



## INOSIA

<b>NPN</b>	80075282	<b>FORMAT</b>	120 capsules
<b>INDICATIONS</b>	Helps reduce symptoms of Polycystic Ovary Syndrome (PCOS). Helps regulate hormones to regularize menstrual cycles and stimulate ovulation. Helps increase progesterone and endometrial thickness.	<b>DOSAGE</b>	4 capsules per day for 3 to 6 months

### COMPOSITION

#### Inositol

Myo-inositol .....	300 mg
D-Chiro-inositol.....	7.5 mg
N-Acetyl-L-cysteine .....	25 mg
Chromium (Chromium (III) picolinate) .....	50 mcg
Vanadium (Vanadium HVP chelate) .....	18.75 mcg
Vitex (Agnus-castus Fruit) .....	40.5 mg
Chinese Peony (Paeonia lactiflora, White Peony, whole plant).....	100 mg
Licorice (Root of Glycyrrhiza glabra) .....	15 mg
Black cohosh (Actea racemosa, root) .....	5 mg

### DOCUMENTATION

Inosia is an all-natural supplement, sold over-the-counter. It is a unique combination of products, designed to reduce the symptoms of PCOS. PCOS is the most common endocrine disorder in women. This disease affects 6-18% of women of reproductive age<sup>1</sup>. In addition to typical ovulatory dysfunctions, this condition is most often accompanied by hirsutism, metabolic disorder (insulin resistance, type 2 diabetes, overweight, hypertension and hyperlipidemia), chronic inflammation and menstrual irregularity<sup>2</sup>.

#### INOSITOL (MYO : DCI 40/1)

Inositol is a naturally occurring metabolite in the ovaries, but is deficient in women with PCOS. Clinically validated by numerous studies, Inositol is known to treat the symptoms of PCOS through these insulin sensitizing properties<sup>2,3</sup>. Restoring the level of Inositol through dietary supplements reduces the consequences of insulin resistance such as metabolic disorders associated with PCOS, in particular hirsutism, ovulation defects, and irregular menstrual cycle<sup>3</sup>. In addition, in medically assisted procreation (MAP), it is recognized that Inositol improves ovarian response to fertility treatments, as well as the quality of ova and embryos, while decreasing the risk of ovarian hyperstimulation<sup>3-5</sup>. For effective treatment, two isoforms of Inositol (Myo-inositol-MYO and D-Chiro-inositol-DCI) should be combined with a physiological ratio of 40: 1 MYO / DCI<sup>3-5</sup>.

### **N-ACETYL-L-CYSTEINE (NAC)**

NAC is an antioxidant amino acid with an insulin sensitizing effect. At equivalent dose, it is as effective as metformin medication in regulating the menstrual cycle and reducing fasting insulin levels, weight, free testosterone, and hirsutism<sup>6</sup>. In MAP, NAC is clinically recognized to protect eggs from oxidative stress, improve their quality and increase the rate of fertilization<sup>7</sup>.

### **CHROMIUM (CHROMIUM (III) PICOLINATE) AND VANADIUM (VANADIUM HVP CHELATE)**

Chromium and Vanadium<sup>8</sup> are very important trace elements in the metabolism of glucose. They promote healthy blood glucose levels<sup>9,10</sup>. In addition, chromium has been shown to reduce the level of triglycerides and bad cholesterol in the bloodstream, while increasing the amount of good cholesterol (HDL)<sup>11-14</sup>. Finally, its appetite-moderating effect on sugary foods has also been described in scientific reports<sup>10</sup>. Thus, chromium would help prevent the onset of the metabolic syndrome and contribute to the control of a healthy weight.

### **VITEX (AGNUS-CASTUS)**

Vitex is derived from a plant called Vitex Agnus-Castus, which is widely used in naturopathy and medicine to treat menstrual cycle irregularities, premenstrual syndrome and breast pain<sup>15</sup>. Increased prolactin in women with PCOS may be the cause of menstrual irregularity and amenorrhea<sup>16</sup>. Several studies have proven that Vitex can decrease prolactin levels and improve the response to fertility treatments in women with polycystic ovaries<sup>15-18</sup>.

### **BLACK COHOSH (CIMICIFUGA RACEMOSA)**

Black cohosh is a plant that is clinically recognized to promote pregnancy in women with PCOS through its positive effects on ovulation, progesterone level and endometrial thickness<sup>19,20</sup>.

### **CHINESE PEONY (PAEONIA LACTIFLORA)**

Clinical and preclinical studies show that this plant has an anti-androgenic effect in women suffering from hirsutism and menstrual irregularities related to PCOS. This plant combines its mode of action with Licorice and Cinnamon to decrease testosterone levels and regularize cycles and ovulation<sup>21-25</sup>.

### **LICORICE PLANT (GLYCYRRHIZA GLABRA)**

Licorice root extract increases the number of ovulatory cycles of women with PCOS due to its anti-androgenic properties. Several clinical studies have found a decrease in free and total testosterone<sup>26</sup>. In combination with Peony of China, clinical studies also show an improvement in the ratios between sex hormones (FSH/LH)<sup>22,24,25</sup>.

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