ExHALE
Exercise for Health, Achievement, Lifestyle and Energy

FOOD AS FUEL

'How To Eat for energy, focus & wellbeing'

STRATHCLYDE SPORT

BRAIN & FOCUS

- Your brain uses 20% of your daily energy, mostly from glucose (from carbohydrates). Irregular or insufficient intake can lead to brain fog, poor memory, and reduced cognitive speed (Benton & Donohoe, 1999).

- Nutrients like B vitamins, iron, and omega-3s support neurotransmitter function (e.g. dopamine, serotonin), which regulate concentration, motivation, and mood.

SLEEP & RECOVERY

- Undereating can disrupt melatonin production and your circadian rhythm, making it harder to fall or stay asleep (Peuhkuri et al., 2012).

STRESS & IMMUNITY

- Skipping meals increases cortisol (stress hormone) levels, which may worsen anxiety and decrease your immune response. Balanced nutrition helps modulate the stress response (Gibson & Green, 2002).

- Micronutrients like zinc, vitamin C, and protein are essential for a resilient immune system — especially during periods of academic pressure.

DID YOU KNOW ?

A 2020 UK survey found nearly 40% of students skip meals weekly due to stress, time constraints, or budgeting , often reporting low energy, anxiety, and poor concentration as a result

WHY FOOD MATTERS

Your brain and body run on fuel — but not just any fuel. Regular, balanced eating helps you feel better, think sharper, and perform your best in daily life.

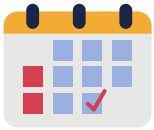
Especially as a student, nutrition supports your learning, memory, stress resilience, and immune health.

REGULAR EATING & WHY

Regular eating (every 2–4 hours) helps stabilise blood glucose, mood, metabolism, and overall function is backed by several sources in nutrition science, sports nutrition, and metabolic research.

But.....WHAT DOES REGULAR EATING LOOK LIKE

Eating every 2–4 hours can stabilise energy, mood, and metabolism. However, it may require adjusting to suit your routine, studies, sleep, and social life. It can be as simple as the following:



- 3 meals + 3 snacks: 8am, 10am, 1pm, 3pm, 7pm, 9:30pm
- 2 meals + 2 snacks: 7am, 11am, 3pm, 7pm
- 3 meals + 1 snack: 10am, 2pm, 5pm, 9pm

Following a regular, structured eating pattern throughout the day offers a wide range of physical and mental benefits that support both academic performance and overall well-being.

- Stable blood glucose = better focus, mood, and stamina
- Prevents extreme hunger → fewer impulsive choices
- Supports digestion, hormone balance, and immune function
- Boosts metabolism & protects muscle
- Improves sleep and physical performance

UNDEREATING.

- Even if unintentional, under-eating can cause:
- Low energy & fatigue
- Mood swings or brain fog
- Poor memory, low motivation
- Weakened immune system
- Hormonal imbalance (e.g. menstrual changes, libido)
- Nutrient deficiencies (iron, B12, calcium, etc.)

REMEMBER: Hunger signals aren't always reliable — stress, distraction, and irregular eating can suppress or confuse your body's hunger cues. Regular meals help support both physical and mental wellbeing, even when you "don't feel hungry."

- Stress, irregular routines, restrictive eating, or skipped meals can suppress or override hunger cues.
- Prolonged undereating can reduce levels of ghrelin (the hunger hormone), leading to a false sense of "not being hungry."
- Distractions (like studying, screens, or anxiety) can interfere with interoceptive awareness — the brain's ability to recognise internal signals like hunger and fullness.

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FURTHER INFORMATION

Penny Vlachou,
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"BNF's Nutrition for Students hub offers practical tips on healthy eating, budgeting, and meal planning for student life."

BBC Good Food's student page shares quick, budget-friendly recipes ideal for beginner cooks and busy schedules.

MACRONUTRIENTS AT A GLANCE

- Builds and repairs muscles and tissues
- Essential for hormone and enzyme production
- Supports your immune system
- Helps with satiety (feeling full)
- Found: Dairy, meat, poultry, fish, eggs, tofu, legumes, nuts, and seeds.

- Main source of energy for your brain and body
- Helps maintain blood sugar levels
- Prevents your body from breaking down muscle for fuel
- Provides fibre, vitamins, and minerals
- Found: Dairy, fruit, starchy veg, and whole grains.

- Provides long-lasting energy
- Vital for brain health and nerve function
- Helps absorb fat-soluble vitamins (A, D, E, K)
- Needed for hormone production and cell membrane structure
- Aids in satiety and insulation

DAILY GUIDE

General nutrition guidelines apply across populations, students, especially young adults (ages 18–25), have specific energy and nutrient needs due to:

- High cognitive demands (studying, exams)
- Lifestyle stressors (sleep disruption, irregular routines, etc.)
- Physical activity levels (which vary widely)
- Continued physical growth and brain development (especially under age 25)

MACRONUTRIENT DISTRIBUTION

Energy Needs

Women: 1,900–2,400 kcal/day
Men: 2,400–3,000 kcal/day
Depends on body size, physical activity, metabolism, and stress levels.

FATS (15 - 25%)

Include healthy fats from nuts,oils, avocado, fish

PROTEIN (15 - 25%)

0.8g - 1.2g/kg bw: higher if active or under stress.

CARBOHYDRATES (45 - 65%)

Prioritise whole grains, fruits, and vegetables

DONT FORGET TO HYDRATE

2–2.5 litres/day, depending on body size and activity

- Light Activity (e.g. walking, yoga) 300–500ml.
- Moderate Activity (e.g. brisk walking, gym workout) 500–700 ml.
- Intense (e.g. running, HIIT, sport training) 700–1000 ml.

Other Considerations

- Hot/humid weather: Increase intake by 20–30%
- Exercise 1 hour+: Include electrolytes (e.g., sodium, potassium)

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Myth or Fact ?

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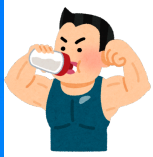
MYTH : YOU MUST EAT NO LATER THAN 60 mins AFTER TRAINING

It's partially evidence-based, but not as critical as once believed — especially for casual exercisers. The science supports nutrient timing, but the importance of the "golden hour" is often overstated.



Protein Timing

- Early research emphasized a narrow 30–60 min "anabolic window" post-workout.
- Newer studies show total daily protein is more important than timing.
- Eating protein 1–2 hrs before or after training still supports muscle protein synthesis (MPS), especially when fasted.

Timing helps, especially when fasted — but there's a broad window, not a rigid deadline.

Carbohydrate Timing

- Post-workout carbs help replenish glycogen, mainly for endurance athletes or two-a-day sessions.
- Glycogen synthesis is fastest in the first 1–2 hrs, but continues afterward.
- If not training again soon, immediate carbs aren't essential.

Carb timing matters for frequent or intense training, less so for casual exercisers.

MPS Window

- MPS stays elevated for 24–48 hours post-exercise.
- Early protein intake still helps maximise the response, especially when fasted.

The anabolic window is longer than 1 hour, but eating soon remains beneficial.

Conclusion

The "golden hour" is a real phenomenon, but the urgency has been exaggerated.
Think of it as a "best practice", not a biological deadline.
If you're training hard, especially fasted or multiple times per day, eating soon after helps.
If your overall diet is solid, you won't lose progress if you miss the hour.

MYTH : EXTREME EXERCISE IS THE BEST WAY TO LOSE WEIGHT

Being active can improve overall health, wellbeing, self-esteem, stress and depression.

However, our energy balance is mostly determined by what we eat and our metabolic rate (energy you burn when doing nothing). Which means losing weight by just being active is harder work

Extreme exercise can also result in acute training overload, potentially causing a musculoskeletal injury.

It is important to always gradually increase your exercise regimes over several weeks to avoid injury.

The best way to lose weight is to combine a nutrient dense, calorie reduced diet with regular physical activity, undertaking at least 150 minutes of moderate-intensity activity per week, along with muscle-strengthening activities at least two days a week.

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Myth or Fact ?

STRATHCLYDE SPORT

MYTH:LIFTING WEIGHT WILL NEGATIVELY AFFECT MY RUNNNING

Introducing strength work into your training schedule can boost running performance for the following reasons;

- **Improves Running Economy and Efficiency:** Resistance training enhances muscle efficiency, helping you use less energy at a given pace (Yamamoto et al., 2008 – Journal of Strength & Conditioning Research)
- **Increases Power & Speed:** Strength work, especially plyometrics and heavy lifts, improves stride and sprint capacity (Beattie et al., 2014 – Journal of Sports Physiology and Performance).
- **Reduces Injury Risk:** Stronger muscles and connective tissue(tendons and ligaments) has been proven to lower injury risk (Lauersen et al., 2014 – British Journal of Sports Medicine)

MYTH: LIFTING WEIGHTS WILL MAKE ME BULKY.

A common misconception amongst female populations is that you will 'bulk' out simply from lifting some weights, which is clinically proven to be a myth

- **Hormones Matter:** Women have much lower testosterone levels than men, making extreme muscle growth naturally very difficult(Kraemer et al., 1998 – Medicine & Science in Sports & Exercise)
- **Lifting Builds Lean Muscle, Not Bulk:** Resistance training increases muscle tone while decreasing body fat(Westcott, 2012 – Current Sports Medicine Reports).
- **Toned, Not "Huge":** Most female lifters achieve a sculpted, athletic look, not size, through regular strength training.

MYTH: I NEED TO BE FIT BEFORE I JOIN THE GYM

A common misconception is that gyms are only for people who are already fit, confident, or experienced — which often prevents people from getting started.

- **Fitness Is Built, Not Required: Strength, endurance, and confidence are developed through regular training, not before it (ACSM, 2022).**
- **Structured Support Improves Adherence: Access to inductions, coaching, and guided programmes significantly improves confidence, safety, and long-term participation (ACSM, 2021).**
- **Beginners Benefit Most: Individuals with lower starting fitness often see the greatest relative improvements when beginning structured exercise (Warburton et al., 2006 – CMAJ).**
- **Consistency Over Confidence: Long-term progress is driven by regular attendance and gradual progression, not initial ability or fitness level.**

FACT: The gym is where fitness starts and support is built in.

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DIET PILLS

STRATHCLYDE SPORT

WHAT ARE DIET PILLS?

Diet/weight loss/fat burner/fat blocker pills are marketed as quick ways to lose weight.

There are hundreds of types of diet pills that can be bought from health shops and online, which often claim to 'reduce hunger', 'boost metabolism' and 'strip body fat'.

BUT DO DIET PILLS ACTUALLY WORK?

Diet pills contain a variety of active ingredients that are reported to aid weight loss, including: caffeine, green tea extract, vitamins, herbal extracts, ephedrine and DNP.

There is no evidence that these ingredients are effective in promoting weight loss.

Medical approval has been withdrawn on safety grounds for sibutramine, fenfluramine and dexfenfluramine, but which can still be bought over the Internet.

There are a number of medications which have been clinically proven and approved for weight loss in the UK. Orilstat (brand name Xenical or Alli) can be prescribed or bought from your chemist and works by reducing the amount of fat absorbed by your body from food, but has unpleasant side effects. Semaglutide and Tirzapetide (Brand names Ozempic, Wegovy and Mounjaro) are prescription only and work by slowing the rate at which your stomach empties as well as impacting on your hunger signals and blood sugar.

WHAT ARE THE RISKS OF TAKING DIET PILLS?

Some diet pills can be dangerous to health due to the ingredients they contain.

Ingredients such as ephedrine, high doses of caffeine and Dinitrophenol (DNP, a pesticide and explosive) can be extremely harmful and can increase your risk of heart attacks, stroke, organ failure and even death.

There have been at least 24 DNP-related deaths in the UK since January 15.

Common and serious side effects of diet pills includes:

- Constipation
- Headaches
- Mood swings
- Rise in body temperature
- Rapid heart rate
- Nausea and vomiting
- High blood pressure
- Insomnia
- Oily or fatty stools/discharge

EFFECTIVE WEIGHT LOSS STRATEGIES

Despite what a product might claim, there is no effective magic pill for weight loss.

Any rapid weight loss which occurs is usually a loss of body water from carbohydrate stores rather than a loss in body fat.

Healthy weight loss typically occurs at a steady rate of 1 to 2 pounds (0.5 to 1 kg) per week. Achieving this requires consistent effort, combining increased physical activity with a reduction in energy intake. Success comes with patience and by monitoring your nutrition carefully—focusing on balanced meals, portion control, and sustainable habits over time.

NHS - BETTER HEALTH

FOOD ADVICE

PHYSICAL ACTIVITY ADVICE

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ENERGY DRINKS

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WHAT IS AN ENERGY DRINK

- An energy drink typically contains stimulant compounds, often claiming to improve physical and mental performance.
- Energy drinks generally contain caffeine, along with high levels of sugar.
- They are different to sports drinks, which are designed for athletes to rehydrate and replace lost electrolytes and energy.
- There are a wide range of energy drinks including carbonated and non-carbonated , sugar-free, and concentrated 'shot' versions.
- Well known brands include: Monster, Red Bull, and Relentless.

KEY POINTS

- Energy drinks do not provide any nutritional value.
- They cause a rapid rise and fall in blood sugar.
- Regular consumption may lead to increased tiredness rather than actually boosting energy levels.

SUGAR IN ENERGY DRINKS

- Energy drinks are often over 10% sugar.
- The sugar within the drinks are called free sugars meaning they are added and not naturally occurring.
- It is advised that adults do not consume more than 50g of free sugar per day.
- A 500ml can of Monster contains 55g free sugars!
- Consuming too much sugar can cause weight gain, type-2 diabetes, dental problems and other health related issues.
- It can also lead to a sugar crash, causing fatigue, decreased concentration, and hunger

CAFFEINE

- Caffeine comes from a plant and is a naturally occurring stimulant.
- It stimulates the central nervous system, increasing feelings of alertness.
- Consuming caffeine at the correct dosage can have a positive effect on physical and mental performance.
- To boost performance, it is recommended to consume ~3 mg per kg bodyweight (225 mg for a 75 kg person)
- Caffeine can enhance endurance, strength, power, speed and reaction times
- Caffeine can improve mood, concentration, alertness, cognitive function, and decrease mental fatigue.
- However, dependence on caffeine could cause detrimental withdrawal symptoms in situations where it is unavailable

COMMON SOURCES OF CAFFEINE

- Common sources of caffeine in the diet include tea, coffee, cola drinks and cocoa (chocolate)
- The typical caffeine content (per serving) of some products is shown below:

Product	Amount	Caffeine Content (mg)
Coffee (black, cafetiere)	300 ml (average mug)	195
Coffee (black, machine)	300 ml (average mug)	120
Coffee (instant)	300 ml (average mug)	210
Tea (black)	300 ml (average mug)	60
Red Bull	250 ml (can)	80
Monster	500 ml (can)	160
Relentless	500 ml (can)	160
Pro Plus	1 tablet	50

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ENERGY DRINKS

STRATHCLYDE SPORT

HOW IT STARTS

WHAT WE THINK IT DOES

REALITY

Energy Drinks

RISKS OF EXCESSIVE CAFFEINE INTAKE

- It is easy to consume high levels of caffeine daily without realising.
- It is advised to restrict caffeine intake to less than 400 mg per day (equivalent of 2-3 coffees)
- Pregnant women should restrict caffeine intake to less than 200 mg per day.
- Side effects from caffeine include: insomnia, headaches, stomach upsets and mood disturbances.
- Caffeine overdoses can cause rapid heart rate, agitation, seizures, irregular heartbeats and – in extreme circumstances – death.
- Inability to sleep/poor quality sleep. Guidance suggests avoiding caffeine 6 hours before bedtime.

OTHER ENERGY DRINK INGREDIENTS

- Manufacturers create a 'proprietary blend' of ingredients for energy drinks and so it is difficult to determine the quantity of each ingredient within the drink.
- Some other ingredients claim to boost performance.
- These may include taurine, guarana, ginseng, L-carnitine, B vitamins and others.
- Many of these ingredients have no evidence of improving performance and/or are present in tiny amounts within drinks, so would have no meaningful effect on performance.
- Caffeine and sugar are primarily responsible for the effects of energy drinks.

ENERGY DRINKS: THE MAIN ISSUES

High intakes of energy drinks are associated with:

- Short sleep duration
- Poor quality sleep
- ADHD symptoms
- Depression
- Insulin resistance
- Dental caries
- Increased central obesity
- Poor academic performance

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SLEEP HEALTH

STRATHCLYDE SPORT

WHAT DOES A GOOD NIGHT'S SLEEP LOOK LIKE?

It is impossible to get good quality sleep every single night. At times, your sleep may become disrupted, fragmented and/or short in duration due to several different factors (e.g. stress, job responsibilities, illness, deployment etc). If symptoms of poor sleep - such as difficulty falling or staying asleep - occur at least 3-times per week and persist for more than 3-months, it is important to consult your doctor, as this may indicate a sleep disorder (e.g., insomnia).

A good night's sleep is typically characterised by sufficient duration (7-9 hours for most adults), continuity (minimal awakenings), and quality (restorative and refreshing upon waking). It involves progressing through multiple complete sleep cycles, including both non-REM and REM stages, with a predominance of deep (e.g., slow wave) sleep in the first half of the night and more REM sleep in the latter half. Highquality sleep also includes consistent sleep and wake times across days.

WHY IS SLEEP IMPORTANT

Sleep is a fundamental and essential physiological process that plays a crucial role in maintaining overall health and well-being. This includes physical restoration, cognitive functioning, emotional wellbeing, metabolic and cardiovascular health, immune function, brain waste clearance, physical performance and hormone regulation.

Good quality sleep is dependent on achieving sufficient duration. Getting enough sleep reduces our risk of poor health. Put simply, the better our sleep, the longer we live, and the better our health.

EFFECTS OF INSUFFICIENT SLEEP DURATION (<6HRS NIGHTLY)

2-3 x greater risk of mski injury

3 x greater risk of respiratory infection

3 - 4 x greater risk of anxiety disorders

3 x greater risk of clinical depression

3 x greater risk of cardiac events

In the short term, sleep deprivation has detrimental effects on human functioning, decision-making, and reaction time. 24-hours of continuous wakefulness leads to impairments in thinking and body movement equivalent to a blood alcohol level above the legal driving limit!

WHAT ARE THE EFFECTS OF SLEEP LOSS ON APPETITE & WEIGHT CHANGE?

- Sleep restriction influences our eating behaviours and how we store and utilise our energy stores.
- Leptin is commonly known as the "fullness" hormone and signals to the brain when we are full and do not need additional energy to function.
- Ghrelin on the other hand is known as the "hunger" hormone and its main function is to stimulate appetite and promote the intake of food.
- Leptin and Ghrelin have opposing roles and interact to maintain energy balance.
- Sleep loss increases our Ghrelin levels (telling our brains that we need to eat) whilst reducing our Leptin levels (telling our brains that we are not full). It also increases our desire for high calorie foods (e.g. high fat, salt and sugary foods). This dysregulation leads to an increased desire to overconsume high calorie foods (e.g., usually unhealthy, processed foods), which in turn, leads to excessive weight gain in the form of fat.

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SLEEP HEALTH

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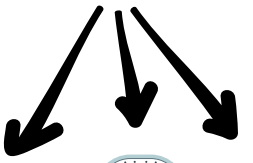
QUICK TIPS

OPTIMAL SLEEP TIPS

Below are some useful, evidence-based guidelines that can be used to help optimise your sleep quality and duration.

1. Avoid blue light from screens 1-2hrs prior to sleep or activate blue light filters to reduce the suppressing effects on melatonin production.
2. Consider educing fluid intake before bed to reduce night-time bathroom visits
3. Avoid "heavy"meals close to bedtime as this may disrupt sleep due to gastro-irritation/heartburn.
4. Keeping your primary sleep environment between 16-19°C supports optimal sleep quality.
5. Try to maintain consistent bed and wake up times to support optimal sleep regulation
6. Reducing stress levels prior to bed as part of a sleep-promoting pre-bedtime routine supports cognitive recovery/good sleep quality.

14-days of sleep restriction (4hrs sleep per night) can lead to increased...



- Increased food intake up to + 308Kcals per day
- Increased bodyweight + 0.5kg
- Increased visceral fat of up to +10%

SLEEP STRATEGIES

Disrupted sleep is a common place amongst student populations of and is shown to significantly impair t components of performance, including alertness, concentration, retaining information, and cognitive function. Below are several strategies that could be use to manage the demands of sleep loss

Sleep Hygiene

- Ensure bedroom is dark (no light)
- Minimise noise disruption
- Cool bedroom temperature (15-19°C).
- Ensure comfortable bedding
- Place phone on silent / switch off

Sleep promoting behaviours

- Consistent bed / wake times
- Sufficient sleep duration (7-9hrs)
- Regular physical activity (not close to bedtime)
- Exposure to natural light in AM or early PM
- Early-afternoon naps (~20mins if required)
- Maintain low stress levels and good nutrition

USEFUL RESOURCES AND FURTHER INFORMATION

Calm Sleep is a mobile app that aids better sleep through guided meditations, soothing music, sleep stories, and nature sounds. Designed to reduce stress and anxiety, it helps users relax and build a bedtime routine.

The Sleep Foundation is a trusted source for expert-backed info on sleep health, disorders, habits, and product reviews, aiming to improve sleep through education and research.

NHS Every Mind Matters – Sleep gives practical tips to improve sleep and mental wellbeing, focusing on routine, screen time, stress, and sleep environment.

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WEARABLE TECHNOLOGY

'A Quick Guide To Wearable Tech'

STRATHCLYDE SPORT

What Are Wearables?

Wearables are body-worn electronic devices (like fitness trackers, smartwatches, sensor clothing) that capture real-time data—heart rate, steps, calories, sleep quality, GPS—and help people adjust workouts, track recovery, and measure progress.

Why?

- It helps track activity, progress, and changes in your body.
- It encourages motivation, awareness, and habit change.
- Linked to better weight management and physical fitness.

MAIN TYPES

- Heart-rate Monitors (wrist or chest)
- Sleep Trackers
- GPS Devices
- Activity Trackers

KEY FEATURES OF WEARABLES EXPLAINED

- **Heart Rate Monitoring:** Real-time heart rate feedback helps users adjust workout intensity. This is vital for training efficiency and safety. According to the British Heart Foundation, maintaining 50–85% of your maximum heart rate can optimise cardiovascular benefits.
- **Step & Distance Tracking**: Most devices monitor daily step counts and distance covered, supporting general activity goals. The NHS recommends at least 150 minutes of moderate activity weekly—roughly 10,000 steps per day can contribute significantly to this.
- **GPS Functionality:** Essential for outdoor enthusiasts, GPS provides accurate distance, pace, and route tracking for activities like running or cycling. A 2022 study from Journal of Sports Sciences confirmed GPS-enabled wearables are over 90% accurate in distance tracking under open-sky conditions.
- **Calorie & Activity Tracking:** Monitoring calorie burn helps with weight management and performance goals. However, note that calorie estimates can vary by up to 27%, depending on the device (Stanford University, 2017), so use as a general guide.
- **Sleep & Recovery Analysis:** Sleep tracking offers insight into rest quality, crucial for recovery and mental health. According to Sleep Council UK, adults need 7–9 hours of sleep per night for optimal health. Wearables can help identify patterns and improve sleep hygiene.
- **Heart Rate Variability (HRV)**: HRV reflects your body's recovery and stress levels. Higher HRV is linked to better resilience and rest; lower HRV may indicate fatigue or overtraining. A 2020 BMJ Open Sport & Exercise Medicine review highlighted HRV as a strong non-invasive tool for assessing recovery.
- **App & Equipment Integration**: Modern wearables sync with gym equipment and fitness apps, offering personalised plans, progress analysis, and enhanced motivation. Integration with platforms like Strava or Apple Health has been shown to improve consistency and adherence to fitness routines.

STRATHCLYDE SPORTS - APP INTEGRATION

Track your workouts effortlessly at Strathclyde Sport with the **Life Fitness Connect** app. All cardio equipment is fully connected, allowing automatic syncing, real-time feedback, and personalised goals.

The **Wattbike app** is a powerful training companion designed to enhance your indoor cycling experience. It offers a range of structured workouts, performance tests, and real-time data tracking.

Boost your indoor cycling with the **Team ICG® app**—connect to ICG bikes, track key metrics like power, cadence, and heart rate, and train smarter with live colour zones via Coach by Colour

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WEARABLE TECHNOLOGY

'A Quick Guide To Wearable Tech'

STRATHCLYDE SPORT

KEY POINT: UNDERSTAND YOUR HR ZONES

Zone 1: 50-60% MHR

- Gentle walk, stretching.
- Improves recovery & circulation.
- Feels: Can hold a full conversation

Zone 2: 60 - 70% MHR

- Brisk walk, light jog
- Optimal zone for burning fat & building aerobic endurance.
- Feels: Deeper breathing but can still talk easily.

Zone 3: 70 - 80% MHR

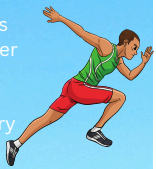
- Steady run or cycle
- Improves stamina and cardiovascular fitness.
- Feels: Quicker breathing, talking shorter conversations.

Zone 4: 80 - 90% MHR

- Tempo run or intervals
- Boosts speed, power, and anaerobic capacity.
- Feels: Breathing heavy, can only say a few words.

Zone 5: 90 - 100% MHR

- Sprints & HIIT bursts
- Increases peak power and max effort tolerance..
- Feels: Breathing very hard, can't speak.



TOP 3 KEY FEATURES EXPLAINED

HEART RATE TRAINING

- Use heart rate zones during workouts to train at the right intensity (e.g., fat burn, cardio).
- Check resting heart rate (RHR) daily, ideally in the morning.
- Review peaks and averages to spot patterns in effort and recovery.

HEART RATE VARIABILITY (HRV)

- Track daily, ideally at the same time each morning (most devices do this automatically)
- Watch for trends, not just single-day changes—lower HRV = stress/fatigue, higher HRV = recovery
- Use HRV to adjust workouts: Low HRV? Prioritize rest or light activity
- Support high HRV with good sleep, hydration, stress reduction, and recovery days.

SLEEP & RECOVERY MONITORING

- Wear the device overnight to track sleep stages (light, deep, REM).
- Aim for 7–9 hours of total sleep, with consistent bedtime/wake time.
- Review sleep scores and note disruptions or trends.
- Link poor sleep to energy or performance dips the next day.

FOR MORE INFORMATION

HRV Explained

Heart Rate Training