

VIS CLINIC NEWSLETTER

The Science of Nutrition



Four Phased Immune Approach for Adults

IN THIS ISSUE

**FOUR PHASED IMMUNE
APPROACH FOR ADULTS-1**

**FOUR TARGETS OF SUPPORT
SUPPLEMENT SPOTLIGHT-7**

VIS CLINIC IV THERAPIES-10

**DECEMBER/JANUARY
WEBINARS-11**

WHAT'S NEW AT VIS CLINIC-12

GIFT IDEAS/OFFERINGS-13

*Many patients are asking how they can support their immune health this winter season. Our Vis Clinic providers have outlined a four phased immune approach that includes ways to support each phase with supplements. *Please note, each patient has individual needs and should seek the advice of a Vis provider to verify supplement protocol.*

PREVENTION PHASE:

Support is focused on immune surveillance efficiency and reduction of baseline levels of inflammation to improve outcomes if the patient becomes infected.

INFECTION PHASE:

Support emphasizes immune activity against infection utilizing NK cell support and Th1 Cell support.

ESCALATING INFLAMMATION PHASE:

Support is focused on anti-inflammatory measures. COVID-19 can enter a dangerous phase in which extreme upregulation of inflammatory cytokines can pose mortal danger. The clinical goal in this Phase is to help the patient stay away from manifesting the excessive inflammatory cytokine production and tissue destruction associated with sepsis, ARDS, and cardiovascular events. Natural approaches here are supportive, not primary. The unfolding disease process can escalate rapidly. Those with Asthma, COPD, Cardiovascular Disease, Diabetes, Obesity, Kidney Disease, Auto-Immune Disease have higher levels of inflammation and may need anti-inflammatory support long-term.

RECOVERY PHASE:

Support is focused on resolving inflammation, inhibiting fibrosis and other forms of tissue damage, curtailing losses of function, and restoring and reoptimizing function. Because patients have been observed to relapse into the Escalating Inflammation Phase, it is essential for clinical surveillance to continue well into what may appear to be the Recovery Phase.

Four Targets of Support

PREVENTATIVE FOUNDATIONAL SUPPORT:

- Long Term Support that is recommend as baseline therapy for adults

ANTIOXIDANT SUPPORT:

- Add Long Term Dosing to Preventative Foundational Support if you have non-pulmonary or pulmonary risk factors listed below, have high oxidative stress markers, or low antioxidant levels or low antioxidant score on WBC testing
- Start Acute Dosing at the first hint of infection

IMMUNE ACTIVATION (NATURAL KILLER (NK) CELL AND T HELPER TYPE 1 (TH1) CELL SUPPORT):

- Add Long Term Dosing to Preventative Foundational Support if you are above age 65, have a low total WBC count, have lymphocytes below 20% of total WBC count
- Start Acute Dosing at the first hint of infection
- Stop with Ramping Inflammation

ANTI-INFLAMMATORY SUPPORT:

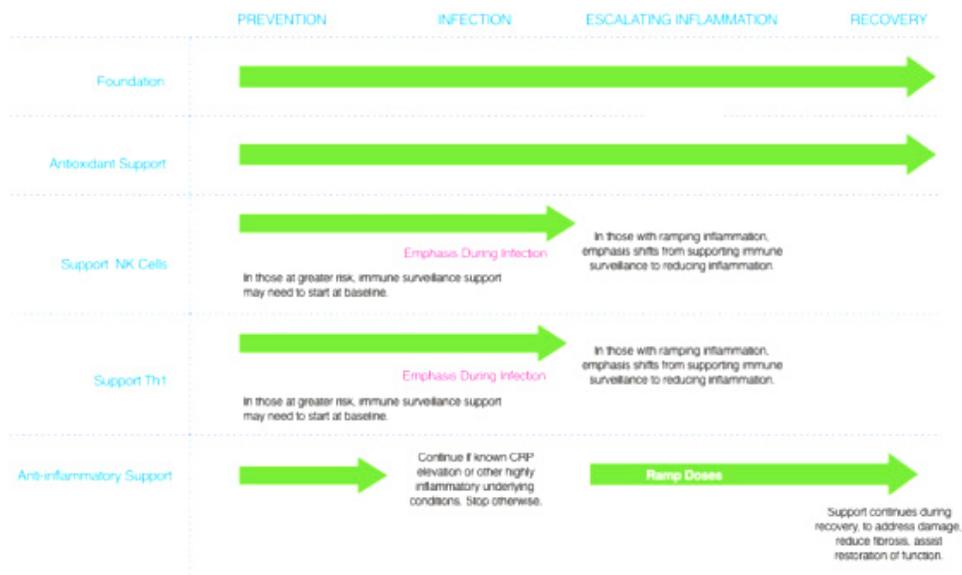
- Add Long Term Dosing to Preventative Foundational Support if you have non-pulmonary or pulmonary risk factors listed below, have high inflammatory markers on lab testing (HS-CRP, Fibrinogen), have other high inflammatory conditions
- Start Acute Dosing at the first sign of ramping inflammation (progression of disease intensifying)

NON-PULMONARY RISK FACTORS

- Advanced age
- Hypertension (HTN)
- Diabetes
- Cardiovascular disease
- Obesity
- Renal disease
- Liver disease
- Auto-immune disease
- Malignancy

PULMONARY RISK FACTORS

- Asthma
- COPD
- Any Lung Inflammation
- Idiopathic Pulmonary Fibrosis
- Environmental Inflammatory Stressors like Air Pollution



Preventative Foundational Support:

Melatonin 20 mg

- Antioxidant hormone that enhances sleep promotion
- Inhibits NLRP3 inflammasome activation and reduces airway inflammation

Adaptogen (Herbal Adrenal Support)

- Stress chemistry is inflammatory and can shift the immune system away from effective Th1 response
- Adaptogenic herbs, often referred to as tonics, are designed to support endocrine and immune functions while enhancing the body's ability to adapt to and cope with mental, physical and metabolic stress

Vitamin A 25,000 IU

- Vitamin A levels drop during various types of infection. Vitamin A supplementation improves resistance and recovery rate.
Individuals with liver disease, pregnant and breastfeeding moms need to be cautious with vitamin A

Vitamin K2-D3

- Tag-Team Vitamin D3 and Vitamin K2 together as they work best together
- Deficiency of fat-soluble vitamins impairs immune function and promotes excessive inflammatory reactions
- Vitamin D3 prevents experimental lung fibrosis. Reduces the risk of acute respiratory infection
- Vitamin D3 is necessary for the formation of macrophage lysosomal enzymes that allow macrophages to kill pathogens, including viruses, that have been engulfed by phagocytosis

Vitamin C

- Vitamin C works as an antioxidant important in protecting the body against the damage from oxidative stress generated during an infection
- Plays a critical role in vascular stability, supporting nitric oxide generation and vasodilation.
- Supports immune cell function of both the innate and adaptive immune responses
- Vitamin C deficiency contributes to decreased immune responsiveness and increased susceptibility to infections
- Vitamin C supplementation has been shown to both prevent and treat respiratory and systemic infections

Quercetin Supreme or Quercenase

- The flavonoid quercetin is a zinc ionophore that facilitates transport of zinc across lipid membranes
- Has been shown in many human studies to modulate mast cell degranulation
- Because bromelain has fibrinolytic effects that may potentially inhibit blood clotting, Bromelain should be used with caution or avoided in individuals on anticoagulant therapy.

Zinc Picolinate 30 mg

- Plays a crucial role in the function of essentially all immune cells
- Deficiency increases susceptibility to a variety of infections
- Antiviral properties-Intracellular zinc has been shown to inhibit RNA synthesis of virus by suppressing replication and transcription complexes
- Anosmia (loss of smell) and dysgeusia (distorted sense of taste) are commonly being reported in patients at every phase of COVID-19
 - These are also classic symptoms of zinc deficiency
- Zinc deficiency greatly impairs immune function, especially resistance to viral infections
- inadequate dietary consumption of zinc is found in almost half of the older population

ProbioMax Daily DF 30 Billion

- Disruption of the gut microbiome can increase sensitivity to viral infections
- Treatment with beneficial probiotics can enhance resistance to viral infection

OrganiX PhytoFood

- Antioxidant protection and Glycemic Control

Antioxidant Support:

Glutathione Intracellular is an acetylated form of glutathione. This form is well-absorbed and more stable throughout the digestive tract than other forms on the market. Use of stomach acid-resistant capsules (DRcaps™) further protect stability.

Liposomal Glutathione is formulated using liposomal technology, which results in superior delivery, absorption and bioavailability. Liposomal delivery bypasses proteolytic degradation in the GI tract and is uniquely effective for reaching and interacting with target tissues.

- Antioxidant
- Blocks reactive oxygen species (ROS) in upregulating the NETosis that drives sepsis, destruction of epithelial and endothelial tissue, thickening of mucous secretions, and thrombus formation.
- Anti-inflammatory
- Supports innate immune response, Phagocytic activity of neutrophils, supports dendritic cell function of activating the adaptive immune system thru antigen presentation
- Supports adaptive immune response, supports Th1 response, T lymphocyte proliferation
- Decreases fibrotic damage to the lungs and other organs by inhibiting TGF-Beta

N-Acetyl-L-Cysteine (NAC)

- Anti-inflammatory and antioxidant
- NAC downregulates NET (neutrophil extracellular traps) formation through the downregulation of ROS
- Anti-thrombotic
 - Increase intraplatelet GSH and reduce platelet ROS
- Mucolytic
- Improves mucociliary escalator function
- Supports production of sIgA
- Inhibits excess production of IgE and IgG4 (allergy/sensitivities)
- Supports destruction of biofilms and inhibition of their formation
- Inhibits adhesion of pathogenic bacteria to epithelial cells

Polyphenols

Secondary metabolites of plants that are generally involved in defense against ultraviolet radiation (antioxidants) or aggression by pathogens. Long term consumption of diets rich in plant polyphenols offer protection against development of cancers, cardiovascular diseases, diabetes, and infection.

Curcumin

- Curcuminoids are turmeric-derived compounds with antiviral and anti-inflammatory activity
- Inhibits NLRP3 inflammasome activation
- The curcuminoids demethoxycurcumin and curcumin have viral replication inhibition potential against the main protease (Mpro) identified as likely involved in viral maturation and spread in SARS-CoV-2

Green Tea Extract with Epigallocatechin Gallate (EGCG)

- Favorably modulate viral-induced pathological cellular processes: Modulation of NLRP3 inflammasome activation

pTeroPure® trans-Pterostilbene Resveratrol

- Reduce inflammation via several mechanisms including downregulation of IL-6 and TNF-alpha and promotion of Sirtuins.
- Modulate the NLRP3 Inflammasome
- Protects lung epithelia by upregulating Nrf2 to promote Glutathione

TrueBroc® Glucoraphanin (from broccoli extract) (Brassica oleracea italica) (seed)

- Anti-inflammatory phytochemical found in cruciferous vegetables that inhibits NLRP3 inflammasome biology.
- Activates the antioxidant Nrf2 pathway and is anti-fibrotic. Upregulates Glutathione levels

Immune Activation:

Natural Killer (NK) Cell Support

- NK cells serve to contain viral infections while the adaptive immune response is generating antigen-specific cytotoxic T cells that can clear the infection

T Helper Type 1 (Th1) Cell Support

- Th1 cells play a key role in antiviral immunity
- Th1 and NK cells support each other's activation
- Stimulate macrophages to destroy pathogens rapidly and fully
 - IFN- γ generated by NK cells and Th1 Cells stimulate macrophages to destroy pathogens
- Goal of therapy: shorten time course between macrophage/dendritic cell phagocytosis of virus or virally infected cell and the time point at which the engulfed material is degraded

NK Cell and Th1 Support, Th2 Inhibition

Viracid

- Provides support for immune challenges
- Strengthens immune function
- Maintains normal inflammatory balance
- Includes the synergistic blend of botanical extracts black elderberry, astragalus, echinacea, and andrographis, all of which have been used traditionally for their clinically effective immune- modulating properties.

Do not consume this product if you are pregnant or nursing.

Anti-V Formula

- A broad-spectrum immune support formula containing ECHINAMIDE, astragalus, reishi mushroom, lomatium and licorice extracts. ECHINAMIDE is made from hand-picked fresh organic Echinacea purpurea flower, leaves, stem, and roots. Do not use if you are allergic to plants of the Asteraceae/Compositae (daisy) family

Berberine Balance

- Berberine is a naturally occurring botanical extract commonly isolated from plants such as Oregon grape, barberry, and goldenseal
- Berberine inhibits NLRP3 inflammasome
- Berberine inhibits IL-6-induced inflammation
- Berberine promotes the Th1 cytokines



Anti-Inflammatory Support:

Goal of Anti-Inflammatory Support is inhibition of the NLRP3 inflammasome and NFkB.

Potassium Citrate and Opti-Mag 125 Magnesium work together as a team

Potassium

- Maintaining blood potassium levels is important, to prevent potassium cellular efflux, which upregulates inflammasome assembly.

Turmeric and Curcumin (Turiva and Super Curcumin)

- Curcuminoids are turmeric-derived compounds with antiviral and anti-inflammatory activity.
- Inhibit NLRP3 inflammasome activation.
- The curcuminoids demethoxycurcumin and curcumin have viral replication inhibition potential against the main protease (Mpro) identified as likely involved in viral maturation and spread in SARS-CoV-2.

High Dose Melatonin Max 60 mg

- Inhibitory effect on NLRP3 inflammasome.

Natto-K 20,000

- An all-natural potent fibrinolytic enzyme that is extracted and highly purified from natto, a fermented soybean food. Natto-K enzymatically breaks down fibrin associated with vascular disorders and injuries. Fibrin is a blood clotting protein. Natto-K supports the body in areas such as cardiovascular-related disorders, vascular and circulatory disorders, and aids in conditions of poor healing. **Consult your health care practitioner before taking this product if you have a bleeding disorder or are taking any drug that affects blood coagulation or blood pressure such as heparin, warfarin (Coumadin), diuretics, ACE inhibitors, or beta blockers**





Four Targets of Support Supplements

We have bundled our immune supporting supplements to make it easy to shop. Choose a bundle below to address your target of support. Adult Dosing only.

Preventative Foundational Immune Support: [Click here to shop](#)

- **Adaptogen** Take (2) two capsules in AM with or without food
- **Bio C 1:1™** Take (1) one capsule (2) two times daily with food
- **K2 D3-5000** Take (1) one capsule daily with food
- **Melatonin 20mg** Take (1) one capsule daily at bedtime
- **OrganiX PhytoFood Powder** Blend, shake or briskly stir one level scoop (8g) into 6-8 fl oz chilled water. Adjust amount of water to desired sweetness and/or thickness (1) one time daily
- **ProbioMax® Daily DF 30 Billion CFU Probiotic** Take (1) one capsule daily with water
- **Quercenase** Take (2) two capsules (2) two times daily with food
-OR-
- **Quercetin Supreme** Take (2) two capsules (2) two times daily with food
- **Vitamin A 25,000** Take (1) one capsule daily with food
- **Zinc Picolinate 30 mg** Take (1) one capsule (2) two times daily with food



Antioxidant Support: [Click here to shop](#)

- **Glutathione Intracellular**
Long Term dosing: Take (1) one capsule (2) two times daily with food
Acute dosing: Take (2) two capsules (3) three times daily with food
- **Antioxidant Activator**
Long term dosing: Take (1) capsule (2) two times daily with food
Acute dosing: Take (2) two capsules (2) two times daily with food
- **NAC 900mg**
Long Term dosing: Take (1) one capsule (1) one time daily away from food
Acute dosing: Take (1) one capsule (2) two times daily away from food
- **Liposomal Glutathione**
Long term dosing: Take (1) one mL (approx. 2 pumps) and hold in mouth for 30 seconds before swallowing (1) one time daily
Acute dosing: Take (1) one mL (approx. 2 pumps) and hold in mouth for 30 seconds before swallowing (3) three times daily



Immune Activation: [Click here to shop](#)

- **Berberine Balance**
 Long term dosing: Take (1) one capsule daily
 Acute dosing: Take (1) one capsule (3) three times daily
- **Viracid**
 Long term dosing: Take (1) one capsule (2) two times daily 12 hours apart
 Acute dosing: Take (2) two capsules (4) four times daily 4-6 hours apart
- **Anti-V Formula**
 Long term dosing: Take (1) one softgel (2) two times daily
 Acute dosing: Take (1) one softgel (5) five times daily



Anti-Inflammatory Support: [Click here to shop](#)

- **OptiMag®125** Take (1) one capsule (2) two times daily with food
- **Potassium Citrate** Take (1) one capsule (2) two times daily with food
- **Natto-K 20,000** Take (2) two capsules (2) two times daily at least 30 minutes before or two hours after a meal
- **Super Curcumin**
 Long term dosing: Take (1) one capsule daily with food
 Acute dosing: Take (1) capsule (3) three times daily with food
- **Melatonin Max 60mg**
 Long term dosing: Take (1) one capsule at bedtime
 Acute dosing: Take (1) capsule (2) two times daily in the morning and at bedtime to control inflammation
- **Turiva**
 Long term dosing: Take (1) one capsule daily with food
 Acute dosing: Take (1) capsule (2) two times daily with food



Lab Considerations for Prevention:

CBC

Patients with the most marked lymphopenia have significantly higher mortality than those with total lymphocytes above 20% of White Blood Cell (WBC) total.

Identify Inflammatory Markers

HS-CRP, Omega-Check (Essential Fatty Acids), Fasting Insulin, Arterial Inflammatory Markers, Clotting Markers

Glycemic Control Markers

C-Peptide, GSP, HgbA1C, HS-CRP

Identify deficiencies in key nutrients that are central to healthy, robust immune system activation via SpectraCell WBC Nutrient Testing

Measures WBC (intracellular) tissue levels of Fat- and Water-soluble vitamins, minerals, and antioxidants

Serum Nutrients

Vitamin D3 (target is 50-70 ng/ml), Magnesium (target is > 2.0 mg/dl), Potassium (target is > 4.0 mEq/L)

Assess Oxidative Stress

Urinary F2-isoprostane/creatinine marker is the “gold standard” for measuring oxidative stress which can be used to assess efficacy of antioxidant therapy.

ApoE E4 Gene Testing

The ApoE e4e4 allele increases risks of severe COVID-19 infection, independent of preexisting dementia, cardiovascular disease, and type-2 diabetes. ApoE e4 not only affects lipoprotein function (and subsequent cardio-metabolic diseases) but also moderates macrophage pro-/anti-inflammatory phenotypes

Eliminate Non-Purposeful Inflammation by discovering allergies and sensitivities

Reducing or eliminating inflammation promoting foods is also important.

IgG Food Reactions, IgE Allergies to food and the environment, IgA Gluten Testing, MRT (cytokine mediated) Food Testing

Lifestyle Considerations

- Follow a Phytonutrient Dense Diet/Avoid Inflammatory Foods
 - 10 cups of non-starchy organic vegetables daily
- Avoid IgG Food Sensitivities
- Avoid IgE Food Allergies
- Avoid IgA Food Reactions
- Avoid MRT Food Sensitivities
- Limit exposure to inhalant IgE allergens
- Avoid smoking, 2nd hand smoke, vaping, air pollution, and other environmental lung irritants (excess aerosol sprays and bleach)



Sources

1. *Evidence Supporting a Phased Immuno-physiological Approach to COVID-19 From Prevention Through Recovery*. PMID: 32425712PMC7190003. May 20, 2020. Yanuck, S F; Pizzorno, J; Messier, H; Fitzgerald, KN .
2. *Oxidation, Inflammation, ApoE4 and Coronavirus, Oh My!!* Vis Clinic Webinar Fall 2020
3. *The Functional Medicine Approach to COVID-19: Virus-Specific Nutraceutical and Botanical Agents* ifm.org April 7, 2020
4. *Prevention and Optimizing Immune Function* Vis Clinic Webinar Spring 2020

Disclaimer

The Content is not intended to be a substitute for professional medical advice, diagnosis, or treatment. Always seek the advice of your qualified health provider with any questions you may have regarding a medical condition. Never disregard professional medical advice or delay in seeking it because of something you have read here.

Vis Clinic IV Therapies

15 and 25g Meyers IV

What is a Myers' Cocktail?

The "Myers' Cocktail," is an intravenous vitamin-and-mineral formula used for the treatment of a wide range of clinical conditions. It consists of magnesium, calcium, vitamin C, B complex vitamins, and extra vitamin B5 and B6. Vis Clinic offers a range of Nutrient Cocktails based on the dosing of various IV nutrients. The smaller dose IV's are generally given over 20 to 30 minutes. The larger dose IV's can generally be given over an hour. The patient rests comfortably in a recliner during the nutrient infusion.

Why use the IV Nutrient Cocktail?

Intravenous administration of nutrients offers better potency and can achieve serum concentrations not obtainable with oral or even intramuscular (IM) administration. Various nutrients have been shown to exert powerful pharmacological effects, which in many cases are dependent on the concentration of the nutrient. For example, an antiviral effect of vitamin C has been demonstrated at a concentration of 10-15 mg/dl in the blood, an amount not achievable through oral supplementation.

The IV Myers' Cocktail has been found to be effective against:

- Acute asthma attacks
- Fibromyalgia
- Acute muscle spasm
- Chronic sinusitis
- Cardiovascular Disease
- Migraines
- Fatigue (including Chronic Fatigue Syndrome)
- Recurrent infections
- Upper respiratory tract infections
- Seasonal allergic rhinitis
- Anxiety



Holiday Special:
Receive 10% off 15 and 25 g Meyers IV
for the month of January

December and January Webinars

To register, please click on the webinar

EATING HEALTHY FOR THE HOLIDAYS

December 16, 2020

12:00-1:00pm

Cost: FREE

Join Dr. Chad Krier and Health Coach Dana for a lively discussion about making healthy dietary choices while enjoying time with family and friends during the holiday season. Helpful tips and recipes included



VIS CLINIC 10 AND 25 DAY CLEANSE

January 6 & February 3, 2021

12:00-1:00pm

Cost: FREE

Join Dr. Chad Krier for this 2-part webinar to learn how Vis Clinic's 10 and 25 Day Cleanse can help you increase energy, lower cholesterol, improve hormone metabolism, build a stronger immune system, and improve sleep and mental clarity. Part 2 includes a virtual group follow up with Dr. Chad after completing the cleanse

CORE FOOD PLAN

January 19 and 20th, 2021

12:00-1:00pm

Cost: \$20.00

Join Dr. Jennifer Mead and Health Coach Dana for this 2 part webinar on the Core Food Plan. This foundational food plan is designed for those interested in health maintenance, disease prevention, and an awareness of one's relationship with food. We will discuss the importance of whole foods, clean and organic eating, quality protein, healthy fats, high fiber and low sugar, and phytonutrient diversity. Comprehensive guide and meal plan included.



What's New at Vis Clinic?

**Meet our new Vis Clinic Team members,
Alyssa Hamilton and Maggie Lallement**

Alyssa has worked in many different environments and positions, from a ranch hand, to teaching preschool, being a nanny, and a Household Manager. She enjoys horseback riding, the outdoors, travelling, and spending time with her family. Alyssa has quite the menagerie complete with cats, a dog, and chickens! She is very creative and loves to do art, write, and make costumes. (She has more hobbies than she can remember at times!) A cup of tea or hot chai and the works of Tolkien are about her favorite things in the world, besides the mountains of southern Colorado, and her family. Alyssa is so excited to join the amazing team at Vis clinic and she is looking forward to getting to know all the fantastic people that frequent this wonderful place!



Maggie has a bachelor's degree in nursing. Her nursing experience includes emergency room and long term care/clinic nursing. These experiences have formed her desire to work in an environment that fosters the healthcare of the holistic person. She found herself struggling to live what she preached in her own life. She is thrilled to join the Vis team and grow not only personally, but also professionally in understanding and applying functional medicine. She met her husband 7 years ago and has been married a year and a half. She has two dogs that keep her and her husband on their toes. She also enjoys being outdoors and spending time with her family.

Please join us in welcoming Alyssa and Maggie to Vis Clinic!

Give the Gift of Health

Infrared Sauna, Massage Chair, Vis Clinic Gift Cards

Infrared Sauna:

Perfect for individuals struggling with...

- Cardiovascular disease
- Diabetes
- High blood pressure
- Congestive heart failure
- Rheumatoid arthritis
- Chronic fatigue
- Poor digestion
- Depression and anger
- Chronic muscle and joint pains
- Mold Toxicity
- Heavy Metal Toxicity
- Cleansing



Individual sessions or packages are available. Call Vis Clinic for information and pricing. Our sauna offers 3 in 1 wavelengths, allowing you to experience a deep, detoxifying sweat. Your health is calling. Try our Infrared sauna today!

Try our Infinity Massage Chair!

Massage Techniques Include:

Kneading * Tapping * Knocking
Shiatsu * Sync* Rhythm

Product Features Include:

Air Ionizer * 3D/4D Massage Technology * Calf-kneading Massage * Automatic Footrest Extension * Wireless Remote * USB Charging Station * 49" L-Track * Zero Gravity * Spinal Correction & Waist Twist * Rhythm Technique * Bluetooth Technology * Apple & Android App Functionality * Zero Wall Space-saving Technology * Chromotherapy Lights * Reflexology * Lumbar Heat * Body Scanning * Four Wheel Massage Mechanism * Airbag Compression Therapy



Vis Clinic Gift Cards:

The ultimate gift of health, our Vis gift cards can be used towards any service in our clinic. Any amount can be applied. Call or visit us to get your gift card ready for the holidays.