2ND EDITION

BioInformatics

A HEALTHCARE MAGAZINE OF BIOPHAR LIFESCIENCES

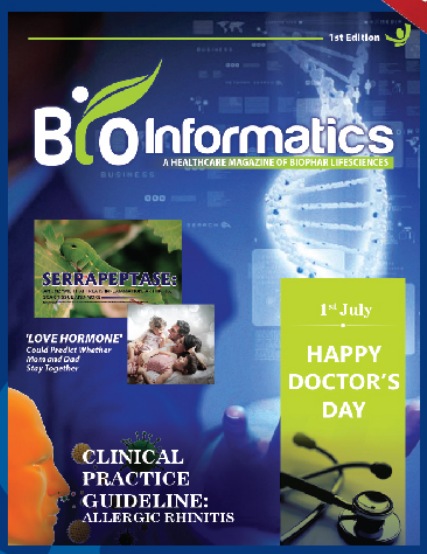
FRONTLINE HEALERS

IN TIMES OF WAR- A SALUTE TO THE SILENT WARRIORS

Bravery is not just **"gut instinct"**- it's chemical courage, fueled by:

- Adrenaline
- Cortisol
- Dopamine
- Testosterone
- Oxytocin and Endorphins

1st JULY 2025
NATIONAL DOCTORS DAY



Carrying Forward the Legacy – **Biophar Magazine, 2nd Edition**

As we celebrate another Doctors' Day, we are proud to present the **2nd edition of Biophar Magazine**—a continuation of the journey we began. Building on the foundation laid in our inaugural edition, this issue further deepens our tribute to the healing hands and compassionate hearts that define the medical profession. With fresh stories and renewed insights, we remain committed to honoring the unwavering dedication of doctors across the nation. Here's to continuity, growth, and the ongoing celebration of those who make health their mission.

PAGE 1

When the nation called, over **1,200 MILITARY AND CIVILIAN DOCTORS** stepped forward-mobilized within just **48 HOURS** during the India-Pak conflict of **MAY 2025.**

NOT WITH WEAPONS,
BUT WITH HEALING HANDS.
NOT SEEKING GLORY,
BUT TO SERVE IN SILENCE.

Today, on **Doctors' Day**, we don't just say thank you-
We stand in awe of your sacrifice, your strength and your unwavering spirit

YOU ARE MORE THAN CAREGIVERS.
YOU ARE THE GUARDIANS OF HUMANITY.

BIOPHAR

BIOPHAR LIFESCIENCES PVT. LTD.

ABOUT US :

Biophar Lifesciences Pvt. Ltd is a **WHO** and **ISO 9001 Certified** pharmaceutical company established under the visionary leadership of **Mr. Gulshan Rawat (Managing Director),** who brings with him extensive experience and deep insight into the pharmaceutical industry. His commitment to quality and strategic direction has helped position Biophar as one of India's most trusted pharmaceutical brands.

Biophar's product portfolio spans a wide range of key therapeutic areas, including **Anti-infectives, Nutritional Supplements, Gastrointestinal, Pain Management, Cardiovascular & Diabetes, Dermatology, Urology, and Central Nervous System (CNS)** care—with a strong emphasis on clinically relevant, quality-driven solutions.

Biophar is committed to establish strategic partnerships with **world-class pharmaceutical manufacturing units** that hold **WHO-GMP and USFDA** approvals. We actively seek collaborations with manufacturers who consistently uphold the highest standards of quality, regulatory compliance, and operational excellence, and who serve as trusted partners to leading global pharmaceutical brands. Our vision is to ensure the availability of premium, reliable, and globally benchmarked healthcare products for our customers, reinforcing our dedication to **quality, innovation, and patient well-being.**

MR. GULSHAN RAWAT
(MANAGING DIRECTOR)

VISION

To be a globally respected pharmaceutical company, recognized for trusted therapies, continuous innovation, and unwavering commitment to patient well-being. At Biophar, we envision a healthier world through accessible healthcare solutions and sustainable growth.

MISSION

To improve patient lives by delivering high-quality, affordable, and innovative pharmaceutical products. We are committed to ethical practices, scientific excellence, and building enduring partnerships that advance healthcare in India and globally.

COMPANY PROFILE

Biophar Lifesciences Pvt. Ltd. is a leading manufacturer and marketer of a wide range of pharmaceutical formulations, known for its commitment to quality, affordability, and innovation. We specialize in the manufacturing, export, and supply of a diverse portfolio, including:

- IINJECTABLES, TABLETS, CAPSULES, SOFTGEL CAPSULES
- ORAL LIQUIDS (SYRUPS & SUSPENSIONS), DRY SYRUPS
- EXTERNAL LIQUIDS, OINTMENTS, CREAMS, POWDERS
- BETA-LACTAM PRODUCTS, NUTRACEUTICALS, SOAPS, SHAMPOOS
- EYE DROPS, EAR DROPS, ORAL SACHETS & POWDERS

Driven by our motto - quality formulations affordable to the Indian masses with global standards — Biophar has rapidly expanded across India through a robust network of distributors, agents, and franchise partners.

Our continued focus is to strengthen our presence in unrepresented regions by appointing new PCD franchisees, distributors, and partners on a monopoly basis, ensuring wider access to effective healthcare solutions.

TRUSTED SUPPLIER

The fundamental principle of Biophar Lifesciences Pvt.Ltd. is “QUALITY”. We stick to the set standards of quality that help us to endow high quality products to several reputed hospitals like

- ✓ SIR GANGA RAM HOSPITAL, NEW DELHI
- ✓ FORTIS HEALTHCARE
- ✓ APOLLO HOSPITALS
- ✓ PGIMER

CERTIFICATIONS & AWARDS

Catalogue of 1500+
High Quality Products

Associated with Top Quality Manufacturers Like:-

AKUMS · UNIMARCK · biodeal Pharmaceuticals · HETERO · Ravenbhel Healthcare Pvt. Ltd. · SYNOKEM

DIVISION OF BIOPHAR

RECH ELIST PHARMA (A Subsidiary of BLS) · MEDIFLOWER (A Division of Biophar Group) · BIOCADMEH CARDIAC & DIABETIC DIVISION · RESPICARD · BioBox PHARMA

Introducing
VONOREF-20
by BIOPHAR GROUP

Vonoprazan 20 mg | Manufactured by HETERO

Biophar Group — a trusted name across India's pharmaceutical landscape — proudly launches VONOREF 20, a next-generation acid suppressant designed for rapid and reliable relief. Backed by HETERO's world-class manufacturing facility, VONOREF 20 ensures premium quality with superior efficacy

Why Choose VONOREF 20?

1. **Next-Gen Acid Suppression:** Fast-acting relief for GERD, ulcers, and acid-related disorders.
2. **Backed by Science:** Clinically proven effectiveness with superior acid control.
3. **Trusted Global Manufacturing:** Manufactured by HETERO, ensuring superior quality with consistency.

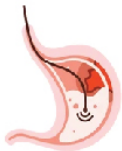
VONOREF 20- Fast. Reliable. Backed by Science.

Key Studies Supporting Vonoprazan's Benefits

1

RAPID AND EFFECTIVE ACID SUPPRESSION

A 2016 randomized clinical trial published in Gut demonstrated that Vonoprazan significantly increased intragastric pH faster than esomeprazole (a PPI), showing potent acid suppression from the first dose (Ashida et al., 2016).



2

SUPERIOR HEALING OF EROSIVE ESOPHAGITIS

A multicenter, double-blind study in The American Journal of Gastroenterology found that Vonoprazan achieved higher healing rates for erosive esophagitis after 8 weeks of treatment compared to lansoprazole (Kumagai et al., 2017).

3

ENHANCED H. PYLORI ERADICATION RATES

A 2019 meta-analysis in Alimentary Pharmacology & Therapeutics reported that Vonoprazan-based triple therapy improved H. pylori eradication rates by 10–15% compared to standard PPI therapies, especially in regions with high antibiotic resistance (Murakami et al., 2019).

VONOPRAZAN OFFERS:

FASTER SYMPTOM RELIEF

MORE RELIABLE ACID CONTROL

IMPROVED TREATMENT SUCCESS

ESPECIALLY FOR PATIENTS WHO RESPOND POORLY TO TRADITIONAL PPIS.

Vonoprazan:

The Next-Generation Acid Suppressant Revolutionizing Gastrointestinal Care

When it comes to managing acid-related gastrointestinal disorders like gastroesophageal reflux disease (GERD) and peptic ulcers, proton pump inhibitors (PPIs) have been the go-to treatment for decades. However, the medical community has been buzzing about a newer, more potent alternative: Vonoprazan.

Vonoprazan belongs to a novel class of drugs (potassium- competitive acid blocker (P-CAB), that inhibit gastric acid secretion more rapidly and sustainably than traditional PPIs. Unlike PPIs, which require activation in an acidic environment and have a slower onset, Vonoprazan works by competitively blocking the potassium binding site of the gastric proton pump, providing almost immediate and consistent acid suppression.

THE SILENT HEART:

How Stress Is Stealing Our Heart Health

1. STRESS CAN TRIGGER A HEART ATTACK : Literally Acute emotional stress can cause a sudden surge in hormones like adrenaline and cortisol, which temporarily increase blood pressure and heart rate - and in some cases, trigger heart attacks, especially in people with underlying heart disease.

2. BROKEN HEART SYNDROME IS REAL: Known medically as Takotsubo cardiomyopathy, this condition mimics a heart attack and is often triggered by intense emotional distress-like grief or shock. It's more common in women and can cause temporary heart failure.

3. CHRONIC STRESS RAISES LONG-TERM HEART RISKS: Chronic stress increases levels of inflammation in the body -a key factor in the development of atherosclerosis (narrowing of the arteries). According to the American Heart Association, people under long-term stress are **40-60%** more likely to develop cardiovascular disease.

4. CORTISOL: The Stress Hormone That Wears Down the Heart Long-term exposure to high levels of cortisol can lead to increased cholesterol, blood sugar, and blood pressure - a triple threat for heart health.

5. SLEEP DISRUPTION IS A HIDDEN CULPRIT: Stress often leads to poor sleep-and poor sleep increases your risk of hypertension and irregular heart rhythms. Just 3 nights of 4-hour sleep can significantly raise inflammatory markers linked to heart disease.

6. WORK STRESS IS A HEARTBREAKER: Studies show that people with high job strain (high demands and low control) have a 23% greater risk of heart attack compared to those with less stressful jobs.

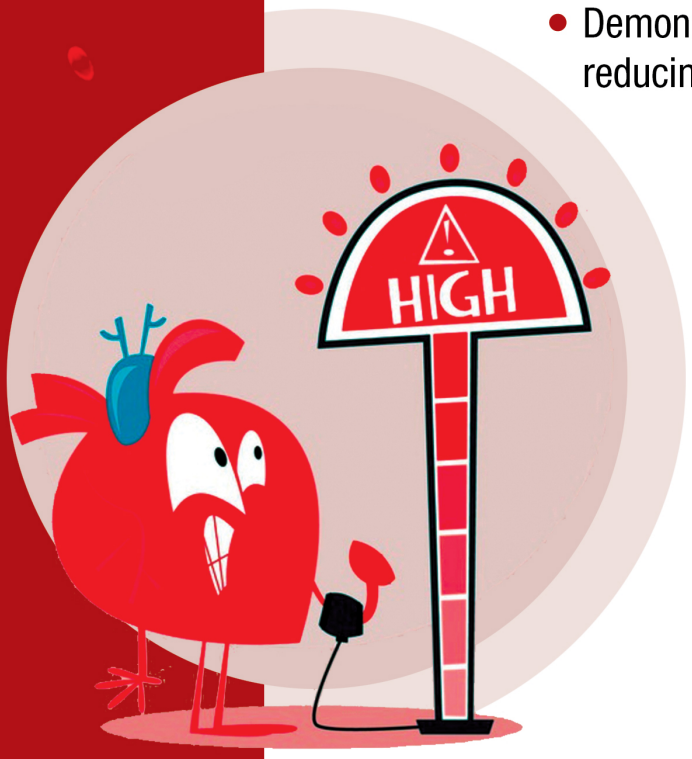
7. LONELINESS IS AS RISKY AS SMOKING: Chronic emotional stress from loneliness or social isolation can be as harmful to the heart as smoking **15 cigarettes** a day, according to research from Brigham Young University.

Bisowalk-5

Bisoprolol Fumarate 5mg HEART SHAPE TABLETS

Steady Protection in Every Dose...

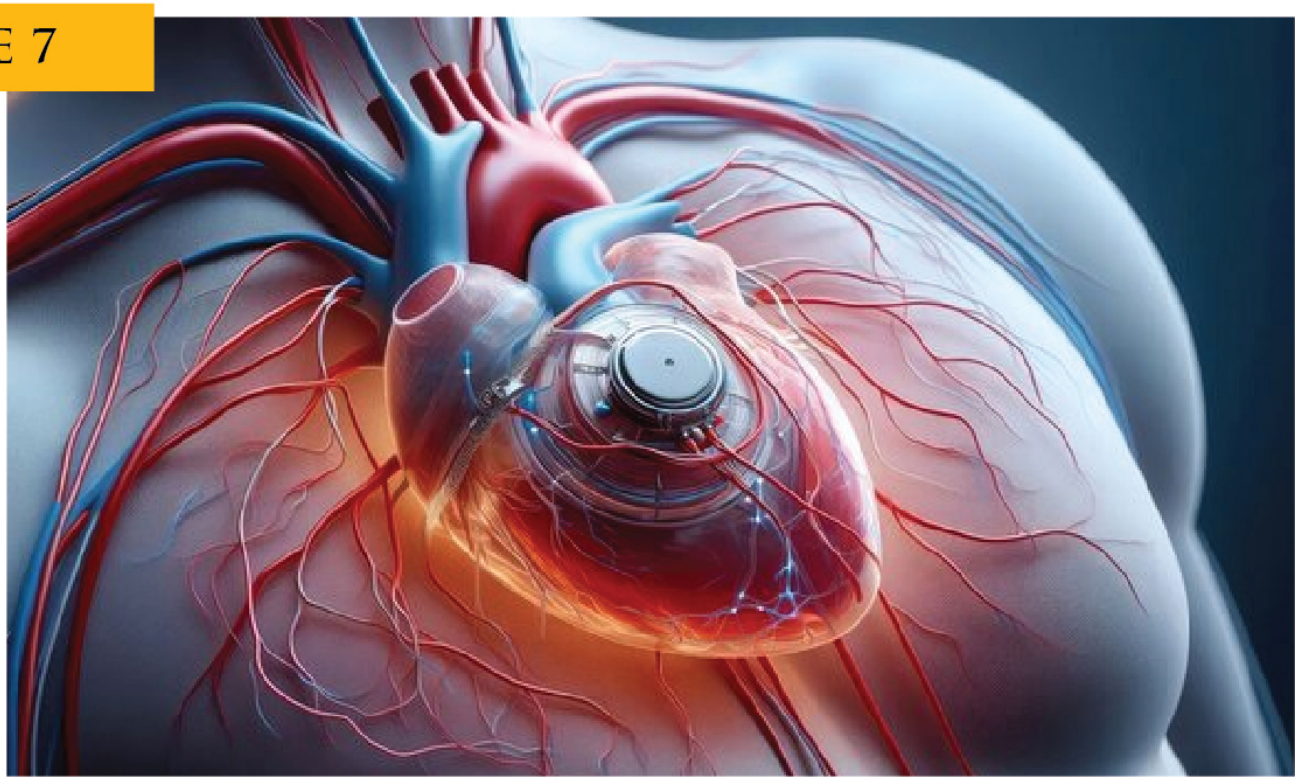
- Potent, highly selective beta-1 adrenergic blocker[1]
- Increases left ventricular function and reduces heart rate[1]
- Strong recovery effect on myocardial systolic and diastolic function[2]
- Demonstrates beneficial effects by reducing mortality and morbidity rates[1]



FOR THE MANAGEMENT OF:

Essential Hypertension

1.Drugs. 2002;62(18):2677-96.
2. Comput Math Methods Med. 2022; 2022: 3098726.



Understanding the Evolution of Pacemakers

For the earliest recipients of pacemakers back in the **1950s,** they were heavy boxes strapped to their bodies, which helped their hearts keep beating. This was the reality of cardiac pacemaker, which were newly invented during the **mid-19th century.** They were futuristic, but at the same time, they were bulky.

THE INTRODUCTION OF PACEMAKERS

The story of the cardiac pacemaker in the form we know it today started around **100 years** ago, in 1928, when it was developed in Australia and America separately. However, it took another series of experiments and advancements for scientists across the globe to develop the first external pacemaker in the **1950s. In 1958,** a patient named Arne Larrson became the first patient in the world to receive a pacemaker, which was successfully implanted by a team of Swedish doctors. This pacemaker was completely hand-made, and it was powered by nickel-cadmium batteries, with the mold to produce it being based on a shoe polish can. The patient was required to power this pacemaker by charging it through an externally-plugged source, which required him to stay at a place for around **12 hours at least once a week**. Though it might seem very primitive and even scary today, this device was the first breakthrough that led to the beginning of implantable pacemakers, and made humans realise the life-lenghthening potential of this technology. The patient who received the first pacemaker implant lived on for the next 43 years, receiving more than **22 units** and multiple surgical interventions.

Journey to
HEALTHIER HEART STARTS
with...

NUTOVA 40

Atorvastatin 40mg TABLETS

- First-line lipid-lowering therapy in patients at risk of CHD[1]
- Reduces levels of total cholesterol and triglyceride[1]
- Produces greater reductions in total cholesterol than lovastatin[1]

IN MANAGEMENT OF:

Hyperlipidemia
Hyperlipidemia & Mixed Dyslipidemia
Homozygous Familial Hypercholesterolemia
Prevention of Cardiovascular Disease
Concomitant Lipid-lowering Therapy

NUTOVA 10/20

Atorvastatin Calcium 10, 20mg TABLETS

NUTOVA-F

Atorvastatin 10mg + Fenofibrate 160mg TABLETS

1.Malhotra, H.S., Goa, K.L. Atorvastatin. Drugs 61, 1835–1881 (2001).

The 4 Love & Happiness Hormones

1. DOPAMINE-
The Reward Hormone

WHAT IT DOES: Gives you pleasure, motivation, and the "feel-good" sensation when you accomplish something.

TRIGGERED BY:

Achieving goals | Praise and recognition
Eating chocolate | Listening to music

BYTE QUOTE:
Dopamine is your brain's way of giving you a high-five.

2. OXYTOCIN
The Love Hormone

WHAT IT DOES: Promotes bonding, trust, empathy, and affection.

TRIGGERED BY:

Hugs & cuddles | Holding hands
Eye contact | Petting animals

BYTE QUOTE:
Oxytocin is the warm fuzzy you feel in a bear hug or puppy cuddle.

3. SEROTONIN-
The Mood Stabilizer

WHAT IT DOES: Regulates mood, sleep, appetite, and overall sense of well-being

TRIGGERED BY:

Sunlight | Nature walks
Gratitude | Meditation

BYTE QUOTE:
Serotonin is your inner sunshine, even on cloudy days.

4. ENDORPHINS-
The Painkillers

WHAT IT DOES: Reduces pain, boosts pleasure, and creates that **"runner's high."**

TRIGGERED BY:

Exercise | Laughter
Spicy food | Dancing

BYTE QUOTE:
Endorphins are your body's built-in morphine-minus the prescription.

A MULTICENTER, OPEN-LABEL study of the efficacy and safety of telmisartan in mild to moderate HYPERTENSIVE PATIENTS

Arq. Bras. Cardiol. 79 (4) · Oct 2002

ABSTRACT

OBJECTIVE: To evaluate the efficacy and tolerability of telmisartan, given once a day to patients with mild to moderate hypertension, as well as to assess the 24-hour blood pressure profile with ABPM.

METHODS: Initially, 163 patients over 18 were selected, regardless of sex, with blood pressure levels >140/90mmHg at visit 1, which was confirmed at visit 2. One hundred thirty-four patients completed the study. After a 4-week placebo run-in phase, telmisartan 40mg/daily was given for 6 weeks. In those patients whose blood pressure (BP) levels were lower than 140/90mmHg, the same dosage was kept for an additional period of 6 weeks. For those who had BP higher than 140/90mmHg, the dosage was increased to 80mg/daily. Sixty-two patients were included in a subgroup that underwent ABPM 3 different times during the study.

RESULTS: In the overall group, blood pressure reduction ranged from 162.3±14.5/101.3±5.75 mmHg (baseline) to 147.3±20.1/90.8±10.9 mmHg (week 12) ($p<0.05$). Mean blood pressure decreases were 14.4mmHg for systolic BP and 10.3mmHg for diastolic BP, after 12 weeks of active treatment. A subanalysis showed that 47 (35%) patients took telmisartan 40mg throughout the study and 81 (65%) had the dosage increased to 80mg daily. Using ABPM, an 8-mmHg reduction in systolic BP as well as a 5-mmHg reduction in diastolic BP were observed, when compared with baseline values in the final 6 hours (18-24 hours after the last dose of study medication).

CONCLUSION: Our results confirm that telmisartan given once a day is effective in reducing blood pressure levels in mild to moderate hypertensive patients. This reduction occurs in a sustained and gradual manner during a 24-hour period confirmed by ABPM

BRING A CONTROL OVER

HIGH BLOOD PRESSURE...

TELWALK-AZ

Telmisartan 40mg + Azelnidipine 8mg

TABLETS

TELWALK 40/12.5-CH

Telmisartan 40mg + Chlorthalidone 12.5mg

TABLETS

TELWALK-BS

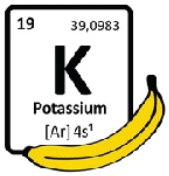
Telmisartan 40mg + Bisoprolol 5mg

TABLETS

SCIENCE CURIOUS CORNER

Where curiosity meets discovery

Did You Know?



BANANAS ARE RADIOACTIVE.

They contain potassium-40, a naturally occurring isotope that emits radiation. Don't worry—it's completely safe!

OCTOPUSES HAVE THREE HEARTS.

Two pump blood to the gills, and one pumps it to the rest of the body. And their blood is blue!

YOUR BODY GLOWS IN THE DARK.

Humans emit a very faint glow, 1,000 times weaker than our eyes can see. It's caused by biochemical reactions inside us!

THE EIFFEL TOWER GROWS IN SUMMER.

Due to thermal expansion, it can grow more than 15 cm (6 inches) taller when it's hot

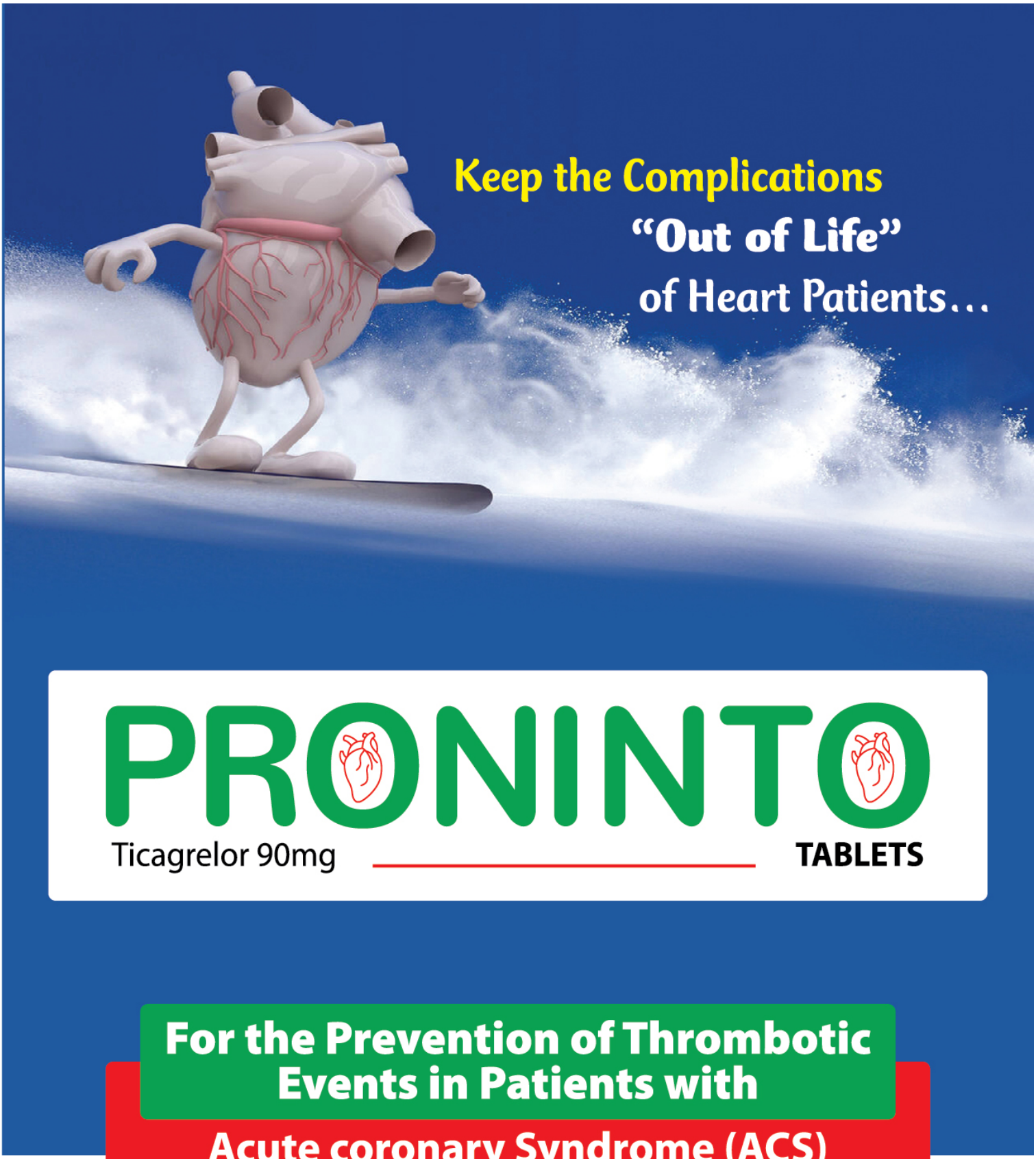
Did You Ever Wonder...?

1 Q: WHY IS THE SKY BLUE?

A: Because blue light from the sun scatters more in the atmosphere than other colors due to its shorter wavelength.

2 Q:CAN SOUND TRAVEL IN SPACE?

A: Nope! Space is a vacuum-no molecules, no sound. That's why sci-fi space battles are silent in real life.



PRONINTO

Ticagrelor 90mg

TABLETS

For the Prevention of Thrombotic Events in Patients with

Acute coronary Syndrome (ACS)

Myocardial infarction

GET UPDATED, GET SMART

Because knowledge isn't power—it's superpower.

1

ALICE Experiment at CERN Converts Lead into Gold:
On May 8, the ALICE experiment at CERN achieved a remarkable feat by detecting the conversion of lead into gold. This breakthrough could have profound implications for our understanding of nuclear physics and the processes occurring in high-energy environments.

World Meteorological Organization Warns of 2°C Warming by 2030:
A recent report from the World Meteorological Organization (WMO) signals mounting urgency over global climate change, projecting that the world is on track to experience nearly 2°C of warming above pre-industrial levels by 2030. This could lead to extreme temperatures, declining sea ice, and more frequent heat waves, posing severe risks to ecosystems and infrastructure.

2

3

Vitamin D Supplements Show Signs of Protection Against Biological Aging:
A major clinical trial published on May 21 reveals that vitamin D supplements can reduce biological aging by preserving telomeres, potentially adding three years to lifespan. This finding could have significant implications for aging research and public health.

New Gonorrhoea Vaccine Launched in the UK:
On May 21, NHS England launched the world's first gonorrhoea vaccine, with an efficacy of 30–40%. This development marks a significant step forward in combating antibiotic-resistant infections.

4

A Step Ahead in the Prevention of

HEART FAILURE...

SCUVALK-100

Sacubitril 49mg + Valsartan 51mg

TABLETS

FOR TREATMENT OF SYMPTOMATIC CHRONIC HEART FAILURE WITH REDUCED EJECTION FRACTION

RIDDLE ME THIS

THE DIABETES EDITION

1. I'M NOT SWEET, THOUGH SUGAR'S MY GAME,
Too Much Of Me, And Life's Not The Same.
Check Me Daily, Keep Me In Range-Ignore Me, And Things Can Get Strange.
WHAT AM I?
_____

2. I'MA LITTLE DEVICE YOU CARRY WITH CARE,
I check your sugar with just a small tear.
Stick your finger, give me a drop,I'll show the number right on top.
WHAT AM I?
_____

3. THOUGH I'M NOT ALIVE, I KNOW WHAT TO DO—
Delivering doses just right for you.
I mimic your pancreas day and night,
Helping your sugars stay just right.
WHAT AM I?
_____

4. A SHOT OR A PEN, I GO UNDER THE SKIN,
I HELP THE GLUCOSE BATTLE TO WIN.
I'M WHAT THE BODY LACKS IN KIND,
SO I GIVE A BOOST TO KEEP YOU FINE.
WHAT AM I?
_____

5. I'M NEW IN 2025, TAKEN AS A PILL,
I help with sugar and weight loss skill.
No needle needed, just once a day,
I help type 2 in a smarter way.
WHAT AM I?
_____

6. I'M A QUIET HELPER THAT STICKS TO YOUR SKIN,
READING YOUR SUGARS AGAIN AND AGAIN.
YOU SCAN OR SYNC TO GET THE CLUE—
WHEN TO EAT, AND WHAT TO DO.
WHAT AM I?
_____

Answers: 1. Blood sugar (Glucose) 2. Glucometer 3.Insulin pump
4.Insulin 5.Orforglipron 6.CGM (Continuous Glucose Monitor)

*For **Sugar Management** that Goes Beyond...*

Emprace 10

Empagliflozin 10mg **TABLETS**

Emprace 25

Empagliflozin 25mg **TABLETS**

Emprace L 10/5

Empagliflozin 10mg + Linagliptin 5mg **TABLETS**

Emprace M 12.5/850

Empagliflozin 12.5mg +
Metformin 500, 850, 1000mg

TABLETS

TYPE 2 DIABETES MELLITUS

HEART FAILURE

CHRONIC KIDNEY DISEASE

COMBINATION OF EMPAGLIFLOZIN AND LINAGLIPTIN AS SECOND-LINE THERAPY

in Subjects With **Type 2 Diabetes** Inadequately Controlled on **Metformin**

Diabetes Care Publish Ahead of Print, published online January 12, 2015

OBJECTIVE: To Evaluate The Efficacy And Safety Of Combinations Of Empagliflozin/linagliptin As Second-line Therapy In Subjects With Type 2 Diabetes Inadequately Controlled On Metformin.

RESEARCH DESIGN AND METHODS: Subjects Were Randomized To A Combination Of Empagliflozin 25 Mg/linagliptin 5 Mg (N = 137), Empagliflozin 10 Mg/linagliptin 5 Mg (N = 136), Empagliflozin 25 Mg (N = 141), Empagliflozin 10 Mg (N = 140), Or Linagliptin 5 Mg (N = 132) As Add-on To Metformin For 52 Weeks. The Primary End Point Was Change From Baseline In Hba1c At Week 24.

RESULTS: At Week 24, Reductions In Hba1c (Mean Baseline 7.90–8.02% [62.8–64.1 Mmol/mol]) With Empagliflozin/linagliptin Were Superior To Those With Empagliflozin Or Linagliptin Alone As Add-on To Metformin; Adjusted Mean (Se) Changes From Baseline Were 21.19% (0.06) (213.1 Mmol/mol [0.7]) With Empagliflozin 25 Mg/linagliptin 5 Mg, 21.08% (0.06) (211.8 Mmol/mol [0.7]) With Empagliflozin 10 Mg/linagliptin 5 Mg, 20.62% (0.06) (26.8 Mmol/mol [0.7]) With Empagliflozin 25 Mg, 20.66% (0.06) (27.2 Mmol/mol [0.7]) With Empagliflozin 10 Mg, And 20.70% (0.06) (27.6 Mmol/mol [0.7]) With Linagliptin 5 Mg ($P < 0.001$ For All Comparisons). In These Groups, Respectively, 61.8, 57.8, 32.6, 28.0, And 36.1% Of Subjects With Baseline Hba1c ‡7% (‡53 Mmol/mol) Had Hba1c <7% (<53 Mmol/mol) At Week 24. Efficacy Was Maintained At Week 52. The Proportion Of Subjects With Adverse Events (Aes) Over 52 Weeks Was Similar Across Treatment Arms (68.6–73.0%), With No Hypoglycemic Aes Requiring Assistance.

CONCLUSIONS:
Combinations Of Empagliflozin/linagliptin As Second-line Therapy For 52 Weeks Significantly Reduced Hba1c Compared With The Individual Components And Were Well Tolerated.

Tech VS Type

Type 1: 2025's Smartest **DEVICES FOR DIABETES**

FEATURE FORMAT: Like a gadget review column
Compare latest tools:

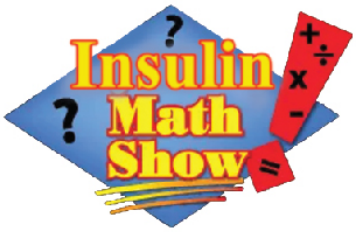
- **AI insulin** delivery systems
- **Smart** CGMs
- **Health** wearables
- Personalized **meal planners**
- App-controlled **insulin pens**

RATE THEM:

- INNOVATION
- EASE OF USE
- TIME-SAVING
- AFFORDABILITY

BRAIN TEASERS

"SWEET PUZZLES WITH A TWIST"



1. INSULIN MATH MYSTERY

Ravi takes 1 unit of insulin for every 10g of carbs.

He plans to eat:

2 slices of bread (15g carbs each) ■ 1 apple (20g carbs) ■ 1 cup of milk (12g carbs)

How many units of insulin does he need for the meal?

2. DIABETES ACRONYM DECODER

Unscramble the diabetes-related acronyms:

CGM – M_____

T1D – _ _ _ _ _ 1 _____

A1C – _____ C_____

GLP-1 – G_____-L_____ P_____-1

3. FIND THE FALSE FACT

Which of these statements is false?

A) Continuous Glucose Monitors give real-time blood sugar data

B) Type 1 diabetes is preventable

C) Orforglipron is a 2025 oral diabetes drug

D) Exercise can help manage type 2 diabetes

ANSWERS: CGM – Continuous Glucose Monitor T1D – Type 1 Diabetes
A1C – Hemoglobin A1C GLP-1 – Glucagon-Like Peptide-1

UPDATES FROM THE 2025 AMERICAN DIABETES

Association guidelines on standards of medical care in diabetes

Updates from the 2025 American Diabetes Association guidelines on standards of medical care in diabetes. Explor Endocr Metab Dis. 2025;2:101428

INTRODUCTION

Diabetes mellitus is a major risk factor for both cardiovascular and chronic kidney disease (CKD) while CKD is also associated with cardiovascular morbidity. In fact, cardiovascular disease is the leading cause of death in patients with diabetes mainly from heart failure or myocardial infarction. The newer therapeutic agents in diabetes have positive impact on both cardiovascular and renal outcomes. Thus, the American Diabetes Association (ADA)'s annual update on the Standards of Medical Care in Diabetes is an important resource for all caregivers involved in diabetes management as it incorporates the latest scientific research, clinical evidence, and emerging technologies in diabetes management. The 2025 guidelines present significant updates that reflect a deeper understanding of diabetes management, emphasizing expanded usage of technologies such as continuous glucose monitoring, personalized pharmacological approaches, and lifestyle interventions.

Diabetes continues to pose a significant global health burden, affecting millions of individuals worldwide. The International Diabetes Federation estimated that there were 537 million people with diabetes mellitus (DM) globally in 2021 and projects this disease to increase to 643 million by 2030 and 783 million by 2045 [1]. Caring for patients with diabetes requires addressing many issues, particularly cardiovascular and renal, besides glycemic control. Recent guidelines for the management of cardiovascular disease (CVD) in diabetes and diabetes management in chronic kidney disease (CKD) are available from specialty experts [2, 3]. The American Association of Clinical Endocrinology has also published a recent consensus statement on the comprehensive management of type 2 DM (T2DM) [4]. The prevalence of diabetes is rising and so, effective, evidence-based strategies for diagnosis, monitoring, and management are needed.

TREATMENT RECOMMENDATIONS

The 2025 guidelines emphasize greater usage of combination therapies, particularly in patients with earlystage T2DM, as opposed to the stepwise treatment strategy advocated in 2024. While the 2024 guidelines already recommended glucagon-like peptide-1 receptor agonists (GLP-1 RAs) for weight loss due to their proven efficacy in reducing body weight and improving glycemic control, the 2025 update broadens their scope of use for their multifaceted benefits in diabetes management, including weight loss, kidney disease, and metabolic dysfunction-associated steatotic liver disease (MASLD)/metabolic-associated steatohepatitis (MASH) [11, 12]. The 2025 guidelines mention the dual receptor agonist of glucose-dependent insulinotropic polypeptide (GIP) and GLP-1 that has been approved for T2DM and obesity management [13, 14]. Additionally, the guidelines underscore the renal-protective effects of GLP-1 RAs, particularly in slowing the progression of diabetic kidney disease [15]. New evidence highlights the potential of GLP-1 RAs in managing MASLD/MASH, conditions that are increasingly prevalent among individuals with T2DM, by reducing hepatic inflammation and improving metabolic parameters [11]. Notably, the 2025 guidelines also introduce the combination of GLP-1 RAs with pioglitazone, emphasizing their synergistic effects in enhancing insulin sensitivity, reducing liver fat, and improving overall metabolic outcomes [16]. Also highlighted is the use of resmetirom, a recently FDA-approved thyroid hormone receptor-β agonist, for moderate and advanced MASLD [16]. Given the increased incidence of heart failure (HF) in patients with diabetes, the 2025 ADA Standards of Care recommend using GLP-1 RAs in individuals with T2DM, obesity, and symptomatic HF with preserved ejection fraction (HFpEF). While sodium-glucose cotransporter 2 (SGLT2) inhibitors remain the first-line therapy for HF in diabetes, GLP-1 RAs are now recognized as complementary agents that can be prescribed concomitantly

Supported by cardiovascular outcome studies, GLP-1-RAs and SGLT2 inhibitors are preferred for patients with DM and CVD [13, 17]. Many patients undergoing surgery have diabetes, pre-diabetes, or unrecognized diabetes. These patients may also develop adverse events from the surgical stress and hospitalization

KEY RECOMMENDATIONS FROM THE 2025 ADA STANDARDS OF CARE IN DIABETES GUIDELINES

SECTION	Key recommendations (2025)
DIAGNOSIS	Consider antibody-based screening for presymptomatic type 1 diabetes in individuals with a family history of the disease
PHARMACOLOGICAL ADVANCES	GLP-1 RA or dual GIP-GLP-1 RA are recommended for their multifaceted benefits in diabetes management
DIETARY GUIDANCE	Importance of adequate water consumption highlighted Recommend high-quality, sustainable eating patterns such as the plant-based diet Replace sugar with non-nutritive sweeteners in moderation and short term to aid caloric restriction
DIGITAL TECHNOLOGY	Strongly recommend CGM for individuals with T2DM on non-insulin regimens as well as those on insulin

CONCLUSIONS

These 2025 ADA updates reinforce the commitment to evidence-based practices and patient-centered care in DM. The broader adoption of innovative therapies and technologies, alongside a deeper focus on sustainability and equity, marks a significant step forward in improving diabetes outcomes globally.

Three-Way Strength to Beat Diabetes...

DAPAWALK-GM 10/2 500

Dapagliflozin 10mg + Glimepiride 2mg + Metformin 500mg **TABLETS**

DAPAWALK-GM 10/1 500

Dapagliflozin 10mg + Glimepiride 1mg + Metformin 500mg **TABLETS**

DAPAWALK-M 500 SR

Dapagliflozin 10mg + Metformin 500mg (SR) **BILAYERED TABLETS**

DAPAWALK-M 1000

Dapagliflozin 10mg + Metformin 1000mg **TABLETS**

IN MANAGEMENT OF:

- Type-II Diabetes Mellitus
- Patients Un-controlled on Mono & Dual therapy

7 GAME

Changing Tips to Revolutionize
Healthy Living with Diabetes..

Living with diabetes can be a daily challenge, but it doesn't mean to compromise on our overall health and well-being. With the right strategies and lifestyle adjustments, we can revolutionize our approach to **healthy living while effectively managing diabetes.**

1. PRIORITIZE NUTRITION
- Eat a Balanced Diet
- Count Carbohydrates
- Limit Processed Foods an Added Sugars

2. STAY ACTIVE, STAY FIT
- Do Exercises/Physical Activities
- Monitor Blood Sugar Levels During Exercise
- Stay Active Throughout the Day

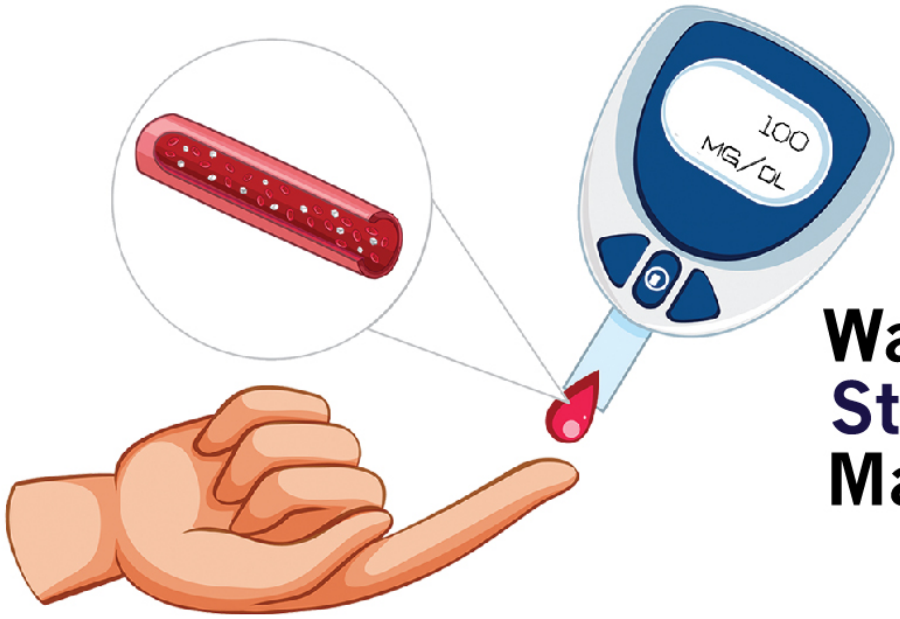
3. PRIORITIZE STRESS MANAGEMENT
- Practice Mindfulness and Relaxation Techniques
- Get Sufficient Sleep

4. STAY CONSISTENT WITH MEDICATION AND MONITORING
- Take Medications as Prescribed
- Regularly Monitor Blood Sugar Levels

5. BUILD A SUPPORTIVE NETWORK
- Seek Emotional Support
- Involve Loved Ones To Talk & Share Thoughts

6. STAY EDUCATED AND EMPOWERED
- Stay Informed About Diabetes
- Understand Glucose Levels

7. SCHEDULE REGULAR CHECK-UPS
- Stay Committed to Medical Check-ups



Walk the Path to Stable Diabetes Management...

GLYWALK-M

40/500 | 80/500

Gliclazide 40, 80mg + Metformin 500mg **TABLETS**

GLYWALK-MP

60/15/500

Gliclazide 60mg + Metformin 500mg (SR) + Pioglitazone 15mg **TABLETS**

IN MANAGEMENT OF:

- **Type- 2 Diabetes Mellitus**
- **Patients Uncontrolled on Monotherapy**

Potentiate the Insulin to keep the Diabetes in Full Control...

Linawalk-M

Linagliptin 2.5mg + Metformin 500mg

TABLETS

LINAWALK-D 5/10

Linagliptin 5mg + Dapagliflozin 10mg **TABLETS**

LINAWALK-M 5/500

Linagliptin 5mg + Metformin 500mg **SR TABLETS**

100/ 10

SITAWALK-D

Dapagliflozin 10mg + Sitagliptin 100mg
TABLETS

500

SITAWALK-DM

Dapagliflozin 10m + Metformin 500mg +
Sitagliptin 100mg **TABLETS**

100/ 500 SR

SITAWALK-M

Sitagliptin 100mg + Metformin 500mg
TABLETS

20/ 10

TELDIET-D

Teneligliptin 20mg +
Dapagliflozin 10mg **TABLETS**

500/ 1000

VILDALIST-DM

Vildagliptin 100mg + Dapagliflozin 10mg +
Metformin 500, 1000mg **TABLETS**

500/5

VILDALIST-DP/ P

Vildagliptin 50mg + Dapagliflozin 5mg
Vildagliptin 50mg + Pioglitazone 15mg **TABLETS**

In Management of:

Type-2 Diabetes Mellitus with marked Hyperglycemia

Patients Uncontrolled on Monotherapy

Bone and joint pain once meant prescriptions, ice packs, and avoiding stairs. But in 2025, a new era of orthopedic wellness is unfolding—one rooted in plant science, molecular nutrition, and next-generation bioactives.

Today's orthopedic patients and prevention-focused consumers are turning to natural compounds with pharmaceutical-grade impact—from turmeric-derived nanocomplexes to plant sterols and fermented vitamins that speak directly to bone cells.

Welcome to the future of orthopedic nutrition, where food and function intersect to rebuild strength, reduce inflammation, and preserve mobility.

What Are Bioactive Compounds and Phytonutrients?

Bioactives are natural compounds found in food that trigger specific biological responses—reducing inflammation, promoting collagen synthesis, and even stimulating bone-building cells (osteoblasts). Phytonutrients are bioactives specifically from plants, with a growing role in orthopedic prevention and recovery. And unlike traditional drugs, these compounds offer long-term support without the side effects.

BREAK THROUGH BIOACTIVES IN ORTHOPEDIC HEALTH

1. CURCUMIN NANOCOMPLEXES

Curcumin's natural anti-inflammatory power is supercharged in these advanced forms—up to 40x more bioavailable.
USED FOR: Joint stiffness, post-op inflammation, osteoarthritis management.

2. RESVERATROL + QUERCETIN SYNERGY BLENDS

Resveratrol (from red grapes) and quercetin (from onions/apples) are flavonoids that modulate inflammatory genes and slow cartilage breakdown.
USED FOR: Early-stage osteoarthritis, autoimmune joint disorders, recovery support.

3. HYALURONIC ACID (HA) + ASTAXANTHIN FORMULAS

HA supports synovial fluid and joint lubrication; astaxanthin, a potent marine carotenoid, protects joint tissues from oxidative stress.
USED FOR: Joint hydration, improved mobility, aging knees and hips.

4. GENISTEIN (SOY ISOFLAVONES)

A phytoestrogen that stimulates osteoblast activity and mimics estrogen's protective effect on bones.
USED FOR: Menopausal bone loss, spinal degeneration, and osteopenia.

5. BOSWELLIA SERRATA EXTRACT

This ancient anti-inflammatory herb is now standardized to high levels of AKBA, its active compound, shown to reduce joint pain in as little as 7 days.
USED FOR: Rheumatic joint inflammation, back pain, and sports recovery.

6. VITAMIN K2 (MK-7, FERMENTED FORM)

Fermented K2 directs calcium into bones, not arteries, and is now available in sustained-release formats for all-day bone support.
USED FOR: Osteoporosis, fracture prevention, spinal health.

7. SULFORAPHANE (FROM BROCCOLI SPROUTS)

A cellular detoxifier and Nrf2 pathway activator, sulforaphane reduces joint inflammation and cartilage damage at the gene level.
USED FOR: Inflammatory arthritis, chronic joint stress, systemic inflammation

PRECISION ORTHOPEDIC NUTRITION:

Where Tech Meets Nature.....

WHAT MAKES 2025 TRULY INNOVATIVE ISN'T JUST THE COMPOUNDS- IT'S HOW THEY'RE USED:

- Bioprinted nutrient delivery systems (e.g., time-release phytonutrient beads for joints)
- Wearables that track inflammation levels to signal when to dose key compounds
- DNA and microbiome testing to personalize phytonutrient plans

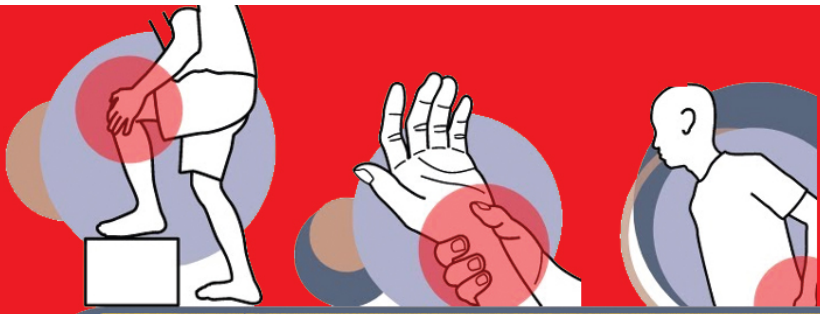
Imagine a scenario where a supplement adapts to our body's real-time needs. That's no longer science fiction—it's what orthobiology clinics are starting to offer.

THE BONE-GUT-INFLAMMATION AXIS: A NEW FOCUS

Emerging research in 2025 highlights how gut health directly impacts orthopedic health. Compounds like prebiotic polyphenols (from pomegranate and green tea) help:

- Support the microbiome
- Reduce gut-driven systemic inflammation
- Improve mineral absorption (especially calcium and magnesium)

"By improving gut health, we're not just helping digestion—we're improving bone density and joint comfort," explains **DR. LUIS MENDOZA, A NUTRITIONAL BIOCHEMIST IN BOSTON.**



ASTAXANTHIN:

The Bright Red Antioxidant Powering Joint Health

Why this marine supernutrient is gaining traction in orthopedic wellness

It may come from microalgae and give flamingos their pink hue—but astaxanthin is no longer just a colorant or seafood pigment. In 2025, it's making waves as one of the most promising natural compounds for bone and joint health, thanks to its powerful antioxidant and anti-inflammatory effects.

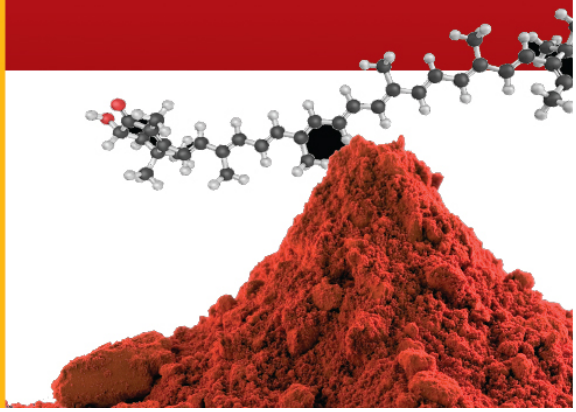
Once overlooked in mainstream medicine, astaxanthin is now a featured ingredient in orthopedic supplements, athlete recovery formulas, and even post-surgical support regimens. **But what makes this compound so special for bones and joints?**

WHAT IS ASTAXANTHIN?

Astaxanthin is a carotenoid—similar to beta-carotene—but 10 to 100 times more potent as an antioxidant. Derived primarily from the microalga Haematococcus pluvialis, it protects cells from oxidative stress at a deep, mitochondrial level.

Unlike other antioxidants, astaxanthin:

- Doesn't become pro-oxidant (even at high doses)
- Crosses the blood-brain and blood-retinal barriers
- Embeds in cell membranes, providing stable protection



ASTAXANTHIN'S ROLE IN BONE AND JOINT HEALTH

1. ANTI-INFLAMMATORY POWER

Chronic inflammation is the root of many orthopedic problems—think osteoarthritis, tendonitis, or post-injury swelling. Astaxanthin inhibits key inflammatory pathways (like NF-κB and COX-2) and reduces pro-inflammatory cytokines (like IL-6 and TNF-alpha), helping:

- Ease joint pain
- Improve range of motion
- Support long-term joint integrity

2. CARTILAGE PROTECTION

New studies show astaxanthin helps protect chondrocytes—the specialized cells in cartilage—from oxidative damage and breakdown. This is critical in slowing cartilage degradation in aging joints or overused knees and hips.

3. BONE DENSITY SUPPORT

Emerging animal research suggests astaxanthin may:

- Inhibit bone loss (especially in estrogen-deficient states like menopause)
- Reduce oxidative stress in osteoblasts (the bone-building cells)
- Improve calcium metabolism indirectly via gut and mitochondrial effects

While more human studies are underway, the potential for astaxanthin in osteoporosis prevention and fracture healing is compelling.

4. MUSCLE-JOINT RECOVERY COMBO

In athletes and active adults, astaxanthin is now used as a dual-action recovery agent:

- Reduces muscle fatigue and joint inflammation
- Speeds up recovery post-exercise or injury
- Enhances endurance and joint comfort during high-impact activity

7 UNKNOWN FACTS ABOUT ROSEHIP FOR JOINT HEALTH

1. IT'S MORE EFFECTIVE THAN GLUCOSAMINE IN SOME STUDIES

Clinical trials have shown that standardized rosehip extract can outperform glucosamine in reducing joint pain and improving mobility—especially in people with knee osteoarthritis.

In a **3-month study,** rosehip reduced pain by **30–40%** and improved walking distance better than glucosamine.

2. IT CONTAINS UNIQUE "JOINT-LUBRICATING" COMPOUNDS

Rosehip is rich in galactolipids, especially **GOPO® (glycoside of mono and diglycerol),** a rare compound that inhibits inflammation at the cellular level and helps maintain healthy joint lubrication.

3. IT WORKS LIKE A NATURAL NSAID—WITHOUT THE SIDE EFFECTS

Rosehip blocks **COX-1 and COX-2 enzymes,** much like ibuprofen, but doesn't harm the stomach lining or raise cardiovascular risks. It's one of the best natural alternatives to over-the-counter painkillers.

4. IT'S A COLLAGEN-CO-FACTOR POWERHOUSE

High in natural vitamin C, rosehip plays a crucial role in collagen synthesis, helping rebuild cartilage and support connective tissue. Without vitamin C, our body can't form or repair collagen properly.

5. IT REDUCES CRP—A MARKER FOR JOINT INFLAMMATION

Rosehip has been shown to **lower C-reactive protein (CRP)** levels, a key biomarker of systemic inflammation, making it beneficial not just for joints, but for whole-body anti-inflammatory support.

6. IT MAY HELP DELAY JOINT REPLACEMENT

In Scandinavian studies, patients using rosehip extract regularly were less likely to progress to joint surgery within a year compared to those using placebo or standard treatment alone.

Say Goodbye to Joint Stiffness & Reclaim the Freedom to Move...

COLSF

Astaxanthin 10% 4mg + Rosehip 275mg + Boswellia Serrata 100mg + L-Gutamic Acid 50mg + Magnesium 5mg + Collagen Peptide Type-1 40mg + Vitamin E 10mg + Curcumin 100mg + Piperine 5mg **TABLETS**

OSTEOARTHRITIS | SENILE CHONDRAL DEGENERATION
CHRONIC INFLAMMATORY ARTHRITIS | JOINT STIFFNESS

Help Patients Tend to
FLEXIBILITY & STRENGTH...

Tendibio-Plus

Collagen Peptides 200mg + Rosehip Extract 10mg +
Sodium Hyaluronate 75mg + Chondroitin Sulphate 200mg +
Vitamin C 50mg **TABLETS**

ALL TYPES OF TENDINOPATHIES
JOINT STIFFNESS & PAIN
OSTEOARTHRITIS
RHEUMATOID ARTHRITIS
SENILE CHONDRAL DEGENERATION

JOINT HEALTH QUIZ:

1 Which vitamin is essential for calcium absorption in the body?

A. Vitamin A
B. Vitamin D
C. Vitamin C
D. Vitamin K

2 What is the name of the tissue that cushions joints and prevents bones from rubbing together?

A. Tendon
B. Ligament
C. Cartilage
D. Synovial fluid

3 Which natural supplement is rich in alactolipids and used for joint pain relief?

A. Rosehip
B. Turmeric
C. Ginger
D. Collagen

4 Osteoarthritis primarily affects which part of the joint?

A. Bone marrow
B. Cartilage
C. Tendon
D. Ligament

5 What mineral, alongside calcium, is essential for maintaining bone density?

A. Potassium
B. Magnesium
C. Iron
D. Zinc

6 What's the medical term for "joint inflammation"?

A. Osteoporosis
B. Arthroplasty
C. Arthritis
D. Myalgia

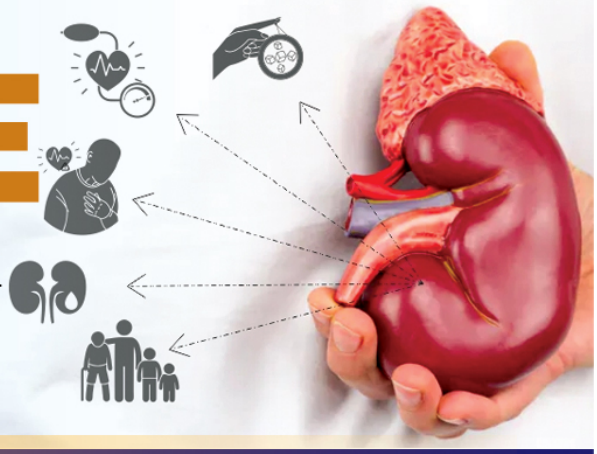
ANSWER KEY:

1.B – VITAMIN D 2.C – CARTILAGE 3.A – ROSEHIP 4.B – CARTILAGE 5.B – MAGNESIUM 6.C – ARTHRITIS

A Smarter Way to

Manage CKD...

AlphaKITE



Calcium-3-Methyl-2-Oxo-Valerate 67mg + Calcium-4-Methyl-2-Oxovalerate 101mg + Calcium-2-Oxo-3-Phenylpropionate 68mg + Calcium-3-Methyl-2-Oxobutyrate 86mg + Calcium DL-2-Hydroxy-4 (Methylthio) Butyrate 59mg + L-Lysine Acetate 105mg + L-Threonine 53mg + L-Tryptophan 23mg + L-Histidine 38mg + L-Tyrosine 30mg + Total Nitrogen Content 36mg + Calcium Content (1.25mmol) 0.05g **TABLETS**

FOR PREVENTION AND THERAPY OF DAMAGES DUE TO CKD IN PATIENTS WITH PROTEIN RESTRICTED DIET

Reignite Strength with

Perfect Trio...

Juvinate-LC

L-Carnitine 500mg + Folic Acid 1.5mg + Methylcobalamin 1500mcg **TABLETS**

CHRONIC FATIGUE SYNDROME | MUSCLE CRAMPS/ MUSCLE PAIN

POSTSURGICAL RECOVERY

BOOST THE

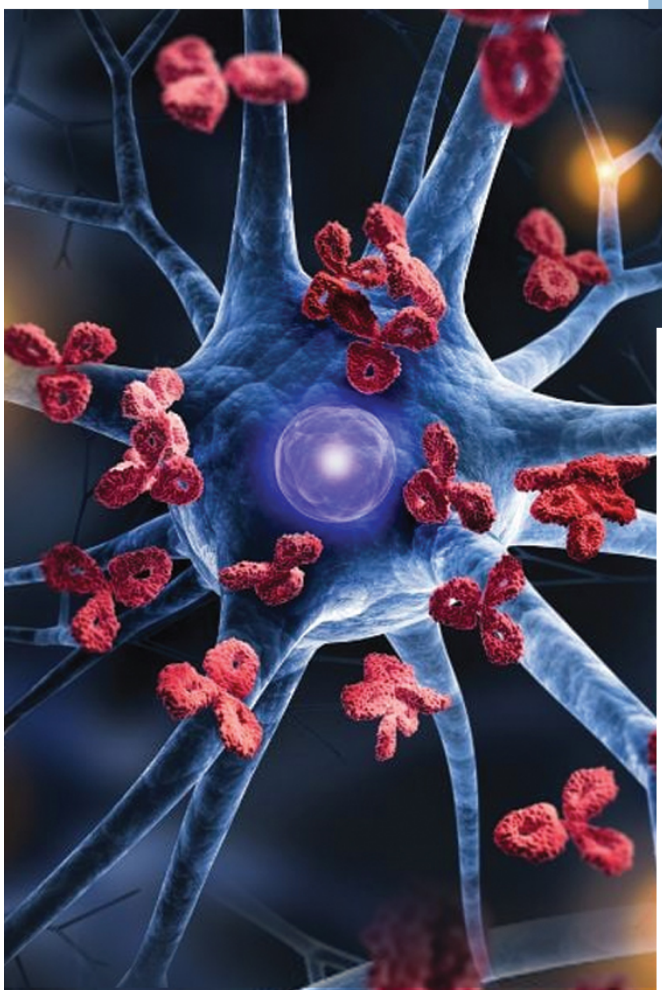
STRENGTH OF WEAK BONES...

LONCALS Plus K27

Calcium Citrate Malate 1250mg + Vitamin K27 90mcg + Vitamin D3 1000 I.U. + Methylcobalamin 1500mcg + Magnesium 50mg + Zinc Oxide 15mg **TABLETS**

POSTMENOPAUSAL OSTEOPOROSIS

OSTEOPOROSIS / OSTEOMALACIA



Curb the Nerve Damage with...

NEURABURG FORTE

Vitamin B Complex with B12 **TABLETS**

DIABETIC NEUROPATHY

PERIPHERAL NEUROPATHY

DRUG / ALCOHOL INDUCED NEUROPATHY

POLMACOXIB

A NOVEL NON-STEROIDAL
Anti-Inflammatory Drug (NSAID)

POLMACOXIB: A DRUG REVIEW," International Journal of Health and Allied Sciences: Vol. 13: Iss. 2, Article 2.

Polmacoxib has shown a promised therapeutic option for the management of osteoarthritis and other mmatory conditions. This drug review mainly aims to provide a comprehensive overview of polmacoxib, focusing on its pharmacological properties, clinical efficacy, safety profile, and potential therapeutic applications. Polmacoxib is a notable drug due to its dual mechanism of action, combining selective COX-2 inhibition with inhibition of carbonic anhydrase, which may contribute to its enhanced anti-inflammatory and analgesic effects. Being a selective COX-2 inhibitor, it helps minimize gastrointestinal side effects typically caused by conventional nonselective NSAIDs. Data from clinical studies suggest that polmacoxib provides statistically and clinically significant analgesic and remarkable benefits. Clinical trials have demonstrated that polmacoxib provides substantial pain relief and functional improvement in patients with osteoarthritis.

The Polmacoxib clinical study, particularly the phase 3 trial, provides significant information regarding the drug's safety and effectiveness and explains why it was selected above other NSAIDs . Because of its potential dual inhibition of COX enzymes and CA-I/II, Polmacoxib is a new NSAID that may reduce the likelihood of NSAID induced hypertension and related cardiovascular hazards. Many NSAIDs that inhibit COX-II, such as Celecoxib, Rofecoxib, and Valdecoxib, were available on the market to treat osteoarthritis, rheumatoid arthritis, and pain; however, a small number of NSAIDs were taken off the market because of their gastrointestinal and cardiotoxic side effects.According to the studies, Polmacoxib 2mg may function more quickly than celecoxib and provide quick relief from OA symptoms and indications.

MECHANISM OF ACTION

Cyclooxygenase (COX) enzymes are involved in the control of inflammation, and NSAIDs block them. COX-1 produces prostaglandin, which protects the GI mucosa. On the other hand, COX-2 is a mediator of both pain and inflammation and is elevated in response to inflammation. Since first generation NSAIDs are nonselective and inhibit both COX-1 and COX-2, their benefits on pain and inflammation reduction may be accompanied by GIproblems. Greater COX-2 selectivity in compounds is hypothesized to mitigate GI tract damage by suppressing COX-2 and promoting the production of protective prostaglandins through COX-1, all while preserving anti-inflammatory properties. In contrast to other NSAIDs, Polmacoxib binds to carbonic anhydrase (CA) with great affinity and inhibits COX-2, giving it a dual mechanism of action. The coexistence of COX-2 and CA reduces Polmacoxib's COX-2 inhibitory action due to its high-affinity binding to CA. Compared to conventional NSAIDs or COX-2 inhibitor medications, it is safer for cardiovascular, renal, and gastrointestinal tissues due to its distinct dual COX2 and CA binding qualities.

ADMINISTRATION

Polmacoxib is administered orally. The recommended dose is 2 mg once daily after meals.

CONCLUSION

Polmacoxib is a specific COX-2 inhibitor with promising efficacy in managing pain and discomfort. Its pharmacokinetic characteristics and pharmacological profile support its use as a suitable NSAID. While early evidence suggests a favorable trade-off between security andsufficiency, more inquiry is necessary to assess long-term security and silent encounters. Polmacoxib may provide patients and doctors with an effective therapy option for a variety of pain and inflammation-related disorders.

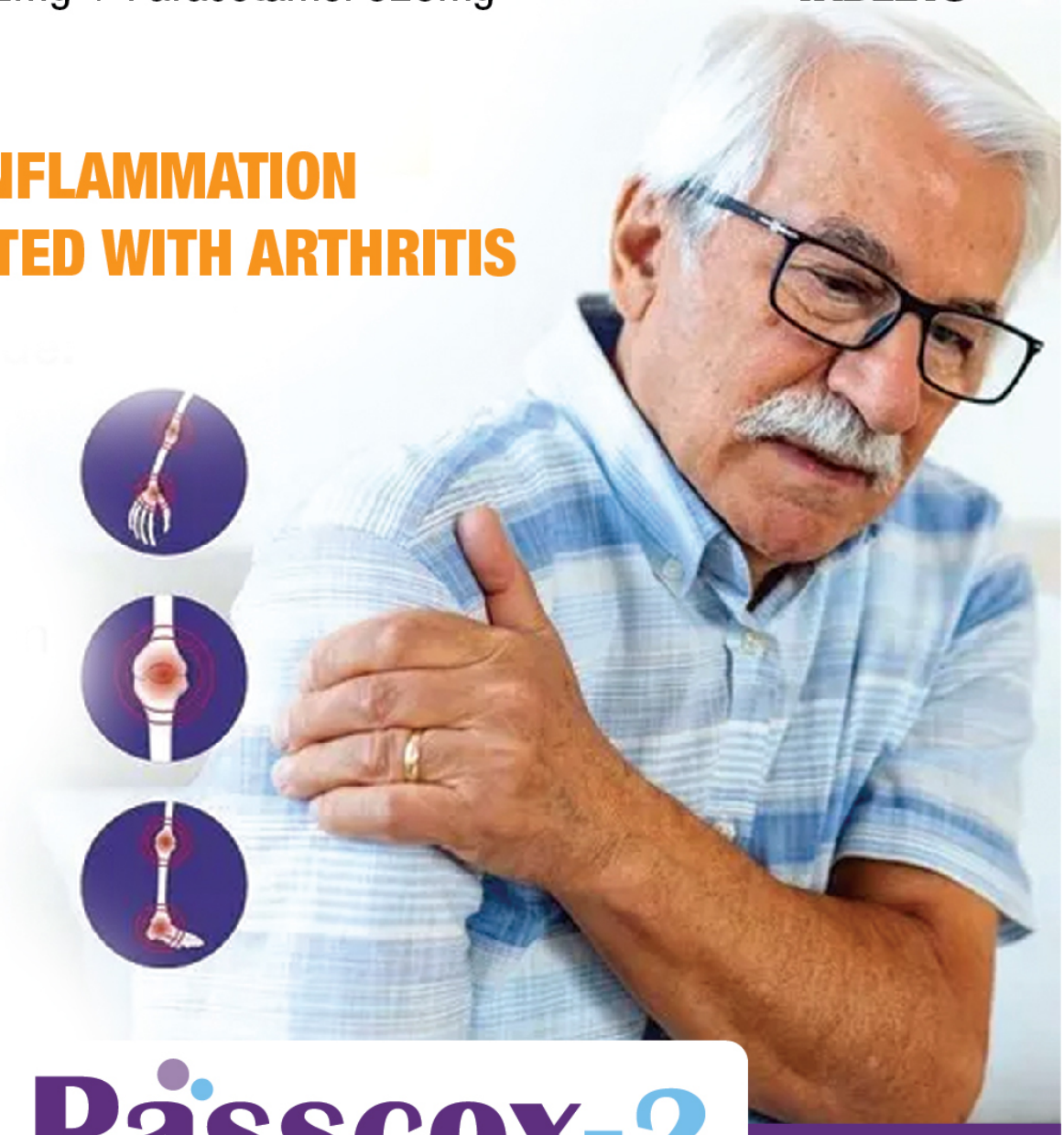
Power-Packed Pain Relief...

Passcox-Plus

Polmacoxib 2mg + Paracetamol 325mg

TABLETS

PAIN & INFLAMMATION ASSOCIATED WITH ARTHRITIS

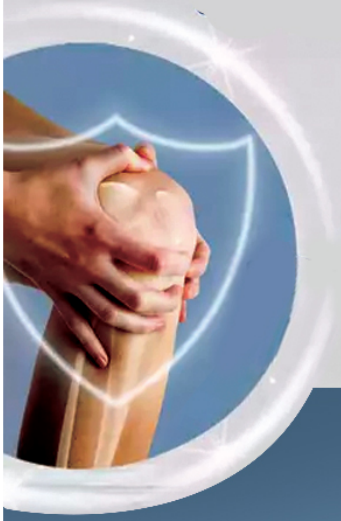


Passcox-2

Polmacoxib 2mg

TABLETS

Restore Joint Comfort and Flexibility…



TOFLIST-5

Tofacitinib 5mg **TABLETS**

MODERATELY TO SEVERELY ACTIVE RHEUMATOID ARTHRITIS

PSORIATIC ARTHRITIS (PSA)

INADEQUATE RESPONSE / INTOLERANCE TO METHOTREXATE

TORODOL-TH

Etodolac 400mg + Thiocolchicoside 4mg **TABLETS**

SHOOT THE MUSCLE SPASM & PAIN to Regain the Relief...

SKELETAL MUSCLE SPASM & PAIN ASSOCIATED WITH:

- Low Back Pain
- Torticollis/ Dorsal Pain
- Sprains & Strains
- Traumatological Disorders
- Degenerative Vertebral Disorders & Vertebral Static Problems

Reimagining UTI Prevention:

The Power of Nutrients and Antioxidants

URINARY TRACT INFECTIONS (UTIS) are among the most common bacterial infections, particularly affecting women. While antibiotics have been the cornerstone of treatment, the rise of antibiotic-resistant strains has prompted a shift towards exploring natural alternatives. Recent research highlights the significant role of specific nutrients and antioxidants in preventing and managing UTIs.

CRANBERRY EXTRACT:

MORE THAN JUST A FOLK REMEDY

Cranberries have long been associated with UTI prevention. Recent studies have provided scientific backing to this tradition. A study published in the Journal of Integrative and Complementary Medicine found that a supplement containing cranberry extract, pumpkin seed extract, and vitamins C and B_2 significantly reduced the number of UTIs and the need for antibiotics in participants . This combination suggests that cranberry's efficacy may be enhanced when paired with other nutrients.

Further research indicates that cranberry polyphenols, particularly proanthocyanidins, can modulate the gut microbiota, potentially reducing the colonization of uropathogenic bacteria . This gut-urinary tract axis underscores the importance of a holistic approach to UTI prevention.

VITAMIN C:

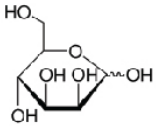
A DUAL-ACTION DEFENDER

Vitamin C is renowned for its immune-boosting properties, but its role in UTI prevention is gaining attention. A study published in BMC Microbiology demonstrated that vitamin C inhibited the growth of uropathogenic E. coli and disrupted biofilm formation, a key factor in chronic infections . Additionally, in a clinical trial involving pregnant women, daily intake of vitamin C, along with ferrous sulfate and folic acid, resulted in a lower incidence of UTIs compared to those who received only the latter two supplements .

These findings suggest that vitamin C's antimicrobial properties, combined with its role in supporting overall immune function, make it a valuable component in UTI prevention strategies

D-MANNOSE:

A NATURAL ADHESION INHIBITOR



D-Mannose, a simple sugar found in cranberries and other fruits, has been studied for its ability to prevent bacterial adhesion in the urinary tract. A systematic review published in European Urology found that D-Mannose significantly reduced the incidence of recurrent UTIs and prolonged the time between infections, thereby proving quality of life for affected individuals .While D-Mannose is not recommended during pregnancy, its potential as a non-antibiotic alternative for UTI prevention in non-pregnant individuals is promising.

THE SYNERGY

OF NUTRIENTS AND ANTIOXIDANTS

The interplay between various nutrients and antioxidants can enhance their individual effects. For instance, combining cranberry extract with vitamin C may provide a multifaceted approach to UTI prevention by targeting bacterial adhesion, supporting immune function, and modulating the microbiota.Moreover, the

concept of nutriepigenomics—the study of how nutrients influence gene expression—suggests that dietary components can impact the body's response to infections at a molecular level. While research in this area is still emerging, the potential for nutrients to modulate immune responses and inflammation pathways offers exciting possibilities for UTI prevention and management.

LOOKING AHEAD:

PERSONALIZED NUTRITION FOR UTI PREVENTION

As research continues to uncover the complex elationships between diet, microbiota, and immune function, personalized nutrition strategies are becoming more feasible. Tailoring dietary interventions based on individual health profiles and genetic predispositions could lead to more effective and sustainable approaches to UTI prevention.In conclusion, integrating specific nutrients and antioxidants into daily routines offers a promising avenue for reducing the risk of UTIs. While these natural alternatives should not replace conventional medical treatments, they can serve as complementary strategies in maintaining urinary tract health.

FOR HEALTHY LOOKING SKIN

Glolist

L-Glutathione 500mg + Astaxanthin 4mg +
Alpha Lipoic Acid 40mg + L-Ascorbic Acid 40mg

HORMONAL SUPPORT

Cyprolist-E

Cyproterone 2mg + Ethinyl Estradiol 0.035mg **TABLETS**

Dydrolist 10

Dydrogesterone 10mg **TABLETS**

Dydrolist 20 SR

Dydrogesterone 20mg SR **TABLETS**

Estalist

Estradiol 2mg **TABLETS**

URINARY TRACT HEALTH SUPPLEMENTS

Mybery-D

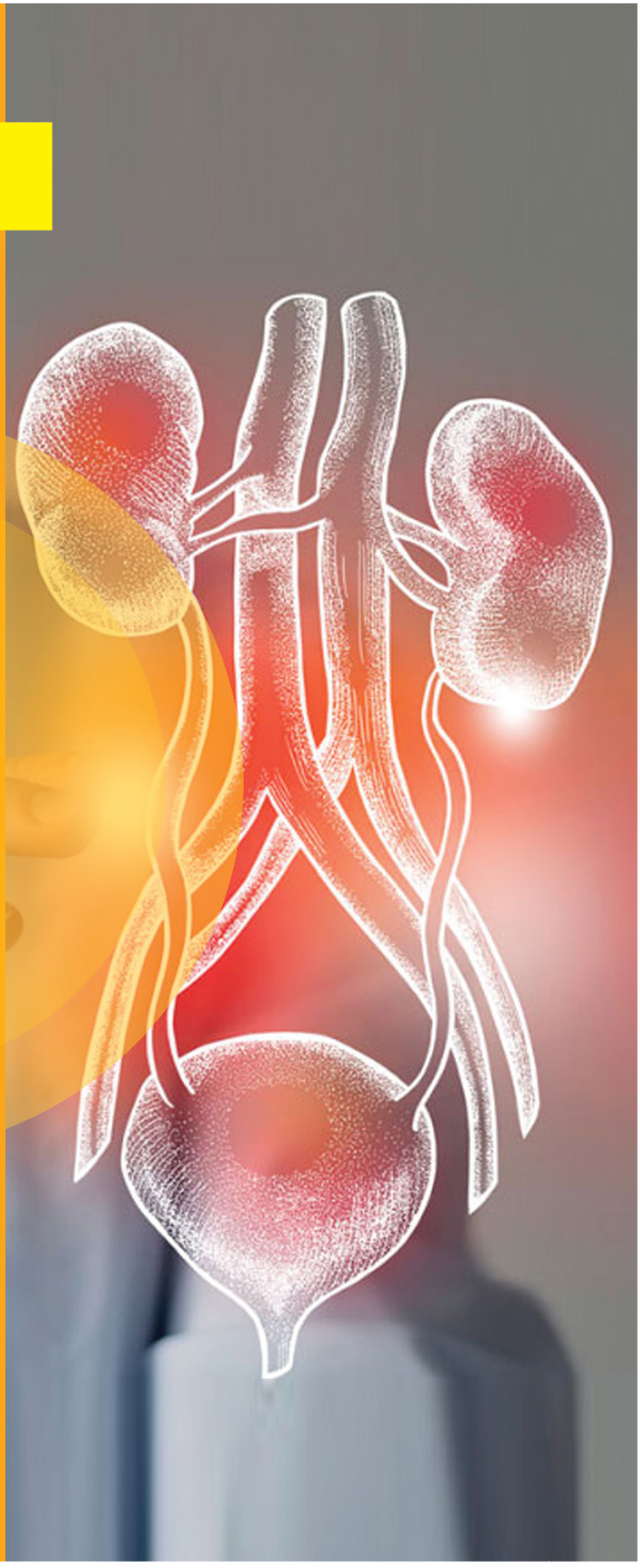
D-mannose 300mg + Cranberry Extract 200mg + Potassium Magnesium Citrate 978mg
SUSPENSION

Mybery-D

Cranberry Ext. 300mg + D-Mannose 600mg + Sodium 15.88mg **CHEWABLE TABLETS**

Mybery-D

Cranberry Ext. 200mg + D-Mannose 300mg + Potassium Magnesium Citrate 978mg
SACHET



Quality

We are committed to achieve ever-increasing levels of customer satisfaction through continual improvement in the quality of our product and services. Our products are manufactured by using modern techniques and quality management system through adherence to ISO 9001-2008 CERTIFIED & GMP PRINCIPLES.

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