

SANSKRITI IAS DAILY CURRENT AFFAIRS

05-10-2026

Creatine

MedicalNewsToday

Creatine may help build muscle even without exercise, study suggests

Participants taking a creatine supplement without participating in an exercise program gained about 2.4 pounds of lean muscle over 12 weeks.



Why in News: A new **12-week study** found that creatine supplementation helped middle-aged adults gain muscle and strength even without a structured workout programme.

Biological Functions

- **Creatine** is a naturally occurring **nitrogen-containing organic compound** that supports energy supply in skeletal muscles.
- About **50% of body creatine** comes from dietary sources, particularly **protein-rich animal foods** such as meat, seafood and milk.
- The remaining creatine is synthesised in the **liver, kidneys and pancreas** from amino acids such as **arginine, glycine and methionine**.

Dietary and Supplementary Sources

- Major dietary sources include **red meat, seafood and animal milk**.
- **Creatine monohydrate** is the commonly used form of creatine supplement.

Energy Metabolism

- Around **95% of creatine** is stored in **skeletal muscles**, mainly as **phosphocreatine**.
- **Phosphocreatine** helps regenerate **adenosine triphosphate (ATP)**, the primary energy currency of cells.
- The remaining **5%** is stored in tissues such as the **heart and brain**.

Central Secretariat Library

Why in News: The **Supreme Court** has taken **suo motu cognisance** of the proposed relocation of the **135-year-old Central Secretariat Library**, which reportedly lacks space in the Central Vista redevelopment plan.

Institutional Profile

TT Telegraph India

SC to hear plea on relocation of 135-year-old Delhi library amid lack of space in Central Vista plan

The Supreme Court is scheduled to hear on October 5 a suo motu case on the proposed relocation of the 135-year-old Central Secretariat...



- The **Central Secretariat Library (CSL)** is one of the oldest libraries of the **Government of India** and functions under the **Ministry of Culture**.
- It is located at **Shastri Bhawan, New Delhi**, and serves the information requirements of Union ministries and departments.
- With more than **8.5 lakh books and records**, it is the **second-largest Central Government library** after the **National Library, Kolkata**.



Historical Evolution

- The library was established as the **Imperial Secretariat Library in Kolkata in 1891**.
- It shifted to Delhi in **1911** following the transfer of the British Indian capital from Kolkata to Delhi.
- It was subsequently housed in **North Block** and moved to **Shastri Bhawan in 1969**.

Heritage Value

- Its collection includes **rare publications, government records and gazettes**, with the oldest listed book being a **1702 compilation of writings by a French traveller**.

Ichamati River

ETV Bharat

Tradition Of India-Bangladesh Joint Durga Idol Immersion On Ichamati River Fades

The traditional Ichamati river Durga idol immersion in Taki has changed due to strict geopolitical borders, heightened surveillance and...



Why in News: Traditional **Durga idol immersion** activities in Taki along the Ichamati River have been affected by heightened border surveillance and geopolitical restrictions.

Transboundary Character

- The **Ichamati** is a **transboundary river of India and Bangladesh** and also forms part of the international boundary between the two countries.
- It is a bifurcation of the **Mathabhanga River**, which is a tributary of the **Padma**.

Course and Geography

- The river originates at **Mahjdia village in Nadia district, West Bengal**, and flows through **Nadia and North 24 Parganas**.
- It subsequently enters Bangladesh through **Satkhira and Khulna districts** before joining the **Kalindi River** near Hasnabad.

- The river extends for approximately **216 km** and ultimately reaches the **Bay of Bengal near Moore Island**.

Environmental Concerns

- The Ichamati and its tributaries form an **oxbow lake complex** near Bangaon in North 24 Parganas.
- **Siltation** has reduced dry-season flow while contributing to flooding during the rainy season.

Petroglyphs

TH The Hindu

Petroglyphs discovered near megalithic umbrella stone site at Peralam-Kozhummal

Archaeologists discover 10 sqm of granite petroglyphs near Peralam-Kozhummal umbrella stones, resembling Ettukudukka motifs,...



Why in News: Archaeologists discovered **petroglyphs engraved on granite rock** near the restored Umbrella Stone site at **Peralam-Kozhummal in Kannur district, Kerala**.

Archaeological Characteristics

- **Petroglyphs** are symbolic images created by **carving or engraving rock surfaces** through removal of material.
- The term derives from Greek **petros (stone)** and **glyphein (to carve)**.
- Common techniques include **pecking, incising, abrading, sculpting, polishing, drilling and scratching**.

Global and Indian Distribution

- Petroglyphs occur on every continent except **Antarctica**, with major concentrations in Africa, the Americas, Siberia, Australia and Europe.
- **Edakkal Caves in Wayanad, Kerala**, are an important Indian example of rock engravings.

Historical Significance

- Petroglyphs provide evidence of ancient societies through depictions of **animals, humans, geometric forms and symbolic imagery**.
- Some were used for **communication, territorial marking, astronomical observations, mapping and musical purposes**.

Petroglyphs vs Petrographs

- **Petroglyphs** are created by physically removing rock material, whereas **petrographs** are images painted or drawn on rock surfaces.
- Petroglyphs generally have greater durability because the images are physically carved into the rock surface.

Desert National Park

DD India

Two male Great Indian Bustards released into wild at Jaisalmer's Desert National Park

In a major milestone for the conservation of the critically endangered Great Indian Bustard (GIB), Union Environment Minister Bhupender...



Why in News: Two **captive-bred male Great Indian Bustards (GIBs)** were released into the wild at **Sam in Desert National Park, Rajasthan**, as part of conservation efforts for the critically endangered species.

Geographical Setting

- **Desert National Park** is located in the **Thar Desert near Jaisalmer, Rajasthan**, and covers more than **3,160 sq. km**.
- Its landscape includes **sand dunes, thorny scrub and lakebeds of extinct salt lakes**.
- The region is extremely hot and arid, with annual rainfall generally below **100 mm**.

Ecological Features

- The park contains **open grasslands, thorny bushes, plantations and sand dunes**, with vegetation characteristic of the Thar's arid thorn ecosystem.
- Important plant species include **khejri (Prosopis cineraria)**, sewan grass and aak, while dhok, ronj and salai are also present.
- The park contains **Rajbaugh Lake, Malik Talao Lake and Padam Talao** as its three principal lakes.
- It is notable for the presence of **Jurassic-period fossils**, adding geological significance to the protected area.

Biodiversity and Conservation

- Fauna includes **blackbuck, chinkara, desert fox, Indian wolf, desert cat and several reptiles**.
- The park is a major habitat for the **Great Indian Bustard (GIB)**, one of India's most threatened grassland birds.



Ramappa Temple

TNIE The New Indian Express

Mining won't harm Telangana's Ramappa Temple: SCCL

On the proposed Venkataapur Opencast Project in Mulugu district, the management said it would proceed only after a comprehensive scientific...



Why in News: A proposed **open-cast mining project** near Ramappa Temple and Ramappa Lake has raised concerns because of potential threats to the **UNESCO World Heritage Site**.

Historical and Cultural Context

- **Ramappa Temple**, also called **Rudreshwara Temple**, is located in **Telangana** and was constructed in **1213 CE** during the **Kakatiya Empire**.
- It was built by **Recharla Rudra**, a general under Kakatiya ruler **Ganapati Deva**, with **Ramalingeswara Swamy** as the presiding deity.
- The temple is popularly named after its chief sculptor **Ramappa**, making it notable as a temple named after its architect/sculptor.



UNESCO Recognition

- The temple was inscribed as a **UNESCO World Heritage Site in 2021** under the name **"Kakatiya Rudreshwara (Ramappa) Temple, Telangana."**

Architectural Significance

- The temple has a distinctive **pyramidal Vimana**, carved granite and dolerite pillars, and a **six-foot-high star-shaped platform**.
- Its lightweight porous bricks are traditionally described as sufficiently light to **float on water**, contributing to the structure's reduced weight.
- The foundation employs the **sandbox technique**, using a mixture involving **sand, lime, jaggery and black myrobalan**, intended to provide cushioning against seismic forces.

G7 Group

Why in News: The **G7** countries agreed to release **100 million barrels of diesel** and

The Guardian

G7 to release 100m barrels from reserves to combat surging diesel prices – as it happened

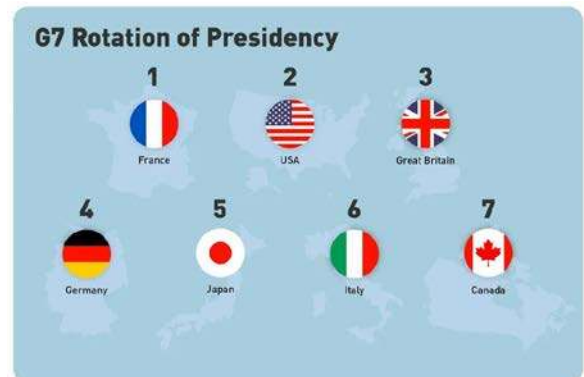
Macron says G7 will 'work in a coordinated manner to help bring down the prices of petroleum products'



crude oil from emergency reserves, highlighting the grouping's role in responding to global energy disruptions.

Composition and Evolution

- The **G7** is an informal grouping comprising **Canada, France, Germany, Italy, Japan, the United Kingdom and the United States**.
- It was established in **1975** in response to the global oil crisis and initially focused primarily on the global economy.
- **Russia** joined the grouping in 1998, creating the **G8**, but the group returned to the G7 format in **2014**.



Institutional Features

- The G7 now addresses **foreign and security policy, trade, climate, development and other global issues**.
- It has **no permanent secretariat or firmly established administrative structure**, making it an informal grouping.
- The **presidency rotates annually** among members, while the **European Union does not hold the rotating G7 presidency**.
- G7 decisions are generally adopted through **consensus**, with the annual presidency shaping the agenda and thematic priorities`.

IndiGo Wins Best Airline Cabin Crew Award



IndiGo Beats Air India to Win Best Cabin Crew Title for 2026

IndiGo also received the award for the "Best Low-Cost Airline in India & South Asia".



Why in News: **IndiGo** was named the **Best Airline Cabin Crew in India and South Asia for 2026** by **Skytrax** and also won the **Best Low-Cost Airline in India & South Asia** award.

Major Awards

- **IndiGo** won the regional **Best Airline Cabin Crew** award for 2026, followed by **Air India** and **Air India Express**.
- IndiGo received the **Best Low-Cost Airline in India & South Asia** award for the **16th time**.
- **Cathay Pacific Airways** was named the world's **Best Airline Cabin Crew** for 2026.
- **Singapore Airlines** was ranked the **World's Best Airline**, replacing Qatar Airways at the top.

Global Rankings

- The global top three for **Best Airline Cabin Crew** were **Cathay Pacific, Singapore Airlines and Malaysia Airlines**.
- **15 of the global top 20** airlines in the cabin-crew ranking were from **Asia**.
- **Air India** ranked **57th** globally in 2026, improving from 84th in 2025.
- **IndiGo** ranked **61st** globally in 2026, compared with 39th in 2025.



Survey and Award Framework

- The **World Airline Awards** were based on passenger surveys covering **more than 300 airlines**.
- The survey involved passengers from **over 100 nationalities** between **September 2025 and August 2026**.
- The 2026 award ceremony was held in **September 2026 at the Langham Hotel, London**.

Other Important News of the day

Places in News

Tuvalu

TH The Hindu

Tuvalu: Barely above water

When leaders visit the coral atolls that form the Pacific nation of Tuvalu on October 5, they will find a once-vibrant ecosystem wiped out...



Why in News: Scientists have warned that the **Tuvalu archipelago** could become increasingly uninhabitable by the end of the century because of **climate change and associated impacts**.

Geographical Profile

- **Tuvalu**, formerly known as the **Ellice Islands**, is a **Polynesian island country in the west-central Pacific Ocean**.
- It has only about **26 sq. km of land area** and is among the world's smallest countries.
- It lies approximately midway between **Australia and Hawaii**, with **Kiribati** to the north and **Fiji** to the south.

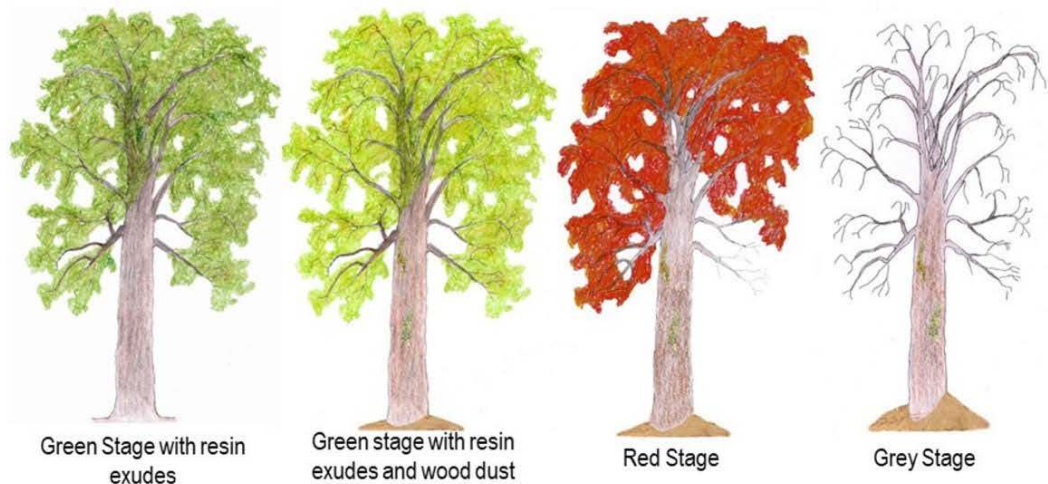
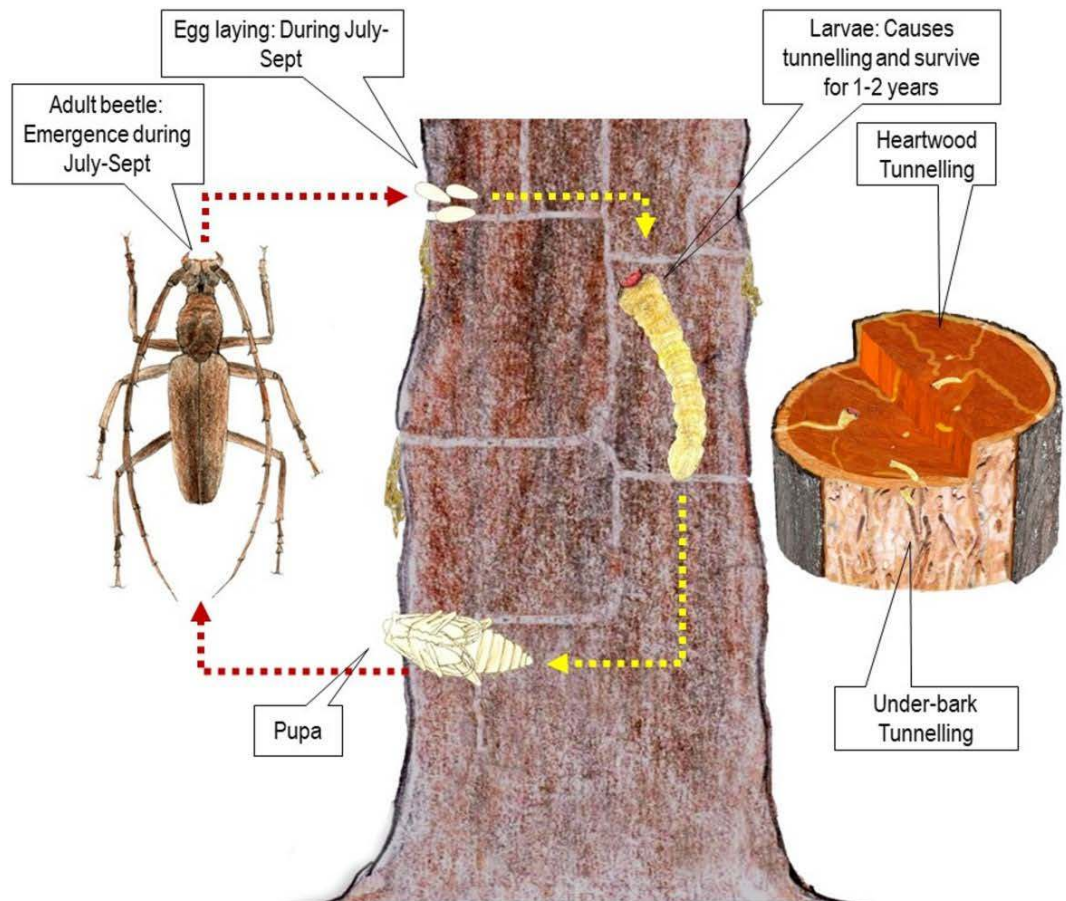


	➤ The country consists of nine islands, comprising four reef islands and five coral atolls. Capital and Physical Features ➤ Funafuti Atoll is the capital and the most populous atoll of Tuvalu. ➤ Tuvalu has no rivers and experiences a hot and rainy climate. Economic and Climate Vulnerability ➤ The economy depends on limited copra production, stamp revenues, fishing fees and foreign aid. ➤ Its low-lying island geography makes Tuvalu particularly vulnerable to sea-level rise and climate change.
Environment	Sal Heartwood Borer  The Indian Express <u>The sal and the beetle: Why Madhya Pradesh is cutting 1.4 lakh trees to save the forest</u> The trees in Dindori forests are witnessing a major infestation of the sal heartwood borer this year, compelling the government and local...  Why in News: A major infestation of the sal heartwood borer has been reported in the Dindori forests of Madhya Pradesh, prompting government and community measures to control the pest. Biological Profile ➤ The sal heartwood borer is a beetle belonging to the order Coleoptera and family Cerambycidae. ➤ Its scientific name is Hoplocerambyx spinicornis, and it has been recognised as a major sal pest since 1897. ➤ The pest damages both standing sal trees and freshly felled timber, making it one of the most destructive insects affecting sal forests. ➤ An infestation is considered epidemic when affected sal trees exceed 1% of the total trees. Sal Tree: Geographical Profile ➤ Sal (Shorea robusta) is a dominant tree species of the dry deciduous forests of central India. ➤ Its natural distribution includes Uttarakhand, Terai region of Uttar Pradesh, Jharkhand, Odisha, Madhya Pradesh, Chhattisgarh and West Bengal.

	➤ Sal can tolerate temperatures of about 5°C to 40–45°C and generally requires warm and humid conditions. Ecological and Economic Uses ➤ Sal timber is valued for construction and railway sleepers because of its strength and resistance to decay. ➤ Sal seeds yield oil used in cooking and industries, while sal leaves are traditionally used to make plates and bowls. ➤ Sal resin is traditionally used as dhoop in religious practices.
Sports News	in India at Asian Games 2026  The Times of India  <u>Other side of India's Asian Games success: 201 athletes won just 6 bronze, 137 returned empty-handed</u> NEW DELHI: India's 85-medal haul at the Aichi-Nagoya Asian Games was its secondbest finish, but the headline numbers don't reveal... Why in News: India finished fourth at the 2026 Asian Games in Aichi-Nagoya, Japan, winning 85 medals, comprising 21 gold, 27 silver and 37 bronze. Overall Performance ➤ India secured fourth position, retaining the rank achieved at the Hangzhou Asian Games. ➤ India's 2026 tally of 85 medals was lower than its record 106 medals at Hangzhou 2022, held in 2023. ➤ China topped the medal table with 341 medals, followed by Japan with 269 and South Korea with 150. Major Team-Sport Achievements ➤ India's men's hockey team defeated Malaysia 5–1 to retain its Asian Games title. ➤ India's women's hockey team defeated China 1–0 to win its first Asian Games gold since 1982. ➤ Both Indian hockey teams secured qualification for the Los Angeles 2028 Olympic Games. ➤ India won gold medals in both men's and women's cricket, defeating Pakistan and Sri Lanka respectively in the finals. ➤ India also secured gold medals in both men's and women's kabaddi, defeating Iran in both finals.

Individual Sporting Achievements

- **Archery** produced nine medals for India, including **five gold, two silver and two bronze**.



- **Kumkum Mohod** won gold in women's individual recurve and mixed team events, with her individual victory being India's first individual Asian Games gold in recurve archery.

	➤ Indian shooters won 15 medals, including three gold, eight silver and four bronze. ➤ Neeru Dhanda became the first Indian woman to win an individual Asian Games gold in trap shooting. ➤ Athletics contributed India's highest medal count with 24 medals, including one gold, nine silver and 14 bronze. Other Key Performances ➤ Indian boxers won six medals, including three gold, with gold medals coming from Lovlina Borgohain, Parveen Hooda and Ankush Panghal. ➤ Indian wrestlers won six medals, including two gold, two silver and two bronze, marking India's best Asian Games wrestling tally since Jakarta 1962. ➤ Aman Sehrawat and Sujeet Kalkal won gold medals in freestyle wrestling. ➤ Pranavi Urs became the first Indian woman to win an individual Asian Games gold medal in golf and also contributed to India's women's team silver. ➤ India's performance reflected strong representation across archery, shooting, athletics, boxing, wrestling, hockey, cricket and kabaddi, with notable achievements by women athletes.
Science and Technology	Bulletin of the Atomic Scientists  NDTV <u>India's Nuclear Punch: Atom Bombs Backed By Long-Range Missiles</u> A new assessment published by the regarded Bulletin of the Atomic Scientists (BAS) says India continues to modernise and expand the systems...  Why in News: A recent assessment by the Bulletin of the Atomic Scientists (BAS) highlighted India's continuing modernisation of systems capable of delivering nuclear weapons while noting its long-standing No First Use (NFU) doctrine. Institutional Background ➤ The BAS is an independent, nonprofit organisation established to raise public awareness about nuclear weapons and other existential threats.

	➤ It was founded in September 1945 at the University of Chicago by scientists associated with the Manhattan Project. ➤ Its major areas of focus include nuclear risk, climate change and disruptive technologies. Doomsday Clock ➤ The Doomsday Clock was created by the BAS in 1947 as a symbolic indicator of humanity's proximity to global catastrophe. ➤ Midnight symbolises global annihilation, while the clock reflects risks from nuclear weapons, climate change and disruptive technologies. ➤ In January 2026, the clock was set at 85 seconds to midnight, its closest setting to doomsday.
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Uttar Pradesh in News

Uttar Pradesh Renames Bhadohi as Sant Ravidas Nagar

THE Hindu

U.P. Chief Minister renames Bhadohi as Sant Ravidas Nagar Bhadohi

Uttar Pradesh Chief Minister Yogi Adityanath announced on Sunday (October 4, 2026) that Bhadohi district has been renamed as Sant Ravidas...



Why in News: Uttar Pradesh Chief Minister **Yogi Adityanath** announced the renaming of **Bhadohi district as Sant Ravidas Nagar**, citing the contribution of **Sant Ravidas**, a prominent Bhakti-era Dalit saint, to social progress and education.

Historical and Social Context

- **Sant Ravidas** was a prominent **Bhakti movement saint** associated with social equality and opposition to caste-based discrimination.
- The renaming seeks to recognise his contribution to **social reform, equality and education**.
- Bhadohi is located in **eastern Uttar Pradesh** and is internationally known for its **carpet industry**.

Administrative Dimensions

- The district was earlier officially known as **Bhadohi** and is now referred to as **Sant Ravidas Nagar** following the state government's decision.
- **District names** are generally altered through the **state government's administrative and legal process**, subject to applicable state laws and notifications.

- The development is significant for **Uttar Pradesh**, where district and place renaming has periodically been undertaken to reflect historical, cultural or social identities.

