

AND H **12TH** IH **9TH NATIONAL** NATIONAL GAMES FOR PERSONS WITH DISABILITIES **NEWSLETTER OF** SPECIAL THE OLYMPIC **15TH** GAMES NATIONAL GAME S



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剖析鐵人三項賽事中運動員從游泳、 Decoding athletes' physical transitions in triathlon from swimming to cycling to running.

Looking into Sports

介紹保齡球專業技巧, 分析直線球與曲線球的優劣 全運主場出擊 Mastering bowling techniques: straight ball vs curved ball National Games in HK

全運全城運動 **Ready Set Go**

探討如何透過訓練提升殘奧乒乓球運動員的發揮 Exploring how training elevates para table tennis athletes' performance.



Get ready for another exciting issue

今

期

續送上精彩內容

分享全運會冷知識,探討內地不同省市的運動強項 Uncovering the interesting facts about the National Games and exploring the sporting strengths of the provinces and cities in Mainland China.

National Games Lens

我們的故事 **Our Stories**

兩位暫准義工分享他們的運動經驗與全運會工作 Two volunteers share their stories working for the National Games.

LOOKING **INTO SPORTS**

📥 鐵人三項選手從水中躍出、跨上單 ➡➡ 車、到最後全力衝刺跑步,他們的 身體彷彿化身為「變形金剛」,在瞬間切 换動力模式。這不僅是肌肉記憶的極致展 現,更是一場神經協調與能量轉化的精密 科學。科學家發現,頂尖選手的適應能力 堪稱人體精密科技。

動

No start

hen triathletes emerge from the water, leap onto their bikes, and run towards the finish line, their bodies seem to transform like transformers, switching power modes instantly. This ability is not merely a display of muscle memory, it is an intricate science involving neural coordination and energy transformation. Scientists have found that the adaptability of top athletes is very similar to advanced human technology.

肌肉記憶: 三棲變形的神經代碼

Muscle Memory: The Neural Mechanisms behind Triathlon Transformation

鐵人選手的秘密在於大腦內能高效管理游泳、騎單車和跑步三套

獨立的「運動操作系統」。運動生理學家指出,這套系統類似 電腦同時運行多個程式,關鍵是如同電腦晶片的「跨項記憶封裝 技術」,即選手透過特定順序的交替訓練(如:200公尺自由式 →5公里騎行→3公里跑步),讓肌肉建立記憶,就像變形金剛 般在不同模式間快速切换。

然而,這套系統也有致命弱點:若三項訓練比例失衡,神經網絡 可能像「卡住」的齒輪般失靈。最新研究指出,游泳、騎單車和 跑步的最佳訓練時間比例應為1:1.8:1.2, 誤差超過15%將導致動 作混淆,猶如變形金剛誤觸錯誤的變形指令。此時,選手可能陷 入「鬼擋牆」:明明體能充足,卻無法切換運動模式。有解決方 案的!「虛擬實境神經連接訓練」利用虛擬實境模擬轉項時的訊 號突變,重寫大腦的「指令集」,如同為神經系統安裝防止當機 的修補程式。

The secret to triathletes' success lies in their brain's ability to manage three independent motion operating systems for swimming, cycling and running with high

efficiency. Exercise physiologists suggest this system functions like a computer running multiple programmes simultaneously, akin to cross-event memory processing technology in a computer chip. Through a specific training sequence (e.g. 200m freestyle \rightarrow 5km cycling \rightarrow 3km running), athletes develop muscle memory that enables them to switch modes quickly, much like the Transformers.

However, this system has a critical weakness: if the training ratios among the three disciplines are imbalanced, the neural network may malfunction like a stuck gear. Recent studies suggest that the optimal training time ratio should be



量子糾纏效應: 能量跨項鍊金術

Quantum **Entanglement Effect: Energy Alchemy** across Events

更令人驚奇的是,**三項運動的** 能量系統竟能產生如「量子糾 纏**」般的協同效應:**游泳划水 的離心收縮,類似彈簧儲能 的動作,令踩踏單車更有爆發 力;騎單車產生的乳酸可強 化跑步時的微血管氧氣交換效 率;跑步時的心跳波動則有助 調節游泳換氣節奏,誤差僅 ±2.3%。 這種協同效應的秘訣在於黑洞 訓練法 —— 刻意製造能量赤

字,例如在游泳後立即進行負 重騎行,促使身體將乳酸轉化 為爆發力。然而,若這「乳酸 煉金術」失控,肌肉可能突然 酸化,引發「能量逆流」。採 用間歇性低氧訓練(IHT)能 顯著提升肌肉緩衝能力。例如 在模擬海拔2500米的低氧與 正常氧氣環境間交替訓練,可 促使肌肉產生更多名為碳酸酐 酶的酵素,這種關鍵酶能將過 量乳酸轉化為丙酮酸,重新進 入能量循環。

Even more astonishing is the energy system in triathlon, becomes uncontrolled, muscles which creates a synergistic effect just like "quantum may rapidly acidify, causing "energy entanglement". The centrifugal contractions experienced backflow". Intermittent hypoxia training during swimming, similar to spring energy storage, enhance (IHT) can significantly enhance muscle power output during cycling. Additionally, the lactic acid buffering capacity. Alternating training produced while cycling enhances microvascular oxygen between low-oxygen environments that exchange efficiency during running. Furthermore, heart rate simulate altitudes of 2,500m and normal fluctuations during running help regulate breathing rhythm oxygen levels stimulates the production while swimming, with an error margin of only $\pm 2.3\%$. of an enzyme called carbonic anhydrase which is crucial for converting excess lactic acid into pyruvate, allowing it to re-enter the energy cycle.

The secret to this synergy lies in deliberately creating an energy deficit, known as the "black hole training method". For example, immediately engaging in weighted cycling after swimming prompts the body to convert lactic acid into explosive power. However, if this "lactic acid alchemy"

1:1.8:1.2 for swimming, cycling and

running. Deviations excessing 15% may lead to movement confusion, similar to a Transformer activating the wrong transformation command. This can lead to "ghost walls", where athletes have physical capacity but fail to switch modes. Fortunately, there is a solution! "Virtual reality neural connection training" simulates transition signal in a virtual environment, effectively rewriting the brain's "instruction set", installing a patch to prevent crashes in the nervous system.



「腦內啡與皮質醇比例」 黃金平衡───

1:0.7

當選手體內的「腦內啡與皮質醇比例」達 到1:0.7的黃金平衡時,下丘腦會釋放「神 經Y」,啟動三大終極節能機制:肌肉收 縮效率飆升至93%(常人為68%),痛覺 閾值提升至戰傷士兵的水平。然而,在實 際訓練中,要維持這一平衡優勢可能面臨 多重挑戰。

The

Body's Energy-Saving Mode

肌肉收縮

效率飆升至

Breaking the

Critical Point:

突破臨界

點

2

體節能模

式

最棘手的問題在於「激素平衡的脆弱性」 — 過度追求黃金比例可能導致內分泌系 統超載,引發皮質醇反彈性上升,反而抑 制運動表現。為解決這個問題,運動科學 家開發出「智能激素調節系統」:以人工 智能算法調整訓練強度,當檢測到皮質醇 異常升高時,系統會立即啟動「48小時恢 復模式」,讓內分泌系統得以自我調節。 另一個關鍵挑戰是「遮蔽痛覺的危險性」 — 雖然提升痛覺閾值能增強耐力,但也 可能掩蓋了潛在的運動傷害。

When an athlete's endorphins to cortisol ratio reaches a golden balance of 1:0.7, the hypothalamus releases "neuropeptide Y", activating three ultimate energy-saving mechanisms: muscle contraction efficiency soars to 93% (compared to 68% for the average person), and pain thresholds rise to levels seen in wounded soldiers. Maintaining this balance during actual training, however, is challenging.

The most challenging issue is the **"fragility of hormonal balance"**: the excessive pursuit of the golden ratio may overload the endocrine system, causing a rebound increase in cortisol levels that hampers performance. To address this concern, exercise scientists have developed an "intelligent hormone regulation system" using artificial intelligence (AI) algorithms to adjust training intensity. When elevated cortisol levels are detected, the system activates a "48-hour recovery mode", allowing the endocrine system to self-regulate. Another challenge is the "danger of masking pain". While raising pain thresholds can enhance endurance, it may also obscure potential injuries.

機械義肢:競技精神與高科技爭論 Prosthetics: The Paradox of Competitive Spirit and Technology

2016年的里約殘奧會,英國鐵人三項選手安 迪·劉易斯 (Andy Lewis)穿上用於跑步的刀 鋒型義肢贏得金牌。研究發現這種義肢的彈力 極其接近自然人類肌腱,使用者在跑步時比健 全運動員能量消耗減少25%,速度提升最高 可達11%,動用的肌肉也少很多。然而,高科 技裝備「入侵」殘奧會引發了不少擔憂:某些 運動員可以通過使用更先進的義肢,在速度、 力量和耐力方面超越其他競爭者,這些技術讓 部分運動員在競技中享有不公平的優勢,是否 違背公平競賽的精神?世界鐵人三項總會雖有 設下義肢的規定,但科技進步導致規則解釋爭 議,這場公平與否的討論,恐怕比鐵人三項賽 道更引人入勝。

At the 2016 Rio Paralympics, British triathlete Andy Lewis won a gold medal using blade-like prosthetics designed for running. Research shows that these prosthetics mimic human tendon elasticity, reducing energy consumption by 25% and increasing speed by up to 11%, with less muscle engagement. Yet, advanced technology in the Paralympics grant certain athletes an unfair advantage to some athletes who are able to outperform in speed, strength, and endurance. Do these technologies violate the spirit of fair play? Although World Triathlon has established regulations regarding prostheses, technological advancements have led to ongoing disputes, creating a battleground that may be even more captivating than the triathlon course itself.

參考文獻 Reference:

Chesher, S. M., Rosalie, S. M., Chapman, D. W., Charlton, P. C., van Rens, F. E., & Netto, K. J. (2024). A single trunk-mounted wearable sensor to measure motor performance in triathletes during competition. Proceedings of the Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology, 238(4), 361-369.

Mascret, N., Montagne, G., Devrièse-Sence, A., Vu, A., & Kulpa, R. (2022). Acceptance by athletes of a virtual reality head-mounted display intended to enhance sport performance. Psychology of Sport and Exercise, 61, 1–10.

NATIONAL GAMES IN HK

主

出

保齡球 — 香港人主場 Bowling — Hong Kong People's Home Ground

十五屆全國運動會(簡稱「十五運會」)群眾賽事活動保齡 球,將於今年8月22至24日在香港啟德體育園保齡球中心舉 行。早前舉辦的甄選賽已順利完成,吸引了77支男子隊及18支女子 隊參賽,參賽球手超過500人,人數比以往賽事增加近一倍。到底保 齡球是如何成為香港人生活的一部分?

The Bowling mass participation event at the 15th National Games (NG) will take place at the Hong Kong Kai Tak Sports Park Bowling Centre from August 22 to 24, 2025. Recent selection events drew an impressive 77 men's teams and 18 women's teams, bringing together over 500 participants — nearly doubling the attendance of previous bowling events. How has bowling evolved to become such an integral part of Hong Kong's sports culture? 上世紀六、七十年代,香港經濟迅速發展,保齡球作為一種新興的社交活動,廣 受市民歡迎。1986年,保齡球選手車菊紅 為香港贏得第一面亞運金牌,此後,胡兆 康、麥卓賢、張振中及曾德軒等運動員在 國際賽事中屢獲殊榮,推動保齡球運動員在 香港的發展。2011年,香港首次舉辦世界 女子保齡球錦標賽;2012年,香港第四次 主辦亞洲保齡球錦標賽。隨着多項國際和 地區性賽事在香港舉行,保齡球運動知名 度和地位大大提升,逐漸成為香港的運動 盛事。

> During Hong Kong's economic boom of the 1960s and 1970s, bowling emerged as a popular social activity among its citizens. In 1986, bowler Che Kuk-hung won Hong Kong's first gold medal at the Asian Games. Since then, athletes such as Wu Siu-hong, Mak Cheuk-yin, Cheung Chun-chung, Tseng Tak-hin have earned numerous accolades in international competitions, further promoting the growth of bowling in Hong Kong. In 2011, Hong Kong hosted the World Women's Bowling Championship for the first time, and in 2012, it hosted the Asian Bowling Championship for the fourth time. These marquee international and regional events have significantly enhanced bowling's visibility and prestige, firmly establishing it as one of Hong Kong's premier sporting disciplines.

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那麼今次香港作為主場,對本地參賽者帶來優勢嗎?在運動心理學上,確有 「觀眾效應」的理論,當中指出如果主場觀眾熱情支持,例如唱隊歌、揮舞 橫額、大聲喝采、穿上主隊球衣,或喊出偶像球員名字等,都能激勵球員提 升自己的表現,減輕疲倦感,甚至突破球員的極限,增加獲勝機會。

Does hosting provide local athletes with an advantage? Sports psychology recognises the "audience effect" theory, which suggests that enthusiastic home crowd support - expressed through team chants, banner displays, thunderous cheering, jersey wearing, and enthusiastic calls for star players — can motivate athletes to elevate their performance, diminish fatigue and push them beyond their perceived limitations, ultimately improving their chances of victory.

> **Straight Ball vs** Each with its 直 球 與 (曲球 , 各顯 **Own Charm ※神通** Curved Ball

觀賞賽事時,你曾否驚嘆參賽者的手如像裝上遙控裝 置,能準確掌握保齡球在球道上的走向?現在就來了 解一下吧!保齡球的基本投球方式分為「直線球」和 「曲線球」,各有優點和適用情況。

直線球是指在投球時,球沿直線向球道前進,不 偏轉,直接衝向球瓶區,是一般初學者最先接觸 的球路。

曲線球是指投球後,球以直線前進,但球在前進過程 中會快速橫向旋轉,產生橫向破壞力,造成連環碰 撞,增加瓶子全倒的機會。

Have you ever marvelled at how participants seem to control the bowling ball with remote-like precision, guiding it flawlessly down the lane? Let's explore this mastery! The fundamental bowling techniques are categorised into straight ball and curved ball, each offering distinct advantages in different scenarios.

A straight ball is delivered along a direct path towards the pins without deviation. This technique typically serves as foundation skill for beginners.

A curved ball initially travels in a straight line but spins quickly sideways, creating a lateral force that triggers a chain reaction, ultimately increasing the chances of knocking down all the pins.

線 **Straight Ball**

優點 Advantages

a)準確性高:路徑簡單,容易控制,適合初 學者掌握。

High Accuracy: The straightforward trajectory facilitates control, making it suitable for novices.

b)穩定性高:容易控制球的落點和力度,保 持穩定性,更適合練習。 High Stability: Managing the landing point and force is easier, which helps

maintain stability and is beneficial for practice.



缺點 Disadvantages

a) 攻擊力有限: 直線擊球難以有效地擊倒所有瓶子, 特別在瓶子排列不理想的情況下。 Limited Strike Power: Straight shots may struggle to knock down all the pins, particularly when they are not ideally arranged.

b)變化不足: 路徑單一, 讓對手易於預測直線球的路 徑,缺乏靈活性。

Lack of Variation: The singular trajectory allows opponents to easily predict the straight ball's path, resulting in a lack of flexibility.



優點Advantages

- a)高擊倒率:更有效地攻擊瓶子的角度,增 加瓶子擊倒率,尤其是對角瓶的擊打。 High Knockdown Rate: It effectively targets the angles of the pins, thereby increasing the likelihood of knocking them down, especially the corner pins.
- b)變化多樣:選手可以根據比賽需要調整球 的旋轉和角度,增加戰術的多樣性。 Variety of Techniques: Bowlers can adjust the spin and angle of their deliveries according to the requirements of the game, thereby introducing tactical diversity.



缺點 Disadvantages

- a)控制難度高:需要技巧和經驗,初學者可能較難掌 握,容易出現失誤。
- Higher Difficulty in Control: This technique demands a high level of skill and experience, making it more challenging for beginners to master and potentially leading to an increased number of mistakes.
- b)環境影響大: 球的運動軌跡變化多, 容易受到球道 狀況影響,擊瓶效果不如直線球穩定。 Sensitivity to Lane Conditions: The ball's trajectory can vary greatly, making it susceptible to lane conditions and resulting in less consistent pin action compared to straight balls.

保齡球之球瓶是惡魔? Are bowling pins demonic?

埃及考古學家在約公元前5200年的古墓中發現有九 個球瓶和一個石球的遺跡,因而被認為當時可能已有 類似保齡球的運動。到了三至四世紀的歐洲,這項運 動更成了宗教儀式,人們把球瓶視為「惡魔」,然後 用球去擊倒以象徵除魔。及後再傳入美國,逐漸由九 個球瓶演變成為現在十個球瓶的保齡球運動。

Egyptian archaeologists have discovered remnants of nine pins and a stone ball in tombs dating to around 5200 BC, suggesting that a sport akin to bowling may have existed during that time. By the third to fourth centuries in Europe, this activity had evolved into a religious ritual where people viewed the pins as demons and used balls to knock them down as a symbolic act of exorcism. Later, bowling was introduced to America, evolving from the nine pins to the ten-pin bowling we recognise today.

保齡球,帶動全身肌肉運動 Bowling engages all muscle groups

得高分,增強自信。

掌握基本技能 Mastering basic skills

> 直線球/曲球控制 Straight Ball/Curve Control

通過手腕角度決定球的運行軌跡 Use wrist angle to determine the ball's trajectory

補中技巧 Spare Techniques 針對剩餘球瓶制定策略

例如處理「分樽」 Develop strategies for addressing remaining pins, such as handling splits



調節出手速度和球的旋轉速度 Adjust the release speed and the ball's spin rate

重點:選擇合適的保齡球! Key Point: Choosing the appropriate bowling ball!

一般而言,選擇一個重量相等於自身體重 十分之一的球(約10至16磅)是最簡單的 計算方法。另外,也要考慮球的材質,球 速快的選手可選用球質較軟的球,反之則 選用球質較硬的。

The simplest approach to selecting a bowling ball is choosing one that weighs approximately one-tenth of your body weight (around 10 to 16 pounds). Beyond weight, one must consider the ball's composition; bowlers with faster delivery speeds may prefer softer balls, while those with slower speeds should opt for harder balls.

保龄球可說是相對易入門的運動,大多數人學習了基本技巧便可參與「比 賽」,而且此運動也有很多好處,它是一種簡單的帶氧運動,成年人每 小時可消耗約240卡路里,有助改善心肺功能和四肢協調。同時,保齡 球能帶動整個身體的肌肉群,令全身約200多條肌肉都得到鍛煉。

當然,保齡球可帶來競技的快感,不管選手身體是強是弱,均有機會獲

Bowling is a relatively accessible sport; most people can participate in competitions after mastering the basic techniques. It offers numerous benefits as a simple aerobic exercise, with adults burning approximately 240 calories per hour, contributing to enhanced cardiovascular health and improved coordination. Additionally, bowling engages the entire body's muscle groups, delivering a workout that activates over 200 muscles.

Naturally, bowling can also provide the thrill of competition. Regardless of an athlete's physical strength, anyone can achieve impressive scores, thereby boosting their confidence.

參考文獻 Reference:

張泰榮、劉輝梁、蘇俊賢、江界山:<保齡球運動曲球專項肌力 訓練>,《文化體育學刊》(2008)頁33-38。 郭怡瑩: <核心肌力訓練對保齡球選手肌耐力及穩定度之影響> (碩士論文,中國文化大學,2012)



左右移動站立位置以適應球道 狀況 Alter your standing position to the left or right

READY SET GO

殘奧乒乓球:身體限制,無礙決戰 Para Table Tennis: Overcoming Physical **Limitations in Competitive Play**

🔼 國第十二屆殘疾人運動會暨第九屆 特殊奧林匹克運動會(簡稱「殘特 奧會」)由2025年12月8日至15日在廣 東、香港和澳門舉行,香港將承辦四個競 賽項目,分別是殘奧項目硬地滾球、輪椅 擊劍、乒乓球(TT11組)和特奧項目乒 乓球,以及一個大眾項目——輪椅舞蹈。

今期為大家介紹的是殘奧乒乓球(TT11 組),賽事將在荃灣體育館舉行。殘疾人 乒乓球適合不同類別的殘疾人士參與。自 1960年首屆羅馬殘疾人奧運會,乒乓球已 是殘奧運初創項目之一。比賽主要分為三 個組別共11級:輪椅組(TT1-TT5級)、企 立組(TT6-TT10)和智障組(TT11級), 根據運動員的殘疾程度進行區分。

he 12th National Games for Persons with Disabilities (NGD) and the 9th National Special Olympic Games (NSOG) will take place from December 8 to 15, 2025, in Guangdong, Hong Kong and Macao. Hong Kong will host four competition events: NGD events Boccia, Wheelchair Fencing and para Table Tennis (TT11 class), and NSOG event Table Tennis, along with one mass participation event — Para Dance Sport. This section introduces para table tennis (TT11 class), which will be held at the Tsuen Wan Sports Centre. Designed for athletes with various disabilities, table tennis has been one of the original events in the Paralympic Games since its inception at the 1960 Rome Paralympics. Competitions are primarily divided into three categories across 11 classes: wheelchair (TT1-TT5), standing (TT6-TT10) and intellectual disability (TT11), with classifications based on athlete's level of disability.

殘疾乒乓球知多些 Learn More about Disability **Table** Tennis

輪椅組:最重要靠腰力 Wheelchair category: **Relying on Core Strength**

輪椅組乒乓球運動員因身體機能的 限制,可能影響他們的靈活性和 反應速度,尤其在快速移動和擊球 時,需特別的技巧來控制輪椅以準 確擊球。所以,輪椅的設計和配置 要根據個人需求進行調整。例如座 椅高度配合運動員的體型以便接觸 球;後輪通常較大,呈八字形,以 提供更好的推動力和穩定性;前 輪則較小且靈活,有利於快速轉向 和移動。舉例說,2021年亞洲青 少年殘疾人運動會乒乓球銅牌得主 鄭中,因先天性脊椎損傷需以輪椅 代步。他曾分享,打乒乓球時最大 困難是操控輪椅的爆發性,因此, 體能訓練主要針對腰部,因為輪椅 運動員的腰力相等於健全人士的腳 力,強化腰力尤為重要。

Wheelchair table tennis athletes often face limitations in their physical functions that affect their agility and reaction speed, particularly during rapid movements and striking. Unique techniques are required to control the wheelchair for accurate shots. Therefore, the wheelchair's design and configuration must be tailored to meet individual needs: the seat height should align with the table; a larger V-shape between the rear wheels can improve propulsion and stability, and smaller and flexible front wheels enable quick turning and movement. Cheng Chung, a bronze medallist in table tennis at the 2021 Asian Youth Para Games, uses a wheelchair due to a congenital spinal injury. He noted that the biggest challenge for him is controlling the explosive movements of the wheelchair. Thus, training for this category emphasises core strength, which is equivalent to the leg strength of able-bodied individuals, making it essential for performance.



企立組:利用靈活雙腿彌補不足 Standing category: Utilising Agile Legs to Compensate

企立組乒乓球運動員的小肌肉群較弱,握拍時可能有 困難。他們可使用矯形器具將球拍固定在手中,或綑 縛手及球拍輔助握拍,但只能限於握拍的手。另外, 運動員站立時的平衡能力或許較弱,快速移動和擊球 帶來一定挑戰。所以,殘奧乒乓球的比賽規則為輪椅 運動員作出調整:單打賽事發球時,運動員擊球後可 用乒乓球桌面平衡身體,但擊球前則不得以桌面作為 支撐或觸碰桌面。另一例子:患有「先天性結締組織 異常」的乒乓球運動員王愉程,肌肉天生無力,需植 入矯形儀器支撐脊椎才能挺直身體。香港體育學院教 練發現她手部力量比其他同級選手較弱,於是以橡筋 帶和啞鈴進行額外體能訓練,同時利用她雙腿靈活的 優勢,彌補不足。

Athletes in the standing category may have weaker small muscle groups and difficulties holding the paddle. They may use assistive devices to secure the paddle or bind their hands to the paddles, but this is limited to the hand holding the paddle. Balancing is also a challenge for them during rapid movements and striking. Therefore, para table tennis rules have been adjusted to allow standing athletes to use the table for balance after hitting the ball, but not for support. And they cannot touch table before hitting the ball. Joelle Wong, a table tennis athlete with a congenital connective tissue disorder has weak muscles and requires an orthopaedic device to support her spine. Coaches at the Hong Kong Sports Institute incorporated resistance bands and dumbbells into her additional training, leveraging her leg agility to compensate for her weaknesses in hand strength.

障組:培養肌肉記憶 Intellectual Disability category: **Developing Muscle Memory**

至於智障組的運動員,基本上所有一般乒乓球運動員 可以做到的動作,他們都能做到。唯一區別是,乒 乓球講究反應、手眼協調,以及瞬間判斷能力,智障 人士的反應和判斷能力都有較多限制,掌握技術的理 解能力亦相對弱,訓練時間遂比正常運動員長。例 如,2012年倫敦殘疾人奧林匹克運動會乒乓球T11女 單金牌得主黃家汶患有輕度智障,對上下左右方向的 指示容易感到混淆,於是教練透過指導她擊打桌面不 同位置的「落點」訓練,強化肌肉記憶,幫助她在比 賽中有更佳發揮。

Athletes with intellectual disabilities generally possess the ability to perform the same movements as typical table tennis players, but may have limitation in quick reactions, hand-eye coordination, and instant judgement abilities. Their understanding of technical skills may also be less developed, resulting in longer training periods. For instance, Wong Ka-man, the gold medallist in women's singles T11 at the 2012 London Paralympics, has mild intellectual disabilities and often confuses directional instructions. Her coach devised a training programme focusing hitting different spots on the table to enhance her muscle memory, thereby improving her performance in competitions.

以口咬拍,不可能的任務? **Biting the Paddle — An Impossible Task?**

埃及運動員易卜拉欣 · 哈馬托 (Ibrahim Hamadtou) 在十歲時因火車事故失去雙臂,被稱為「不可能先 生」。因為熱愛乒乓球,他經過三年時間用嘴巴及 腳訓練,在確保頸部和牙齒不會因此而受傷下,於 2016年里約殘奧用嘴巴持球拍及用腳發球。他展現 的堅強意志和創造力,成為運動場上的典範。

Egyptian athlete Ibrahim Hamadtou, who lost both arms in a train accident at the age of 10, is affectionately known as "Mr. Impossible" for his passion for table tennis. Spending three years training to avoid any injury to his neck and teeth. he mastered the technique of holding the paddle with his mouth and serving with his feet in the 2016 Rio Paralympic Games. His determination and creativity have established him as a role model in the sports world.

殘健結合,促進共融 Integration of Disabled and Able-Bodied Athletes



「殘健結合」指的是在運動或活動中,殘疾運動員與健全運動員共同參與、 合作和競技,更可組成混合團隊。過程中,運動員之間可以互相學習和分享 技巧。過去一些「殘健結合」的活動中,健全運動員更充當殘疾運動員的教 練,深入研究其身心特點,為他們制定個性化訓練計劃,從握拍姿勢到擊球 技巧,幫助技術及能力的提升。這種共融的環境可促進社會對殘疾人士的理 解與尊重,提升包容度和殘疾運動員的心理健康。

The term "integration" refers to the participation, cooperation and competition between athletes with disabilities and able-bodied athletes in sports or activities, facilitating the formation of mixed teams and mutual learning. In some events, able-bodied athletes even assume the role of coaches for athletes with disabilities, studying their physical and mental characteristics to create personalised training plans. This inclusive approach not only enhances athletic performance but also fosters understanding and respect for individuals with disabilities.

> 參考文獻 Reference: 曲安:<乒乓球輪椅的分析與評價研究>(碩士論文,大連 交通大學,2010) 熊珂俊:<影響中國殘奧乒乓球運動員運動成績的非智力 因素研究>(碩士論文,山東師範大學,2015) 于海峰:<對我國殘奧乒乓球女隊 TT8-TT10 級主力隊員 技術特點的研究>(碩士論文,山東師範大學,2013)

NATIONAL GAMES HARTHER Mass Participation Events LENS

Interesting Facts about the National Games

全運會是奧運會的「選拔賽」?

Do the National Games serve as athlete selection for the Olympics?

China's first Olympic gold medal at the 1984 Los Angeles Olympics. Subsequently, from the Seventh National Games in 1993 onwards, the event has been scheduled one year after the Olympics, with the strategy evolving to "the National Games discover talents, the Asian Games train talents, and the Olympics deliver results". The renowned athlete Liu Xiang exemplified this approach: he won the men's 110m hurdles at the Ninth National Games in 2001 with a time of 13.36 seconds, and later broke the Olympic record with a time of 12.91 seconds to claim gold at the 2004 Athens Olympics.

全運會提出「全運惠民,健康中 國」的理念,自2017年第十三屆 起首次增設19個群眾比賽項目, 讓老百姓從「觀眾」轉為全運會賽 場上的「參賽者」。舉辦群眾項目 旨在傳承傳統文化,賽事包括龍 舟、象棋、太極拳、健身氣功、舞 龍舞獅等民間傳統運動,推動中國 傳統運動文化的發揚與傳承。例 如,中國摔跤是最古老的體育項目 之一,早在兩千多年前中國已有摔 跤活動,而且常常伴以歌舞和音樂 的配奏,將生活與生產、競技與娛 樂結合一起,以達至強身健體,強 化民族團結的目的。

The National Games embraces the philosophy of "benefit ordinary people, make a healthy China". Since the 13th National Games in 2017, 19 mass participation events have been introduced, allowing citizens to transform from spectators into participants. These events aim to preserve traditional culture, including folk sports such as dragon boating, Chinese chess, tai chi, health gigong, and dragon and lion dancing, thereby promoting the heritage of Chinese sports culture. For example, Chinese wrestling, one of the oldest sports which has been practised for over 2,000 years, weaves together music and dance in its performance. By harmoniously blending elements of daily life, competitive sport and cultural entertainment, these events simultaneously strengthen physical wellbeing and cultivate national unity.

Why are events" in the National Games? 全運會為何有 there 「群眾項目」 "mass participation 賽 事 ?

第五(1983年)和第六屆(1987年)全運會均在奧運會前一年舉 辦,以「全運練兵,奧運奪金」的戰略,作為運動員出戰奧運的選拔 場、練兵平台和前哨戰。例如,許海峰在第五屆全運會的射擊比賽中 獲得兩枚銀牌,翌年,他在洛杉磯奧運會為中國奪得首枚奧運金牌。 從1993年第七屆起,全運會調整至奧運會後一年舉辦,戰略改為「全 運會出人才,亞運會練人才,奧運會出成績」。大家應該記得田徑名 將劉翔,他在2001年第九屆全運會以13秒36獲得男子110米欄冠軍, 及後於2004年雅典奧運會以12秒91打破奧運會紀錄,奪得金牌。

The Fifth (1983) and Sixth (1987) National Games were held one year before the Olympic Games, serving as a platform for athletes to prepare and qualify under the strategy of "training for the National Games, winning gold at the Olympics". For example, Xu Haifeng won two silver medals in shooting at the Fifth National Games, and the following year he secured



有趣的是,跟奧運會一樣,全運會一樣 有體育「強省」,**跳水是廣東省的天下,** 游泳則由浙江獨領風騷,而山東省更自 2009年第十一屆起連續四屆稱霸獎牌 榜,奧運金牌乒乓球手李曉霞、張繼科、 陳夢,擊劍名將孫一文等都來自山東,其 成功源於完善的人才培養體系,以及智慧 科技。

在山東,體育學校覆蓋全面,形成「市市 有體校、縣縣有體校」的佈局;加上教練 隊伍專業化,實行金牌教練工程,以「走 出去+引進來」的策略,聘請外籍教練, 同時有複合型訓練團隊,推行「訓練、醫 療、管理一體化」,提升訓練科學性。另 外,以廣東跳水隊為例,他們實行「傳統 經驗+科技賦能」模式,通過三維測力 台及動作捕捉系統,構建「數據化訓練體 系」,令隊伍於技術難度和動作規格上長 期領先。浙江省游泳辦公室自1994年建 立從人才選拔、輸送到培養的完整管理體 系,其科研團隊更率先提出「冠軍模型」 概念,透過高科技設備全方位監控運動員 的形態、體能及技術等指標,對照冠軍參 數而制定個人化訓練方案,精準優化出發 距離及轉身時間等核心技術。

當然,地理環境因素也影響運動員的表現。例如,西藏隊在中、長跑項目有獨特優勢,是因為依託海拔約 3,000 米的林芝高原訓練基地,為運動員提供天然的高原訓練環境,提升他們的心肺功能和耐力。

Much like the Olympics, certain provinces dominate at the National Games. Guangdong leads in diving, while Zhejiang excels in swimming. Most impressively, Shandong has commanded the medal table for four consecutive editions since the 11th National Games in 2009. This excellence is exemplified by Olympic champions including table tennis legends, such as Li Xiaoxia, Zhang Jike and Chen Meng, alongside fencing star Sun Yiwen — all originate from Shandong. Their remarkable success stems from a sophisticated talent cultivation system coupled with cutting-edge training technology.

In Shandong, sports schools are widespread, creating a comprehensive network where "every city and county has a sports school". Their elite coaching teams implement a "gold medal coaching programme" through a strategic "go out and bring in" policy, recruiting foreign coaches while maintaining a multidisciplinary training team that seamlessly integrates training, medical care and management. This approach enhances the scientific methodology of training. Similarly, the Guangdong diving team employs a "traditional experience + technology empowerment" model, utilising 3D force platforms and motion capture systems to develop a data-driven training system, keeping the team at the forefront of overcoming technical difficulty and surpassing execution standards. Meanwhile, Zhejiang's swimming success story began in 1994 when their swimming department pioneered a comprehensive management system covering everything from talent scouting to elite training. Their research team was the first to introduce the "champion model", using high-tech equipment to monitor athletes' form, fitness and techniques. This model enables the creation of personalised training plans based on champion parameters, resulting in numerous video analyses and performance optimisations.

Geographic environment also plays a crucial role in athletic excellence. **Tibet's middle-and long-distance runners enjoy natural advantages** through their Linzhi Plateau training base, positioned at approximately 3,000 metres above sea level. This elevated environment serves as a natural altitude training facility, naturally boosting cardiovascular capacity and endurance performance.



圍棋、象棋、國際象棋是今年的群眾賽事 之一。棋類活動被納入「運動」,因其具 備競技性質,也有淘汰制、積分和排名, 與運動賽事無異。而參賽棋手對弈長達數 小時,需保持專注與情緒穩定,這種抗壓 訓練與運動員的賽場競技心理狀態一致, 加上長期下棋可以訓練決策思維,培養認 知能力與人格素養,呼應體育促進「健全 人格」發展的目標。此外,群眾體育的普 及性亦是被挑選的原因,棋類活動打破年 齡及體力限制,例如,十五運會群眾比賽 圍棋項目海南省選拔賽與象棋項目海南省 選拔賽,象棋參賽選手年齡跨度從 12 歲到 70歲,體現了其廣泛的參與性。

參考文獻 Reference: 馮加付、郭修金:<新中國成立以來全運會改革: 歷程,經驗及展望>(2021) Go (game), Chinese chess and Chess are mass participation events of this year's National Games. Chess activities have earned recognition as a sport in the sports world through their competitive nature, featuring elimination tournaments, sophisticated scoring systems and rankings that mirror traditional athletic competitions. The mental endurance required is extraordinary — players engage in marathon battles lasting several hours or even multiple days, demanding unwavering concentration and remarkable psychological resilience that rival any physical contest.

Moreover, playing chess enhances decision-making skills and cognitive abilities, perfectly embodying sport's fundamental goal of fostering comprehensive human development. The accessibility of these games also contributes to their classification as sports as they transcend age barriers and physical constraints. This inclusivity was vividly demonstrated at the Go and Chinese chess qualifiers for the NG in Hainan where participants spanned an impressive age range from 12 to 70 years old.

全國第十二屆殘疾人運動會 暨第九屆特殊奧林匹克運動會 香港賽區賽事日期

THE 12TH NATIONAL GAMES FOR PERSONS WITH DISABILITIES AND THE 9TH NATIONAL SPECIAL OLYMPIC GAMES (HONG KONG) COMPETITION SCHEDULE

比賽項目 Competition	比賽場地 Venue	比賽日期 Date
特奧乒乓球 Special Olympics Table Tennis	荃灣體育館 Tsuen Wan Sports Centre	2025.12.3-9
硬地滾球 Boccia	啟德體藝館 Kai Tak Arena	2025.12.9-14
輪椅擊劍 Wheelchair Fencing	馬鞍山體育館 Ma On Shan Sports Centre	2025.12.9-14
殘奧乒乓球(TT11組) Para Table Tennis (TT11)	荃灣體育館 Tsuen Wan Sports Centre	2025.12.11-14
輪椅舞蹈 (大眾項目) Para Dance Sport (Mass Participation Event)	馬鞍山體育館 Ma On Shan Sports Centre	2025.9.6-7

NATIONAL GAMES VOLUNTEER COMMITMENT





立即去片 Watch the exclusive video

一支熱心盡責且效率超卓的義工隊伍正在誕生!

為確保十五運會在香港賽區順利舉行,我們已展開第一期義工招 募,成功收到超過3萬份申請,遠超預期!體現了「全運義工 全 城起動」的精神。當中,超過18,000名申請人已成為「暫准義 工領袖」或「暫准義工」,正進行培訓與實習。

義工們將負責在各項比賽及大型活動中提供不同範疇的義工服 務。我們十分感謝香港市民的熱心支持,期待與義工們攜手舉辦 一連串精彩非凡的體育盛事!









周朗浩,全運會暫准義工,前香港輪椅擊劍代 表。曾於2019年於阿聯酋沙迦舉辦的IWAS世界運 動會的輪椅劍擊U17男子重劍個人賽奪得銅牌,並 於2022年於巴西聖保羅舉行的IWAS輪椅劍擊U23 世界錦標賽男子A級及B級重劍個人賽奪得銀牌。

Chow Long-ho is a former Hong Kong wheelchair fencing representative and is currently a Provisional Volunteer for the Games. He won a bronze medal in the U17 Men's Épée Individual event at the 2019 IWAS World Games held in Sharjah, United Arab Emirates, and a silver medal in the Men's Category A and Category B Épée Individual events at the 2022 IWAS Wheelchair Fencing U23 World Championships held in São Paulo, Brazil.

A passionate, responsible, and highly efficient volunteer team is taking shape!

To ensure the smooth operation of the Games in the Hong Kong competition region, we have conducted the first round of volunteer recruitment, successfully receiving over 30,000 applications - far exceeding expectations! This truly reflects the spirit of "Let's Volunteer for the National Games." Among these applicants, more than 18,000 have been selected as Provisional Volunteer Leaders or Provisional Volunteers and are currently undergoing training and internships.

OUR STORIES 我們的故事

鄭亦彤,全運會暫准義工領袖,擁有豐富義工經 驗,曾參與共創明「Teen」的友師計劃,並於「惜 食堂」協助處理食材分類工作。在全運會中她將 擔任大會與義工之間的溝通橋樑,協助管理並帶 領義工達成工作目標。

Tiffany Cheng, a Provisional Volunteer Leader for the Games, brings substantial volunteer experience to her position from her participation in the "Strive and Rise Programme" and food sorting initiatives with "Food Angel". In her role, she will manage and lead her team of volunteers to achieve their objectives.

Volunteers will be responsible for providing various volunteer services during different competitions and large-scale events. We sincerely thank the people of Hong Kong for their enthusiastic support and look forward to working hand in hand with the volunteers to host a series of extraordinary sporting events!

MESSAGE FROM NGCO 「喜洋洋」、「樂融融」出沒注意!

五運會和殘特奧會的吉祥物「喜洋 洋」和「樂融融」以國家一級保護 野生動物「中華白海豚」為原型,形象可愛 萌寵[,] 名字寓意喜氣洋洋、其樂融融、團圓 和美。你可留意到兩隻吉祥物已在全港多區 亮相? 當中包括金鐘添馬公園、維多利亞公 圆、香港文化中心和香港單車館等[,]有空不 妨跟它們拍照打卡!

The mascots for the Games , "Xiyangyang" and "Lerongrong," are inspired by the Chinese white dolphin, a "Grade 1 National Key Protected Species". With their adorable and endearing appearance, their names convey meanings of joy, harmony and unity. Have you noticed that these two mascots have already made appearances across various districts in Hong Kong, including Tamar Park in Admiralty, Victoria Park, Hong Kong Cultural Centre as well as Hong Kong Velodrome? When you have a moment, do take the opportunity to photograph and check in with them!

你知道今屆會徽設計背後的意思嗎?會徽以木棉紅、紫荊花紫 及蓮花綠三種花瓣交疊旋轉組成,設計理念深具意義。由於十五 運會首次由粵港澳三地共同承辦,因此會徽選取了三地的代表花 **卉形態與色彩,花瓣環繞花心螺旋圍合一體,形成同心禮花,捕** 捉禮花綻放的瞬間,寓意粵港澳大灣區交融互通、活力無限、背 靠祖國、綻放世界,展現「繁榮、包容」的精神內涵。

Are you familiar with the symbolism behind the emblem design? The emblem features three intertwining and rotating petals - representing the cotton tree, bauhinia and lotus — each symbolising Guangdong, Hong Kong and Macao, respectively. The vibrant design celebrates the historic co-hosting of the Games by these three regions for the first time. The emblem incorporates the representative flowers and colours of these three regions, with petals spiraling around

and inclusiveness".



Watch Out for "Xiyangyang" and "Lerongrong"



中国·广东|香港|澳门 2025 China Guangdong | Hong Kong | Macao

a central core in interwoven patterns, crafting a design reminiscent of blooming fireworks that captures the moment of spectacular display. This symbolises the seamless integration and boundless vitality of the Guangdong-Hong Kong-Macao Greater Bay Area (GBA), backed by the strong support of our country and flourishing on the global stage, ultimately encapsulating the themes of "prosperity

統



想認識更多運動員的奮鬥故事, 可以掃描以下二維碼重溫節目內 容(廣東話播放): For more athletes' stories, you can scan the QR code for review (in Cantonese):



跨平台媒體節目聚焦運動員故事 Cross-Platform Media Programmes Spotlight Athletes' Inspiring Stories

統籌辦於5月至12月期間在多個本地免費電視台及電台推出一系列 有關十五運會和殘特奧會的節目,內容包括:介紹十五運會和殘 特奧會、分享冷知識以及嘉賓訪問。新城電台節目「梨事會之全 運新世代」已於五月首播,共26集;而Now TV電視節目「我們 的全運會」也於六月播出第一集「全運傳承」,一連十集邀請不 同運動員分享他們的備戰情況。

NGCO also launched a series of programmes from May to December 2025 on domestic free-to-air television and radio channels about the Games. The programmes at Metro Radio launched in May while Now TV aired its first episode in June.

最新消息! Latest update!

香港承辦的八項競賽項目——擊劍、籃球(男子22歲 以下組)、場地自行車、高爾夫球、手球(男子)、七 人制橄欖球、鐵人三項及沙灘排球的測試賽均已順利完 成。全城正積極準備,期待比賽正式展開!

All test events for the eight competition events hosted in Hong Kong have been successfully completed. These include fencing, basketball (men's U22), track cycling, golf, handball (men), rugby sevens, triathlon, and beach volleyball. The city is gearing up with great enthusiasm for the Games to commence! 掃描二維碼重溫 測試賽花絮 Scan the QR code to revisit highlights of the test events



