

Edificio Allen W. Lloyd,  
Paseo Tijuana 406-Suite  
203, Segundo Piso, Zona  
Del Rio, Tijuana,  
Baja California C.P.  
23310  
Phone: 011-526646832944

[www.ramirezdelrio.com](http://www.ramirezdelrio.com)

## Dr. Fernando Ramirez's Umbilical Cord Stem Cell Therapy Program



(Mexico)

**Phone: 011-5266-4683-2944 or 011-5266-4973-2569**

**Steenblock Research Institute (SRI)  
U.S. research support team: 1-949-248-7034 (California)**

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# FACTS TO CONSIDER

Readers are advised that:

1. The use of umbilical cord blood stem cells to treat non-blood borne diseases or conditions such as cerebral palsy, stroke, multiple sclerosis, Lou Gehrig's disease, Parkinson's disease, macular degeneration, etc. is **experimental**. Evidence of effectiveness in ameliorating or otherwise improving such conditions is, at this point-in-time, tentative and may be supported or overturned as findings from animal and human experiments, case history studies, etc. come to light.
2. The cord blood stem cell program outlined in this document operates solely in Mexico under Mexican law.
3. Fernando Ramirez, MD was issued a special license by the Mexican government which allows him to administer cord blood stem cells for research and therapeutic purposes.
4. Part of the income received from cord blood stem cell treatments is invested in research and testing.

**There is a 90 minute documentary on the Ramirez cord blood stem cell program in Tijuana, Mexico, available from the producer, Burton Goldberg. Click on this link <http://www.burtongoldberg.com/stem-cell-therapy.html> to see an 8 minute trailer of this documentary.**

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## 1. What are stem cells? Where do they come from?

“Stem cells have the remarkable potential to develop into many different cell types in the body. Serving as a sort of repair system for the body, they can theoretically divide without limit to replenish other cells as long as the person or animal is still alive. When a stem cell divides, each new cell has the potential to either remain a stem cell or become another type of cell with a more specialized function, such as a muscle cell, a red blood cell, or a brain cell.” From the *National Institutes of Health* (NIH) Stem Cell Information website

<http://stemcells.nih.gov/index.asp>

There are 4 main sources of stem cells:

- 1) Fertilized egg derived stem cells (called embryonic stem cells in the press)
- 2) Stem cells taken from aborted human fetuses (a human fetus up to two months of age is considered an embryo),
- 3) Umbilical cord blood and
- 4) Adult bone marrow & other adult tissues (fat, skin, etc).

To learn more about umbilical cord stem cells visit:

<http://www.stemcelltherapies.org/stemcells1.htm>

## 2. What's wrong with having treatment with fetal or cord blood stem cells abroad?

Quality control and assurance is a *major issue* with so-called (fetal) embryonic stem cell therapy abroad. The materials being used apparently come from aborted fetuses. When questioned about the QC/QA (Quality Control/Quality Assurance) used to insure that the fetal cells are properly screened for disease, no QC/QA certificates have ever been presented.

This quality control is often lacking in cord blood stem cell programs outside of the U.S. as well.

On the other hand, the umbilical cord stem cells utilized by Dr. Ramirez, are processed using the very highest standards and state-of-the-art technology. The cord blood is only collected from healthy mothers who give birth to full term, normal, healthy babies --

which is then screened for major communicable diseases according to the American Association of Blood Banks standards. Blood that passes the test at this level is then sent to the laboratory where skilled technicians use special technology to separate CD34+/CD133+ cells, CD44- cells, and other subtypes. These progenitor cells are then expanded in a medium that is free from any animal products (No mouse feeder cells or other animal serums). After peak expansion is reached, the stem cells are frozen in liquid nitrogen and stored. (Certificates of analysis are furnished to researchers by the lab where the umbilical cord blood stem cells are produced). Published studies indicate that properly frozen cells are viable for about fifteen (15) years when stored in liquid nitrogen. However, the human umbilical cord derived stem cells used by Dr. Ramirez are seldom “on ice” for more than 4 months before being used.

As for safety concerns, fertilized egg derived and aborted fetal embryonic stem cells have only been used for less than a decade, mostly by scientists doing research in lab animals. No one really knows what secondary diseases or cancers may arise 20 years or so down the line. Umbilical cord blood (which contains stem cells) has been used for over 18 years in both adults and children in the treatment of cancer and blood disorders, with no reports of secondary diseases or cancers from the use of the cord blood.

And.....from "Stem Cell Research: Slow but Steady Progress" (Oct. 9, 2004)

"What is seldom discussed, however, is that embryonic cell transplantation remains experimental, with glimmers of hope but few benefits to current medical care. There have been no human clinical trials using embryonic stem cells. Even successful animal experiments continue to report tumor growth, host-source incompatibility or rejection and perplexing anomalies. Furthermore, while mice embryonic stem cells are relatively easy to work with in laboratories, human embryonic stem cells are not, experts say."

**For more information about the challenges of embryonic stem cells:**

<http://www.stemcellresearch.org/facts/quotes3.htm>

### **3. Why are scientists focused on embryonic stem cells and not umbilical cord stem cells?**

Many scientists argue that embryonic stem cells are pluripotent, i.e., can give rise to any cell or tissue, while umbilical cord stem cells are far less so. This position has been challenged by findings that embryonic-like stem cells are also found in cord blood (see <http://www.stemcelltherapies.org>). There are also published studies in mainstream peer-reviewed journals that support the use of cord blood derived CD34+ and CD133+ stem cells for a wide variety of tissues, including bone, heart, brain, liver, kidney, GI tract, etc.

Stem Cells from Human Umbilical Cord Blood Show Ability to Form Bone, Nerve and Heart Cells, BOSTON, July 19 /PRNewswire

<http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=109&STORY=/www/story/07-19-2004/0002212680&EDATE=>

There is also an element of bias in that funding appears to be sometimes controlled by agencies that either have a vested interest in embryonic stem cells or have other blinders on:

<http://www.worldmag.com/subscriber/displayarticle.cfm?id=10284>

**Miracle cells** (University of Kansas, Dr. Kathy Mitchell)

SCIENCE: Cutting-edge researchers are making unheralded breakthroughs with stem cells from umbilical cords—but have a hard time breaking through the NIH funding wall. "I think people who want embryonic stem cells just don't want [alternatives] to work" | by *Lynde Langdon*

#### **4. Is the use of human umbilical cord stem cells illegal in the USA?**

Cord blood and many other forms of adult stem cell use are allowed for the treatment of malignant and blood related disorders in the United States. Recently the FDA has approved two studies using the child's own stored cord blood for (1) delivery complications and (2) diabetes, type 1. However, the use of human umbilical cord derived stem cells (where the donor is different from the recipient) is not yet approved by the FDA for neurological disorders or injuries.

#### **5. Why is it that American physicians can't get and use umbilical cord stem cells, and foreign doctors can?**

U.S. law allows laboratories that process hUCSCs to dispense them to scientists and physicians engaged in animal studies. Also, cells processed solely to meet the standards of a given country, say Ecuador, can be exported to that country. Dr. Ramirez possesses a special license issued by the Mexican *Ministry of Health* and the Mexican Parliament that allows him to import human umbilical cord stem cells that meet Mexican standards and use them in human patients for research and therapeutic applications.

## **6. Why can't I use my own cord blood or that of a relative and have stem cells made up just for my use?**

Cord blood and the stem cells derived from cord blood are regulated by the FDA as a biologic (considered like a drug). It is illegal to use the stem cells for conditions not approved by the FDA.

## **7. Where does Dr. Ramirez get his human umbilical cord stem cells (hUCSCs)?**

The cord blood is donated by American mothers and is then processed in a laboratory that uses state-of-the-art technology to extract, expand, and freeze the umbilical cord stem cells.

## **8. How is donated blood screened and processed?**

Human umbilical cord stem cells utilized by Dr. Fernando Ramirez comes from healthy mothers who have given birth to healthy babies. It is routinely screened and processed according to FDA and American Association of Blood Bank (AABB) standards:

<http://www.fda.gov/cber/gdlns/celltissue.pdf> - FDA tissue and cell screening protocols (37 pages)

[http://www.aabb.org/Content/Programs\\_and\\_Services/Cellular\\_Therapies/hpactivities.htm](http://www.aabb.org/Content/Programs_and_Services/Cellular_Therapies/hpactivities.htm) - American Blood Bank Screening Standards

Blood with good test results is then processed for removal and culturing of the progenitor (stem) cells using state-of-the-art technology such as:

[https://www.stemcell.com/product\\_catalog/stemsep.asp](https://www.stemcell.com/product_catalog/stemsep.asp)

## **9. How many stem cells are contained in the vials used by Dr. Ramirez?**

Currently Dr. Ramirez utilizes vials containing over 1.5 million human umbilical cord derived stem cells consisting of CD34+/AC133+ and mesenchymal stem cells.

### **10. What is the cost of a single treatment using human umbilical cord stem cells?**

Charges vary depending on the number of vials used. Generally, the cost is \$ 6K per vial. However, the price per vial goes down with additional vials (2 vials are \$5,000 each and 3 are \$4,500 each and 4 or more vials are \$4,000 each). For severe cases, more vials are usually needed. If a surgical team is used to do a catheter infusion, the cost of this procedure is \$5,000.

### **11. Is there anyone offering financial assistance for hUCSC treatments in Mexico?**

Sadly, not at this time. SRI is accepting donations for clinical research in the U.S. which we hope will begin by 2010.

### **12. Can patients pay on installment or by credit card?**

Generally, payment has to be made no less than 2 weeks prior to a scheduled treatment although some people pay Dr. Ramirez using a cashier's check just prior to their treatment.

Also, many parents of children doing hUCSCT have been quite successful in doing fundraising by selling donated items on E-Bay, holding benefit concerts, and setting up collection jars at local fire stations, churches, synagogues, etc.

### **13. Does Dr. Ramirez's staff help with finding affordable airfare or with making hotel arrangement?**

No. These are the responsibilities of each patient or his caregivers. These web addresses may prove helpful in obtaining affordable airfare and accommodations:

<http://www.expedia.com/Default.asp?CCheck=1&>

**For those being picked up by Dr. Ramirez' Program Coordinator, the following hotels are in convenient locations to Interstate 5 and are therefore preferred hotels:**

**Comfort Inn:** [www.comfortinnhotelcircle.com](http://www.comfortinnhotelcircle.com) 1-800-835-6043

**Comfort Inn & Suites:** [www.comfortinnzoo.com](http://www.comfortinnzoo.com) 1-619-881-6200 Reservations: 1-800-380-3583

**Ramada Plaza Hotel:** [www.RamadaHotelCircle.com](http://www.RamadaHotelCircle.com) 1-800-532-4217

**Residence Inn-Marriott:** [www.residenceinnsd.com](http://www.residenceinnsd.com) 1-619-881-3600  
**Howard Johnson-Mission Valley Hotel Circle:** [www.hojo.com](http://www.hojo.com) 1-619-293-7792  
**DoubleTree Club Hotel:** [www.doubletreeclubsd.com](http://www.doubletreeclubsd.com) 1-619-881-6900  
**Hawthorne:** [www.hawthorn.com](http://www.hawthorn.com) 1-619-299-3501  
**Kings Inn:** [www.kingsinnsandiego.com](http://www.kingsinnsandiego.com) 1-619-297-2231  
**Travelodge:** [www.missionvalleyhotel.com](http://www.missionvalleyhotel.com) 1-619-297-2271  
**Mission Valley Resort:** [www.missionvalleyresort.com](http://www.missionvalleyresort.com) 1-619-298-8281  
**Vagabond Inn:** [www.vagabondhc.com](http://www.vagabondhc.com) 1-619-297-1691  
**Holiday Inn Select:** [www.holidayinn.com](http://www.holidayinn.com) 1-619- 291-5720 Reservations: 1-800-433-2131  
**Days Inn SeaWorld:** [www.daysinn.com](http://www.daysinn.com) 1-619-297-8800  
**Super 8 Motel** 445 Hotel Circle South: [www.super8.com](http://www.super8.com) 1-619-692-1288 Reservations: 1-800-554-6267  
**Best Western Seven Seas:** [www.bw7seas.com](http://www.bw7seas.com) 1-619-291-1300 ext. 174 Reservations: 1-800-328-1618  
**Premier Inns:** [www.premierinns.com](http://www.premierinns.com) 1-619-291-8252. Reservations: 1-800-711-6676  
**Motel 6 #0014:** [www.motel6.com](http://www.motel6.com) 1-619-296-1612 Reservations: 1-800-4-Motel 6  
**Crowne Plaza:** [www.cp-sandiego.com](http://www.cp-sandiego.com) 1-800-2-Crowne  
**The Handlery Hotel & Resort:** [www.handlery.com](http://www.handlery.com), 1-619-298-0511

#### **14. Is there a best time to go for treatment?**

The decision to have or not to have stem cell therapies is difficult for all involved. The decision as to what type of cells to use, how to give the cells, what tests need to be done before hand and what treatments need to be done before and after the transplant all vary from case to case. Such questions will be answered by Dr. Ramirez after copies of the patient's medical records and enrollment forms have been received.

#### **15. What does one need to enter Mexico?**

All Americans visiting Mexico will soon need to carry a valid US passport. Call SRI for current policy updates (949-248-7034). Birth certificates are currently required for children.

#### **16. Where can I go to learn about Dr. Ramirez's background?**

<http://www.ramirezdelrio.com/about.html>

## 17. How can I reach Dr. Ramirez?

Go to Dr. Ramirez's website and you will find contact information:

[www.ramirezdelrio.com](http://www.ramirezdelrio.com)

## 18. What is the general sequence for enrolling in the stem cell program?

1. Find out as much as you can about stem cells.
  - a. Check out <http://www.stemcelltherapies.org>
  - b. Check out <http://www.ramirezdelrio.com>
  - c. Check out the 8 minute trailer on Ethical Stem Cells at <http://www.burtongoldberg.com>
  - d. Read through this handbook.
  - e. Read through "*Umbilical Cord Stem Cell Therapy*" by Dr. David A. Steenblock and Dr. Anthony Payne. The book is available through Steenblock Research Institute (SRI) (949-248-7034) and amazon.com
  - f. If the patient is an adult and wants to use his/her own stem cells, Dr. Steenblock offers bone marrow stem cell treatments at his clinic in Mission Viejo, California. His websites are <http://www.bonemarrowstemcelltherapy.com> and <http://www.strokedoctor.com>. In addition, for those who would prefer taking a supplement rather than having the stem cells, Dr. Steenblock has started a new program of testing various nutrients on a person's blood to see which work best for each individual in supporting their stem cell growth. This testing may be particularly beneficial for autistic children. Dr. Steenblock's clinic telephone number is 1-800-300-1063.
  - g. After finding out what you can, make a list of questions and call SRI at 949-248-7034. SRI staff is following Dr. Steenblock's patients as well as Dr. Ramirez' umbilical cord stem cell patients.
2. To maximize the benefits of the stem cell treatment, Dr. Ramirez advises patients doing detoxification programs to reduce or eliminate (a) infection, (b) inflammation in areas different from primary concern, (c) heavy metal toxicity, (d) chemical toxins, and/or (e) nutritional deficiencies. This is particularly important for autistic children and those with MS, ALS, Parkinson's, and Alzheimer's disease.
3. If and when the patients or parents/guardians decide on the treatment, they fill out the enrollment form on Dr. Ramirez' website. Copies of the patient's recent

medical records (about 10-30 pages of the significant records) and the enrollment form are faxed to SRI at 949-388-3441.

4. Based on the medical records, SRI staff will obtain recommendations from Dr. Ramirez concerning the type and amount of cells needed for the patient's health condition.
5. If and when the patients or parents/guardians feel comfortable taking the next stem cell step, they can provide preferable dates for the treatment. SRI will then coordinate with Dr. Ramirez and all concerned to make sure one of the dates is available.
6. After a date is decided, travel arrangements and hotel accommodations can be made.
7. Families are encouraged to arrive in San Diego at least one day prior to the treatment and stay in one of the recommended hotels listed in this handbook. On the morning of the treatment, the Program Coordinator (George) picks up the patient and any family or friends from the hotel, takes them across the border, stays with them through the treatment and afterwards, returns them to the hotel.
8. Follow up consultations to track the patient's progress will be done on a regular basis via emails and/or phone calls by SRI staff. Follow up medical records about four or five months after the treatment will also be requested.

### **19. How are the stem cells given?**

Most infants and small children are given the stem cells via a subcutaneous injection into the tissues adjacent to the umbilicus (belly button). Older children and adults are typically given stem cells by IV drip (a process that takes about 20 minutes). Blood may be drawn and reinjected to increase the number of growth factors given with the stem cells. Some neurological patients receive hUCSCs by direct catheter implant into the damaged areas of the brain, a procedure performed by an interventional radiologist and his operating room team in Mexico.

### **20. Why is a subcutaneous injection used on most children, and an IV approach in most adults?**

Many years of injecting cells subcutaneously near the umbilicus have shown that this method produces notable results. It appears the cells migrate from the injection site and enter the circulation over a period of hours and perhaps days. Since an IV approach is not

always easily done on some patients – especially infants and small children – the “subQ” approach is routinely employed on these patients.

[http://www.journal-mhr.com/PDF\\_Files/vol\\_2\\_3/2\\_3\\_Abstracts/2\\_3\\_6AB.html](http://www.journal-mhr.com/PDF_Files/vol_2_3/2_3_Abstracts/2_3_6AB.html)

In older patients, direct introduction of the cells into the circulation via IV is used. There are some neurological conditions for which a direct infusion of cells into the circulatory system is deemed the best approach to treating the patient.

The use of a subcutaneous, IV or combination route is decided by Dr. Ramirez based on his clinical judgment and past stem cell patient responses.

### **21. How long does it usually take before some change is seen?**

Patients typically report changes by the 3<sup>rd</sup> to 4<sup>th</sup> week after treatment. Most major changes are seen during the first 180 days following treatment. They may then plateau and diminish over time, although some patients report seeing new improvements more than one year following a single treatment.

An important thing to consider is appreciating the little changes. Waiting for only the big changes can be frustrating for all concerned.

### **22. In those patients who saw results almost from the moment the cells entered their bodies, how can the stem cells work that fast?**

There is no way the cells could engraft, differentiate and begin “doing their thing” in a matter of minutes – or hours. It is felt that the initial results are attributable to growth factors present in the stem cell medium. Also, the cells themselves may stimulate the body to create growth factors and other compounds that foster cell repair and replacement.

### **23. Is the reported healing and recovery due to the stem cells or to something else?**

First, the umbilical cord stem cells begin to produce a specific growth factor almost immediately after injection (GDNF = glial derived growth factor) which has the power to rescue neurons from a lack of oxygen, associated with conditions that include a stroke or traumatic brain injury. This GDNF activity can rescue up to 60-70 % of dying neurons if administered soon after the injury.

In later stages and in younger patients such as those suffering from cerebral palsy, one type of stem cell (CD34+) has a tendency to produce “white matter cells”. These cells make up the “wiring” that connects one neuron to the next and to the muscles of the body. When you look at a cross section of the brain, the white matter makes up about 60% of the brain’s inner volume. The gray matter is the neurons which are spread over the surface of the brain. While the CD34+ stem cells have been reported to promote some neurons in addition to the glial white matter, the primitive progenitor cells (AC133+) more readily assist with neuronal growth. The mesenchymal stem cells provide support for the other stem and progenitor cells, they help support the extracellular matrix in the brain and also help promote the growth of new neurons. For those with autoimmune disorders, the mesenchymal cells also provide immune modulation.

Besides rescuing dying tissues by the action of GDNF, the stem cells may also save cells by a process called “cell fusion”. In this method, the stem cells seek out sick and dying cells and melt their body into the dying cell body. This combination cell then has the vitality of the stem cell and its cell nucleus. Such fusion is more often seen in brain cells that have hundreds of connections with other cells.

#### **24. How do the stem cells know where to go in the body?**

Many animal studies have shown that stem cells “home” in on specific chemical signals given off by injured, damaged or diseased tissues or organs.

#### **25. Can stem cell treatment work if the injury or condition is old?**

When these signals are weak they require intervention to increase their numbers (signal amplification). Dr. Steenblock in Mission Viejo, California has pioneered ways to amplify these chemical signals. His pre-stem cell treatment program is offered as a comprehensive 5 to 35 day outpatient program. For further information on Dr. Steenblock’s Personalized Regenerative Medicine program, call his clinic at 1-800-300-1063.

#### **26. Is anything done at the time of treatment to enhance the likelihood of stem cells entering the brain?**

One of the difficulties in getting hUCSCs into the brain lies in the blood brain barrier – which slows or blocks entry of many things into the CNS including stem cells (The exception: Children and adult patients with Multiple Sclerosis and many other neurological diseases have “leaky” blood brain barriers due to the inflammation involved). Fortunately, the FDA approved drug mannitol temporarily opens up the blood brain barrier long enough for a great many stem cells to get into the brain, and in some cases, is utilized by Dr. Ramirez for this purpose.

## **27. What is the relationship between Dr. Ramirez and Steenblock Research Institute in California?**

Dr. Ramirez retains the services of SRI to gather and analyze patient response information and data, and also utilizes various technologies and protocols developed by the institute's director, Dr. Steenblock. These include a special diet regimen that is part of a USPTO Patent filed in 2004 by SRI.

During early 2004, Dr. Ramirez launched a clinical pilot study to see what effect, if any, umbilical cord stem cells would have on cerebral palsy in children. Steenblock Research Institute helped screen candidates for the study, collected their medical records and other documentation and collaborated with Dr. Ramirez and his team to help insure that safety, informed consent and other concerns were addressed. Eight children were ultimately admitted to the study and were given umbilical cord stem cells by Dr. Ramirez and then followed for six months. SRI's analysis of the responses of the children indicated that all eight experienced clinically significant improvement in seven areas of function.

A paper based on this pilot study titled "Umbilical Cord Stem Cell Therapy for Cerebral Palsy" by Fernando Ramirez, David A. Steenblock, Anthony G. Payne and Lyn Darnall has been published in the free access online journal, *Medical Hypotheses & Research* [http://www.journal-mhr.com/PDF\\_Files/vol\\_3\\_2/3\\_2\\_PDFs/3\\_2\\_2.pdf](http://www.journal-mhr.com/PDF_Files/vol_3_2/3_2_PDFs/3_2_2.pdf)

## **28. Is there anything patients should do prior to receiving hUCSCs in Mexico?**

Dr. Ramirez recommends that those who plan on having stem cell therapy ask their doctor for a heavy metals toxicity test. This test measures levels of mercury, arsenic, cadmium, aluminum and other heavy metals that are harmful to young neural progenitor cells. If one or more of the heavy metals is significantly elevated, they can be reduced to the normal range by use of chelating drugs given either orally or intravenously.

Also, because stem cells home in on signals from inflamed, infected, damaged or diseased tissues, it is important to make sure that all but the target tissue(s) and organ(s) are free of inflammation, etc. A head-to-toe check including teeth and gums is thus a prudent pre-treatment measure. Any infections or inflammations should be dealt with prior to leaving for stem cell treatment in Mexico.

Some parents take their children out of school and restrict contact with others in the week prior to and following hUCSC treatment. In this way they decrease the odds of their child contracting an infection that might interfere with the stem cell treatment.

### **29. Can I communicate with people who have had umbilical cord stem cell therapy or parents of kids who've had this treatment?**

Yes. We ask, however, that your conversations be brief and gracious.

**NOTE: Please do not disseminate any of the patient phone #s below to third parties without first obtaining their permission. This will help insure that these folks do not wind up deluged with calls!!!**

**Emily Pike, 10, Cerebral Palsy.** Emily was born "dead" -- 28 minutes hypoxic, and as a result had extreme developmental delays and visual problems. Siblings ignored Emily because, as her Mom (Karen) put it, she "had no personality". Emily received 200 hours + of HBO and just about every conceivable kind of treatment available, with only minor gains in function. Then she had stem cell therapy -- November 2002. Since that time she has shown great gains in her ability to focus/concentrate, and to articulate (Her vocabulary has expanded and she now uses complex sentences). She can now hold a crayon and make a line, count to 24, makes jokes, feeds her better, and has greater interaction with her siblings (who now describe her as being "so cute"). Emily's parents were so impressed with the gains after stem cell therapy, that they brought her back for a second treatment (Which was administered during late June 2003). Her folks recently reported (May 2004) that Emily attended her elder sister's wedding using a walker! The Pikes welcome queries concerning Emily's response to Stem Cell Therapy:

Phone numbers: (561) 644-1685, (561) 798-4724

E-mail: [KarenTPike@aol.com](mailto:KarenTPike@aol.com)

### **Sammy Mograbi, child with CP**

“Sammy is participating in a pilot study of 10 children with cerebral palsy who receive an injection of human stem cells. On Oct. 14th, we drove from San Diego to a clinic in Tijuana where Sammy had an injection of umbilical cord stem cells. The shot did not hurt, Sam did not shed a single tear, and we were on a Jetblue aircraft flying home the same day. It works something like this: The stem cells migrate to where they are needed, where there is damage, and differentiate into that specific cell type. Sam has deep damage

in his basal ganglia and other areas. This damage has caused his neurological system to hold onto a primal reflex called the ATNR (asymmetrical tonic neck reflex). This reflex normally diminishes by 3 months of age when babies bring their hands together and put them into their mouths. Retaining this ATNR prevents Sam from bringing his hands together to play. Intense rehabilitation has helped reduce it somewhat, but not enough for the right hand to be functional.

Two weeks post injection Sam did a play activity using his right hand together with the left in a midline position. A first for Sam. Four weeks post injection one of Sam's therapists (specializing in developmental movement) noted changes in how Sam's left wrist movements are 'articulating', showing connectedness to the elbow joint and shoulder in a more normal manner. She described the various changes she saw as following a developmental pattern, one in which Sam has gaps from his birth injury. In her view, Sam is now able to do very primal movements that show a strengthening of his spinal structure, much like a developing infant gains control from the head downward.

According to this view, if Sam can fill in the missing pieces of his foundation then he can learn how to integrate his new abilities into his life through daily activities/ therapy and progress.”

Linda Mograbi  
E-mail: [Samym@aol.com](mailto:Samym@aol.com)

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### **7 year old Alyssa Bavaro**

|  |
|--|
| <p>What follows below is a statement tendered by a licensed physical therapist concerning pre- and post-umbilical cord stem cell treatment responses of <i>Alyssa Bavaro</i>. The mother, <b>Kelly</b>, is very willing to speak with parents concerning the remarkable turnaround of her daughter: &lt;<a href="mailto:kelly0023@aol.com">kelly0023@aol.com</a>&gt;, phone 1-718-351-9655 (NYC area).</p> |
|--|

**Jill Conlon, PT, MHS**

3/12/05

Re: Alyssa Bavaro  
D.O.B. 1/24/98  
Dx: Cerebral Palsy

To Whom It May Concern:

I am a pediatric physical therapist who has been seeing Alyssa since February 2002 at home twice weekly for thirty minute sessions.

When I first evaluated Alyssa, she presented as a pleasant, happy child, non-verbal except for cooing, crying sounds. Her vision, hearing, and tactile systems were intact. She communicated by eye contact, smiling, and turning her head toward voices, lights, or music. Alyssa was completely dependent for her feedings; liquids were squirted from a bottle into her mouth and her mother placed small pieces of table food or jarred baby food into her mouth.

Alyssa demonstrated severely increased tone throughout her extremities and decreased tone in neck and trunk musculature. Her extremities were typically held in a hyper-extended position. When placed in supine, she presented with the classic asymmetrical tonic neck reflex posturing (ATNR). When her head was actively or passively turned to one side, the arm and leg extended on the side to which the face was turned. The other arm and leg flexed. While the ATNR is a normal reflex in newborns, it is commonly integrated by six months of age. Perseveration of the ATNR interferes with normal development by preventing the child from bringing her hands or objects to her mouth, to midline, or across midline. Athetoid movements were obvious, specifically in her oral musculature, which demonstrated tongue thrusting, writhing lips, etc. Alyssa's range of motion (ROM) in her upper extremities was within functional limits (WFL), however, it required a slow steady stretch to achieve it. Passively flexing her elbows and shoulders was an effort. Alyssa predominately maintained both hands in a fist position severely limiting her ability to grasp or release items.

Passive ROM in the lower extremities was WFL except for significant limitations in hip abduction and knee extension. Alyssa scissored her lower extremities both in a relaxed posture and especially during any attempts at volitional movement. To position Alyssa in quadruped over a bolster required a concerted effort on my part to flex her hips and knees and then I needed to maintain them in that position as she was constantly trying to kick back out into extension.

Upon initial evaluation in 2/02, Alyssa was severely limited in any anti-gravity movements or postures. She was unable to roll, to sit, or to maintain an erect head without maximal assistance. Over the course of my treatment sessions with her, she made slow steady gains. Specific improvements were noted in rolling which she could now perform at times independently, or otherwise with minimal assistance, and in

increased head control (amount of time her head maintained upright when in supported sitting). Tone problems continued to interfere with progress in other areas.

Then Alyssa went for umbilical cord stem cell therapy at Dr. Fernando Ramirez's facility in Tijuana, Mexico on 12/13/04. I admit that I, as well as most of my colleagues, was somewhat skeptical of his claims of "miracle cures."

On my first visit, 12/15/04, following her return, her mom reported that Alyssa had "her hand in her mouth all day today." I did not notice any significant difference in her at that point in time.

On my visit of 12/20/04, I proceeded as usual with pull-to-sit (abdominal/head/neck strengthening exercises performed from a supine position). In the past, I needed to grasp Alyssa's wrists since her arms were in their "normal" ATNR posturing on the floor. But today, to my extreme surprise, when I said, "Give me your hands", ALYSSA TRIED TO! She was able to lift them off the floor and toward me although not completely to midline. Then I noticed how much more relaxed her peri-oral musculature was. There was no tongue thrusting, no more lip twisting- just a calmness that was shocking to me. Head control in midline during pull-to-sit was better with my verbal cueing. Mom reported that Alyssa was easier to feed and that there was a strong increase in her appetite.

On 12/28/04, I was again astounded. When I tried to position Alyssa in quadruped over my legs, I was easily able to flex her hips and knees and then SHE MAINTAINED THE FLEXED POSITION without any assistance on my part.

On 1/3/05 we worked on the bolster. Sit straddling was so much easier than previously with decreased hip adduction tone present. Quadruped over the bolster was improved, again with Alyssa's ability to maintain the lower extremity flexion and with weight bearing on one (still fist) hand independently and with assistance with the other hand.

On 1/10/05, Alyssa demonstrated improved head control while in supported short sit on my leg. There was a decrease in neck flexion and an increase in the amount of time Alyssa was able to hold her head in midline with verbal cueing. She continued to require maximal assistance for her trunk to maintain the sitting posture.

On 1/18/05, Alyssa demonstrated the ability while supine to reach up and to midline with her hands to grasp mine for the anticipated pull-to-sit activity. I actually felt her abdominals forcefully initiate contractions to assist in the movement. THIS SHE HAD NEVER, EVER DONE BEFORE. While in supported short sitting on my leg, Alyssa's arms were relaxed-held by her side with a slight natural looking bend at the elbow and hands resting in her lap- not the extreme hyperextension that she had previously exhibited.

On 1/31/05 Alyssa was able to maintain quadruped over the bolster once positioned there with assistance at only one elbow to keep it extended. She was able to weight bear on the other with active force production at the elbow and with decreased fisting with both hands. I placed Alyssa into her adaptive seating, a High-Low Chair that she has had for over a year but had been unable to tolerate due to excessive muscle tone/extensor

thrusting. Alyssa sat in the chair for a total of fifteen minutes while distracted by toys WITHOUT COMPLAINTS.

I did not see Alyssa again until 2/21/05. As per doctor's orders, I only worked on upper extremity activities. Alyssa was under the influence of pain medication but performed bilateral midline activities such as clapping and playing with an accordion toy with hand over hand assistance. Moving her arms through their passive ROM was so much easier than before. Additionally, ALYSSA WAS NOW GRASPING THE HANDLES ON THE TOY WITH HER FINGERS!

On 2/28/05, we continued with upper extremity work. While supine, Alyssa was able to cradle a baby doll with one upper extremity and brush the doll's hair with a hairbrush that she was holding in her other hand. She did require some assistance for the repetitive motions of brushing, but she held the brush independently for over ten minutes.

On 3/2/05 Alyssa assisted with feeding. I placed a spoon with a small amount of baby food on it in her hand, placed my hand over it, and guided it to her mouth. She was able to maintain her grip on the spoon even after I took my hand away. THEN SHE AMAZED ME. I positioned her bottle propped up on her casted trunk, placed her left hand around it, put the nipple in her mouth, and backed off. In the past, her caregiver not only needed to hold the bottle, but also needed to squeeze it to allow the liquid to drip into her mouth. Not today. Alyssa was opening and closing her jaw purposefully, using her teeth, to depress the nipple enough to get liquid.

Alyssa had her casts removed on 3/3/05 but physical therapy orders for lower extremity stretching, strengthening, and weight bearing are on hold until 3/14/05.

I am anxious to see what the future brings. My doubts about the effectiveness of stem cell therapy are gone. Alyssa has demonstrated unbelievable growth in her abilities in just these three short months. SHE IS LIVING PROOF that this works. The changes in Alyssa's muscle tone have made it possible for her to perform volitional movements that she never did before. I realize it will take time to strengthen her muscles and help her to learn how to use them in more normal movement patterns, but now that her casts are off and I can work with her legs, the possibilities seem endless.

Sincerely,

Jill Conlon, PT, MHS  
NY License#016064-1  
NJ License#QA06563

Alyssa's Physical Therapist

### **30. What dietary or lifestyle restrictions should be observed prior to and following stem cell treatment?**

In general, think in terms of what you should eat if you were a young woman who has just become pregnant.

1. The body should be as pure as possible for the stem cells to grow and differentiate into the specialized cells (brain cells, muscle cells, kidney cells, etc) needed to help repair the diseased or injured tissue.
2. Stem cells generally have two week intervals for their growth and expansion in numbers. Through the entire body, all aspects of repair are going on each day. However, for our purposes, the first two weeks may be considered important for the stem cells creating safe homes (called niches) for growing and multiplying into more and more healthy stem cells.

For the first two weeks after the treatment, it is important to avoid the things that kill off stem cells and do more of the things that promote healthy stem cell growth.

3. As the stem cells begin to migrate to the injured tissue and then divide into specialized cells that can replace the damaged and dead cells, there is a need to assist the first round of cell differentiation as well as continue to support the next two week cycle of new stem cell growth and multiplication promoted by the increased growth factors.
4. During the second and third month, as the new neurons and glial cells integrate into the neural network, the stem cell patient can go on a maintenance diet that continues healthy living but is less restrictive.

#### **5. Recommendations for parents of children being treated:**

- a. Consume healthy, fresh foods and drinks.
- b. Avoid places and foods that provoke allergies.
- c. Reduce as much as possible, environmental and dietary toxins.
- d. Minimize stress.
- e. Maintain a positive attitude
- f. Appreciate the child's smallest successes. The small changes eventually lead to big changes.

## 6. Recommendations for adults being treated:

- a. **Avoid red meat** for at least 4 days prior and 2 weeks following hUCSC treatment, especially those with neurological disorders. Red meat contains fats (arachidonic acid) that are pro-inflammatory and inflammation can kill off stem cells.
- b. **Avoid grilled** (hydrocarbon formation) **and fried foods** (fats that promote inflammation).
- c. **Avoid alcoholic beverages** for at least 1 week prior to and 6 months following treatment. Alcohol inhibits nerve growth factor and is toxic to new neurons.
- d. **Avoid tobacco** at least 1 month prior to and six months following treatment. Tobacco is not just tobacco. It also includes carcinogens and heavy metals. Smoking restricts the blood flow and leads to reduced circulation (and function) in various parts of the brain.
- e. **For the first week following the treatment, eat sparingly of anti-cell proliferative (anti-cancer) foods** such as onions, garlic, ginger, apples, berries (cranberries, raspberries, blueberries, blackberries, etc), citrus fruits, honey, red grapes, cauliflower, broccoli, Brussels Sprouts, and almonds. These foods should be resumed after the first week because they are generally high in antioxidants.
- f. **Avoid sweets**, including sugars, candies, carrot juice, and fruit juices during the first month following stem cell therapy. These foods can produce rapid fluctuations in blood sugar levels, which is not good for damaged brain cells.
- g. **Avoid herbal supplements and over-the-counter medications** for one month after the treatment, unless directed by your physician.
- h. **Vitamin-Mineral supplements** that have been working for the patient can be continued through the treatment. These nutrients usually provide some antioxidant protection for stem and progenitor cell survival.
- i. **Limit consumption of seeds and nuts.** While these foods are generally nutritious, they also contain L-arginine, which can increase nitric oxide in the central nervous system and promote inflammation. This is especially applicable to patients with neurological challenges involving CNS inflammation.

- j. **Avoid monosodium glutamate** (and its alias names such as hydrolyzed vegetable protein, hydrolyzed protein, hydrolyzed plant protein, plant protein extract, sodium caseinate, calcium caseinate, yeast extract, textured proteins, autolyzed yeast or hydrolyzed oat flour, etc). MSG is toxic to new neurons. MSG may also be included in malt extract, malt flavoring, bouillon, broth stock, flavoring, natural flavoring, natural beef or chicken flavoring, seasoning or spices labeling. Eating fresh foods reduces this risk.
- k. **Avoid emotional and physical stress.** This is another glutamate issue. Stress stimulates the adrenal glands to secrete adrenal hormones (called glucocorticosteroids) which increase glutamate. Some glutamate is needed for learning and memory but too much glutamate kills off new neurons, especially in the hippocampus (the center for learning and memory).

For this reason, **steroids (including cortisone products)** should be avoided for the first two months unless prescribed by a physician.

- l. **Avoid foods that cause allergies.** Allergies increase inflammation which can attract the stem cells to areas different from the person's main health concerns. The cytotoxic products that are released in inflammatory conditions can also kill off the stem and progenitor cells.
  - m. Women should not undergo hUCSCT during or just following a menstrual period. The inflammation associated with menstruation may compromise hUCSC activity.
- 

## 7. Factors that can increase stem cell growth:

- a. **A good night's sleep.** During the first part of the night (from about 10pm to 3am), growth factors such as human growth hormone are stimulating stem cell growth in the brain as well as the body. From 3am to about 7am, cortisol is stimulating an increase in glutamate to assist with memory consolidation and the incorporation of brain cells into the neural network. Both aspects of sleep are important for cell repair and learning and memory.
- b. **Don't fight against fatigue.** If you are tired during the daytime after the stem cell treatment, the increase in growth factors are doing their thing with slowing

down the body for cell repair. If you are tired, rest. If you are sleepy, sleep. The calm allows for sufficient serotonin and melatonin to promote stem cell growth.

- c. **If you feel energized, do some exercise or physical therapy.** The movement promotes a growth factor called vascular endothelial growth factor (VEGF) that stimulates the growth of stem cells for blood vessel growth and repair. VEGF also stimulates neural growth factors (such as brain derived neuro-trophic factor or BDNF) in the brain. Avoid activities that may cause bodily injury since an injury will divert stem cells to newly damaged tissues instead of the desired treatment site.
- d. **Learn something new each day** about an entirely new subject, place, language, etc. The new learning requires the growth of new stem cells. Life-long learning is an important ingredient for keeping the brain cells active, regardless of the person's age.
- e. **Listen to music that is relaxing and music that is structurally complex.** Music that provides a depth and complexity of rhythms, frequencies, timbre and internal integrity – such as is common to the “classics” -- will bring about changes in nerves and brain regions connected to the inner ear. The result can be greater electrical activity and a synchronization of activity between various parts of the brain.
- f. **Create a stress reduction program.** Don't kill off your stem cells with negative thoughts.
- g. **Drink 6-8 glasses of pure water.** Water (not soft drinks or coffee) is important in cell-to-cell communication and stress reduction.
- h. **Eat selections from Dr. Steenblock's Regenerative Diet Program.** This diet is rich in fresh alkaline vegetables, moderate in poultry and fish. The diet does not include red meat, processed foods, sweets, sugar-containing beverages, foods with additives, hormones, colors, preservatives, monosodium glutamate/vegetable hydrolyzed protein (MSG/VHP) or pesticides.
- i. **Eat foods containing calcium, magnesium, potassium, B complex and serotonin foods** which can help reduce stress.
  - 1. **Serotonin-generating foods:** Squash, pumpkin, turnips, and celery (do not eat any brown spots on celery; they can promote free radical damage.)
  - 2. **Calcium-rich foods:** Salmon, sardines, green leafy vegetables, collards, filberts, kale, kelp, mustard greens, prunes, turnip greens, and watercress.

3. **Magnesium-rich foods:** Avocados, brewer's yeast, dulse, green leafy vegetables, salmon, and watercress .
4. **Potassium foods include:** Avocados, brewer's yeast, dulse, raisins, and winter squash.
5. **B complex foods include:**  
*Folic acid* is in green leafy vegetables, asparagus, and spinach.  
*Pyridoxine* (Vitamin B6) is in Poultry, fish oil, vegetables, sunflower seeds  
*Methylcobalamin* (Vitamin B12) is in Poultry, fish and fish oil.  
Refrain from using cyanocobalamin (a synthetic form of vitamin B12 with less neurological activity).

- j. **Seaweeds** such as wakame and kambu contain sulfated fucoidans which support bone marrow stem cell production.
- k. **Eat avocados** (one per week). These foods contain tyrosine, a mood elevator. The processing of tyrosine in nervous tissue is associated with the growth and guidance of nerve pathways.
- l. **Ginseng** for two months (adults only) can assist with both stem cell growth and stem cell differentiation into specialized cells.
- m. **Ginkgo biloba** also assists with stem cell growth and differentiation. However do not take this if you are taking other medications.
- n. **DHA** (docosahexaenoic acid) rich fish and seafood (see the chart below for seafood that has less mercury content). This omega-3 fatty acid plays a role in nerve cell growth, cognition and also modulates inflammatory responses.

**Methylmercury Advisory Level**  
 When people eat fish, the methylmercury in it can harm brain cells, but the fish oils contain Omega-3 fatty acids good for the heart.

● High ● Middle ○ Low

| FISH TYPE    | OMEGA-3 OUNCES PER SERVING | METHYL-MERCURY LEVEL |
|--------------|----------------------------|----------------------|
| Salmon       | 0.68-1.83                  | ○                    |
| Sardines     | 0.98-1.70                  | ○                    |
| Oysters      | 0.37-1.17                  | ○                    |
| Halibut      | 0.40 - 1.00                | ●                    |
| Shark        | 0.90                       | ●                    |
| Tilefish     | 0.80                       | ●                    |
| Tuna, white* | 0.73                       | ●                    |
| Swordfish    | 0.70                       | ●                    |
| Lobster      | 0.07-0.41                  | ●                    |
| Crabs        | 0.34-0.40                  | ●                    |
| Pollack      | 0.46                       | ○                    |
| Mackerel     | 0.34                       | ●                    |
| Shrimp       | 0.27                       | ○                    |
| Clams        | 0.24                       | ○                    |
| Tuna, light* | 0.26                       | ○                    |
| Scallops     | 0.17                       | ○                    |

\*Canned; serving is three ounces.

SOURCES: American Heart Association; Food and Drug Administration AP

## 8. Four Weeks After the Injection

After the stem cells have been given time to migrate to where they are needed and proliferate they will then differentiate (“turn into”) into various cells such as new neurons, red blood cells, immune cells, etc. **The following are prudent measures to implement about four weeks after a stem cell injection.**

- a) **Eat foods containing lots of vitamin A.** Sources of Vitamin A include: Cod liver oil, fish oil, beet greens, watercress, kale, pumpkin, spinach, winter squash, and leafy lettuce.
- b) **Vitamin D** from 20 minutes exposure to moderate sunlight – stimulates BDNF, a neural growth factor that supports the growth of new neurons. BDNF also supports the pancreas and insulin producing pancreatic cells.
- c) **Supplement with antioxidants.** Antioxidants can help protect new stem cells and new neurons from the toxic effects of a compound called glutamate (Glutamate is produced in the body and can be stimulated by from dietary sources such as aspartame). Among the more potent antioxidants are Glutathione, Coenzyme Q10, N-acetyl cysteine (NAC), alpha lipoic acid, and vitamins A, C, and E.

## DR. DAVID STEENBLOCK'S REGENERATIVE DIET

While some of this information can apply to children, it is mainly intended for adults

1. ***Eat Organic*** as much as possible. Since environmental toxins can be harmful to nerve cells and the activity of the cell's power-generating "factories" (mitochondria), a maintenance and regenerative diet needs to be as non-toxic as possible. While organic foods may still have some pesticide residues, certified organic foods are usually preferable to conventionally grown foods. Note that a recently published study (2004) found that fish farm sources of salmon, halibut, bass and trout appear to have more heavy metal contamination than fish from lakes and ocean sources. Fish is an important source of omega-3 fatty acids that protect brain cells from toxins and cell-damaging free radicals. However, if fish and poultry are eaten, they need to be as free of heavy metals such as methylmercury as possible.

Organic Food Delivery: The following are taken from the Internet and provided for your convenience. If you find their services unsatisfactory, please let us know and we will not include them in future handouts. If you find other companies that provide good service, we will be glad to add them to our list.

### **Organic Foods and Untreated Seeds**

<http://www.localharvest.org> (where to find fresh local food)

[www.saltspringseeds.com](http://www.saltspringseeds.com)

<http://www.seabreezed.com>

<http://www.all-organic-food.com>

<http://www.greenearthorganics.com>

<http://www.shopnatural.com>

<http://www.simplyorganic.net>

<http://www.organicexpress.com>

2. ***Eat fresh, whole foods*** as much as possible. If chewing is a problem, a blender can be used. Fresh foods provide the needed enzymes for more efficient digestion. Processed foods are made to last on the shelf for long periods of time and may therefore have preservatives, additives, colors, salts, and sugars.
3. ***High Alkaline Diet***: Improves immune function and protects against infection, inflammation and disease.

***70% of diet as raw vegetables and fruits***: Asparagus, beets, carob, carrots, cauliflower, celery, green beans, ripe olives, radishes, spinach, sprouts, string beans, watercress, chard, mustard greens, kale, carrots, leafy lettuce (no cabbage or iceberg lettuce) and fresh

vegetables juices (no tomato juice). A Jerusalem artichoke twice a week assists with liver detoxification. Prunes and beet tops assist with elimination.

**30% of the diet as:** Avocado, fish, chicken or wild game.

4. **Fiber** According to the American Dietetic Association, the recommended daily intake of fiber for healthy adults is 20-35 g/day, with good sources being vegetables. Dietary fiber assists in lowering blood cholesterol levels and helps to normalize blood sugar and insulin levels, especially in patients with cardiovascular disease and Type 2 diabetes.
5. Foods that contain **antioxidants** can assist the activity of the cell's energy-producing (the mitochondria) and protect nerve cells from damage from inflammation. Vegetables high in antioxidants include kale, spinach, Brussel Sprouts, alfalfa sprouts, broccoli, and beets. Organic blueberries and red grapes are highly recommended, as they are rich in cell-protective compounds and promote the growth of new neurons.

Antioxidant Seasonings (Don't use for at least a month after the injection): Curcumin (curry), ginger, natural vanilla flavoring, Fenugreek, parsley, thyme, sage, rosemary, etc. can also be used as antioxidant flavorings to increase the healing benefits of the meal. However clove and cinnamon have been found interfere with energy production in the cell's mitochondria (energy producing factories of our cells) and are not recommended.

Glutathione protects cells and neurons against free damage and is associated with improvement in diabetic retinopathy. Factors that increase and/or have a sparing effect on glutathione include moderate sunlight (vitamin D3), Fenugreek, riboflavin, aloe vera, ginger, vitamin E, Ginkgo biloba, pycnogenol, green tea, and vitamin C. The B vitamin riboflavin is also important [It plays an essential role in generating flavin adenine dinucleotide (FAD), important in the production of glutathione. **Note that various drugs, including Tylenol can deplete glutathione and therefore their use is discouraged.**

6. Foods that contain **tryptophan** should be included in planning one's diet. Tryptophan is needed for the mood-modulating compound serotonin and the sleep hormone and antioxidant, melatonin. One of the richest sources of tryptophan is turkey. It should be noted that reduced levels of tryptophan can impact niacin levels, which are required by the mitochondria for energy production.
7. **Eat smaller quantities of food** on a more frequent basis (mini-meals) to help maintain stable blood sugar levels. Reduced caloric intake can increase the production of specific compounds (such as heat shock protein and brain-derived neurotrophic factor) that are important to nerve cell protection and blood sugar utilization and insulin activity.
8. **Acidophilus** and **bifidobacteria** are helpful for promoting a healthy lining in the bowel and prevent and treat leaky gut syndrome and constipation. Both probiotics are available in yogurt and in supplement form at most health food stores.

9. Fresh olives provide *monosaturated fats* that favorably influence various aspects of liver function, as well as those of skeletal muscles and the production of energy by cells in general. A healthy combination of fats has been recommended as 4 parts canola oil, 1 part fish oils, and 1 part olive oil.
  
10. ***Prostacyclin enhancement:*** Prostacyclin is made by cells that line blood vessels and helps open up these vessels, which allows more oxygen-carrying red blood cells to flow through. Nutrients and herbs that help increase prostacyclin production include gamma linolenic acid (GLA), fish oil (EPA and DHA), and ginger.
  
11. ***Rotate the foods in your Diet*** - Eat the same foods once every four or more days rather than every day to provide a greater variety of nutrients and reduce the risk of allergies from excesses of any food components. Allergies create inflammation and inflammation can kill off stem cells and progenitor cells. Usual suspects include wheat, gluten products, cow's milk, corn, etc.

## DR. STEENBLOCK'S REGENERATIVE DIET SUMMARY

(after first week)

| 80 % Per Day<br>(4 choices out of 5 servings) | 20% Per Day<br>(1 choice out of 5 servings)     | <u>0% Per Day</u>   |
|---|---|---|
| Chlorophyll foods                             | Artichoke                                       | <b>Cigarettes/Cigars</b>  |
| Asparagus                                     | Avocado (once a week)                           | <b>Beer</b>   |
| Beets   | Brussel Sprouts                                 | <b>Wine</b>   |
| Beans   | Broccoli  | <b>Other Alcoholic drinks</b>                                   |
| Carob   | Lentils   | <b>Sodas</b>  |
| Cauliflower                                   | Chickpeas                                       |   |
| Chard   | Carrots   | <b>Red Meats</b>  |
| Cucumber                                      |   |   |
| Red Pepper                                    | Blueberries with plain yogurt                   | <b>White Potatoes</b>   |
| Green beans                                   | Red Grapes                                      | <b>Wheat</b>  |
| Kale  | Grape Juice                                     | <b>Gluten breads</b>  |
| Leafy lettuce                                 |   | <b>Soybeans</b>   |
| Mustard greens                                | Couscous, Taboulee                              |   |
| Onions  | Barley, Oats                                    | <b>Margarine</b>  |
| Parsnips                                      |   |   |
| Prunes (bedtime)                              | Almonds and filberts<br>(not roasted or salted) | <b>Foods with</b>   |
| Radishes                                      | Sesame seeds                                    | <b>Artificial colors</b>  |
| Spinach                                       | Pumpkin seeds                                   | <b>Preservatives</b>  |
| String beans                                  | Olives  | <b>Monosodium glutamate</b>                                     |
| Sweet potatoes                                |   |   |
| Watercress                                    | Fish  | <b>Processed foods/cereals with<br/>increased salt or sugar</b> |
| Vegetable Juices                              |   |   |
| Plain Yogurt smoothies                        | Turkey  | <b>Aspartame (Nutrasweet)</b>                                   |
|   | Chicken   |   |
| Curcumin/Curry                                | Eggs  |   |
| Ginger  | Wild Game                                       | <b>Fried Foods</b>  |
| Garlic  |   | <b>Pickled foods</b>  |
| Fenugreek                                     | Berries   |   |
| Rosemary                                      | Melons  | <b>Salted Nuts</b>  |
| Parsley/Cilantro                              | Kiwi  |   |
| Sage  | Mango   | <b>Sweetened Chocolate</b>                                      |
| Thyme   | Persimmon                                       |   |
| Natural vanilla flavoring                     | Plums   | <b>Coffee (caffeinated)</b>                                     |
|   | Pomegranate                                     |   |
| Knox Gelatin                                  |   |   |
|   | Watermelon                                      |   |
| Figs  | (mornings by itself)                            |   |

You will find recipes that are consistent with this dietary program in

The DASH Diet Action Plan: Based on the National Institutes of Health Research: Dietary Approaches to Stop Hypertension by Marla Heller, 2007. Available at Amazon.com

NutriGenie DASH Diet Software for Windows by NutriGenie (CD-ROM).

The Inflammation-Free Diet Plan by Monica Reinagel, 2007.

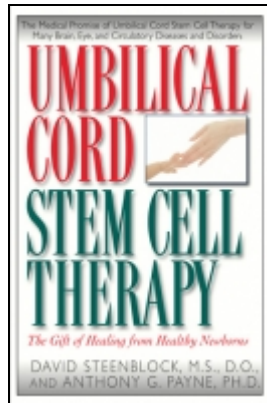
“The Paleo Diet” by Loren Cordain, Ph.D., Available online from amazon.com

<http://www.paleodiet.com/> -- Compilation of resources to help you keep your diet consistent with this program

<http://www.paleofood.com/> -- Online recipes that are “paleo”

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**Umbilical Cord Stem Cell Therapy**  
by  
**Drs. David A. Steenblock & Anthony G. Payne**

A 172 page hardcover book on human umbilical cord stem cell basics and hUCSC therapy written by Drs. David A. Steenblock and Anthony G. Payne titled "Human Umbilical Cord Stem Cell Therapy: The Gift of Healing from Healthy Newborns" is available from Amazon.com, Barnes & Nobles, WalMart, and other retail outlets nationwide.

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