

# HP Placenta

## HP Placenta for complete rejuvenation, regeneration and revitalization

The major function of the placenta is to facilitate the transfer of nutrients, gases and the removal of waste products for the growth and development of the fetus. Human maternal placentophagy, also known as the postpartum ingestion of whole placenta were practiced in the early 1970s in small number of women from United States and Mexico as they were shown to improve mood stability, increase vitality, improve lactation and decrease postnatal bleeding.

The placenta functions as a natural storage centre for vast nutrients and biological active components with remarkable healing and therapeutic attributes. Research findings indicated that placenta HP contain polydeoxyribonucleotide (PDRN), enzymes, nucleic acids (RNA, DNA), amino acids, peptides, vitamins and trace elements which provides a complete inside-out rejuvenation. It is also rich in growth factors GCSF, EGF, FGF, HGF, IGF, PDGF, TGF, VEGF which show an array of physiological effects ranging from immunomodulation, anti-inflammatory, wound healing, cellular proliferation and regeneration.

HP Placenta 330 mg (2 mL x 10 vials) and 500 mg (4 mL x 10 vials) are prepared via cold process cryopreservation extraction and heatless sterilization, a unique patented method which could retain all beneficial bioactive components and nutrients of the placenta in pure and fresh form. This notable method is in contrast to other conventional extraction methods, which apply heat sterilization at a minimum temperature of 120°C could destroy or reduce the bioactive compounds and nutrients present in the placenta. Henceforth, with our unique extraction method, HP Placenta richly repairs, rejuvenates and regenerates cells and tissues thus restoring health, beauty, vitality and youth.

### Source:

Biswas, T. K., Auddy, B., Bhattacharya, N. P., Bhattacharya, S. & Mukherjee, B. (2001). Wound healing activity of human placenta. *Acta Pharmacologica Sinica*. 12: 1113-1116.

Chakraborty, P. D. & Bhattacharyya, D. (2012). Aqueous extract of human placenta as a therapeutic agent. *Recent Advances in Research on the Human Placenta*. InTech, Rijeka, Croatia. 77-92.

Marracini, M. E. & Gorman, K. S. (2015). Exploring placentophagy in humans: Problems and recommendations. *Journal of Midwifery and Women's Health*. 60: 371-379.

Selander, J., Cantor, A., Young, S. M. & Benyshek, D. C. (2013). Human maternal placentophagy: A survey of self-reported motivations and experiences associated with placenta consumption. *Ecology of Food and Nutrition*. 52: 93-115.

Young, S. M., Gryder, L. K., David, W. B., Teng, Y., Gerstenberger, S. & Benyshek, D. C. (2016). Human placenta processed for encapsulation contains modest concentrations of 14 trace minerals and elements. *Nutrition Research*. 36: 872-878.

## Shelf-Life and Storage

6 years from date of manufacture in original enclosed state. The product must be stored in a refrigerator at an optimum temperature of +4°C to +12°C and do not expose to heat or sunlight.

## Recommended Dosage

One vial each time for 2 to 3 times each week for a duration of three to four months. If necessary can be administered daily for two to three weeks depending on the patient's individual health.

## Biological and Clinical Applications of Placental Extracts

### Eases inflammation

Sur and co-workers (2003) investigated the anti-inflammatory activity of human placental extracts by inducing inflammation in the hind paws of Wistar rats. Results showed significant anti-inflammatory activities and edema inflammation was reduced following administration of human placental extracts.

Sur, T. K., Biswas, T. K., Ali, L. & Mukherjee, B. (2003). Anti-inflammatory and anti-platelet aggregation activity of human placental extract. *Acta Pharmacologica Sinica*. (2): 187-192.

### Hair growth promotion

Kwon et al. (2015) investigated in vitro hair growth promotion on human placental extracts on C57BL6/J mice. Results showed that human placental extracts could significantly augment minoxidil (MXD) – a promoter of hair growth. The hair follicles were increased in number and size and concluded that human placental extracts as a potential therapeutic treatment for baldness in humans.

Kwon, T., Oh, C., Choi, E., Park, H., Han, H., Ji, H. & Kim, B. (2015). Human placental extract exerts hair growth-promoting effects through the GSK-3 $\beta$  signalling pathway in human dermal papilla cells. *International Journal of Molecular Medicine*. 1088-1096.

### Heals wounds and burns

In many countries, the usage of human placental extracts for burn injuries, chronic wounds and post-surgical dressings has already been applied as a traditional medicine in the older days. Placenta extracts were shown to be effective in healing normal and infected wounds. Previous research by Hong et al. (2010) investigated the efficacy of human placenta extracts in wound healing using mice models. An 8-mm diameter of single full-thickness skin defect was made on the back on the mice skin and human placenta extracts were injected into the boundaries of the wound. The experimental

## Constituents of HP Placenta

Constituents	Functions	Source
Nucleic Acids	DNA, RNA, Polydeoxyribonucleotide (PDRN)	Effective wound healing function especially for the treatment of ulcers, wounds and scars Noh et al., 2016
Amino Acids and peptides	Alanine, aspartic acid, cysteine, histidine, leucine, lysine, phenylalanine, proline, serine, threonine, tryptophan, valine, tyrosine	Amino acids stimulates fibroblasts production, collagen production, decrease skin pigmentation, anti-ageing. Park et al., 2010
Vitamins	Vitamin B1, B2, B5, B6, B7, B9, B12	Important in cell metabolism, provide energy, promote cell division and growth. Biswas et al., 2001
Minerals and trace elements	Calcium, copper, iron, magnesium, manganese, phosphorus, potassium silicon, sodium, zinc	They are essential in minute quantities for the development of the human body and body function. Young et al., 2016
Cytokines and growth factors	IL-1, IL-2, IL-4, GCSF, EGF, FGF, HGF, IGF, PDGF, TGF, VEGF	Natural proteins which acts as messengers for growth regulation, stimulation, cells migration and cells differentiation Nikolaos et al., 2015

### Source:

Park, S. Y., Phark, S., Lee, M., Lim, J. Y. & Sul, D. (2010). Anti-oxidative and anti-inflammatory activities of placenta extracts in benzo[a]pyrene-exposed rats. *Placenta*. 31(10): 873-879.

Noh, T. K., Chung, B. Y., Kim, S. Y., Lee, M. H., Kim, M. J., Youn, C. S., Lee, M. W. & Chang, S. E. (2016). Novel anti-melanogenesis properties of polydeoxyribonucleotide, a popular wound healing booster. *International Journal of Molecular Sciences*. 1-11.

Nikolaos, V., Charalampous, G., Dimitrios, Z. & Nikolaos, V. (2015). The endocrine and paracrine role of placental cytokines, growth factors and peptides. *An Obstetrics and Gynecology International Journal*. 14: 33-38.

Biswas, T. K., Auddy, B., Bhattacharya, N. P., Bhattacharya, S. & Mukherjee, B. (2001). Wound healing activity of human placenta. *Acta Pharmacologica Sinica*. 12: 1113-1116.

Young, S. M., Gryder, L. K., David, W. B., Teng, Y., Gerstenberger, S. & Benyshek, D. C. (2016). Human placenta processed for encapsulation contains modest concentrations of 14 trace minerals and elements. *Nutrition Research*. 36: 872-878.

Pathak, P. & Kapil, U. (2004). Role of trace elements zinc, copper and magnesium during pregnancy and its outcome. *Indian Journal of Paediatrics*. 71: 1003-1005.

group showed significant decrease in wound size when compared to the placebo group. Growth factors TGF- $\beta$  and VEGF, functioning in the proliferation of epithelial cells, tissue remodelling and regulation of angiogenesis were shown to increase significantly in mice treated with human placental extracts.

Hong, J. W., Lee, W. J., Hahn, S. B., Kim, B. J. & Lew, D. H. (2010). *The effect of human placenta extract in a wound healing model*. *Annals of Plastic Surgery*. 65: 96-100.

Bhattacharya, N. (2011). *Use of amniotic membrane, amniotic fluid, and placental dressing in advanced burn patients*. In Bhattacharya, N. & Stubblefield, P. (eds.) *Regenerative medicine using pregnancy-specific biological substances* pp. 383-393. London: Springer.

### **Inhibits bacterial and fungal growth**

Placental extracts contain vast nutrients including amino acids, proteins, hormones glycosaminoglycans, nucleic acids and polydeoxyribonucleotides (PDRNs). Chakraborty and Bhattacharyya (2005) studied the role of placenta extracts on the growth of different bacteria. These placental extracts could inhibit the growth of clinical isolated bacteria such as *E. coli*, *S. aureus* and fungi such as *S. cerevisiae*, *K. fragilis* and *C. albicans*.

Chakraborty, P. D. & Bhattacharyya, D. (2005). *In vitro growth inhibition of microbes by human placental extract*. *Current Science*. 88: 1745-1749.

### **Improves health Status in elderly people**

Kong and Park (2012) investigated the effects of placental extracts on health status in elderly people. Participants of more than 65 years old were randomly categorized into placebo group and treatment group. Participants either received subcutaneous placental extracts or normal saline for a period of eight weeks. The scores of physical function, sexual life and general health perception showed significant improvement from the baseline health status in the treatment group as compared to the placebo group. This study demonstrated that placental extract regimen could improve the health status in elderly people.

Kong, M. & Park, S. B. (2012). *Effect of human placental extract on health status in elderly Koreans*. *Evidence-Based Complementary and Alternative Medicine*. 1-5.

### **Reduces fatigue**

Chronic fatigue is a subjective feeling of emptiness and lack of power which effects daily life or after work for a period of more than six months. Symptoms include memory and concentration difficulties, malaise, sore throat, muscle aches, joint pain, sleep disturbances and headache. This study examines the effectiveness of human placental extract for the treatment of chronic fatigue in 78 subjects randomly assigned to either control or experimental group. Subjects are either treated with human placental extracts or normal saline for six weeks. Results showed experimental group with subcutaneous injection of human placental extracts was effective for the improvement of chronic fatigue syndrome.

Park, S. B., Kim, K., Sung, E., Lee, Y. & Shin, H. C. (2016). *Human placental extract as a subcutaneous injection is effective in chronic fatigue syndrome: A multi-center, double-blind, randomized, placebo-controlled study*. *Biological and Pharmaceutical Bulletin*. 39: 674-679.

### **Reduces pain**

This study investigated the effectiveness of acupuncture point injection using placenta extract in patients suffering from complex regional pain syndrome (CRPS). CRPS is an inflammation-associated disorder characterized by spontaneous pain, swelling, changing of the skin colour and restricted movement. Two case studies from patients with CRPS showed remarkable amelioration after receiving injections of placental extract into acupuncture points BL23, BL24, BL25 and LR4. Both patients showed complete pain relief, swelling reduction, redness disappearance and articular movement restoration.

Cho, T. H. & Park, K. M. (2014). *Complex regional pain syndrome type 1 relieved by acupuncture point injections with placental extract*. *Journal of Pain and Relief*. 5: 1-4.

### **Treatment of varicose ulcers**

Growth factors extracted from human placentas were used for the treatment of chronic varicose ulcers in eighteen patients. All patients were randomly allocated to receive dressings containing or not containing the growth factors for a period of 48 hours. Results showed patients treated with placental growth factors enhanced the

formation of epithelial and granulation tissue and accelerated the wound healing process.

Burgos, H., Herd, A. & Bennett, J. (1989). *Placental angiogenic and growth factors in the treatment of chronic varicose ulcers: preliminary communication*. *Journal of the Royal Society of Medicine*. 82: 598-599.

### **Benefits of HP Placenta**

- Regenerates cells, tissues and organs
- Increases flexibility in joints and discs
- Improves immune system against diseases
- Improves alertness and mental awareness
- Improves skin elasticity and thickness, enhance skin texture
- Improves sleep patterns
- Improves in blood circulation
- Enhances stamina and energy level
- Renews sexual satisfaction
- Eliminates constipation
- Decreases pre-menstrual tension and related feminine problems
- Reduces pre-menopause syndrome and a delay in menopause
- Stabilizes weight to a normal level
- Decreases serum concentrations of cholesterol and triglycerides
- Decreases risk of heart disease
- Relieves symptoms related to any chronic disease
- Increase vigour and energy

### **Efficacy and Safety of HP Placenta**

Numerous clinical studies and researches were conducted to demonstrate the safety and effectiveness of placental therapy. HP Placenta is a safe therapeutic agent which has the ability to rejuvenate, regenerate and revitalize the cells, tissues and even organs within human body.

### **Improvement of Chronic Skin Dermatitis by HP Placenta**



**Before**  
**After**  
60 year old female diagnosed with chronic dermatitis and secondary infection, showed significant skin improvement after receiving one dosage of HP Placenta 330 mg.



**Before**  
**After**  
Male patient diagnosed with chronic dermatitis showed significant skin improvement after administration of HP Placenta 330 mg.

