# needed.

This guide is intended as a helpful resource in talking to your health practitioner about the benefits of Needed's Prenatal Multi.

Needed.® is a nutrition company on a mission to empower real nourishment in women on their motherhood journey. We work directly with health practitioners and researchers to offer science-backed products and education. Learn more at thisisneeded.com. If you have questions, drop us a note at practitioners@thisisneeded.com.



### Existing prenatals aren't cutting it.

- 97% of mamas-to be take a prenatal supplement<sup>1</sup>, yet 95% are deficient in key nutrients<sup>2</sup>
- Most prenatals provide inadequate nutrient amounts (RDAs and % Daily Values set to avoid disease conditions, not support optimal health) and tough-to-absorb forms
- This impacts everything from mamas fertility, wellbeing in pregnancy, and recovery postpartum

## A better prenatal to support optimal health is needed.

- Vitamins, minerals, and botanicals selected and dosed to fully nourish both mama and baby versus meet minimum requirements, unlike most prenatals
- Easy to take powder allows us to offer optimal dosages of all nutrients
- Expertly formulated in partnership with naturopathic and functional medicine doctors, other health practitioners, and researchers
- Every batch is thirdparty tested



baby's healthy development and growth



mama's hormone balance, energy, and immunity



breastmilk nutrient content



mama's postpartum recovery



mama's fertility and health for years to come

"I'm one of the naturopathic doctors that worked directly with Needed in creating this prenatal. It is so incredibly needed. We spent almost three years vetting every nutrient form, dose, and ingredient supplier to offer the most nourishing product. I'm excited to finally offer my patients and, the community of mamas and mamas-to-be, a prenatal without any compromise."

### We leverage optimal forms and dosages including:

# 1,500mcg each of the active and inactive forms of Vitamin A (Retinyl Palmitate and Beta Carotene)

- Vitamin A plays a critical role in fertility, fetal development, preventing pregnancy complications, and supporting postpartum recovery.
- ✓ Many women avoid the "active" forms of Vitamin A, like Retinyl Palmitate, in pregnancy and instead take just Beta Carotene, a less "usable" form. This caution exists because Vitamin A is a fat soluble nutrient which means that it is not readily eliminated and can bioaccumulate. However, we think instructions to entirely avoid Retinyl Palmitate are misguided. Though toxicity can occur at very high levels³, avoidance of Retinyl Palmitate has led to a high rate of Vitamin A deficiency in pregnancy and in newborns, which can be damaging as well.⁴

#### 4,000IU Vitamin D3

- Vitamin D plays a critical role in fertility, fetal development, and preventing pregnancy complications.
- ✓ Studies suggest 90% of women are deficient⁵ and 50% of women are critically deficiency, even in those taking a prenatal vitamin prenatal vitamin⁶,
- ✓ A double blind, randomized clinical trial found that Vitamin D supplementation of 4,000 IU/day for pregnant women was safe and most effective in achieving sufficiency in all women and their neonates regardless of race.<sup>7</sup>

#### 918mcg Methylated Folate

- Supplementation of folate is universally recommended for preventing pregnancy complications.
- 40 to 60% of women carry a gene variant, MTHFR, that prevents the conversion of Folic Acid into the methylated form usable by the body.8 Even for those without an MTHFR issue, Folic Acid bioaccumulates in the body and unmetabolized Folic Acid can be harmful.9
- ✓ While too little Folate can lead to mood imbalances, so can too much Folate. Folate epigenetically modifies the expression of serotonin membrane transport proteins resulting in increased serotonin reuptake and lower serotonin activity.¹¹ This is why we have carefully chosen the dose and form we have.

# 150mcg each of the two active forms of Vitamin B12 (Adenosyl and Methylcobalamin)

Methylcobalamin and Adenosylcobalamin are two active coenzyme forms that are readily usable by the body. Adenosylcobalamin specifically supports energy at the mitochondrial level as well as supports a healthy metabolism. It is often missing in prenatals.

- ✓ Vitamin B12 is a great example of a nutrient with too low of an RDA. The Vitamin B12 RDA for pregnant and nursing mothers is 2.6 mcg and 2.8 mcg, respectively. A study from The Journal of Nutrition, suggests that recommended dosages should be 3x higher than the RDA in the bioactive or readily usable form (methylcobalamin or adenosylcobalamin).¹¹ Other research suggests that dosages should be almost 200x higher at 500 mcg.¹² Most of the practitioners we work with agree and regularly dose at this level or higher.
- Cyanocobalamin, the more common (cheap and man-made) form of B12, consists of Cobalamin (B12) attached to a cyanide molecule, a harmful compound that requires additional processing for safe removal from the body. We avoid this form.

#### 550mg Choline

- Choline plays a critical role in fetal development, preventing pregnancy complications, and supporting postpartum recovery.
- 95%+ of pregnant mamas aren't meeting their needs for Choline.<sup>13</sup>
- Needed's Prenatal Multi is the first prenatal to provide the full RDA. Most prenatal vitamins contain just 55mg or less. 14
- Many studies suggest Choline intake above 930mg per day is optimal. On average, pregnant mamas consume just 320mg of Choline in their diet.<sup>15</sup>

#### 400mg Magnesium Bisglycinate

- Magnesium supports healthy blood pressure, improves sleep quality, and many common pregnancy discomforts including back pain, nausea, and headaches.
- √ 50% of mamas don't meet the RDA.¹6
- Magnesium BisGlycinate is a mineral chelate where the magnesium is bound to two glycine amino acids. This form is better absorbed and gentler to digest than other forms of Magnesium.

# Excluding added Iron, Boron, and Omega-3 (DHA + EPA)

- Iron needs vary significantly by individual. Iron should be taken separately based on a women's unique situation. The 6mg of Iron is present in other ingredients.
- Most mamas consume enough Boron, and too much is harmful.<sup>17</sup>
- For optimal absorption and nutrient protection we created a separate Omega-3 (DHA + EPA).

### In selecting these dosages and forms, together with our practitioner partners, we reviewed:

- 1. peer reviewed, published research,
- 2. the clinical practice of health practitioners that regularly check nutrient levels,
- the physiological mechanisms of nutrient usage, meaning how a particular nutrient form is actually used and stored by the body,
- traditional healing practices used across cultures for thousands of years (instead of just following the RDAs),
- 5. and, we vetted hundreds of suppliers and manufacturers, and did extensive sampling to create the optimal prenatal for you.

# Our Products Work Best Together.

We designed our Prenatal Multi to be taken with our Omega-3, Collagen Protein, and Pre/Probiotic. Together, these products optimally nourish mama and baby before, during, and after pregnancy—and beyond.

## **Supplement Facts**

Serving Size 1 Scoop (13 g)
Servings Per Package about 30.

Amount Per	1 Scoop Serving	% Daily Value Pregnancy
Calories	20	
Total Fat	1 g	1%†
Total Carbohydrate	3 g	1%†
Vitamin A (as 50% beta-carotene, 50% retinyl palmitate)	1500 mcg	115%
Vitamin C (as ascorbic acid)	500 mg	417%
Vitamin D (D3 as cholecalciferol)	100 mcg (4000 IU)	667%
Vitamin E (as d-alpha-tocopherol from sunflower oil)	30 mg	158%
Thiamin (Vitamin B1 as thiamine hydrochloride)	5 mg	357%
Riboflavin (Vitamin B2 as 50% riboflavin 5- phosphate, 50% riboflavin)	20 mg	1,250%
Niacin (Vitamin B3 as niacinamide)	25 mg	139%
Vitamin B6 (as pyridoxal 5-phosphate)	40 mg	2,000%
Folate (as L-methylfolate, glucosamine salt)	918 mcg DFE (551 mcg folate)	153%
Vitamin B12 (as 50% adenosylcobalamin, 50% methylcobalamin)	300 mcg	10,700%
Biotin	350 mcg	1,000%
Pantothenic acid (as calcium D-pantothenate)	150 mg	2,140%
Choline (as choline bitartrate, Vitacholine®)	550 mg	100%
Calcium (as calcium malate, DimaCal®)	400 mg	31%
Iron (from magnesium bisglycinate)	6 mg	22%
lodine (as potassium iodide)	290 mcg	100%
Magnesium (as magnesium bisglycinate TRAACS®)	400 mg	100%
Zinc (as zinc bisglycinate TRAACS®)	25 mg	192%
Selenium (as L-selenomethionine)	200 mcg	286%
Copper (as copper bisglycinate TRAACS®)	1 mg	77%
Manganese (as manganese bisglycinate TRAACS®)	5 mg	192%
Chromium (as chromium picolinate)	120 mcg	267%
Molybdenum (as molybdenum glycinate chelate TRAACS®)	100 mcg	200%
Sodium (from salt)	65 mg	3%
Potassium (as potassium glycinate TRAACS®)	100 mg	2%
Vitamin K2 (as menaquinone-7 K2VITAL® Delta)	90 mcg	**
Needed.® Organic Fruit & Vegetable Antioxidant Blend (High ORAC)	100 mg	**
Grape, Cranberry, Pomegranate, Blueberry, Apple, mangostana), Bilberry, Chokeberry (Aronia arbutifo		
Boron	0 mg	**

oron 0 mg \*\*

\*\* Daily Value not established

OTHER INGREDIENTS: CITRIC ACID, MEDIUM CHAIN TRIGLYCERIDES FROM ORGANIC COCONUT OIL, GUM ACACIA, NATURAL VANILLA FLAVOR, SALT AND MONK FRUIT EXTRACT.

**WARNING**: Accidental overdose of iron-containing products is a leading cause of fatal poisoning in children under six. Keep out of reach of children. In case of accidental overdose, call a doctor or poison center immediately.

OTHER INGREDIENTS: CITRIC ACID, MEDIUM CHAIN TRIGLYCERIDES FROM ORGANIC COCONUT OIL, ACACIA FIBER, NATURAL VANILLA FLAVOR, SALT, AND MONK FRUIT EXTRACT.

#### Interested in sharing Needed?

We offer a Practitioner Partners referral program that rewards practitioners and their communities for prioritizing better nutrition. To learn more, visit thisisneeded.com/pages/practitioner.



#### REFERENCES

<sup>1</sup>March-of-Dimes Prenatal Health and Nutrition Survey, September 2017

<sup>2</sup> Numerous studies including: The Nurses' Health Study, 2010

<sup>3</sup>The WHO says 10,000IU (equivalent to 3,000mcg) a day of the active form of Vitamin A is the upper limit. However, other research suggests that no risk has been observed at 30,000IU/9,000mcg a day. Beta Carotene does not apply towards the upper limit, as there is no research to suggest that Beta Carotene can cause Vitamin A toxicity.

<sup>4</sup>Numerous studies including: Lakshmy, R. Metabolic syndrome: Role of maternal undernutrition and fetal programming. Rev Endocr Metab Disord 14, 229–240 (2013). https://doi.org/10.1007/s11154-013-9266-4

<sup>5</sup> Many practitioners in our community prefer to see levels closer to 50 - 80 nmol/L and even in Southern California see deficiency rates upwards of 90% for women that do not appropriately supplement with Vittamin D.

<sup>6</sup>Critically deficient defined here as 37.5 -80 nmol/L or less of serum 25-hydroxyvitamin D (circulating Vitamin D in the body and the

best measure of Vitamin D supply) from: Bodnar, Lisa M et al. "High prevalence of vitamin D insufficiency in black and white pregnant women residing in the northern United States and their neonates." The Journal of nutrition vol. 137,2 (2007): 447-52. doi:10.1093/jn/137.2.447

<sup>7</sup> Hollis, Bruce W et al. "Vitamin D supplementation during pregnancy: double-blind, randomized clinical trial of safety and effectiveness." Journal of bone and mineral research: the official journal of the American Society for Bone and Mineral Research vol. 26,10 (2011): 2341-57. doi:10.1002/jbmr.463

<sup>®</sup> Greenberg, James A, and Stacey J Bell. "Multivitamin Supplementation During Pregnancy: Emphasis on Folic Acid and I-Methylfolate." Reviews in obstetrics & gynecology vol. 4, 3-4 (2011): 126-7

Pfeiffer, Christine M et al. "Unmetabolized folic acid is detected in nearly all serum samples from US children, adolescents, and adults." The Journal of nutrition vol. 145,3 (2015): 520-31. doi:10.3945/ jn.114.201210

In The Walsh Research Institute

<sup>11</sup> Bae, Sajin et al. "Vitamin B-12 Status Differs among Pregnant, Lactating, and Control Women with Equivalent Nutrient Intakes." The Journal of Nutrition, vol. 145,7 (2015): 1507–1514

12 https://www.b12-vitamin.com/daily-requirement/

<sup>13</sup>The Nurses' Health Study, reported in 2010

<sup>14</sup> Balchem

15 Balchem

<sup>16</sup> Jama 2019

 $^\eta$  Pahl, M V et al. "The effect of pregnancy on renal clearance of boron in humans: a study based on normal dietary intake of boron." Toxicological sciences : an official journal of the Society of Toxicology vol. 60,2 (2001): 252-6. doi:10.1093/toxsci/60.2.252

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.