# Men and Women Hormone

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# Hyperlinks

Women's Health Products

Men's Health Products

# Hormone health: portfolio at a glance

Formula	Application	Advantages	Dosage
<u>EstroFactors®</u>	Targeted support for healthy estrogen metabolism*	Offers BioResponse DIM®, which may promote the 2-hydroxyestrone pathway. HMR lignans are also featured to increase the production of enterolactone, which has been associated with reduced aromatase activity.*	2 capsules 1-2x/day
Meta I 3 C°	Promotes healthy estrogen balance*	Features indole-3-carbinol (I3C), a nature-identical version of the compound found in cruciferous vegetables, which promotes the breakdown of estrogen to its beneficial, protective metabolite—2-hydroxyestrone.*	1 capsule 2x/day
Chasteberry Plus®	Supports menstrual regularity, relieves menstrual discomfort*	Combines chasteberry and black cohosh to help support menstrual regularity, ease menstrual cramps, and support reproductive health. Ashwagandha helps support healthy aging and libido.*	1 tablet 2x/day
<u>Estrovera®</u>	Plant-derived menopausal hot flash relief*	Provides relief for multiple menopausal symptoms, including hot flashes, sleep disturbances, mood swings, irritability, anxiety, and sexual problems.*	1 tablet 1x/day
Wellness Essentials® Women	Targeted support for women's health*	Supports heart health, bone health, and overall wellness daily.*	1 packet 1x/day
HerSynergy®	Female libido support*	Formulated to promote libido in women with a special, concentrated extract of fenugreek, which may support multiple key markers of sexual function and arousal. *	1 tablet 2x/day
Testralin™	Testosterone balance support*	Provides 14 key ingredients—including green tea, flax lignans, and plant sterols—that may help promote healthy testosterone balance and beneficially influence estrogen and testosterone metabolism.*	1 tablet 1x/day
Concentrated Ultra Prostagen™	Saw palmetto & stinging nettle complex for men	Features concentrated extracts of saw palmetto and stinging nettle combined with other select nutrients to support healthy prostate and urinary function.*	1 tablet 1x/day
Wellness Essentials for Men's Vitality	Targeted support for men's health*	Supports vitality, libido, and overall wellness daily.	1 packet 1x/day
HisSynergy™	Male libido support*	Provides premium Ayurvedic herbal extract support for healthy male sexual function, libido, and vitality—in one formula.*	2 tablets 2x/day
Axis Endo™	Specialized support for hormone metabolism in men and women*	Features key vitamins, minerals, and phytochemicals that influence pathways of estrogen and testosterone metabolism and may help reduce oxidative stress in sensitive tissues.* This multidimensional formula features flaxseed lignans, calcium D-glucarate, and zinc.	2 scoops 1-2x daily
Zinc A.G.™	GI-friendly, highly absorbable zinc	Features zinc as an amino acid chelate with arginine and glycine designed to be highly absorbable and well tolerated. Zinc is especially important for immune and tissue health.*	1 tablet 1-2x daily
<u>BioSōm®</u>	Liquid, liposomal DHEA	An easy-to-use liposomal form of dehydroepiandrosterone (DHEA).	1 full spray taken orally 1-4x/day
<u>Thyrosol®</u>	Thyroid support formula*	Offers a multifaceted approach by providing nutritional support for healthy thyroid function along with additional support for stress-related fatigue.*	1 capsule 3x/day
	EstroFactors®  Meta I 3 C®  Chasteberry Plus®  Estrovera®  Wellness Essentials® Women  HerSynergy®  Testralin™  Concentrated Ultra Prostagen™  Wellness Essentials for Men's Vitality  HisSynergy™  Axis Endo™  Zinc A.G.™  BioSōm®	EstroFactors® Targeted support for healthy estrogen metabolism*  Meta I 3 C® Promotes healthy estrogen balance*  Chasteberry Plus® Supports menstrual regularity, relieves menstrual discomfort*  Estrovera® Plant-derived menopausal hot flash relief*  Wellness Essentials® Women Female libido support for women's health*  Testralin™ Testosterone balance support*  Concentrated Ultra Prostagen™ Saw palmetto & stinging nettle complex for men  Wellness Essentials for Men's Vitality Targeted support for men's health*  HisSynergy™ Male libido support*  Axis Endo™ Specialized support for hormone metabolism in men and women*  Zinc A.G.™ Gl-friendly, highly absorbable zinc  BioSom® Liquid, liposomal DHEA	EstroFactors® Targeted support for healthy estrogen metabolism® Meta I 3 C® Promotes healthy estrogen balance® Chasteberry Plus® Supports menstrual requiarity, relieves menstrual requiarity, relieves menstrual discomfort® Plant-derived menopausal hot flash relief® Targeted support for womens health® Bestrovera® Plant-derived menopausal hot flash relief® Targeted support for womens health® Sesentials® Women Targeted support for womens health® Fernale libido support® Fernale libido support® Teststralin® Testosterone balance support® Testosterone balance and beneficially influence estrogen and testosterone metabolism.  Testosterone balance stringing nettle complex for men Support balthy prostate and urinary function.*  Wellness Essentials for Men's Vitality Male libido support for hormone metabolism in men and women® Teatures key termin, minerals, and phytochemicals that influence pathways of estrogen and testosterone metabolism

BioResponse DIM® is a trademark of BioResponse, L.L.C.

- References:

  1. Gottfried S. New York, NY. Scribner; 2013.
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  3. Wang C et al. J Steroid Biochem Molec Biol. 1994;50:205-212.
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\* These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.





To learn more, contact your Metagenics representative or call 800.692.9400 Metagenics.com



Hormone Health

A Robust Approach to Hormone Health for Both Men and Women



### () Hormone Health

# Hormone health

Throughout the lifecycle, we are affected by the fluctuation of hormones. The body addresses these fluctuations in order to maintain harmonious equilibrium. However, there are lifestyle factors that can influence hormonal balance and affect a variety of general and sex-specific functions for men and women.<sup>1</sup>

- Mood
- Sexual libido
- Premenstrual syndrome (PMS)

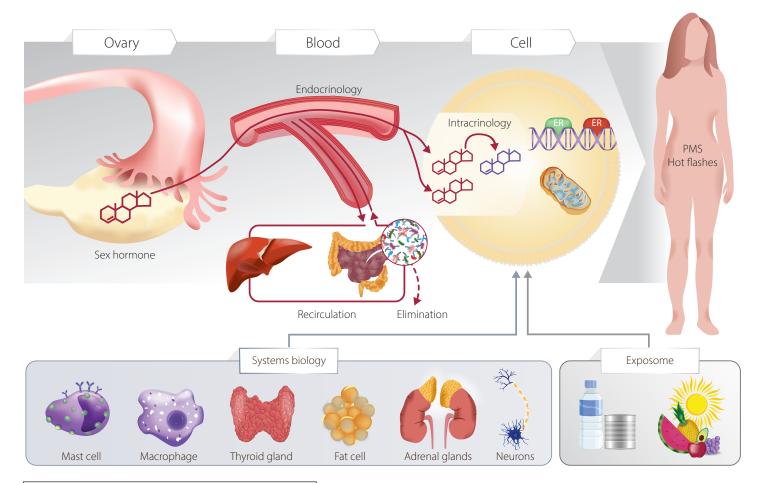
- Premenstrual dysphoric disorder (PMDD)
- Weight management
- Energy levels

## The influence of nutrition and modern living on hormone metabolism

Nutrition plays a significant role in estrogen metabolism as it affects its mechanism of action.<sup>2</sup> Fat-soluble vitamins A and E, as well as water-soluble vitamins  $B_2$ ,  $B_6$ , and  $B_{12}$ , are key in this metabolism process.<sup>2,3</sup>

Influences such as poor diet, obesity, and excess alcohol consumption, as well as overexposure to pesticides and industrial chemicals, can negatively influence the production of estrogen in men and women.<sup>2,3</sup>

Examples of how estrogen dysregulation manifests include difficulty losing weight when levels are elevated, weight gain when too little estrogen is produced, and for men, an increase of estrogen as testosterone decreases with age, resulting in issues with libido and sexual function.<sup>4</sup> Additionally, the stress of modern living and compressed work and family schedules can compound any issues that the body has with hormone metabolism.<sup>5</sup> For example, the natural "fight or flight" response to stress, when sustained over a period of time, can impact normal processes pertaining to reproductive organs such as menstrual regularity, as well as other glands within the endocrine system.<sup>5</sup>



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# Supporting balance through targeted nutrition

Estrogen receptors are present in both men and women.<sup>6</sup> Endogenous estrogens, environmental xenoestrogens, and their metabolites selectively bind to estrogen receptors, thereby influencing estrogen balance.<sup>7</sup> Various phytonutrients may moderate this binding process and reduce or moderate cell signaling to promote hormone balance.<sup>23</sup> For example, Brassica vegetables such as broccoli, cauliflower, kale, and Brussels sprouts provide nutrients and possess antioxidant activity to encourage healthy estrogen metabolism. In particular, a naturally occurring compound found in Brassica vegetables, indole-3-carbinol (I3C), is converted to diindolylmethane (DIM) in the stomach,<sup>8</sup> which may support the 2-hydroxyestrone pathway and promote healthy estrogen metabolism.\*

# Estrogen is a unique hormone with both alpha and beta receptors and found in many tissues of the body<sup>9–11</sup>

### Tissues containing **both** estrogen alpha (ERα) and estrogen beta (ERβ) receptors

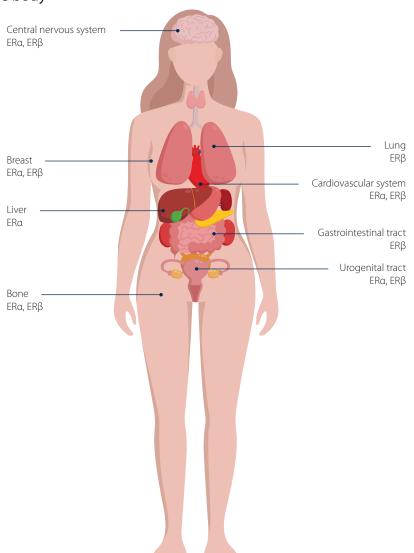
- Breast Bone
- OvaryCNS
- CV system
- Uterus

### Tissues that have **either** estrogen alpha (Erα) OR estrogen beta (ERβ) receptors

# • Liver

· White fat

- ERβ
- Vasculature
- Lung
- BladderGl epithelium



# Addressing the specific needs of men and women

Certain nutritional approaches have been studied for how they interplay with hormone pathways in men and women. Metagenics builds upon this science to offer an extensive line of nutritional formulas that target specific support areas for men's and women's hormonal health.



# Targeted support for healthy estrogen metabolism



Healthy hormone metabolism is a key component of general health. Although hormones fluctuate naturally throughout the lifecycle, the balance is delicate and can be influenced by many different factors, including lifestyle.

For women, there is a constant cycle of hormonal fluctuations that may play a role in day-to-day mood, energy, weight management, and other factors. Lifestyle choices may compound hormonal fluctuations—impacting the balance that is important for a variety of functions.

### Supporting balance through targeted nutrition

Proper estrogen metabolism is important for various areas of health, including neurological and cardiovascular functions. That's why it's important to support healthy estrogen levels through proper nutrition and healthy lifestyle choices.

Brassica vegetables, such as broccoli, cauliflower, kale, and Brussels sprouts, are packed with nutrients and antioxidants that can encourage healthy estrogen metabolism and other health benefits. Indole-3-carbinol (I3C) is a naturally occurring compound found in cruciferous vegetables and is also considered a primary contributor in the health benefits these foods provide. In cruciferous foods, I3C is released during chewing and transported to the stomach. Once in the stomach, it is converted to many active compounds, one of which is diindolylmethane (DIM).

### New Estrofactors—now with DIM

EstroFactors features phytonutrients that provide targeted support for healthy estrogen metabolism. This unique formula features bioavailable BioResponse DIM®, which may support the 2-hydroxy estrone pathway and promote healthy estrogen metabolism as well as help support breast comfort during normal estrogen cycles in women.\*

### Why EstroFactors?

- Features phytonutrients that may help support the functions of enzymes involved in estrogen detoxification\*
- Features a proprietary DIM complex technology from BioResponse®, which has shown improved absorption in independent clinical studies
- Features XNT ProMatrix®, a xanthohumol compound that utilizes proprietary protein matrix technology designed for increased bioavailability and stability
- Xanthohumol shows potent antioxidant activity and has been shown in lab research to beneficially influence kinases involved in initiating and regulating the body's immune response\*
- Features HMR lignans, which may favorably impact estrogen metabolism—especially in combination with active metabolites of *Brassica* vegetables\*
- Ingestion of HMR lignans increases production of enterolactone, which has been associated with reduced aromatase activity\*
- Features a body-ready folate, vitamin  $B_6$ , and vitamin  $B_{12}$  to help contribute to healthy homocysteine metabolism and methylation as well as provide nutritional foundation for healthy neurological and cardiovascular function\*



### Form: 60 Capsules

Serving Size: 2 Capsules <sup>†</sup>	Amount Per Serving	% Daily Value
Vitamin A (from mixed carotenoids)	750 mcg	83%
Vitamin E (as d-alpha tocopheryl succinate and d-alpha tocopheryl polyethylene glycol 1000 succinate	36.2 mg te <sup>††</sup> )	241%
Riboflavin	1 mg	77%
Vitamin B <sub>6</sub> (as pyridoxine HCl)	50 mg	2,941%
Folate (as calcium L-5-methyltetrahydrofolate)	340 mcg DFE	85%
Vitamin B <sub>12</sub> (as methylcobalamin)	30 mcg	1,250%
Rice Protein Matrix and Polyphenols from Hops (Humulus lupulus L.) Cone Extract (standardized to 2.5%	250 mg xanthohumol)	*
Diindolylmethane (DIM) Complex <sup>iii</sup> [starch, diindolylmethane, d-alpha tocopheryl polyethylen: phosphatidylcholine (from sunflower), and silica)] providin		*
Decaffeinated Green Tea (Camellia sinensis) Leaf Extract [standardized to 60% (60 mg) catechins and 40% (40 mg	100 mg ) epigallocatechin gallate	(EGCG)]
N-Acetyl-L-Cysteine	50 mg	*
7-Hydroxymatairesinol (HMR) Potassium Acetate Complex‡	50 mg	*
Proprietary Mix of Curcumin [from Curcuma longa L. rhizome extract standardized to 4 and Fenugreek Galactomannans (from Trigonella foenum-		*
Mixed Carotenoids (including beta-carotene, alpha-carotene, cryptoxanthin, z	1.8 mg eaxanthin, and lutein)	*
* Daily Value not established		• • • • • • • • • • • • • • • • • • • •

<sup>\*</sup> Daily Value not established.

 $Other\ Ingredients:\ Capsule\ [hydroxypropylmethylcellulose\ and\ chlorophyllin\ (color)],\ microcrystalline$ cellulose, magnesium stearate (vegetable), and silica.

Directions: Take two capsules once or twice daily or as directed by your healthcare practitioner.

This product is non-GMO and gluten-free.

Warning: Do not use if pregnant or breastfeeding. Keep out of reach of children.

Caution: Consult your healthcare practitioner before use if you are taking medications, including birth control.

Tamper Evident: Do not use if safety seal is missing or broken.

Storage: Keep tightly closed in a cool, dry place.

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### References:

- 1. Broadbent TA et al. Curr Med Chem. 1998;5:469-491.
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- 3. Agrawal RC et al. Toxicol Lett. 1999;106:137-141.
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# **Complementary Products:**

- Axis Endo: Specialized support for hormone metabolism in men and women\*
- HerSynergy®: Female libido support\*
- UltraFlora® Balance: Daily probiotic support for gastrointestinal and immune health\*

Talk to your healthcare practitioner today about **EstroFactors** or visit Metagenics.com.

Vegetarian capsule
"From BioResponse DIM\*
"As BioResponse DIM\* A proprietary, enhanced bioavailability complex containing Diindolylmethane licensed from BioResponse, L.L.C., Boulder, Colorado.)  $^{\text{H}}$ HMRlignan $^{\text{TM}}$  is a trademark of Linnea, Inc.

# **Healthy Estrogen Metabolism Protocol**

# Assessment Potential Labs and Assessment Tools Potential Cabs and Assessment Tools Assessment Tools

• Estrogen; Progesterone; Cortisol; and Testosterone metabolism of steroidogenic pathway

Focus	Product Name	Dosage	Description	Notes
Core Support	Axis Endo™	2 scoops 1-2x/day	Specialized support for hormone metabolism in men and women*	
	For women: EstroFactors®	1 capsule 1-2x/day	Targeted support for healthy estrogen metabolism*	
	For men: <u>Testralin™</u>	1 tablet 1x/day	Testosterone balance support*	
Targeted Support	Meta I 3 C°	1 capsule 2x/day	Designed to promote healthy estrogen metabolism and balance*	
	MethylCare™	2 capsules 1x/day	Support for healthy methylation and homocysteine metabolism*	
	For women: <u>HerSynergy</u> ®	1 tablet 2x/day	Female libido support*	
	For men: <u>HisSynergy™</u>	1 tablet 1x/day	Male libido support*	
	If menopausal: Estrovera®	1 tablet 1x/day	Menopausal symptom relief*	
Additional Support	PhytoMulti®	1-2 tablets 1x/day	Multivitamin with a proprietary blend of 13 concentrated extracts and phytonutrients	
	<u>UltraFlora® Balance</u>	1 capsule 1-2x/day	Daily probiotic support for GI and immune health*	
	SulforaClear™	1-2 capsules 1x/day	Advanced sulforaphane support*	
	<u>Celapro</u> ®	1 softgel 1x/day	Support for healthy cellular aging*	

### **Dietary Recommendations**

Modified elimination diet

For more information, contact your local sales representative or call 800.692.9400.

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