millers
pharmacy

since 1918

To a healthier **you.**



Healthcare Providers Catalog



Weight Management



Men's Health



Women's Health



Longevity



Skin Solutions



Hair Loss



Energy and Hydration



Hormone Replacement Therapy



Mental Health



Veterinary



Millers of Wyckoff

Millers of Wyckoff, Inc., operating as Millers Pharmacy, boasts a rich legacy that began as an apothecary in 1918. Originally offering retail products, skin care items, and sundries, the pharmacy has evolved into a leader in personalized compounding, delivering specialized medications tailored to the unique needs of its patients.

In response to the growing success and demand for their compounding services, Millers Pharmacy shifted its focus exclusively to cash compounding. This strategic decision allows them to provide customized medication solutions directly to customers while ensuring a high level of service and flexibility to address individual healthcare requirements.

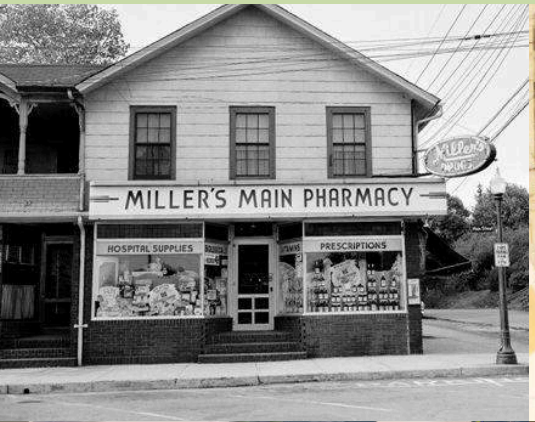
TODAY, MILLERS PHARMACY:
Is licensed in **all 50 states**
Is nationally **accredited by NABP**
Is certified by **Legitscript**
Dispenses **compounding** medication, including sterile
Partners with **leading telemedicine** platforms
Offers a **state-of-the-art technology platform** with customer portal and ship tracking system
Is renowned for best-in-class customer service, **Google rated 4.9**

Licensed in **All 50 States**

Established **in 1918**

A LEGACY OF TIMELESS STRENGTH

Today, we are a flourishing organization experiencing rapid growth, focused on personalized compounding using the latest technology.













Millers Delivers Products and Services to Support **Next Generation Health and Wellness Platforms**

millers pharmacy

since 1918

- TEST & EVALUATE
- COORDINATE CARE
- CURATED PRODUCTS AND SERVICES
- MONITORING AND ADHERENCE

A typical medical clinic offers a wide range of services, including diagnosis, treatment, preventative care, and patient education. Millers plays a crucial role in supporting these services by ensuring access to medications, providing medication information, and assisting with medication adherence.

A Long-Standing Member of **PCCA:**

PREMIER COMPOUNDING ORGANIZATION.

Millers is one of the oldest member of Professional Compounding Centers of America (PCCA). PCCA offers over 9,000 unique formulations to its compounding members. This extensive range includes various dosage forms and therapeutic areas, allowing compounding pharmacists to tailor medications to specific patient needs. Membership in PCCA offers several key benefits for compounding pharmacies, including:

1. **Access to Resources:** members receive access to a wealth of resources, including formulations, training materials, and compounding guidelines.
2. **Educational Opportunities:** PCCA provides various educational programs, seminars, and workshops that help members stay updated on the latest compounding techniques and regulations.
3. **Networking Opportunities:** members can connect with other compounding pharmacists, share best practices, and collaborate on business strategies.
4. **Product Discounts:** members often receive discounts on high-quality raw materials, equipment, and other supplies necessary for compounding.
5. **Technical Support:** PCCA offers technical assistance for compounding-related questions and challenges, helping members solve complex issues.
6. **Regulatory Guidance:** members receive updates on state and federal regulations affecting compounding pharmacy operations.
7. **Marketing Support:** PCCA provides marketing materials and strategies to help members promote their compounding services to healthcare providers and patients.
8. **Research and Development:** members can participate in research opportunities and benefit from the collective knowledge of the PCCA community.
9. **Access to Formulations:** members have access to a comprehensive library of compounded formulations that are proven safe and effective.
10. **Business Development Tools:** PCCA offers tools and resources to help members grow and enhance their compounding business.

We are also **NABP Accredited** and **Legit Script** Certified.

PCCA

NABP Accredited Compounding Pharmacy

LegitScript Certified

Featuring Methylene Blue

Methylene Blue, first synthesized in 1876 by Heinrich Caro, was originally used as a textile dye. In the late 19th century, it became significant in medicine, particularly for staining microbes, aiding in the development of bacteriology. In 1891, it was discovered to have antimalarial properties. Today, it's used in medical treatments, including methemoglobinemia, and as a diagnostic stain in various fields. Its diverse applications continue to evolve in scientific research.

METHYLENE BLUE HAS GAINED POPULARITY TODAY FOR SEVERAL REASONS:

Versatile Applications:

Its uses span across various fields, including medicine, biology, and chemistry, making it a valuable tool for researchers and clinicians.

Antioxidant Properties:

Studies suggest that methylene blue may have neuroprotective and antioxidant effects, which are of interest in aging and neuro-degenerative disease research.

Cognitive Enhancement:

Some research indicates potential benefits for cognitive function, attracting attention in nootropic and mental health circles,

Research and Diagnostics:

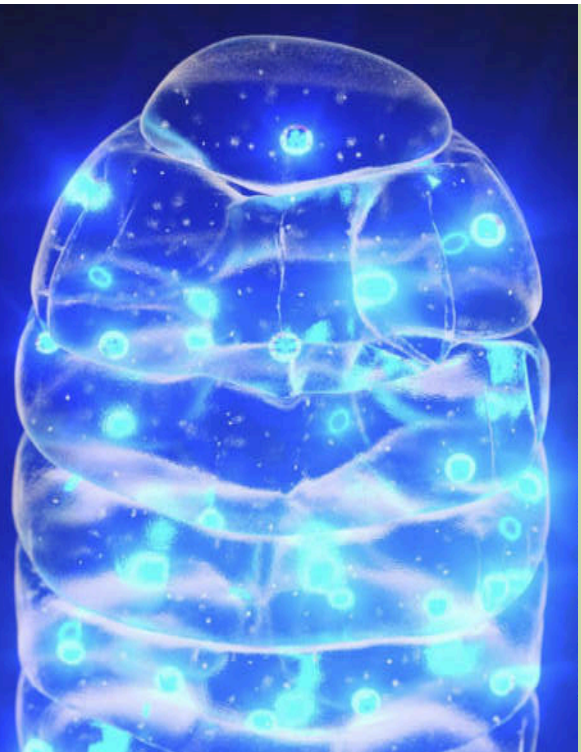
Its effectiveness as a stain in microscopy and a tracer in medical imaging continues to make it indispensable in laboratories.

Historical Recognition:

Its long history of use and extensive research contribute to its credibility and acceptance in various applications.

Emerging Therapeutic Uses:

Ongoing studies are exploring new therapeutic applications, including in areas like chronic fatigue syndrome and in some cancer treatments.



Neuroprotective Agent

Emerging research indicates that methylene blue may have neuroprotective properties, offering potential benefits for various neurological conditions. Oxidative stress plays a crucial role in neurodegenerative disease. Methylene blue acts as an antioxidant, helping to neutralize harmful free radicals and reduce oxidative damage in the brain. Methylene blue was shown to possess anti-inflammatory properties, inhibiting the release of pro-inflammatory molecules and reducing neuroinflammation. By modulating the inflammatory response, methylene blue helps protect the neurons from damage.

WORKING WITH NEW INGREDIENTS:

Nitric Oxide

Nitric Oxide influences aging and telomere dynamics through complex and sometimes contrasting mechanisms:

HOW NITRIC OXIDE MIGHT EXTEND LIFE:

Vasodilation and Cardiovascular Benefits:

Nitric Oxide promotes blood vessel dilation, improving blood flow, reducing blood pressure, and supporting heart health—all factors linked to increased lifespan.

Antioxidant Effects:

Nitric Oxidecan neutralize harmful free radicals, decreasing oxidative stress that damages DNA, proteins, and lipids, thereby slowing cellular aging.

Mitochondrial Support:

Nitric Oxidemodulates mitochondrial function, promoting efficient energy production and reducing mitochondrial dysfunction—a key factor in aging.

Anti-Inflammatory Role:

Nitric Oxidehelps regulate inflammatory responses, preventing chronic inflammation (inflammaging), which is associated with age-related diseases.

HOW NITRIC OXIDE MIGHT SHORTEN TELOMERES:

Generation of Reactive Nitrogen Species (RNS):

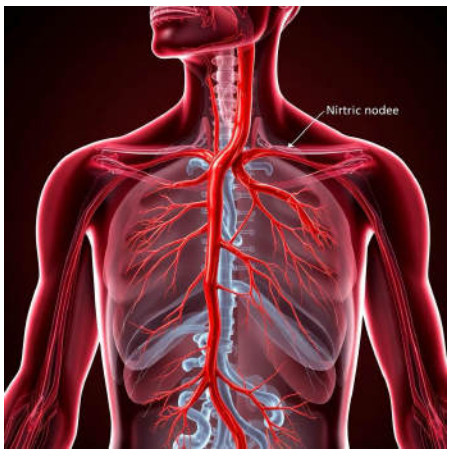
Excess Nitric Oxidecan produce RNS that cause nitrosative stress, damaging DNA, including telomeres.

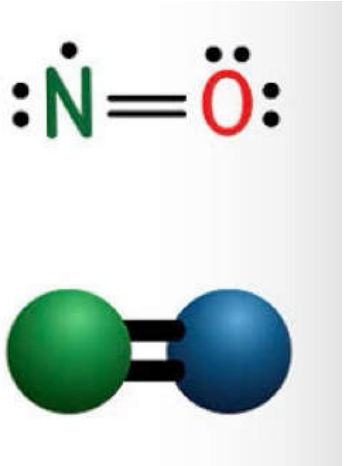
Induction of DNA Damage:

High levels of Nitric Oxideor RNS can lead to oxidative modifications of telomeric DNA, accelerating telomere shortening.

Impaired Telomerase Activity:

Under certain conditions, Nitric Oxidemay inhibit telomerase enzyme activity, reducing the replenishment of telomeres and promoting cellular aging.







WORKING WITH NEW INGREDIENTS:

GHK-Cu

Here's a clear and organized table outlining the benefits of GHK-Cu, its uses, and mechanisms of action:

OVERVIEW

GHK-Cu is a naturally occurring peptide complexed with copper, known for its regenerative and anti-aging properties. It plays a key role in wound healing, skin repair, and tissue regeneration by stimulating collagen and elastin production, promoting angiogenesis, and reducing inflammation. Widely used in skincare products, GHK-Cu helps improve skin elasticity, reduce wrinkles, and accelerate healing. Its antioxidant and anti-inflammatory effects contribute to overall tissue health and aging reduction. Although much research is promising, ongoing studies continue to explore its full therapeutic potential. GHK-Cu's combination of regenerative benefits makes it a popular ingredient in anti-aging and wound care formulations.

BENEFIT & USES OF GHK-CU
Wound Healing Therapies: accelerate tissue repair
Skin Regeneration: products like serums, creams, and anti-aging treatments reduce scars and fine lines
Anti-Inflammatory Treatments: work to decrease redness and irritation
Hair Growth Formulas: help promote follicle health
Antioxidant Properties: protect against oxidative stress
Tissue Repair: supports healing in various tissues
Neuroprotection: potential support for neural regeneration
Regenerative Medicine Research

MECHANISMS OF ACTION
Modulates gene expression related to repair and aging
Stimulates release of growth factors (e.g., TGF-β)
Enhances collagen, elastin, and glycosaminoglycan synthesis
Suppresses inflammatory cytokines
Activates antioxidant enzymes
Promotes cell migration and proliferation of fibroblasts and keratinocytes

millers
pharmacy

since 1918

Weight Management



Sample **Weight Management** Medications

MEDICATION NAME	MECHANISM OF ACTION	MAIN BENEFITS	INDICATIONS
LIRAGLUTIDE (SAXENDA)	GLP-1 receptor agonist; enhances insulin secretion, suppresses appetite, delays gastric emptying	Significand weight loss (~5-10%), improves glycemic control, cardiovascular benefits.	**OBESITY, OVERWEIGHT WITH COMORBIDITIES**
GLP-1s	Long-acting GLP-1 receptor agonist; reduces hunger and caloric intake	Up to 15% weight reduction, sustained appetite suppresion	**OBESITY, WEIGHT MANAGEMENT**
ORLISTAT (XENICAL, ALLI)	Lipase inhibitor; decreases fat absorption from the gut	Modest weight loss (~5%), improves lipid profile reduces blood pressure	**BMI ≥ 30 OR ≥ 28 WITH COMORBIDITIES**
PHENTERMINE-TOPIRAMATE ER (QSYMIA)	Appetite suppressant (phentermine); increases satiety (topiramate)	~8-10% weight loss, improves metabolic parameters	**OBESITY, BMI ≥ 30 OR ≥ 27 WITH COMORBIDITIES**
NALTREXONE-BUPROPRION (CONTRAVE)	Acts on reward pathways in CNS; reduces cravings and appetite.	5-10% weight loss, aids in emotional or binge-eating	**OBESITY, OVERWEIGHT WITH COMORBIDITIES**

Key Advantages of Pharmacotherapy

- Enhances weight loss beyond lifestyle alone.
- Addresses neurohormonal contributors to obesity.
- Improves related health conditions like diabetes, hypertension, and dyslipidemia.
- Supports long-term weight maintenance when combined with healthy lifestyle changes.

Note

Choice of medication should be personalized based on individual health profiles, preferences, and contraindications, with close medical supervision.

Would you like additional information on specific medications or patient selection criteria?

Mechanism of Action of GLP-1:

millers pharmacy
since 1918

1. ENHANCEMENT OF INSULIN SECRETION

GLP-1 binds to its receptors on pancreatic beta cells, stimulating them to release insulin in response to elevated blood glucose levels. This process is glucose-dependent, meaning insulin release is amplified when blood sugar is high, reducing the risk of hypoglycemia. This helps stabilize blood glucose levels efficiently.

2. SUPPRESSION OF GLUCAGON SECRETION

GLP-1 inhibits alpha cells in the pancreas from releasing glucagon, a hormone that raises blood sugar by stimulating hepatic glucose production. Inhibiting glucagon during hyperglycemia reduces hepatic gluconeogenesis and glycogenolysis, lowering blood glucose spikes after meals.

3. SLOWING GASTRIC EMPTYING

GLP-1 acts on receptors in the gastrointestinal tract and the vagus nerve to delay gastric emptying. This prolongs the sensation of fullness after meals, reducing subsequent calorie intake and aiding in weight management.

4. APPETITE SUPPRESSION VIA CENTRAL NERVOUS SYSTEM

GLP-1 receptors are also present in the brain, particularly in the hypothalamus and brainstem regions that regulate hunger and satiety. Activation of these receptors suppresses hunger signals, decreasing feelings of hunger and increasing satiety, which leads to reduced food intake.

5. PROMOTION OF SUSTAINED WEIGHT LOSS

The combined effects on gastric emptying, appetite, and food intake create a sustained reduction in caloric consumption. This not only helps with immediate weight loss but also supports long-term weight management when combined with lifestyle changes.

In summary:

GLP-1 receptor agonists mimic incretin hormones to improve glycemic control through insulin stimulation and glucagon suppression, while also promoting weight loss by delaying gastric emptying and suppressing appetite via central mechanisms. These pleiotropic effects make them a cornerstone in managing obesity and type 2 diabetes.

Lipotropic Formulas

Lipotropic formulas are beneficial for enhancing fat metabolism and supporting liver health, making them effective in weight management. These formulas help prevent fat accumulation in the liver, boost energy levels, and can improve overall. Here are seven commonly prescribed lipotropic formulas that doctors may recommend for weight loss and fat metabolism:

TOP LIPOTROPIC FORMULAS PRESCRIBED BY DOCTORS

METHIONINE, INOSITOL, AND CHOLINE (MIC):	A blend that supports liver function and fat metabolism, promoting weight loss and reducing fat accumulation.
L-CARNITINE:	Often included for its role in transporting fatty acids into mitochondria for energy production, aiding in fat burning.
B12 INJECTIONS:	Commonly used in lipotropic shots to boost energy levels, enhance metabolism, and improve overall well-being.
LIPOTROPIC INJECTIONS (LIPO SHOTS):	Composed of lipotropic agents like methionine, inositol, and choline, these injections target fat loss and enhance metabolism.
OMEGA-3 FATTY ACIDS:	Though not a traditional lipotropic, they support fat metabolism and overall cardiovascular health.
PHENTERMINE:	Sometimes combined with lipotropic compounds, it acts as an appetite suppressant to facilitate weight loss.
HCG (HUMAN CHORIONIC GONADOTROPIN):	Used in some weight loss protocols, often in combination with lipotropic agents to enhance fat loss.

Alternative Supplements to Lipotropic Formulas

Alternative supplements to lipotropic formulas include green tea extract, which is rich in antioxidants and may enhance metabolism and fat loss. L-Carnitine supports the transport of fatty acids for energy production, aiding in weight management. Alpha-lipoic acid, an antioxidant, improves insulin sensitivity and may assist with weight control. Conjugated linoleic acid (CLA) may reduce body fat while promoting lean muscle mass. Additionally, Garcinia Cambogia, a natural extract, may help suppress appetite and inhibit fat production. Prior to starting any supplementation, it's essential to consult a healthcare professional to ensure safety and effectiveness for individual health needs.

millers
pharmacy

since 1918

Men's Health



Sample **Men's Health** Medications

MEDICATION NAME	MECHANISM OF ACTION	MAIN BENEFITS	INDICATIONS
TADALAFIL (CIALIS)	PDES inhibitor; relaxes smooth muscle in blood vessels, increasing blood flow to the penis	Strong, long-lasting erection (up to 36 hours); useful for daily use; also treats BPH	**ERECTILE DYSFUNCTION (ED); BENIGN PROSTATIC HYPERPLASIA (BPH)**
SILDENAFIL (VIAGRA)	PDE5 inhibitor; enhances nitric oxide-mediated vasodilation during sexual stimulation	Rapid onset (30-60 min); effective for ED; enhances confidence and intimacy	**ERECTILE DYSFUNCTION (ED)**
VARDENAFIL (LEVITRA, STAXYN)	PDE5 inhibitor; similar to sildenafil & tadalafil, with longer duration and potency	Quick and reliable response; effective for ED; some benefit in BPH (off-label use)	**ERECTILE DYSFUNCTION (ED)**
TESTOSTERONE REPLACEMENT THERAPY (TRT)	Supplements or replaces deficient testosterone levels	Restores libido, energy, muscle mass, mood; improves bone density	**MALE HYPOGONADISM, TESTOSTERONE DEFICIENCY**
FINASTERIDE (PROSCAR, PROPECIA)	5-alpha reductase inhibitor; decreases dihydrotestosterone (DHT) levels to shrink prostate tissue	Reduces prostate size, alleviates urinary symptoms, halts or reverses hair loss on scalp	**BENIGN PROSTATIC HYPERPLASIA (BPH), MALE PATTERN BALDNESS**
DUTASTERIDE (AVODART)	Similar to finasteride; more potent DHT suppression	Greater effect on prostate and hair loss; used for BPH	**BENIGN PROSTATIC HYPERPLASIA (BPH)**

Highlights for Men's Health Medication

- Enhance Sexual Performance: PDE5 inhibitors improve erectile function, confidence, and relationship quality.
- Support Prostate Health: finasteride and dutasteride effectively reduce prostate size, ease urinary symptoms, and prevent progression of BPH.
- Optimize Hormonal Balance: TRT can restore testosterone to youthful levels, improving libido, energy, and muscle mass.
- Improve Overall Well-being: address age-related declines, boost mood, and enhance quality of life.

Note Millers always tailors treatments based on individual health profiles and monitor for side effects.

millers
pharmacy

since 1918

Women's Health



Sample **Women's Health** Medications

MEDICATION NAME	MECHANISM OF ACTION	MAIN BENEFITS	INDICATIONS
ESTROGEN THERAPY (E.G., ESTRADIOL)	Binds to estrogen receptors in various tissues; replaces diminished estrogen levels during menopause	Relief from hot flashes, night sweats, vaginal dryness; prevents osteoporosis, improves mood	**MENOPAUSE SYMPTOM MANAGEMENT, OSTEOPOROSIS PREVENTION**
CONJUGATED ESTROGEN & MEDROXYPROGES-TERONE (HORMONE REPLACEMENT THERAPY - HRT)	Combines estrogen and progestin; balances hormones, protects the endometrium from hyperplasia	Reduces menopausal symptoms, supports bone health, improves vaginal tissue	**MENOPAUSE SYMPTOM RELIEF, OSTEOPOROSIS PREVENTION, GENITO-URINARYHEALTH**
TAMOXIFEN (SERM)	Selectively blocks estrogen receptors in breast tissue; stimulates other tissues (like bone)	Reduces risk of estrogen receptor-positive breast cancer; protects against osteoporosis	**BREAST CANCER PREVENTION AND TREATMENT**
RALOXIFENE (SERM)	Mimics estrogen's beneficial effects on bone; antagonizes estrogen in breast tissue	Increases bone density, decreases risk of invasive breast cancer	**OSTEOPOROSIS, BREAST CANCER RISK REDUCTION**
CLOMIPHENE CITRATE	Selective estrogen receptor modulator; blocks estrogen receptors in brain to increase gonadotropins	Induces ovulation, supports fertility in women with ovulatory dysfunction	**FERTILITY TREATMENT, OVULATION INDUCTION**
LETROZOLE (AROMATASE INHIBITOR)	Blocks aromatase enzyme; decreases estrogen production from androgens	Used for ovulation induction, reduces estrogen in estrogen-responsive cancers	**INFERTILITY MANAGEMENT, HORMONE-DEPENDENT BREAST CANCER**

Summary of Benefits

- Menopause Symptom Management: estrogen and combination therapies alleviate hot flashes, sleep disturbances and vaginal atrophy.
- Osteoporosis Prevention: estrogen, SERMs, and biphosponates protect bone density, reducing fracture risk.
- Cancer Risk Reduction: tamoxifen and raloxifene substantially lower the risk of estrogen receptor-positive breast cancer.
- Fertility & Ovulation: clomiphene and letrozole assist women in achieving ovulation and conception

millers
pharmacy

since 1918

Longevity



Sample **Longevity** Medications

MEDICATION NAME	MECHANISM OF ACTION	MAIN BENEFITS	INDICATIONS
METFORMIN	Activates AMP-activated protein kinase (AMPK); improves insulin sensitivity; reduces mTOR signaling.	Enhances metabolic health, reduces age-related diseases, may extend lifespan	**TYPE 2 DIABETES, METABOLIC SYNDROME, POTENTIAL OFF-LABEL LONGEVITY USES**
RAPAMYCIN (SIROLIMUS)	mTOR inhibitor; suppresses pathways involved in cell growth and aging	Anti-aging effects in animal models; reduces age-related cellular decline	**EXPERIMENTAL POTENTIAL FOR AGE-RELATED DISEASE RISK REDUCTION**
NAD+ PRECURSORS (E.G. NMN, NR)	Boost NAD+ levels; enhance mitochondrial function; activate sirtuins	Improved cellular energy, DNA repair, anti-inflammatory effects, potential lifespan extension	**ANTI-AGING, MITOCHONDRIAL HEALTH, AGE-RELATED DECLINE**
RESVERATROL	Activates SIRT1 (sirtuins); mimics caloric restriction benefits	Anti-inflammatory, improved metabolic health, potential anti-aging effects	**GENERAL HEALTH SUPPORT, ANTI-INFLAMMATORY, MITOCHONDRIAL SUPPORT**
SENOLYTICS (E.G. DASATINIB + QUERCETIN)	Clears senescent cells; reduces cellular dysfunction	Improved tissue function, reduced inflammation, potential lifespan extension	**EXPERIMENTAL, AIMED AT AGE- ASSOCIATED TISSUE DETERIORATION**

Key Advantages of Longevity Medication

- Potential Extension of Healthspan & Lifespan: targeting the biological processes of aging to improve quality and duration of life.
- Reduction of Age-Related Diseases: decreasing incidence of diabetes, cardiovascular disease, neurodegenerative disorders.
- Improved Cellular and Mitochondrial Function: enhancing energy metabolism and DNA repair.
- Reducing Inflammation & Cellular Senescence: addressing root causes of aging and tissue decline.
- Personalized Interventions: combining various agents for multimodal anti-aging strategies under medical supervision.

millers
pharmacy

since 1918

Skin Solutions



Sample **Skin** Medications

MEDICATION NAME	MECHANISM OF ACTION	MAIN BENEFITS	INDICATIONS
RETINOIDS (E.G. TRETINOIN)	Stimulate collagen synthesis, promote cell turnover	Reduce wrinkles, improve texture, treat acne	ANTI-AGING, ACNE TREATMENT
HYALURONIC ACID	Attracts and retains moisture in the skin	Deep hydration, plumps skin, smooths fine lines	MOISTURIZATION, SKIN PLUMPLING
VITAMIN C (ASCORBIC ACID)	Antioxidant; boosts collagen, neutralizes free radicals	Brightens skin, reduces hyperpigmentation, firms skin	ANTI-AGING, SKIN BRIGHTENING
BENZOYL PEROXIDE	Antibacterial; reduces Propionibacterium acnes	Clears acne, reduces inflammation	ACNE TREATMENT
ALPHA HYDROXY ACIDS (AHAS)	Exfoliate dead skin, promote cell renewal	Smooths texture, brightens complexion, reduces fine lines.	SKIN EXFLOATION, ANTI-AGING
NIACIMIDE (VITAMIN B3)	Strenghtens skin barrier, reduces inflammation, regulates oil production	Reduces redness, improves elasticity, controls sebum	ANTI-INFLAMMATORY, ANTI-AGING, ACNE CARE
SALICYLIC ACID	Beta hydroxy acid; exfoliates, penetrates pores to clear blockages	Unclogs pores, treats acne, reduces excess oil	ACNE, ROSACEA TREATMENT
AZELAIC ACID	Antimicrobial and anti-inflammatory; inhibits keratin production	Reduces acne, diminishes redness, improves skin texture	ACNE, ROSACEA TREATMENT

Key Takeaways:

- These skincare agents support skin renewal, improve appearance, and slow aging signs.
- Combining antioxidants, growth factors, and exfoliants can produce synergistic anti-aging effects.
- Use based on individual skin type, concerns, and treatment goals, ideally under professional guidance.

millers
pharmacy

since 1918

Hair Loss



Sample **Hair Loss** Medications

MEDICATION NAME	MECHANISM OF ACTION	MAIN BENEFITS	INDICATIONS
MINOXIDIL	Vasodilator; increases blood flow to hair follicles, prolongs anagen (growth) phase, stimulates follicle size	Promotes hair growth, thickens miniaturized follicles, halts further loss hair loss, promotes regrowth especially in vertex and crown areas	**ANDROGENETIC ALOPECIA (PATTERN BALDNESS) IN MEN AND WOMEN**
FINASTERIDE (PROPECIA)	Combines estrogen and progestin; balances hormones, protects the endometrium from hyperplasia	Slows hair loss, promotes regrowth, especially in vertex and crown areas	**MALE ANDROGENETIC ALOPECIA, OFF-LABEL FOR WOMEN (WITH CAUTION)**
DUTASTERIDE	Dual 5-alpha reductase inhibitor, blocks both type I and II enzymes, more potent DHT reduction	Greater reduction in DHT, potentially more effective in hair loss	**MALE PATTERN BALDNESS, EXPERIMENTAL OFF-LABEL FOR WOMEN**
LOW-LEVEL LASER THERAPY (LLLT)	Uses laser light to stimulate hair follicle activity and increase cellular energy (ATP production)	Promotes hair growth, increases hair density, safe and non-invasive	**ANDROGENETIC ALOPECIA IN MEN AND WOMEN**
PLATELET-RICH PLASMA (PRP)	Autologous plasma rich in growth factors injected into scalp to stimulate follicle regeneration	Improves hair thickness and density, supports follicle health	**ANDROGENETIC ALOPECIA, ALOPECIA AREATA, POST-TRAUMA HAIR LOSS**
SPIRONOLACTONE	Anti-androgen; reduces DHT effects, blocks androgen receptors in scalp	Reduces hair thinning in women with hormonal imbalance	**FEMALE PATTERN HAIR LOSS, HORMONAL-RELATED HAIR THINNING**

Key Benefits of Hair Loss Medications

- Stimulate Hair Growth: promote thickening of miniaturized hairs and activate dormant follicles.
- Slow or Halt Progression: reduce DHT levels or inflammation to prevent further hair loss.
- Enhance Hair Density and thickness: Support healthier, fuller hair appearance.
- Safe and Non-Invasive options: laser therapy and PRP are minimally invasive and suitable for many patients.
- Personalized Approaches: combining medications and therapies tailored to patient needs yields optimal results.

millers
pharmacy

since 1918

Energy and Hydration



Sample **Energy and Hydration** Medications

MEDICATION NAME	MECHANISM OF ACTION	MAIN BENEFITS	INDICATIONS
CAFFEINE	Central nervous system stimulant; blocks adenosine receptors, increasing alertness and reducing fatigue	Boosts energy, improves focus, reduces perception of fatigue	**ENERGY ENHANCEMENT, MENTAL ALERTNESS, ATHLETIC PERFORMANCE**
L-CARNITINE	Facilitates transport of fatty acids into mitochondria for energy production	Supports fat metabolism, improves energy, reduces fatigue	**FATIGUE REDUCTION, ATHLETIC PERFORMANCE, WEIGHT MANAGEMENT**
COENZYME Q10 (COQ10)	Antioxidant; enhances mitochondrial function; involved in cellular energy production	Increases cellular energy. reduces oxidative stress	**FATIGUE, AGING, CARDIOVASCULAR HEALTH**
B VITAMINS (E.G., B12, B6)	Coenzymes in metabolic pathways; facilitate energy. production from macronutrients	Reduces fatigue, supports nerve function, boosts metabolism	**FATIGUE, ENERGY DEFICIENCY, NERVE HEALTH**
ELECTROLYTE SOLUTIONS	Restore electrolyte balance; support nerve and muscle. function	Rehydrate quickly, prevent dehydration, support muscle function	**DEHYDRATION, MUSCLE CRAMPS, POST-EXERCISE RECOVERY**
ADAPTOGENS (E.G., RHODIOLA, ASHWAGANDHA)	Modulate stress response; support adrenal health; improve resilience to fatigue	Reduce stress-related fatigue, enhance stamina, improve mood	**CHRONIC FATIGUE, STRESS MANAGEMENT, ENDURANCE SUPPORT**
HYDRATING SERUMS & MOISTURIZERS	Contain humectants like hyaluronic acid or glycerin, draw water into the skin	Deep hydration, plumpness, improved skin elasticity	**SKIN DEHYDRATION, ANTI-AGING, SKIN BARRIER SUPPORT**

Key Benefits of Energy and Hydration Medications

- Enhanced Physical and Mental Energy: support daily performance, stamina, and alertness.
- Improved Hydration and Skin Health: maintain optimal skin moisture, elasticity, and barrier function.
- Support for Fat Metabolism: aid in weight management and metabolic health.
- Reduce Fatigue and Stress: adaptogens and mitochondrial support mitigate fatigue caused by stress or aging.
- Rapid Rehydration: electrolytes and topical hydrators restore water and mineral balance for overall health and skin vitality.

millers
pharmacy

since 1918

Hormone Replacement Therapy



Sample **Hormone Replacement Therapy** Medications

MEDICATION NAME	MECHANISM OF ACTION	MAIN BENEFITS	INDICATIONS
ESTRADIOL (E2)	Binds to estrogen receptors; mimics natural estrogen	Relieves menopausal hot flashes, improves bone density	**MENOPAUSE SYMPTOM RELIEF, OSTEOPOROSIS PREVENTION**
MEDROXYPRO-GESTERONE ACETATE	Binds to progesterone receptors; supports endometrial health	Protects against endometrial hyperplasia; supports pregnancy	**COMBINED HORMONE THERAPY FOR WOMEN WITH A UTERUS**
TESTOSTERONE (TOPICAL GELS, PATCHES)	Binds to androgen receptors; promotes male characteristics	Boosts libido, energy, muscle mass, mood	**MALE HYPOGONADISM, AGE-RELATED LOW T**
DHEA (DEHYDROEPIAN-DROSTERONE)	Precursors to androgens and estrogens; converted in tissues	May improve vitality, mood, and libido	**ADRENAL DECLINE, AGING**
LEVOTHYROXINE (T4)	Replaces deficient thyroid hormone; converts to T3 in tissues	Restores metabolic rate, energy. alleviates hypothyroid symptoms	**HYPOTHYROIDISM**

Key Benefits of Hormone Replacement Therapy:

- Relief of Menopausal and Andropausal Symptoms: significantly reduces hot flashes, night sweats, mood swings, and sleep disturbances.
- Improved Bone Density and Reduced Osteoporosis Risk: helps maintain bone strength, decreasing fractures in osteoporosis-prone individuals.
- Enhanced Libido and Sexual Function: restores sexual desire, improves libido, and reduces sexual dysfunction.
- Mood and Cognitive Enhancement: alleviates depression, improves mood stability, and may support cognitive function.
- Overall Quality of Life and Well-being: increases energy levels, improves skin elasticity, and promotes a sense of vitality and youthfulness.

millers
pharmacy

since 1918

Mental Health



Sample **Mental Health** Medications

MEDICATION NAME	MECHANISM OF ACTION	MAIN BENEFITS	INDICATIONS
SELECTIVE SEROTONIN REUPTAKE INHIBITORS (SSRIS) (E.G., SERTRALINE, FLUOXETINE)	Inhibit serotonin reuptake in the brain, increasing serotonergic activity	Reduce depression, anxiety, improve mood and sleep	**MAJOR DEPRESSION, ANXIETY DISORDERS, OCD**
SEROTONIN-NOREPINEPHRINE REUPTAKE INHIBITORS (SNRIS) (E.G., VENLAFAXINE, DULOXETINE)	Block reuptake of serotonin and norepinephrine, boosting their levels	Alleviate depression, anxiety; help with pain syndromes	**DEPRESSION, ANXIETY, NEUROPATHIC PAIN**
ATYPICAL ANTIPSYCHOTICS (E.G., RISPERIDONE, QUETIAPINE)	Block dopamine and serotonin receptors; modulate neurotransmission	Reduce psychosis, mania, agitation; improve mood stability	**SCHIZOPHRENIA, BIPOLAR DISORDER, SEVERE DEPRESSION WITH PSYCHOSIS**
MOOD STABILIZERS (E.G., LITHIUM, VALPROATE)	Modulate neurotransmission; regulate mood circuits (exact mechanisms vary)	Prevent mood swings, stabilize episodes in bipolar disorder	**BIPOLAR DISORDER, MOOD CYCLING PREVENTION**
BENZODIAZEPINES (E.G., DIAZEPAM, LORAZEPAM)	Enhance GABA-A receptor activity, increasing inhibitory neurotransmission	Rapid relief of acute anxiety and panic attacks	**ANXIETY, PANIC DISORDER (SHORT-TERM USE, CAUTION WITH DEPENDENCE)**

Note

These medications target neurotransmitter imbalances to reduce symptoms of depression, anxiety, psychosis, and mood swings. They improve daily functioning, mood stability, and quality of life. Always individualize treatment plans, monitor for side effects, and adjust dosages accordingly.

millers
pharmacy

since 1918

Veterinary



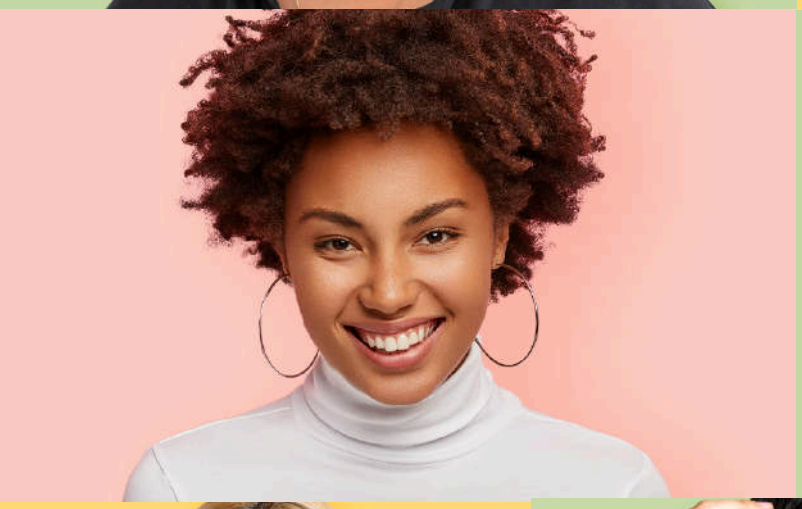
Sample **Veterinary** Medications

MEDICATION NAME	MECHANISM OF ACTION	MAIN BENEFITS	INDICATIONS
PALATABLE FLAVORED ANTIBIOTICS	Specific antibiotic agents tailored with flavor enhancers for animal acceptance	Easy administration, improved compliance, effective infection control	**BACTERIAL INFECTIONS IN CATS AND DOGS**
CUSTOM HORMONE THERAPIES (E.G., TESTOSTERONE, ESTROGEN)	Precise dosing, tailored to animal size and condition	Balanced hormonal support, improved reproductive or behavioral health	**HORMONE DEFICIENCIES, REPRODUCTIVE ISSUES**
TOPICAL ANTI-INFLAMMATORY GELS	NSAIDs or corticosteroids compounded into skin/applicator-friendly formulations	Targeted relief with reduced systemic absorption	**DERMATITIS, JOINT INFLAMMATION, SKIN CONDITIONS**
ORAL PAIN MANAGEMENT SYRUPS	Flexible dosing of NSAIDs, opioids, or multi-ingredient analgesics	Improved palatability, easier dosing for pain management	**POST-SURGICAL PAIN, ARTHRITIS, CHRONIC PAIN**
ANTIFUNGAL AND ANTIBACTERIAL SPRAYS OR POWDERS	Customized concentrations, formulations for topical application	Precise treatment, enhanced adherence, better topical absorption	**FUNGAL INFECTIONS, SKIN WOUNDS, DERMATITIS**

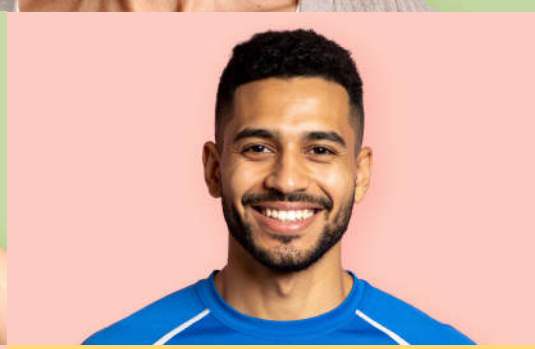
Summary

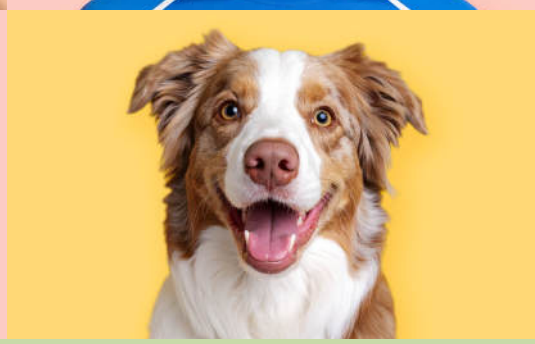
Veterinary compounded medications enable personalized treatment, improving compliance and outcomes by tailoring formulations to each animal's needs. They enhance administration ease, optimize dosing accuracy, and expand therapeutic options-particularly when commercial solutions are unavailable or unsuitable. Always collaborate with licensed compounding pharmacies to ensure safety, quality, and efficacy.









millers
pharmacy

since 1918

Thank you.

CONTACT:
Baruch Halpern, CEO
(786) 288-1919
bhalpern@MillersPharmacy.com