A GUIDE TO SMART SUPPLEMENTATION:

There is a lot of truth in the statement that supplements are truly not needed if you consume a nutritionally rich and diverse diet with 4+ servings of colorful veggies, 1-2 pieces of fruit, herbs, spices, lean protein, and healthy omega-3 rich fats. The reality is that most of us, even on a good day do not reach this ideal- let alone on a daily basis. The other battle we are confronted with is that the nutrient value in our foods is increasingly diminished, and the nutrients harder to access with inflamed and unhealthy gut biomes. Our fresh produce is not the same as it used to be for our grandparent's generation; the soils we are farming are depleted, and as a result, it can take eating 3 apples to get the same nutrient value of an apple produced 50 years ago! The pesticides and chemicals used to keep these large crops free of disease and insects do their job in getting the produce to market and looking pretty but are another layer of health hazards for us to navigate—making eating organic produce increasingly important. Eating from local small farms and buying smart from our farmers market can get you closer to the mark.

It is easy to get lost in researching which supplements might be right for you. Remember the supplement industry is just as big as the pharmaceutical industry and are not held to any quality standards or regulatory authorities. The supplement industry can claim benefits of effect without having any burden of evidence to prove efficacy or claims—so be smart on where you obtain your information and the quality of supplements that you invest in for yourself and your family. The higher quality brands like Designs for Health or Thorn will have outside independent labs verify the dosing listed and will also utilize the more bioavailable (absorbable) higher quality forms so that you are really getting the value of the quantity listed on the label. Finally, remember that supplements are just that- supplemental "nutraceuticals" to augment a healthy diet. A diet of processed foods and sugar with an expensive supplement stack is akin to trying to bail out a leaky canoe with a dixie cup: you're sinking; better to plug the leak with a solid regime of healthy nutrition and exercise first- then add in smart supplementation that might address some of your personal weaknesses (either in your diet, or in your own individual health liabilities).

Once you've got a solid foundation of healthy foods, sleep, and exercise, which supplements are right for you? We typically recommend trying to limit supplementation to four or less daily to avoid unnecessary costs and unruly overwhelming regimens. For most folks living here in the Northwest Vitamin D3 and a quality omega-3 supplement are a good foundation for most. Keep in mind that the need for focused supplementation should be based on an individualized needs or specific vulnerabilities. We have included a quick supplement reference below of some of our favorites. Let your healthcare provider know if you would like some guidance or pointers!

Where to get quality supplements and "nutraceuticals":

- -You can utilize Coeur Vitality's online supplement store Designsforhealth.com/u/CoeurVitality website where you can utilize our 20% discount code every time: "CVAlways20". You are also able to set up scheduled monthly deliveries so important routine supplements do not fall out of habit.
- -We do keep some of our favorite and more commonly used supplements for purchase near our front desk at Coeur Vitality, if you are looking to just try one out before committing to a monthly delivery.
- -Local health food store, Pilgrims Market has an excellent selection and are thoughtful on quality.
- -Economy of scale finds can be found at places like Costco, but you need to be selective on quality!
- -See some of our favorite supplements & brands listed in our attached **Supplement Guide**.

QUICK SUPPLEMENT GUIDE (by concern):

Foundational Supplements:

<u>-Multivitamin:</u> Eating a healthy diet rich in veggies and nutrient rich foods negates the need for a MV—however, if you have large gaps in your nutrition or have a condition that prevents you from absorbing nutrients (inflammatory bowel conditions) or wastes/consumes nutrients (pregnancy, cancer, large Rx medication burden), then a smart multi-vitamin might be valuable.

-Vitamin D3: (ideally w/ Vit K1/2) 2,000-4,000 IU daily Fall-Spring while living in the Northwest to support bone and immune health

-Magnesium: ~60% of the population are deficient, and dietary sources insufficient. Assists with brain focus and calm, sleep, muscle/heart health.

<u>-Omega-3:</u> Refined fish oil ideally from small fish sources (less mercury contamination & higher Omega-3 to 6 ratio's), aim for ~1,000 mg (Add Omega-3's +DHA+EPA's on back of bottle). Natural anti-inflammatory, mental well-being, and brain health/longevity.

<u>-Greens:</u> Double serving of green leafy veggies daily or boost with smart supplementation such as with green veggie powders (Ex: Athletic Greens or "AG1" to add to shakes or check out one of our favorites "Super Greens" citrus lime squeeze packs by Cymbiotika brand.

Joint & Musculoskeletal:

<u>-Curcumen (found in Tumeric)</u>: Natural safe anti-inflammatory! Recommend avoiding frequent NSAID use (Ibuprofen, Motrin, Aleve, Naproxen) as these increase risk of stomach ulcers/bleeds, kidney harm, increased blood pressure, and cardiovascular events! Instead replace with daily safe anti-inflammatory from food source with comparable efficacy with high potency supplementation (Ex: CurcumAvail 400 by DFH).

-Glucosamine & Chondroitin: Evidence shows that ~40% of people benefit from reduced joint pain—however, no evidence of cartlidge growth/improvement or many of the other claims so take caution. If you trial for a few months & note benefit—GREAT....if not, abandon this one!
-SAMe: Shown to be comparable to NSAID's in efficacy (but safer!) for Osteoarthritis pain/inflammation (used as an Rx in Spain, Italy, Germany!)
-Magnesium: ~60% of the population are deficient, and dietary sources insufficient. Low magnesium can contribute to more muscle tension/spasm and affect bone health! Chelated and Malate form will not cause undesirable bowel effects and is more bioavailable.

<u>-CBD topical rubs/oils:</u> Topical CBD from hemp-infused balms can help soothe sore muscles (Ex: "The Fixer" balm by Beam Organics, or Heal-All Pro roll on liquid by Rya Organics).

Cardiovascular Health: (Foundations—sleep 7-9 hrs, reduce stress, exercise 150 min/wk, healthy diet <Ex:Mediterranean diet>)

-Omega-3: Increased consumption through food (fish, avocado, olive oil, nuts, flax, etc) as in the Mediterranean diet is ideal, but you can make up the difference through smart supplementation. O'3's can improve HDL heart healthy lipids that are cardio-protective and decrease general inflammation (the cause of accelerated plaque build-up in arteries). Recent studies in the media have had mixed results on O-3 supp. specific to cardiac event reduction—we feel that there are so many health benefits gained by adding O-v3's that we are not ready to give up on this quite yet!
-CoO10 (CoOnol): We make this co-enzyme naturally, but make less as we age and is depleted w/ certain medications such as "Statins". We have learned that this is an important enzyme in muscle and heart (a big muscle!) health, as well as brain/cognition health with aging.

<u>-Soluble Fiber:</u> Increased consumption through a diet rich in veggies and 1-2 pieces of fruit daily, oats can reduce TG cholesterol and boost heart and bowel health. If diet is lacking—can augment with a supplement (Example: "Piper" gummies)

-Pomegranate: Eat it fresh, juice it, or supplement it!

<u>-Magnesium:</u> Can help in some cases w/ benign causes of palpitations (check w/ provider). Chelated and Malate form will not cause undesirable bowel effects and is more bioavailable.

-Red Yeast Rice: A natural occurring min-dose of essentially a "Statin"—an option for those who have mild lipid elevation, not quite ready to leap to an Rx "Statin". (Coeur Vitality favorite: "Heart Health" squeezable liquid daily packet by Cymbiotika brand....CoQ10 + Red Yeast Rice + Soluble fiber + Pomegrante!).

<u>-Arteriosil-HC:</u> Seaweed supplement that has shown positive benefit on our endothelial glycocalx that lines and protects our blood vessels, reducing plaque/inflammation/stiffening, and lowering blood pressure. This supplement is expensive, but the building data is exciting—consider if you have notable cardiovascular risk factors including: strong family history, diabetes, obesity, age >50 w/ Hypertension or Hyperlipidemia.

Hypertension: (Foundations—sleep, exercise, stress mediation, low salt and high potassium diet)

<u>-Dietary potassium intake:</u> Inversely proportional to blood pressure and risk of stroke. A higher level of potassium reduces salt sensitive blood P. <u>-Regular aerobic exercise (~30 min 5-6x/wk):</u> Associated with blood pressure reductions of 5-8 points. Sedentary individuals have a 30-40% higher risk of developing hypertension compared to those who exercise regularily.

<u>-Weight reduction:</u> Can reduce blood pressure by 5-20 points depending on individual and weight to be lost!

-Sugar reduction: Shown to be just as bad for blood pressure as high salt intake!

-Moderation of alcohol consumption: (~1/day or <10/wk for women, and ~1-2/day or <14/wk for men) can reduce blood pressure ~4 points.

-Minimize OTC medications as many can contribute to elevated BP: including NSAID's (Motrin, Ibuprofen, Aleve, Naproxen), and pseudofed in a lot of allergy and cold medication preparations.

<u>-Increase Beats & Dark-green leafy vegetables:</u> Increase consumption in diet, or consider beet or green powder supplement. Ex: "Athletic Greens" to add to shakes or "Super Greens" citrus lime squeeze packs by Cymbiotika brand.

<u>-Arteriosil-HC:</u> Seaweed supplement that has shown positive benefit on our endothelial glycocalx that lines and protects our blood vessels, reducing plaque/inflammation/stiffening and lowering blood pressure.

Immune System: (Foundations—sleep 7-9hrs, reduce stress, get outdoors in fresh air--there is a reason why viral illness fall in the summer (9)

-Vitamin D3: Vit D3 2,000-4,000 IU Fall-Spring while living in the Northwest. Foods—organ meat such as liver, mushrooms, sardines.

<u>-Vitamin C:</u> Consider supplementing if traveling, meeting w/ groups, recent sick contact or household member. Foods—fruit, citrus!

-Zinc: Consider supplementing if traveling, meeting w/ groups, recent sick contact or household member

- -Quercetin: Potent antioxidant, immune modulating, anti-viral, & anti-histamine properties. Foods-- onions, herbs, berries, tea, broccoli, etc.
- -Elderberry: A berry rich in antioxidant and anti-inflammatory mediators, as well as Vitamins A/B/C.
- <u>-Reishi, Lions Mane, and other medicinal mushrooms:</u> Shown to boost healthy immune systems and even reduce cancer incidence! If you are not a fan of consuming mushrooms, consider a supplement (Ex: ImmunoBerry—Elderberry, Shitake, Astragalus, Wild cherry)
- *******Consider combination supplements such as "Immunotone Plus", "BioFizz Immune", or "BioCap Immune" by DFH

Gut Health: (Foundations—avoid processed, inflammatory foods, preservatives, & sugar. Lots of Veggies--Pre-biotics to nourish gut flora) <u>-Prebiotics:</u> Pre-biotics to nourish healthy gut flora. Can get this through diet rich in fruits and veggies, or augment w/ supplementation.

<u>-Probiotics:</u> Typically not needed daily ongoing—with exception of those with chronic irritable bowel or frequent antibiotic use. Everyone should consider a month of probiotics after a course of antibiotics or diarrheal illness to replenish healthy gut & vaginal flora. Consider with travel to

-Magnesium Citrate: Bowel relaxation. Consider if prone to constipation—add hydration and dietary fiber from fruits/veggies for the best efficacy!
-Aloe. Slippery Elm. Marshmallow. L Glutamine: Soothing for dyspepsia (can help inflamed/eroded gastric/intestinal lining). Ex: GI Revive by DFH.
-Peppermint Oil capsules or Tea: Peppermint can ease indigestion, nausea, gas, and bloating symptoms with IBS. Great studies showing safety and efficacy in children suffering from frequent tummy aches!

Fatigue & Adrenal Support: (Foundations—sleep 7-9 hrs, reduce stress, reduce sugar, "play" to support resilience, exercise 150 min/wk)

-Ashwagandha: Adaptogenic that helps our bodies ability to adapt to stress (Ex: "Adrenotone", or "Adrenal Super Tonic" by Cymbiotika)

-Phosphatidylserine: Attenuates serum cortisol levels in response to acute stress and those that run with higher cortisol levels but take caution that if you have lower cortisol levels this could not be beneficial as cortisol is necessary for our bodies in normal levels. Ex: "Cortisol manager" by Integrative Therapeutics.

Sleep: (Foundations—aim for 7-9 hrs, avoid caffeine after 2 pm, turn screens off 1-2 hrs prior to bed, create wind-down routines)

- <u>-Circadian support:</u> Melatonin 1-6 mg for adults (avoid high doses) & 1 mg for children, consider extended-release forms if more sleep interruption. Can be particularly helpful for travel/time-changes, or night shift-workers.
- -Calming support: Magnesium, CBD, Chamomile or Sleepy-time tea, Passionflower, Lemon Balm, Lavender/Clary Sage/Rose scents
- -Hormonal interrupted: Stress/Anxiety-Gaba, L-Theanine, CBD, Inositol. Menopausal-Valarian root, B6/B12
- <u>-Pain interrupted:</u> Tylenol, CBD (create individualized custom plan with your provider)

reduce risk of travelers diarrhea, with large shifts in bowel habits

- -Snoring/Sleep apnea: Use of prescribed CPAP/BiPAP or customized oral appliance, and/or consideration for positional correction aid
- ***Consider combination supplement sleep aids, that combine several safe vitamin/botanical ingredients to aid sleep: A few of our favorites:
 - *"Insomnitol" by Designs for Health: Melatonin 3 mg, B6, Inositol, L-Theanine, 5-HTP, Gaba, Valarian, Chamomile, Passionflower, Lemon Balm
 - *"SLEEP" by Olly (sold at Target): melatonin 1,3, or 5mg, L-Theanine, Chamomile, Passionflower, Lemon Balm
 - *"Neurocalm" by Designs for Health for stress: Vit B6 & B12, Magnesium, Chamomile, Gaba, L-Theanine, 5-HTP, Phosphatidylserine
 - *"Rum-Dreami" by Rya Organics: CBD, Melatonin 1.5 mg, GABA, L-Theonine, Magnesium, Chamomile, Passionflower, and other botanicals.
 - *"Dream" by Beam Organics: CBD, Reishi mushroom, Magnesium, L-Thanine, Melatonin

Anxiety & Stress: (Foundations—sleep 7-9 hrs, exercise 150 min/wk, prioritize and "play" to gain resilience)

<u>-Magnesium</u>: You want a form that crosses the blood-brain barrier such as Magnesium L-threonate or glycinate. Helps sleep and sense of calm! <u>-5-HTP</u>: A precurser to the neurohormone Serotonin which modulates mood, stress response, sleep

<u>-CBD (without THC)</u>: Can bring a sense of calm & focus without drowsiness in the right form (Ex: CBD gummies by Rye Organics w/ botanicals including Ashwagandha, Lemon balm, and Passion flower). Be skeptical about your sources with CBD—make sure reputable and free of THC. <u>-GABA & L-Theonine</u>: Influence stress neurotransmitter pathways in brain & sense of calm (Ex:Fx Chocolate Exhale or Neurocalm by DFH) <u>-Ashwagandha</u>: Adaptogenic that helps our bodies ability to adapt to stress (Ex: Fx Chocolate Focus by DFH)

***Check out a favorite & smart combination supplement by DFH: "Neurocalm"—GABA, L-Theonine, 5-HTP, chamomile, Magnesium, B12 & B6!

Depressed Spirits: (Foundations—relationships, sleep 7-9 hrs, exercise, spend your time meaningfully, stay true to core values)

<u>-SAMe:</u> Can reduce symptoms of major depression for some people and reasonable for mild symptoms or those who do not tolerate Rx treatment. Used frequently as first line for depression in children and adolescents due to its safety profile!

<u>-5-HTP:</u> A precurser to the neurohormone Serotonin which modulates mood, stress response, sleep, appetite, learning and more! <u>-Omega-3:</u> Natural anti-inflammatory, mental well-being, and brain health. Refined fish oil ideally from small fish sources (less mercury contamination & higher Omega-3 to 6 ratio's), aim for ~1,000 mg (Add Omega-3's +DHA+EPA's on back of bottle). Ex: OmegAvail TG1000 by DFH, Barlean's brand is also excellent sourcing.

<u>-Methylated B-Complex:</u> Low bio-available B12 & folates can contribute to increased incidence of depressed moods and Rx SSRI medication trial failures. Some individuals do not methylate their B's well, and so getting a methylated form is important. Check out "B-Supreme" by DFH.

Metabolism & Weight Management: (Foundations—diet low in sugar, carbs mostly from veggies, balanced with healthy omega-3 fats and lean protein for satiety; good sleep and stress mediation to reduce cortisol; cardiovascular exercise and muscle work to boost metabolism)

-Green-tea: Rich in polyphenols boosting energy and metabolism. Add matcha tea to your routine, or supplement (Ex: EndoTrim by DFH)

-5-HTP: A precurser to the neurohormone Serotonin which modulates healthy moods, decrease stress hormones, and can blunt appetite

-Carrots (Beta-Crypto zanthen):

Stimulates metabolism. Danish study: 3 carrots/day decreased metabolic syndrome & belly (visceral) fat by 50%!

-Stress mediation: See above

-Sleep optimization: See above

Inflammation (Autoimmune): (Foundations—diet low in processed foods & sugar but rich in Omega-3's & veggies, stress mediation, sleep)

-Omega-3: Increased consumption through food (fish, avocado, olive oil, nuts, etc) and can augment further smart supplementation. Refined fish oil ideally from small fish sources (less mercury contamination & higher Omega-3 to 6 ratio's), aim for ~1,000 mg (Add Omega-3's +DHA+EPA's on back of bottle). Ex: OmegAvail TG1000 by DFH, Barlean's brand is also excellent sourcing.

<u>-Curcumen (found in Tumeric)</u>: Natural safe anti-inflammatory! Recommend avoiding frequent NSAID use (Ibuprofen, Motrin, Aleve, Naproxen) as these increase risk of stomach ulcers/bleeds, kidney harm, increased blood pressure, and cardiovascular events! Instead replace with daily safe anti-inflammatory from food source with comparable efficacy with high potency supplementation (Ex: CurcumAvail 400 by DFH or smart combination supplement by DFH: "Inflammatone"—includes Curcumen, Quercetin, & other botanicals that naturally reduce inflammation).

Migraines: (Foundations—hydration, sleep, stress mediation, avoidance of known triggers!)

<u>-B2 (Riboflavin):</u> Evidence based to help particularly with hormonal triggering of migraines (around menstrual cycles, peri-menopause, etc) <u>-Magnesium:</u> You want a form that crosses the blood-brain barrier such as Magnesium L-threonate or glycinate

<u>-Feverfew:</u> A traditional Chinese herb known for a century to help w/ inflammation now w/ evidence backing to help reduce migraines! -Curcumen (found in Tumeric): Natural safe anti-inflammatory—helpful if neck and muscular tension contributing to migraine triggering.

***(A favorite smart combination supplement containing ALL of the above in ONE: "Migranol" by DFH)

Insulin Resistance & Diabetes: (Foundations—low sugar & low carb diet, avoid eating after 6 pm, healthy weight maintenance) -Cinnamon, Fenugreek, & Berber: Assists with blood sugar metabolism and insulin/metabolic function. Check out "GlucoSupreme" by DFH.

Neuropathy: (Foundations— serving of greens daily & controlling for conditions creating toxicity to nerves ie: diabetes, thyroid, alcohol excess) -Methylated B-Complex: Low bio-available B12 & folates can contribute to nerve and memory compromise. Some individuals do not methylate their B's as well, and so getting a methylated form can be very important. Check out "B-Supreme" by DFH or "Liposomal B12 + B6" by Cymbiotika. -Magnesium: You want a form that crosses the blood-brain barrier such as Magnesium L-threonate or glycinate

<u>-Greens:</u> Double serving of green leafy veggies daily or boost with smart supplementation such as with green veggie powders (Ex: Athletic Greens or "AG1" to add to shakes or check out one of our favorites "Super Greens" citrus lime squeeze packs by Cymbiotika brand.

Women's Hormonal Health:

<u>-Prenatal Vitamin w/ Omega-3:</u> Recommend using when trying conceive, pregnancy, & breast feeding to support increased vitamin needs w/ pregnancy. Prenatals contain extra Folic Acid crucial in supporting neurologic development in infants, have extra iron for hematologic support of mother, and omega-3's to promote healthy brain development!

<u>-Hormonal Breast Tenderness:</u> Frequently tenderness precedes menstrual cycle with hormone cycling, and more prominent in women with fibrocystic breast. Reducing coffee and chocolate, as well as adding a primrose supplement can assist in reducing this tenderness! If painful lumps/rashes—please always seek formal medical assessment!

<u>-PMS:</u> Consider supplement containing Vitex (Chasteberry) and Vitamin B6 to assist w/ cramping, bloating, moods. Ex: "Flo"gummy supplement—contains both of these plus botanicals Dong Quai and Lemon Balm.

<u>-Peri & Menopausal:</u> Consider smart supplement combinations to help with sleep, moods, energy, and hot-flashes. Ex: Hormone Harmony by Happy Mammoth—Maca, Vitex (Chasteberry), Ashwagandha, Fennel, Chamomile, etc. See above for tips on sleep and stress/anxiety which is more frequently not ideal due to hormone shifts at this time. Speak to your provider about other treatment options that can be individualized for you!

Healthy Brain Aging & Memory: (Foundations— exercise for body 150min/wk, exercise for brain daily, minimize stress, healthy weight)

-Omega-3: The brain runs optimally off of fuel from healthy fats, ie Omega-3's, and notably less optimally off of sugars!

-CoQ10 (CoQnol): We make this co-enzyme naturally, but make less as we age and is depleted w/ certain medications. We are learning that this is an important enzyme in muscle as well as brain/cognition health w/ aging.

-NMN (converted to NAD once absorbed & activated): NAD is a co-enzyme that rapidly gaining evidence of its important role in cellular health and longevity, to help "age with grace". Choose an NAD precursor that is bioavailable in oral delivery: "NMN" by Cymbiotika or Lipisomal NMN by DFH.
-Methylated B-Complex: Low bio-available B12 & folates can contribute to nerve and memory compromise. Some individuals do not methylate their B's as well, and so getting a methylated form can be very important. Ex: "B-Supreme" by DFH.

Disclaimer: There are <u>SO MANY</u> quality supplements out there, it is easy to get lost in the details of it all even for us. This is meant to be a quick guide, not a comprehensive list. Please consult with a knowledgeable medical practitioner to assist in making individualized recommendations that are the most applicable for you!