adult stem cells that already reside in your body.

#### 18. Should someone in their 70s, 80s or 90s take the Stem Cell Worx health supplement?

Yes, definitely. Many clients over the age of 70 take Stem Cell Worx Intraoral Spray. As it is it a very pure, concentrated formulation we do recommend those over 70 years of age start off with a lower dosage to begin with as the immune system is weaker and more sensitive at this age.

For those over 70 years of age, start with 6 sprays in total a day and build up to the recommended daily dosage of 12 sprays over a 2-3 week period.

#### 19. How much of each ingredient do I receive per day, based on 12 sprays per day?

30mgs of Bovine Colostrum; 30mgs of Trans Resveratrol and 12mgs of fucoidan.

The Stem Cell Worx Intraoral spray is a very concentrated formulation of pure, natural ingredients. Scientific studies show steady proliferation rates of adult stem cells by as much as 80% when taking just 25mgs of the Stem Cell Worx formulation. Refer to the clinical and scientific data section of this document.

Shake the bottle well before each application of 6 sprays as natural ingredients such as these have a tendency to settle at the bottom of the bottle.

### 20. Should I take Stem Cell Worx Intraoral Spray continuously or should I take a break every few months?

It is entirely up to you. Many clients take Stem Cell Worx Intraoral Spray every day and have done so since its launch in late 2011. Other clients like to take the supplement for three months and have a break for a couple of months before recommencing. Others who have suffered a health challenge or injury, who have taken the supplement for three months continuously to assist with their repair and recovery, stop taking the supplement once they have recovered.

The supplement provides increased proliferation of adult stem cells on an ongoing, continuous basis for the entire time a person takes Stem Cell Worx Intraoral Spray. This provides ongoing anti-aging, health and maintenance benefits including the strengthening of the immune system. If a person stops taking the supplement, their adult stem cell release rates will drop.

#### 21. How should I store the supplement; when opened and unopened?

Customers must ensure the supplement is kept out of direct sunlight and heat at all times, whether open or unopened.

In temperatures over 86 degrees Fahrenheit (30 degrees Celsius) it is recommended the product (once opened) be kept in the refrigerator or in an air conditioned room (if unopened).

Many clients prefer to store their supplement in the refrigerator (once opened) as they prefer the taste when the formulation is cooler, and it does keep the product formulation fresher for longer. However this is not essential, just as long as your storage area is cool and dark, and the room temperature is not over 86 degrees Fahrenheit (30 degrees Celsius).

#### 22. What is the expiration date on the product?

Each product has a 10–12 month expiration date from the date of manufacture. This is printed on the back of the product label. As long as the product is correctly stored (see above), it will last for this duration of time unopened. An opened bottle of Stem Cell Worx Intraoral Spray should be used up within 90 days.

#### 23. Do you ship the product to clients who live overseas (outside of the United States of America)?

Yes, Stem Cell Worx ships products to clients all around the world. The only country we cannot ship the product too at present is Germany.

All products are shipped from the United States of America. The standard delivery time for overseas orders (outside of the U.S.A) is 10-12 business days from the date of shipment. The standard time for orders being delivered within the U.S.A. is generally 3-4 business days. Stem Cell Worx ships all products within 24 hours upon receipt of payment on week days, and 48 hours from receipt of payment for orders received at weekends.

#### 24. How can I subscribe to the regular Stem Cell Worx newsletter?

Yes. Send an email to stemcellworx@bigpond.com with the subject line: Newsletter. Alternatively, go to the homepage of the www.stemcellworx.com website and enter your name and email address in the subscription box that appears on the right, top left corner of the screen.

Stem Cell News is issued once every two months. This newsletter is only issued to those who subscribe to the newsletter. Newsletters are not published on the Stem Cell Worx website.

### 25. How do I become a member of the Stem Cell Worx Premium Customer Club and what benefits do I receive?

Customers who purchase more than two bottles of Stem Cell Worx Intraoral Spray from the www.stemcellworx.com website automatically become a member of the Stem Cell Worx Premium Customer Club. This Premium Customer Club membership enables members to receive discounts on all future purchases of the Stem Cell Worx Intraoral Spray with no minimum order requirement, no joining fee or time period in which products must be ordered.

## STEM CELL WORX

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#### APPENDIX 1. CLINICAL AND SCIENTIFIC DATA

### 1. What clinical studies have been published on the three key ingredients in Stem Cell Worx Intraoral Spray?

Over 5000 published clinical and scientific studies demonstrate the benefits of bovine colostrum; over 2000 published studies show the benefits of resveratrol and there are over 850 individual clinical studies on fucoidan. Links to a snapshot of these published studies are provided herewith:

Bovine Colostrum Clinical Studies:

http://www.stemcellworx.com.au/blog/wp-content/uploads/2012/02/Bovine-Colostrum-Clinical-Studies-and-Research-References-2011.pdf Resveratrol Clinical Studies:

http://www.stemcellworx.com/blog/wp-content/uploads/2011/12/Resveratrol-Clinical-Studies-and-Scientific-Research-2011.pdf Fucoidan Clinical Studies:

http://www.stemcellworx.com/blog/wp-content/uploads/2011/11/Fucoidan-Clinical-Studies-and-Scientific-Research-References-2011.pdf

#### 2. Is there causation between the ingredients and the direct increase of adult stem cells?

Yes. The synergistic effect of all three key ingredients within Stem Cell Worx Intraoral Spray utilize specific pathways that are absolutely necessary to activate adult stem cells from the bone marrow, other tissues and organs, and proliferate them into the bloodstream. The tripartite combination of this patent protected formulation is what makes this health supplement so powerful and effective, along with its intraoral spray delivery.

The activation of adult stem cells when taking the Stem Cell Worx supplement occurs due to:

- the abundant number of natural growth and immune factors present in the bovine colostrum that attach to the adult stem cells initiating the proliferation process (IGF-1, IGF-2, Transforming GFs A and B, Epidermal GF, Fibroblast GF and Platelet-derived GF plus many immune factors including immunoglobulins, peptides and cytokines);
- a 98-99% trans-resveratrol (supporting the enrichment and proliferation of Mesenchymal stem cells that reside in the bone marrow);
- a 95% fucoidan (increasing the expression of CD34+ cells).

Please refer to graph on following page.

#### 3. What sets Stem Cell Worx Intraoral Spray apart from other stem cell supplements in the market?

Two unique attributes set the Stem Cell Worx Intraoral Spray supplement apart from all other stem cell supplements, as follows:

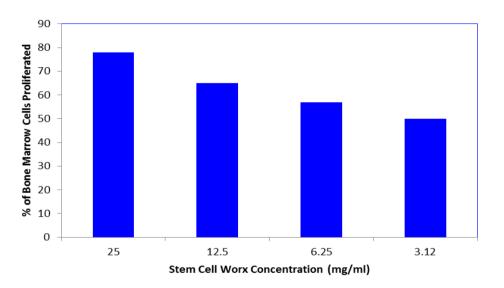
- No other stem cell supplement is delivered in an intraoral spray providing an absorption rate of up to 95% of its nutrients. Intraoral spray delivery (administered in a fine mist spray, sprayed under the tongue, hold for 5-10 seconds, then swallow) is scientifically proven to provide the most powerful absorption rate of these ingredients and the strongest activation of adult stem cells in supplement form. Intraoral is particularly favorable for protein, peptide and cytokine delivery as this route of delivery avoids enzyme degradation (a complication associated with the gastrointestinal (GI) tract) and "first pass effect", a metabolic process that results in compounds being eliminated from the digestive and urinary system right after ingestion). GI tract absorption and first pass effect are major issues associated with many dietary health supplements in pill and capsule form as they result in low absorption and nutritional value deficiencies.
- The natural growth and immune factors within this supplement (that come from its ingredients) play a major role in the initiation process of adult stem cells. They not only enhance the activation process by binding with the adult stem cells but they also maintain and prolong the cell's viability. In addition, these growth factors produce a protein called G-CSF (granulocyte colony stimulating factor) that stimulates the bone marrow to produce more adult stem cells. In the absence of growth and immune factors, very few bone marrow stem cells survive. Most stem cell supplements out in the market do not have these vital growth and immune factors.

#### 4. What clinical studies have been done on the Stem Cell Worx formulation?

Independent clinical studies have been undertaken on the Stem Cell Worx formulation. This testing was carried out by independent Scientists and Bio-Chemists who have no commercial or financial interest, or association with Stem Cell Worx LLC whatsoever. Research and development on the Stem Cell Worx formulation took four years before Stem Cell Worx Intraoral Spray was launched into market in late 2011.

This study used blood samples from healthy humans. The adult stem cell proliferation percentages were determined by flow cytometry, measured in mgs of the Stem Cell Worx formulation.

As this graph demonstrates the Stem Cell Worx formulation produces steady percentages of bone marrow stem cell proliferation with a relatively low dosage of mgs.



Further independent testing was carried out. These were comparable tests that compared the Stem Cell Worx formulation against a stem cell supplement in capsule form for both G-CSF and IL-6 factors. The test results were as follows:

- The Stem Cell Worx formulation had 100% increased activity over the stem cell capsule it was compared with, for G-CSF production.
- The Stem Cell Worx formulation had 50% increased activity over the stem cell capsule it was compared with, for IL-6 production.
- NB. G-CSF is absolutely necessary to stimulate the stem cells from the bone marrow into the bloodstream. Most existing stem cell supplements out in the market do not have this ability. G-CSF stands for granulocyte colony stimulating factor. G-CSF is a protein that stimulates the bone marrow to produce more adult stem cells.

Interleukin-6 (IL-6) is a key cytokine produced by monocytes, fibroblasts and endothelial cells. IL-6 is a stimulator of both B and T cell functions, that both perform important biological roles for adult stem cell stimulation.

Please also refer to links to clinical studies on the following page.

#### APPENDIX 1. CLINICAL AND SCIENTIFIC DATA CONTINUED

#### 5. Is there further independent science that is relative?

Yes, the following published papers and graph provide notable insights on stem cell proliferation capacity of natural ingredients and also the benefits of intraoral delivery for nutritional absorption and effectiveness, that is becoming more widely acceptable, not only for health supplements such as Stem Cell Worx Intraoral Spray, but also for a number of pharmaceutical drugs. Click the titles of these papers (that are hyperlinked) to read these papers in full.

#### • The Open Nutraceuticals Journal 1876-3960 (Published April 2013)

This publication details the effectiveness of certain nutritional compounds in terms of their adult stem cell proliferation capabilities. The effectiveness of two key ingredients in Stem Cell Worx, being bovine colostrum and fucoidan are outlined at the top of page 7 of this Journal. It is important to note that the bovine colostrum and fucoidan used in these studies were not high grade purities, as per the Stem Cell Worx formulation.

http://www.pharmatech.co.nz/wp-content/uploads/2013/05/Article-in-Press-TONUTRAJ130419001.pdf

#### • Life Enhancement Magazine – Intraoral Delivery Is a Better Route of Administration for Nutrients

This paper outlines the advantages of intraoral delivery and why this is the most effective route of administration for many health supplements. All ingredients within Stem Cell Worx Intraoral Spray are best absorbed via intraoral spray delivery. This is due to the molecule size of its ingredients. Furthermore, the ingredients within Stem Cell Worx's patent protected formula are all water soluble, the PH level is appropriate, and therefore resistant to enzyme attack when taken by oral spray administration.

http://www.life-enhancement.com/magazine/article/2787-intraoral-delivery-is-a-better-route

International Journal of Pharmacy & Life Sciences ISSN: 0976-7126
Intraoral Sprays – An Overview. A very detailed and through overview of the advantages of intraoral delivery.

#### http://www.ijplsjournal.com/issues%20PDF%20files/nov2011/10.pdf

• Scientists have found buccal and intraoral delivery is the most effective method of absorbing resveratrol. These delivery methods enable 250 times more of unchanged resveratrol to be found in plasma compared to pill form. Studies found **resveratrol pills** taken orally are quickly digested and metabolized in the intestines and liver (known as the first pass effect) and less than 5 percent of the oral dose in pill form remains in blood plasma as free resveratrol. Stem Cell Worx Intraoral Spray is one of the few intraoral health supplements, and it is the only intraoral stem cell supplement on the market. It contains a 98%-99% pure trans resveratrol that comes from Japanese knotweed (the most pure form of resveratrol available). Click the link below to read this study.

http://www.wikibegin.org/wiki/Utilisateur:HinkleWaldon460

• The details of this graph are outlined in the Physician Desk Reference (a medical guide for Physicians). It shows the absorption rate of nutrients when taken in a variety of forms. Intraoral delivery provides a very powerful form of absorption – as much as 95% of nutrients.

Delivery System	Rate of Absorption
Pills or Tablets	10% absorption
Capsules	20% absorption
Transdermal Patch	45% absorption
Droppers	50% absorption
Intramuscular	90% absorption
Intraoral Spray (under the tongue)	95% absorption
Intravenous	100% absorption
Refer to Physician Desk Reference: NPPD	R#18

These statements have not been evaluated by the Food and Drug Administration.

This product is not intended to diagnose, treat, cure or prevent any disease.